

Appendix 3. Volatile Organic Compound and Reduction-Oxidation Sensitive Data From Ground- and Surface-Water Samples in the West Branch Canal Creek Study Area, Aberdeen Proving Ground, Maryland

- A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.
- B. Concentrations of chlorinated methanes and additional volatile organic compounds for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.
- C. Concentrations of tetrachloroethene plus pentachloroethane for passive-diffusion bag samples and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2003.
- D. Reduction-oxidation (redox) sensitive constituents for peepers in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, July 2003.

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
March 2002 -- Passive-Diffusion Samples [DS01, passive-diffusion sampler location 1; -A1, bag A primary sample; -B2, bag B secondary sample]									
1-1W	DS01-A1	NR	4/9/2002	1226	<10.0	<0.5	<0.5	<1.0	<0.5
1-1W	DS01-B1	NR	4/9/2002	1230	<10.0	<0.5	<0.5	<1.0	<0.5
1-1W	DS02-A1	1	4/9/2002	1245	<10.0	<0.5	<0.5	<1.0	<0.5
1-1W	DS02-A2	2	4/9/2002	1245	<10.0	<0.5	<0.5	<1.0	<0.5
1-1W	DS02-B1	NR	4/9/2002	1240	<10.0	<0.5	<0.5	<1.0	<0.5
1-2E	DS03-A1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
1-2E	DS03-B2	NR	4/9/2002	1250	<10.0	<0.5	<0.5	<1.0	<0.5
1-2E	DS04-A1	1	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
1-2E	DS04-A2	2	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
1-2E	DS04-B1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
1-3W	DS05-A1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
1-3W	DS05-B1	NR	4/9/2002	1403	<10.0	<0.5	<0.5	<1.0	<0.5
1-3W	DS06-A1	NR	4/9/2002	1419	<10.0	<0.5	<0.5	<1.0	<0.5
1-3W	DS06-B2	NR	4/9/2002	1421	<10.0	<0.5	<0.5	<1.0	<0.5
2-1W	DS16-A1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-1W	DS16-B1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-1W	DS17-A1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-1W	DS17-B2	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-2E	DS18-A1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-2E	DS18-B2	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-2E	DS19-A2	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-2E	DS19-B2	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-3E	DS20-A1	1	4/9/2002	--	<10.0	0.6	<0.5	<1.0	<0.5
2-3E	DS20-A2	2	4/9/2002	--	<10.0	0.5	<0.5	<1.0	<0.5
2-3E	DS20-B1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-3E	DS21-A1	NR	4/9/2002	--	<10.0	0.6	<0.5	<1.0	<0.5
2-3E	DS21-B1	NR	4/9/2002	--	<10.0	0.7	1.6 E	<1.0	24.7
2-3E	DS22-A1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-3E	DS22-B1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS23-A1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS23-B1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS23-B2	2	4/10/2002	--	<10.0	x <0.5	x <0.5	x <1.0	x <0.5
2-4W	DS24-A1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	39.8
2-4W	DS24-A2	2	4/10/2002	--	<10.0	x <0.5	x <0.5	x <1.0	x 71.0

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS01-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS01-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS02-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS02-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS02-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS03-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS03-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS04-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS04-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS04-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS05-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS05-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS06-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS06-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS16-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS16-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS17-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS17-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS18-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	1.4 V	DS18-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS19-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS19-B2
--	--	<0.5	0.8	7.2	3.5	<1.0	86.5	DS20-A1
--	--	<0.5	0.7	7.0	3.4	<1.0	107	DS20-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS20-B1
--	--	<0.5	2.3	7.5	6.3	<1.0	108	DS21-A1
--	--	<0.5	14.4	19.7	40.3	<1.0	227	DS21-B1
--	--	<0.5	<0.5	2.0	<0.5	<1.0	24.0	DS22-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	36.6	DS22-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS23-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS23-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS23-B2
--	--	<0.5	6.3	0.9	<0.5	<1.0	<0.5	DS24-A1
--	--	<0.5	10.5	<0.5	<0.5	<1.0	<0.5	DS24-A2

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[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

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2-4W	DS24-B1	NR	4/10/2002	--	<10.0	6.2	0.8 NV	<1.0	12.7
2-4W	DS25-A1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS25-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	DS25-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS26-A2	NR	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	DS26-B1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS26-B2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	DS27-A1	1	4/10/2002	--	<10.4	<0.5	<0.5	<1.0	<0.5
2-4W	DS27-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	DS27-B1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS27-B2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	DS28-A1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	DS28-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	DS28-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-5E	DS29-A2	NR	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-5E	DS29-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-5E	DS30-A1	1	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-5E	DS30-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-5E	DS30-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS31-A1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS31-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS32-A1	NR	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	DS32-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS33-A1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS33-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	DS33-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS34-A1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS34-B1	NR	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS35-A1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS35-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	DS35-B1	1	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	DS35-B2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	DS36-A1	1	4/10/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-6W	DS36-A2	2	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	DS36-B2	NR	4/10/2002	--	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x

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[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	<i>cis</i> -1,2-Dichloro-ethene (µg/L)	<i>Trans</i> -1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	<0.5	4.9	2.2 NV	3.4 NV	<1.0	7.1	DS24-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS25-A1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS25-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS25-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS26-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS26-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS26-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS27-A1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS27-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS27-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS27-B2
--	--	<0.5	<0.5	0.9	<0.5	<1.0	<0.5	DS28-A1
--	--	<0.5 x	<0.5 x	1.1 x	<0.5 x	<1.0 x	<0.5 x	DS28-A2
--	--	<0.5	<0.5	0.6	<0.5	<1.0	<0.5	DS28-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS29-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS29-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS30-A1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS30-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS30-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS31-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS31-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS32-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS32-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS33-A1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS33-A2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS33-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS34-A1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS34-B1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS35-A1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS35-A2
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS35-B1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS35-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	DS36-A1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS36-A2
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	DS36-B2

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2-7W	DS37-A1	1	4/10/2002	--	<10.0	7.3	2.8	<1.0	34.9
2-7W	DS37-A2	2	4/10/2002	--	<10.0 x	8.0 x	3.2 x	<1.0 x	38.3 x
2-7W	DS37-B1	1	4/10/2002	--	<10.0	9.4	6.1	<1.0	58.1
2-7W	DS37-B2	2	4/10/2002	--	<10.0 x	7.6 x	5.0 x	<1.0 x	43.2 x
2-7W	DS38-A1	NR	4/10/2002	--	<10.0 x	5.4 x	0.6 x	<1.0 x	2.5 x
2-7W	DS38-B1	1	4/10/2002	--	<10.0	7.2	1.6	<1.0	7.0
2-7W	DS38-B2	2	4/10/2002	--	<10.0 x	7.5 x	1.7 x	<1.0 x	8.2 x
2-7W	DS39-A1	1	4/10/2002	--	<10.0	5.0	<0.5	<1.0	<0.5
2-7W	DS39-A2	2	4/10/2002	--	<10.0 x	3.9 x	<0.5 x	<1.0 x	<0.5 x
2-7W	DS39-B1	1	4/10/2002	--	<10.0	3.3	<0.5	<1.0	<0.5
2-7W	DS39-B2	2	4/10/2002	--	<10.0 x	3.1 x	<0.5 x	<1.0 x	<0.5 x
2-7W	DS40-A1	NR	4/10/2002	--	<10.0	9.3	13.8	<1.0	131
2-7W	DS40-B1	NR	4/10/2002	--	<10.0	2.0	<0.5	<1.0	<0.5
2-4W	DS41-A1	NR	5/15/2002	0940	<10.0	<0.7	<1.0	<1.0	<0.7
2-4W	DS41-B1	NR	5/15/2002	0840	<10.0	<0.7	<1.0	<1.0	<0.7
2-4W	DS42-A1	NR	5/15/2002	0945	<10.0	<0.7	<1.0	<1.0	<0.7
2-4W	DS42-B1	1	5/15/2002	0945	<10.0	<0.7	<1.0	<1.0	<0.7
2-4W	DS42-B2	2	5/15/2002	0945	<50.0	<3.5	<5.0	<5.0	<3.5
2-4W	DS43-A1	NR	5/15/2002	0950	<10.0	<0.7	<1.0	<1.0	<0.7
2-4W	DS43-B1	NR	5/15/2002	0950	<10.0	<0.7	<1.0	<1.0	<0.7
2-3E	DS44-A1	NR	5/15/2002	0835	<10.0	<0.7	1.9	<1.0	33.8
2-3E	DS44-B1	1	5/15/2002	0835	<10.0	0.9	2.4	<1.0	119
2-3E	DS44-B2	2	5/15/2002	0835	<33.3	<2.3	<3.3	<3.3	93.4
2-3E	DS45-A1	NR	5/15/2002	0845	<10.0	<0.7	<1.0	<1.0	2.1
2-3E	DS45-B1	NR	5/15/2002	0845	<10.0	<0.7	<1.0	<1.0	<0.7
2-3E	DS46-A1	1	5/15/2002	0855	<10.0	<0.7	<1.0	<1.0	<0.7
2-3E	DS46-A2	2	5/15/2002	0855	<50.0	<3.5	<5.0	<5.0	<3.5
2-3E	DS46-B1	1	5/15/2002	0855	<10.0	<0.7	<1.0	<1.0	<0.7
2-3E	DS46-B2	2	5/15/2002	0855	<33.3	<2.3	<3.3	<3.3	<2.3
3-1E	DS100-A1	1	5/9/2002	1015	<20.0	<1.4	<2.0	<2.0	<1.4
3-1E	DS100-A2	2	5/9/2002	1015	<50.0	<3.5	<5.0	<5.0	<3.5
3-1E	DS100-B1	1	5/9/2002	1015	<20.0	<1.4	<2.0	<2.0	<1.4
3-1E	DS100-B2	2	5/9/2002	1015	<20.0	<1.4	<2.0	<2.0	<1.4

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	<0.5	10.7	3.0	8.9	<1.0	14.3	DS37-A1
--	--	<0.5 x	11.8 x	2.9 x	9.8 x	<1.0 x	15.1 x	DS37-A2
--	--	<0.5	10.8	5.2	5.8	<1.0	34.4	DS37-B1
--	--	<0.5 x	9.1 x	4.2 x	4.7 x	<1.0 x	31.5 x	DS37-B2
--	--	<0.5 x	3.6 x	5.9 x	9.2 x	<1.0 x	65.2 x	DS38-A1
--	--	<0.5	3.6	7.9	9.1	<1.0	99.2	DS38-B1
--	--	<0.5 x	3.9 x	8.4 x	9.5 x	<1.0 x	103 x	DS38-B2
--	--	<0.5	<0.5	2.4	<0.5	<1.0	51.8	DS39-A1
--	--	<0.5 x	<0.5 x	1.9 x	<0.5 x	<1.0 x	53.2 x	DS39-A2
--	--	<0.5	<0.5	2.2	<0.5	<1.0	43.0	DS39-B1
--	--	<0.5 x	<0.5 x	2.2 x	<0.5 x	<1.0 x	49.8 x	DS39-B2
--	--	1.7	31.7	9.5	26.1	<1.0	53.4	DS40-A1
--	--	<0.5	<0.5	2.3	<0.5	<1.0	120	DS40-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS41-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS41-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS42-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS42-B1
--	--	<3.5	<3.5	<3.5	<3.5	<5.0	<3.5	DS42-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS43-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS43-B1
--	--	1.4	23.2	29.6	180	<1.0	167	DS44-A1
--	--	1.7	15.2	46.4	104	2.1 NV	>250	DS44-B1
--	--	<2.3	11.9	37.7	82.4	<3.3	378	DS44-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS45-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS45-B1
--	--	<0.7	6.6	33.8	46.8	3.6	>250	DS46-A1
--	--	<3.5	5.4	29.9	42.7	<5.0	519	DS46-A2
--	--	<0.7	6.2	27.5	48.8	2.9	>250	DS46-B1
--	--	<2.3	7.2	32.3	60.7	<3.3	565	DS46-B2
--	--	<1.4	9.0	112	7.3	4.6	>500	DS100-A1
--	--	<3.5	16.4	200	12.4	5.9	>1,250	DS100-A2
--	--	<1.4	<1.4	2.6	<1.4	<2.0	17.6	DS100-B1
--	--	<1.4	<1.4	3.8	<1.4	<2.0	36.1	DS100-B2

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-1E	DS101-A1	1	5/9/2002	1025	<10.0	<0.7	<1.0	<1.0	<0.7
3-1E	DS101-A2	2	5/9/2002	1025	<10.0	<0.7	<1.0	<1.0	<0.7
3-1E	DS101-B1	1	5/9/2002	1025	<10.0	<0.7	<1.0	<1.0	<0.7
3-1E	DS101-B2	2	5/9/2002	1025	<10.0	<0.7	<1.0	<1.0	<0.7
3-1E	DS102-A1	1	5/9/2002	1035	<10.0	14.6	<1.0	<1.0	<0.7
3-1E	DS102-A2	2	5/9/2002	1035	<10.0	18.5	<1.0	<1.0	<0.7
3-1E	DS102-B1	1	5/9/2002	1035	<10.0	15.1	<1.0	<1.0	<0.7
3-1E	DS102-B2	2	5/9/2002	1035	<10.0	16.2	<1.0	<1.0	<0.7
3-2E	DS103-A1	1	5/8/2002	1426	<10.0	18.8	<1.0	<1.0	<0.7
3-2E	DS103-A2	2	5/8/2002	1426	<10.0	19.2	<1.0	<1.0	<0.7
3-2E	DS103-B1	1	5/8/2002	1430	<10.0	32.1	<1.0	<1.0	<0.7
3-2E	DS103-B2	2	5/8/2002	1430	<10.0	28.9	<1.0	<1.0	<0.7
3-2E	DS104-A1	NR	5/8/2002	1440	<10.0	9.3	<1.0	<1.0	<0.7
3-2E	DS104-B1	NR	5/8/2002	1443	<10.0	6.7	<1.0	<1.0	<0.7
3-2E	DS105-A1	NR	5/8/2002	1450	<10.0	5.2	<1.0	<1.0	<0.7
3-2E	DS105-B1	1	5/8/2002	1452	<10.0	7.5	<1.0	<1.0	<0.7
3-2E	DS105-B2	2	5/8/2002	1452	<10.0	7.4	<1.0	<1.0	<0.7
3-2E	DS106-A1	NR	5/8/2002	1507	<10.0	<0.7	<1.0	<1.0	<0.7
3-2E	DS106-B1	NR	5/8/2002	1510	<10.0	<0.7	<1.0	<1.0	<0.7
3-2E	DS107-A1	NR	5/8/2002	1520	<10.0	2.8	<1.0	<1.0	<0.7
3-2E	DS107-B1	NR	5/8/2002	1524	<10.0	2.3	<1.0	<1.0	<0.7
3-2E	DS108-A1	NR	5/8/2002	1530	<10.0	3.1	<1.0	<1.0	<0.7
3-2E	DS108-B1	NR	5/8/2002	1534	<10.0	2.9	<1.0	<1.0	<0.7
3-3E	DS109-A2	NR	5/9/2002	1220	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS109-B1	1	5/9/2002	1220	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS109-B2	2	5/9/2002	1220	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS110-A1	1	5/9/2002	1230	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS110-A2	2	5/9/2002	1230	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS110-B1	1	5/9/2002	1230	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS110-B2	2	5/9/2002	1230	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS111-A1	1	5/9/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS111-A2	2	5/9/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-3E	DS111-B1	1	5/9/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS101-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS101-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS101-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS101-B2
--	--	<0.7	3.6	18.2	10.0	<1.0	74.7	DS102-A1
--	--	<0.7	4.5	23.5	12.8	<1.0	118	DS102-A2
--	--	<0.7	3.3	23.8	8.8	<1.0	108	DS102-B1
--	--	<0.7	3.2	25.2	9.3	<1.0	131	DS102-B2
--	--	<0.7	<0.7	16.8	<0.7	<1.0	27.9	DS103-A1
--	--	<0.7	<0.7	16.4	<0.7	<1.0	54.0	DS103-A2
--	--	<0.7	8.6	71.4	<0.7	<1.0	70.8	DS103-B1
--	--	<0.7	7.7	68.4	<0.7	<1.0	114	DS103-B2
--	--	<0.7	<0.7	37.9	<0.7	<1.0	140	DS104-A1
--	--	<0.7	<0.7	30.1	<0.7	<1.0	84.5	DS104-B1
--	--	<0.7	0.9	12.6	0.7	<1.0	20.2	DS105-A1
--	--	<0.7	1.8	15.2	1.2	<1.0	11.9	DS105-B1
--	--	<0.7	1.6	15.4	1.1	<1.0	17.4	DS105-B2
--	--	<0.7	<0.7	1.1	<0.7	<1.0	4.2	DS106-A1
--	--	<0.7	<0.7	0.9	<0.7	<1.0	3.5	DS106-B1
--	--	<0.7	2.8	5.8	<0.7	<1.0	12.4	DS107-A1
--	--	<0.7	0.9	5.4	<0.7	<1.0	13.1	DS107-B1
--	--	<0.7	2.8	10.5	1.3	<1.0	28.5	DS108-A1
--	--	<0.7	<0.7	8.4	<0.7	<1.0	38.9	DS108-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS109-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS109-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS109-B2
--	--	<0.7	<0.7	2.9	<0.7	<1.0	6.8	DS110-A1
--	--	<0.7	<0.7	2.9	<0.7	<1.0	8.7	DS110-A2
--	--	<0.7	<0.7	2.0	<0.7	<1.0	6.0	DS110-B1
--	--	<0.7	<0.7	1.9	<0.7	<1.0	7.0	DS110-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS111-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS111-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS111-B1

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-3E	DS111-B2	2	5/9/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS112-A1	1	5/15/2002	1355	<10.0	10.1	12.8	32.9	81.0
3-4W	DS112-A2	2	5/15/2002	1355	<2,000	<140	<200	<200	<140
3-4W	DS112-B1	1	5/15/2002	1355	<10.0	10.6	14.0	34.3	86.6
3-4W	DS112-B2	2	5/15/2002	1355	<2,000	<140	<200	<200	<140
3-4W	DS113-A1	1	5/15/2002	1405	<10.0	4.0	4.1	9.5	32.6
3-4W	DS113-A2	2,MA	5/15/2002	1405	<50.0	<35.0	<50.0	<50.0	26.3
3-4W	DS113-A2	2,MA	5/15/2002	1405	<100	<7.0	<10.0	<10.0	33.4
3-4W	DS113-B1	1	5/15/2002	1445	<10.0	4.5	5.2	9.5	36.7
3-4W	DS113-B2	2,MA	5/15/2002	1405	<500	<35.0	<50.0	<50.0	<35.0
3-4W	DS113-B2	2,MA	5/15/2002	1405	<100	<7.0	<10.0	<10.0	28.6
3-4W	DS114-A1	1	5/15/2002	1415	<10.0	19.1	26.1	56.4	127
3-4W	DS114-A2	2	5/15/2002	1415	<2,000	<140	<200	<200	<140
3-4W	DS114-B1	1	5/15/2002	1415	<10.0	18.6	25.4	52.9	123
3-4W	DS114-B2	2	5/15/2002	1415	<2,000	<140	<200	<200	<140
3-4W	DS115-A1	1	5/15/2002	1425	<10.0	<0.7	<1.0	<1.0	8.8
3-4W	DS115-A2	2	5/15/2002	1425	<50.0	<3.5	<5.0	<5.0	8.2
3-4W	DS115-B1	NR	5/15/2002	1425	<10.0	<0.7	<1.0	<1.0	9.0
3-4W	DS116-A1	1	5/15/2002	1435	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS116-A2	2	5/15/2002	1435	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS116-B1	1	5/15/2002	1435	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS116-B2	2	5/15/2002	1435	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS117-A1	1	5/15/2002	1445	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS117-A2	2	5/15/2002	1445	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS117-B1	1	5/15/2002	1445	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS117-B2	2	5/15/2002	1445	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	DS118-A1	1	5/15/2002	1045	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	DS118-A2	2	5/15/2002	1045	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	DS118-B1	NR	5/15/2002	1045	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	DS119-A1	NR	5/15/2002	1055	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	DS119-B1	1	5/15/2002	1055	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	DS119-B2	2	5/15/2002	1055	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS111-B2
--	--	>250	99.3	4.7	1.2	<1.0	<0.7	DS112-A1
--	--	1,280	<140	<140	<140	<200	<140	DS112-A2
--	--	>250	110	6.1	1.7	<1.0	<0.7	DS112-B1
--	--	1,330	<140	<140	<140	<200	<140	DS112-B2
--	--	>250	>250	>250	12.0	24.8	>250	DS113-A1
--	--	445	1,090	207	<35.0	<50.0	260	DS113-A2
--	--	585	1,510	311	7.7	15.9	389	DS113-A2
--	--	>250	>250	>250	15.5	35.9	>250	DS113-B1
--	--	710	1,140	229	<35.0	<50.0	245	DS113-B2
--	--	834	1,480	318	<7.0	26.0	486	DS113-B2
--	--	>250	>250	3.6	<0.7	<1.0	<0.7	DS114-A1
--	--	4,180	<140	<140	<140	<200	<140	DS114-A2
--	--	>250	>250	4.2	<0.7	<1.0	<0.7	DS114-B1
--	--	3,880	<140	<140	<140	<200	<140	DS114-B2
--	--	5.0	38.4	>250	8.9	4.2	150	DS115-A1
--	--	<3.5	34.7	499	7.8	<5.0	148	DS115-A2
--	--	3.8	33.4	218	3.7	1.0	100	DS115-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS116-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS116-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS116-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS116-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS117-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS117-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS117-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS117-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS118-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS118-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS118-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS119-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS119-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS119-B2

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-6E	DS120-A1	1	5/15/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS120-A2	2	5/15/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS120-B1	1	5/15/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS120-B2	2	5/15/2002	1240	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS121-A1	1	5/15/2002	1250	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS121-A2	2	5/15/2002	1250	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS121-B1	1	5/15/2002	1250	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS121-B2	2	5/15/2002	1250	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS122-A1	NR	5/15/2002	1300	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS122-B1	NR	5/15/2002	1300	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS123-A1	NR	5/15/2002	1310	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS123-B1	NR	5/15/2002	1310	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS124-A1	NR	5/15/2002	1320	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS124-B1	NR	5/15/2002	1320	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS125-A1	NR	5/15/2002	1330	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	DS125-B1	NR	5/15/2002	1330	<10.0	<0.7	<1.0	<1.0	<0.7
3-7E	DS126-A1	NR	5/15/2002	1015	<10.0	<0.7	<1.0	<1.0	<0.7
3-7E	DS126-B1	NR	5/16/2002	1015	<10.0	0.9	<1.0	<1.0	<0.7
3-7E	DS127-A1	1	5/16/2002	1005	<10.0	1.6	<1.0	<1.0	36.6
3-7E	DS127-A2	2	5/16/2002	1005	<20.0	<1.4	<2.0	<2.0	34.0
3-7E	DS127-B1	1	5/16/2002	1005	<10.0	1.5	<1.0	<1.0	27.0
3-7E	DS127-B2	2	5/16/2002	1005	<33.3	<2.3	<3.3	<3.3	26.4
3-7E	DS128-A1	1	5/16/2002	1000	<10.0	<0.7	<1.0	<1.0	<0.7
3-7E	DS128-A2	2	5/16/2002	1000	<50.0	<3.5	<5.0	<5.0	<3.5
3-8W	DS129-A1	NR	5/16/2002	0935	<10.0	<0.7	<1.0	<1.0	<0.7
3-8W	DS129-B1	NR	5/16/2002	0935	<10.0	<0.7	<1.0	<1.0	<0.7
3-8W	DS130-A1	1	5/16/2002	0940	<10.0	<0.7	<1.0	<1.0	<0.7
3-8W	DS130-A2	2	5/16/2002	0940	<10.0	<0.7	<1.0	<1.0	<0.7
3-8W	DS130-B1	NR	5/16/2002	0940	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS131-A1	NR	5/16/2002	0925	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS131-B1	1	5/16/2002	0925	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS131-B2	2	5/16/2002	0925	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS132-A1	1	5/16/2002	0900	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS132-A2	2	5/16/2002	0900	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dicloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS120-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS120-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS120-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS120-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS121-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS121-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS121-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS121-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS122-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS122-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS123-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS123-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS124-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS124-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS125-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS125-B1
--	--	<0.7	<0.7	2.4	<0.7	<1.0	15.6	DS126-A1
--	--	<0.7	<0.7	14.9	<0.7	<1.0	73.7	DS126-B1
--	--	217	>250	199	11.5	1.8	24.7	DS127-A1
--	--	196	251	187	10.6	<2.0	21.9	DS127-A2
--	--	>250	>250	228	11.1	2.7	49.6	DS127-B1
--	--	269	301	209	10.0	<3.3	39.6	DS127-B2
--	--	<0.7	<0.7	>250	<0.7	1.7	>250	DS128-A1
--	--	<3.5	<3.5	376	<3.5	<5.0	490	DS128-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	1.3	DS129-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS129-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS130-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS130-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS130-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS131-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS131-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS131-B2
--	--	<0.7	<0.7	0.9	<0.7	<1.0	1.6	DS132-A1
--	--	<0.7	<0.7	1.0	<0.7	<1.0	2.8	DS132-A2

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-9W	DS133-A1	NR	5/16/2002	0905	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS133-B1	NR	5/16/2002	0905	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS134-A1	1	5/16/2002	0855	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS134-A2	2	5/16/2002	0855	<50.0	<3.5	<5.0	<5.0	<3.5
3-9W	DS134-B1	1	5/16/2002	0855	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	DS134-B2	2	5/16/2002	0855	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS135-A1	NR	5/8/2002	1337	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS135-B1	NR	5/8/2002	1340	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS136-A1	NR	5/8/2002	1325	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS136-B1	1	5/8/2002	1330	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS136-B2	2	5/8/2002	1330	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS137-A1	NR	5/8/2002	1317	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS137-B1	1	5/8/2002	1319	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS137-B2	2	5/8/2002	1319	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS138-A1	NR	5/8/2002	1250	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS138-B1	NR	5/8/2002	1253	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS139-A1	1	5/8/2002	1303	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS139-A2	2	5/8/2002	1303	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS139-B1	1	5/8/2002	1307	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS139-B2	2	5/8/2002	1307	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS140-A1	NR	5/8/2002	1221	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS140-B1	1	5/8/2002	1223	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS140-B2	2	5/8/2002	1223	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS141-A1	NR	5/8/2002	1214	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS141-B1	NR	5/8/2002	1212	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS142-A2	NR	5/8/2002	1230	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS142-B1	1	5/8/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS142-B2	2	5/8/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS143-A1	NR	5/8/2002	1237	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	DS143-B1	NR	5/8/2002	1239	<10.0	<0.7	<1.0	<1.0	<0.7
3-11E	DS144-A1	1	5/9/2002	0850	<10.0	<0.7	<1.0	<1.0	<0.7
3-11E	DS144-A2	2	5/9/2002	0850	<10.0	<0.7	<1.0	<1.0	<0.7
3-11E	DS144-B1	1	5/9/2002	0851	<10.0	<0.7	<1.0	<1.0	<0.7
3-11E	DS144-B2	2	5/9/2002	0851	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	1.2	3.6	3.2	<0.7	<1.0	1.3	DS133-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS133-B1
--	--	<0.7	<0.7	0.8	<0.7	<1.0	<0.7	DS134-A1
--	--	<3.5	<3.5	<3.5	<3.5	<5.0	<3.5	DS134-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS134-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS134-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS135-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS135-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS136-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS136-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS136-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS137-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS137-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS137-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS138-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS138-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS139-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS139-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS139-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS139-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS140-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS140-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS140-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS141-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS141-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS142-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS142-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS142-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS143-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS143-B1
--	--	<0.7	1.6	5.0	4.1	<1.0	13.4	DS144-A1
--	--	<0.7	1.4	4.7	4.1	<1.0	13.5	DS144-A2
--	--	<0.7	<0.7	1.9	1.5	<1.0	4.7	DS144-B1
--	--	<0.7	<0.7	1.8	1.4	<1.0	5.5	DS144-B2

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-12E	DS145-A1	1	5/9/2002	0900	<10.0	<0.7	<1.0	<1.0	<0.7
3-12E	DS145-A2	2	5/9/2002	0900	<10.0	<0.7	<1.0	<1.0	<0.7
3-12E	DS145-B1	1	5/9/2002	0901	<10.0	<0.7	<1.0	<1.0	<0.7
3-12E	DS145-B2	2	5/9/2002	0901	<10.0	<0.7	<1.0	<1.0	<0.7
3-13E	DS146-A1	1	5/9/2002	0928	<10.0	<0.7	<1.0	<1.0	<0.7
3-13E	DS146-A2	2	5/9/2002	0928	<10.0	<0.7	<1.0	<1.0	<0.7
3-13E	DS146-B1	1	5/9/2002	0929	<10.0	<0.7	<1.0	<1.0	<0.7
3-13E	DS146-B2	2	5/9/2002	0927	<10.0	<0.7	<1.0	<1.0	<0.7
3-14E	DS147-A1	NR	5/9/2002	0935	<10.0	<0.7	<1.0	<1.0	<0.7
3-14E	DS147-B1	1	5/9/2002	0936	<10.0	<0.7	<1.0	<1.0	<0.7
3-14E	DS147-B2	2	5/9/2002	0936	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS148-A1	NR	5/16/2002	1105	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS148-B1	NR	5/16/2002	1105	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS149-A1	NR	5/16/2002	1100	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS149-B1	1	5/16/2002	1100	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS149-B2	2	5/16/2002	1100	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS150-A1	1	5/16/2002	1050	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS150-A2	2	5/16/2002	1050	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS150-B1	NR	5/16/2002	1050	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS151-A1	NR	5/16/2002	1045	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS151-B1	NR	5/16/2002	1045	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS152-A1	NR	5/16/2002	1040	<10.0	<0.7	<1.0	<1.0	<0.7
3-4W	DS152-B1	NR	5/16/2002	1040	<10.0	<0.7	<1.0	<1.0	<0.7
4-1E	DS250-A1	1	5/8/2002	1005	<10.0	<0.7	<1.0	<1.0	<0.7
4-1E	DS250-A2	2	5/8/2002	1005	<10.0	<0.7	<1.0	<1.0	<0.7
4-1E	DS250-B1	1	5/8/2002	1008	<10.0	<0.7	<1.0	<1.0	<0.7
4-1E	DS250-B2	2	5/8/2002	1008	<10.0	<0.7	<1.0	<1.0	<0.7
4-2W	DS251-A1	NR	5/8/2002	0940	<10.0	<0.7	<1.0	<1.0	<0.7
4-2W	DS251-B1	NR	5/8/2002	0950	<10.0	<0.7	<1.0	<1.0	<0.7
4-3E	DS252-A1	NR	5/8/2002	0920	<10.0	<0.7	<1.0	<1.0	<0.7
4-3E	DS252-B1	1	5/8/2002	0920	<10.0	<0.7	<1.0	<1.0	<0.7
4-3E	DS252-B2	2	5/8/2002	0920	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS145-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS145-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS145-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS145-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS146-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS146-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS146-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS146-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS147-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS147-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS147-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS148-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS148-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS149-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS149-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS149-B2
--	--	<0.7	<0.7	1.4	<0.7	<1.0	0.8	DS150-A1
--	--	<0.7	<0.7	1.2	<0.7	<1.0	<0.7	DS150-A2
--	--	<0.7	<0.7	1.2	<0.7	<1.0	<0.7	DS150-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS151-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS151-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS152-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS152-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS250-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS250-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS250-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS250-B2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS251-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS251-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS252-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS252-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS252-B2

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
4-4E	DS253-A1	1	5/8/2002	0857	<10.0	<0.7	<1.0	<1.0	<0.7
4-4E	DS253-A2	2	5/8/2002	0857	<10.0	<0.7	<1.0	<1.0	<0.7
4-4E	DS253-B1	1	5/8/2002	0853	<10.0	<0.7	<1.0	<1.0	<0.7
4-4E	DS253-B2	2	5/8/2002	0853	<10.0	<0.7	<1.0	<1.0	<0.7
March 2002 -- Surface-water samples [SWDS01, surface-water sample collected near passive-diffusion sampler location 1; -1 ,primary sample; -2, secondary sample]									
1-1W	SWDS01-1	NR	4/9/2002	1220	<10.0	<0.5	<0.5	<1.0	<0.5
1-2E	SWDS04-1	NR	4/9/2002	1223	<10.0	<0.5	<0.5	<1.0	<0.5
1-3W	SWDS06-1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-1W	SWDS16-1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-2E	SWDS19-1	1	4/9/2002	1538	<12.5	<0.6	<0.6	<1.2	<0.6
2-2E	SWDS19-2	2	4/9/2002	1538	<10.0	<0.5	<0.5	<1.0	<0.5
2-3E	SWDS20-1	NR	4/9/2002	--	<10.0	<0.5	<0.5	<1.0	<0.5
2-4W	SWDS26-1	1	4/10/2002	1119	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-4W	SWDS26-2	2	4/10/2002	1119	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-5E	SWDS30-1	NR	4/10/2002	1120	<10.0 x	<0.5 x	<0.5 x	<1.0 x	7.6 x
2-6W	SWDS33-1	NR	4/10/2002	1050	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-6W	SWDS36-1	NR	4/10/2002	1000	<10.0 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x
2-7W	SWDS38-1	NR	4/10/2002	0917	<10.0 x	4.0 x	<0.5 x	<1.0 x	<0.5 x
2-4W	SWDS41-1	NR	5/15/2002	0940	<10.0	<0.7	<1.0	<1.0	<0.7
2-4W	SWDS43-1	NR	5/15/2002	0950	<10.0	<0.7	<1.0	<1.0	<0.7
2-3E	SWDS45-1	NR	5/15/2002	0835	<10.0	<0.7	<1.0	<1.0	1.4
3-1E	SWDS100-1	NR	5/9/2002	1015	<10.0	<0.7	<1.0	<1.0	3.7
3-1E	SWDS101-1	NR	5/9/2002	1025	<10.0	<0.7	<1.0	<1.0	1.7
3-1E	SWDS102-1	NR	5/9/2002	1035	<10.0	<0.7	<1.0	<1.0	3.1
3-2E	SWDS104-1	NR	5/8/2002	1447	<10.0	4.3	<1.0	<1.0	<0.7
3-2E	SWDS107-1	NR	5/8/2002	1502	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS253-A1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS253-A2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS253-B1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	DS253-B2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	SWDS01-1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	SWDS04-1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	SWDS06-1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	SWDS16-1
--	--	<0.6	<0.6	<0.6	<0.6	<1.2	<0.6	SWDS19-1
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	SWDS19-2
--	--	<0.5	<0.5	<0.5	<0.5	<1.0	<0.5	SWDS20-1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	SWDS26-1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	SWDS26-2
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	SWDS30-1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	SWDS33-1
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<1.0 x	<0.5 x	SWDS36-1
--	--	<0.5 x	6.6 x	5.5 x	24.4 x	<1.0 x	26.7 x	SWDS38-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS41-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS43-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS45-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS100-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS101-1
--	--	1.0	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS102-1
--	--	<0.7	3.2	5.8	1.2	<1.0	<0.7	SWDS104-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS107-1

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-3E	SWDS109-1	NR	5/9/2002	1245	<10.0	<0.7	<1.0	<1.0	3.0
3-4W	SWDS112-1	NR	5/15/2002	1355	<10.0	<0.7	<1.0	<1.0	6.2
3-4W	SWDS114-1	1	5/15/2002	1415	<10.0	3.5	4.9	13.9	35.0
3-4W	SWDS114-2	2	5/15/2002	1415	<1,000	<70.0	<100	<100	<70.0
3-4W	SWDS114-2	2, MA	5/15/2002	1415	<100	<7.0	<10.0	14.1	44.2
3-4W	SWDS117-1	NR	5/15/2002	1445	<10.0	<0.7	<1.0	<1.0	<0.7
3-5E	SWDS118-1	1	5/15/2002	1045	<10.0	17.2	3.4	<1.0	1.6
3-5E	SWDS118-2	2	5/15/2002	1045	<200	<14.0	<20.0	<20.0	<14.0
3-6E	SWDS120-1	NR	5/15/2002	1110	<10.0	<0.7	<1.0	<1.0	<0.7
3-6E	SWDS123-1	NR	5/15/2002	1120	<10.0	<0.7	<1.0	<1.0	<0.7
3-7E	SWDS127-1	NR	5/16/2002	1030	<10.0	<0.7	<1.0	<1.0	<0.7
3-7E	SWDS128-2	NR	5/16/2002	1025	<10.0	<0.7	<1.0	<1.0	<0.7
3-9W	SWDS134-1	NR	5/16/2002	0850	<10.0	<0.7	<1.0	<1.0	2.6
3-10E	SWDS136-1	NR	5/8/2002	1155	<10.0	<0.7	<1.0	<1.0	<0.7
3-10E	SWDS141-1	NR	5/8/2002	1200	<10.0	<0.7	<1.0	<1.0	<0.7
3-11E	SWDS144-1	NR	5/9/2002	--	<10.0	<0.7	<1.0	<1.0	18.9
3-12E	SWDS145-1	1	5/9/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
3-12E	SWDS145-2	2	5/9/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
3-13E	SWDS146-1	NR	5/9/2002	0920	<10.0	<0.7	<1.0	<1.0	<0.7
3-14E	SWDS147-1	1	5/9/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
3-14E	SWDS147-2	2	5/9/2002	--	<10.0	<0.7	<1.0	<1.0	1.1
4-1E	SWDS250-1	NR	5/8/2002	1010	<10.0	<0.7	<1.0	<1.0	<0.7
4-2W	SWDS251-1	NR	5/8/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
4-3E	SWDS252-1	NR	5/8/2002	0924	<10.0	<0.7	<1.0	<1.0	<0.7
4-4E	SWDS253-1	NR	5/8/2002	0853	<10.0	<0.7	<1.0	<1.0	<0.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	1.1	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS109-1
--	--	4.9	1.0	<0.7	<0.7	<1.0	<0.7	SWDS112-1
--	--	>250	89.6	0.8	<0.7	<1.0	<0.7	SWDS114-1
--	--	587	<70.0	<70.0	<70.0	<100	<70.0	SWDS114-2
--	--	915	127	<7.0	<7.0	<10.0	<7.0	SWDS114-2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS117-1
--	--	15.7	18.9	73.8	3.5	<1.0	60.3	SWDS118-1
--	--	<14.0	<14.0	47.0	<14.0	<20.0	<14.0	SWDS118-2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS120-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS123-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS127-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS128-2
--	--	1.3	1.0	<0.7	<0.7	<1.0	<0.7	SWDS134-1
--	--	<0.7	3.5	<0.7	<0.7	<1.0	<0.7	SWDS136-1
--	--	<0.7	2.6	<0.7	<0.7	<1.0	<0.7	SWDS141-1
--	--	<0.7	<0.7	6.6	4.8	<1.0	<0.7	SWDS144-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS145-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS145-2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS146-1
--	--	<0.7	4.1	37.6	<0.7	<1.0	82.6	SWDS147-1
--	--	<0.7	4.0	38.3	<0.7	<1.0	73.7	SWDS147-2
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS250-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS251-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS252-1
--	--	<0.7	<0.7	<0.7	<0.7	<1.0	<0.7	SWDS253-1

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	
March 2002 -- Quality-Control and Quality-Assurance Samples [CB, construction blank; DP, deployment blank; EB, equipment blank; TB, trip blank; -G, ground water, -S or -S(1) or -1S, surface water]										
-	CB031102	NR	3/11/2002	--	<10.0	x	<0.5	x	<0.5	x
-	DP031202	NR	3/12/2002	--	<10.0	x	<0.5	x	<0.5	x
-	CB040802	NR	4/8/2002	0735	<10.0		<0.5		<1.0	
-	DP040802	NR	4/8/2002	0941	<10.0		<0.5		<1.0	
-	DP040902	1	4/9/2002	0917	<10.0		<0.5		<1.0	
-	DP040902	2	4/9/2002	--	<10.0		<0.5		<1.0	
-	CB041602	NR	4/16/2002	0855	<10.0		0.9		<1.0	
-	DP041002	NR	4/10/2002	--	<10.0		<0.5		<1.0	
-	DP041602	NR	4/16/2002	1431	<10.0		<0.5		<1.0	
-	DP041702	NR	4/17/2002	0933	<10.0		<0.5		<1.0	
-	DP041902	NR	4/19/2002	0930	<10.0		<0.5		<1.0	
-	DP031202	NR	3/12/2002	--	<10.0	x	<0.5	x	<0.5	x
-	DP031202-G	NR	3/12/2002	--	<10.0	x	1.0	x	<0.5	x
-	EB040802	NR	4/8/2002	1537	<10.0		<0.5		<1.0	
-	EB040902-G	NR	4/9/2002	1050	<10.0		<0.5		<1.0	
-	EB040902-S	NR	4/9/2002	--	<10.0		<0.5		<1.0	
-	EB041002-G	1	4/10/2002	--	<10.0		<0.5		<1.0	
-	EB041002-G	2	4/10/2002	--	<10.0	x	<0.5	x	<0.5	x
-	EB041002-S	NR	4/10/2002	1024	<10.0		<0.5		<1.0	
-	EB041602	1	4/16/2002	1613	<10.0		<0.5		<1.0	
-	EB041602	2	4/16/2002	1613	<10.0		<0.5		<1.0	
-	EB041902	1	4/19/2002	1130	<10.0		<0.5		<1.0	
-	EB041902	2	4/19/2002	1130	<10.0		<0.5		<1.0	
-	EB050802-S(1)	NR	5/8/2002	1201	<10.0		<0.7		<1.0	
-	EB0515S2	2	5/15/2002	0830	<10.0		<0.7		<1.0	
-	EB160502-1S	NR	5/16/2002	0830	<10.0		<0.7		<1.0	
-	TB040802	1	4/8/2002	--	<10.0		<0.5		<1.0	
-	TB040802	2	4/8/2002	--	<10.0		<0.5		<1.0	
-	TB041002	NR	4/10/2002	--	<10.0		<0.5		<1.0	
-	TB041602	NR	4/16/2002	0857	<10.0		<0.5		<1.0	
-	TB041702	NR	4/17/2002	0830	<10.0		<0.5		<1.0	
-	TB041902	NR	4/19/2002	0730	<10.0		<0.5		<1.0	
-	TB050802-S(1)	NR	5/8/2002	0652	<10.0		<0.7		<1.0	

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dicloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name		
--	--	<0.5	x	<0.5	x	<0.5	x	<1.0	x	CB031102
--	--	<0.5	x	<0.5	x	<0.5	x	<1.0	x	DP031202
--	--	<0.5		<0.5		<0.5		<1.0		CB040802
--	--	<0.5		<0.5		<0.5		<1.0		DP040802
--	--	<0.5		<0.5		<0.5		<1.0		DP040902
--	--	<0.5		<0.5		<0.5		<1.0		DP040902
--	--	<0.5		<0.5		<0.5		<1.0		CB041602
--	--	<0.5		<0.5		<0.5		<1.0		DP041002
--	--	<0.5		<0.5		<0.5		<1.0		DP041602
--	--	<0.5		<0.5		<0.5		<1.0		DP041702
--	--	<0.5		<0.5		<0.5		<1.0		DP041902
--	--	<0.5	x	<0.5	x	<0.5	x	<1.0	x	DP031202
--	--	<0.5	x	<0.5	x	<0.5	x	<1.0	x	DP031202-G
--	--	<0.5		<0.5		<0.5		<1.0		EB040802
--	--	<0.5		<0.5		<0.5		<1.0		EB040902-G
--	--	<0.5		<0.5		<0.5		<1.0		EB040902-S
--	--	<0.5		<0.5		<0.5		<1.0		EB041002-G
--	--	<0.5	x	<0.5	x	<0.5	x	<1.0	x	EB041002-G
--	--	<0.5		<0.5		<0.5		<1.0		EB041002-S
--	--	<0.5		<0.5		<0.5		<1.0		EB041602
--	--	<0.5		<0.5		<0.5		<1.0		EB041602
--	--	<0.5		<0.5		<0.5		<1.0		EB041902
--	--	<0.5		<0.5		<0.5		<1.0		EB041902
--	--	<0.7		<0.7		<0.7		<1.0		EB050802-S(1)
--	--	<0.7		<0.7		<0.7		<1.0		EB0515S2
--	--	<0.7		<0.7		<0.7		<1.0		EB160502-1S
--	--	<0.5		<0.5		<0.5		<1.0		TB040802
--	--	<0.5		<0.5		<0.5		<1.0		TB040802
--	--	<0.5		<0.5		<0.5		<1.0		TB041002
--	--	<0.5		<0.5		<0.5		<1.0		TB041602
--	--	<0.5		<0.5		<0.5		<1.0		TB041702
--	--	<0.5		<0.5		<0.5		<1.0		TB041902
--	--	<0.7		<0.7		<0.7		<1.0		TB050802-S(1)

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
-	TB050902-1	NR	5/9/2002	--	<10.0	<0.7	<1.0	<1.0	<0.7
-	TB051502-1	NR	5/15/2002	0720	<10.0	<0.7	<1.0	<1.0	<0.7
-	TB051602-1	NR	5/16/2002	0800	<10.0	<0.7	<1.0	<1.0	<0.7
March 2003 -- Quality-Control and Quality-Assurance Samples [CB, construction blank; DB or DP, deployment blank; EB, equipment blank; -1, primary sample; -2, secondary sample]									
-	CB031303-1	NR	3/13/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	DP031303-1	NR	3/13/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	CB031403-1	NR	3/14/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP031403-1	NR	3/14/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	CB032403-1	NR	3/24/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP032503-1	NR	3/25/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	CB032603-1	NR	3/26/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP032603-1	1	3/26/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP032603-2	2	3/26/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP032703-1	NR	3/27/2003	--	<0.5	<0.5	<0.5	<0.5	6.3
-	CB032803-1	NR	3/28/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP033003-1	NR	3/30/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	DP033103-1	NR	3/31/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	EB031303-1	NR	3/13/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	EBSW040403-1	NR	4/3/2003	0800	<0.5	<0.5	<0.5	<0.5	<0.5
March 2003 -- Passive-Diffusion Samples [DS47, passive-diffusion sampler location 47; -A1, bag A primary sample; -B2, bag B secondary sample; a, second sample from bottle; b, third sample from bottle; Z, multiple analysis of sample]									
2-3E	DS47-A1	NR	4/4/2003	0950	<2.5	<2.5	<2.5	<2.5	<2.5
2-3E	DS47-B1	NR	4/4/2003	0950	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS48-A1	NR	4/4/2003	0955	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS48-B1	1	4/4/2003	0955	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS48-B2	2	4/4/2003	0955	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS49-A1	NR	4/4/2003	1000	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS49-B1	NR	4/4/2003	1000	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS50-A1	NR	4/4/2003	1005	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS50-B1	NR	4/4/2003	1005	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS51-A1	NR	4/4/2003	1010	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS51-B1	NR	4/4/2003	1010	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS52-A1	NR	4/4/2003	1015	<1.7	<1.7	<1.7	<1.7	<1.7

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
2-3E	DS52-B1	NR	4/4/2003	1015	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS53-A1	1	4/4/2003	1020	<2.5	<2.5	<2.5	<2.5	<2.5
2-3E	DS53-A2	2	4/4/2003	1020	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
2-3E	DS53-B1	1	4/4/2003	1020	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS53-B2	2	4/4/2003	1020	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
2-3E	DS54-A1	1	4/4/2003	0905	<0.5	5.4	<0.5	<0.5	1.5
2-3E	DS54-A2	2	4/4/2003	0905	<0.5 x	5.6 x	<0.5 x	<0.5 x	<0.5 x
2-3E	DS54-B1	1	4/4/2003	0905	<2.5	5.0	<2.5	<2.5	<2.5
2-3E	DS54-B2	2	4/4/2003	0905	<0.5 x	5.2 x	<0.5 x	<0.5 x	<0.5 x
2-3E	DS55-A1	1	4/4/2003	0910	<2.5	<2.5	<2.5	<2.5	<2.5
2-3E	DS55-A2	2	4/4/2003	0910	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS55-B1	NR	4/4/2003	0910	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS56-A1	NR	4/4/2003	0915	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS56-B1	NR	4/4/2003	0915	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS57-A1	NR	4/4/2003	0920	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS57-B1	NR	4/4/2003	0920	<0.5	<0.5	<0.5	<0.5	<0.5
2-3E	DS58-A1	NR	4/4/2003	0925	<1.7	<1.7	<1.7	<1.7	<1.7
2-3E	DS58-B1	NR	4/4/2003	0925	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS59-A1	NR	4/4/2003	1110	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS59-B1	NR	4/4/2003	1110	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS60-A1	NR	4/4/2003	1115	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS60-B1	NR	4/4/2003	1115	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS61-A1	NR	4/4/2003	1120	<1.7	6.7	<1.7	<1.7	<1.7
2-7W	DS61-B1	NR	4/4/2003	1120	<0.5	6.9	<0.5	<0.5	<0.5
2-7W	DS62-A1	NR	4/4/2003	1125	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS62-B1	NR	4/4/2003	1125	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS63-A1	NR	4/4/2003	1130	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS63-B1	NR	4/4/2003	1130	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS64-A1	1	4/4/2003	1135	<1.7	5.6	<1.7	<1.7	<1.7
2-7W	DS64-A2	2	4/4/2003	1135	<0.5	5.3	<0.5	<0.5	<0.5
2-7W	DS64-B1	NR	4/4/2003	1135	<0.5	5.3	<0.5	<0.5	<0.5
2-7W	DS65-A1	1	4/4/2003	1140	<10.0	<10.0	<10.0	<10.0	<10.0
2-7W	DS65-A2	2	4/4/2003	1140	<0.5 x	7.5 x	3.2 x	<0.5 x	24.1 x

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS52-B1
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	33.1	DS53-A1
-- x	<0.5 x	-- x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	33.8 x	DS53-A2
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	23.7	DS53-B1
-- x	<0.5 x	-- x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	25.7 x	DS53-B2
--	<0.5	--	0.6	3.0	3.6	<0.5	9.8	DS54-A1
-- x	<0.5 x	-- x	0.7 x	3.0 x	3.8 x	<0.5 x	9.8 x	DS54-A2
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	4.2	DS54-B1
-- x	<0.5 x	-- x	0.7 x	2.8 x	3.1 x	<0.5 x	9.5 x	DS54-B2
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	DS55-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS55-A2
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS55-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS56-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS56-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS57-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS57-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS58-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS58-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS59-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS59-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS60-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS60-B1
--	<1.7	--	<1.7	6.7	<1.7	<1.7	122	DS61-A1
--	<0.5	--	<0.5	6.9	<0.5	1.4	121	DS61-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	14.8	DS62-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	15.6	DS62-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS63-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	3.1	DS63-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	4.0	DS64-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	6.0	DS64-A2
--	<0.5	--	<0.5	1.0	<0.5	<0.5	7.0	DS64-B1
--	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0	DS65-A1
-- x	<0.5 x	-- x	8.4 x	2.6 x	5.5 x	<0.5 x	9.1 x	DS65-A2

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
2-7W	DS65-B1	1	4/4/2003	1140	<0.5	5.2	3.2	<0.5	35.5
2-7W	DS65-B2	2	4/4/2003	1140	<0.5 x	5.3 x	3.3 x	<0.5 x	37.8 x
2-7W	DS66-A1	NR	4/4/2003	0830	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS66-B1	NR	4/4/2003	0830	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS67-A1	NR	4/4/2003	0840	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS67-B1	1	4/4/2003	0840	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS67-B2	2	4/4/2003	0840	<0.5	<0.5	<0.5	<0.5	<0.5
2-7W	DS68-A1	NR	4/4/2003	0850	<1.7	<1.7	<1.7	<1.7	<1.7
2-7W	DS68-B1	NR	4/4/2003	0850	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS153-A1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS153-B1	NR	4/3/2003	0925	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS154-A1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS154-B1	1	4/3/2003	0931	<2.5	<2.5	<2.5	<2.5	<2.5
3-1E	DS154-B2	2	4/3/2003	0935	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS155-A1	NR	4/3/2003	0944	<2.5	<2.5	<2.5	<2.5	<2.5
3-1E	DS155-B1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS156-A1	NR	4/3/2003	--	<2.5	<2.5	<2.5	<2.5	<2.5
3-1E	DS156-B1	NR	4/3/2003	0950	<2.5	<2.5	<2.5	<2.5	<2.5
3-1E	DS157-A1	NR	4/3/2003	0958	<0.5	7.3	34.9	<0.5	131
3-1E	DS157-B1	NR	4/3/2003	--	<0.5	8.9	36.7	<0.5	114
3-1E	DS158-A1	1	4/3/2003	--	<0.5	2.2	<0.5	<0.5	<0.5
3-1E	DS158-A2	2	4/3/2003	1007	<0.5	2.2	<0.5	<0.5	<0.5
3-1E	DS158-B1	NR	4/3/2003	1002	<0.5	2.2	<0.5	<0.5	2.4
3-1E	DS159-A1	NR	4/3/2003	--	<0.5	6.0	11.5	<0.5	21.3
3-1E	DS159-B1	NR	4/3/2003	1008	<0.5	<0.5	<0.5	<0.5	<0.5
3-1E	DS160-A1	NR	4/3/2003	--	<0.5	2.0	<0.5	<0.5	<0.5
3-1E	DS160-B1	NR	4/3/2003	--	<0.5	2.1	<0.5	<0.5	<0.5
3-1E	DS161-A1	1	4/3/2003	1022	<0.5	<0.5	32.9	<0.5	>250
3-1E	DS161-A2	2	4/3/2003	1022	<2.5 x	<2.5 x	32.5 x	<2.5 x	396 x
3-1E	DS161-B1	1	4/3/2003	--	<2.5	<2.5	39.4	<2.5	476
3-1E	DS161-B2	2	4/3/2003	1022	<2.5 x	<2.5 x	40.7 x	<2.5 x	505 x
3-1E	DS162-A1	NR	4/3/2003	1027	<0.5	3.7	12.0	<0.5	23.6
3-1E	DS162-B1	1	4/3/2003	--	<0.5	2.3	17.0	<0.5	64.1
3-1E	DS162-B2	2	4/3/2003	1029	<0.5	2.4	17.0	<0.5	66.9

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	<0.5	--	9.8	2.0	5.2	<0.5	4.3	DS65-B1
-- x	<0.5 x	-- x	10.1 x	1.8 x	5.4 x	<0.5 x	5.0 x	DS65-B2
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS66-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS66-B1
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS67-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS67-B1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS67-B2
--	<1.7	--	<1.7	<1.7	<1.7	<1.7	<1.7	DS68-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS68-B1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS153-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS153-B1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	6.2	DS154-A1
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	DS154-B1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	5.7	DS154-B2
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	DS155-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS155-B1
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	DS156-A1
--	<2.5	--	<2.5	<2.5	<2.5	<2.5	<2.5	DS156-B1
--	<0.5	--	22.4	54.4	169	2.6	249	DS157-A1
--	<0.5	--	22.9	55.2	167	2.4	232	DS157-B1
--	<0.5	--	1.0	64.3	10.7	<0.5	153	DS158-A1
--	<0.5	--	1.0	63.1	10.5	<0.5	155	DS158-A2
--	<0.5	--	1.5	52	9.8	<0.5	114	DS158-B1
--	<0.5	--	3.7	45.7	43.3	<0.5	>250	DS159-A1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	DS159-B1
--	<0.5	--	<0.5	3.4	<0.5	<0.5	7.2	DS160-A1
--	<0.5	--	<0.5	3.5	<0.5	<0.5	7.7	DS160-B1
--	<0.5	--	71.2	225	227	7.2	>250	DS161-A1
-- x	<2.5 x	-- x	74.6 x	247 x	258 x	6.3 x	856 x	DS161-A2
--	<2.5	--	86.7	260	281	7.0	785	DS161-B1
-- x	<2.5 x	-- x	88.9 x	254 x	282 x	6.2 x	842 x	DS161-B2
--	<0.5	--	7.3	29.7	8.9	<0.5	123	DS162-A1
--	<0.5	--	10.1	37.8	9.9	<0.5	134	DS162-B1
--	<0.5	--	10.0	36.0	9.5	<0.5	148	DS162-B2

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	DS163-A1	1	4/3/2003	--	<10.0	<10.0	<10.0	<10.0	<10.0
3-4W	DS163-A2	2	4/3/2003	1359	<2.5 x	<2.5 x	<2.5 x	<2.5 x	34.6 x
3-4W	DS163-B1	1	4/3/2003	--	<50.0	<50.0	<50.0	<50.0	<50.0
3-4W	DS163-B2	2	4/3/2003	1359	<2.5 x	<2.5 x	<2.5 x	7.0 x	32.9 x
3-4W	DS164-A1	NR	4/3/2003	1335	<100	<100	<100	<100	<100
3-4W	DS164-B1	1	4/3/2003	1335	<33.3	<33.3	<33.3	<33.3	<33.3
3-4W	DS164-B2	2	4/3/2003	--	<50.0	<50.0	<50.0	<50.0	<50.0
3-4W	DS165-A1	1	4/3/2003	1329	<100	<100	<100	<100	<100
3-4W	DS165-A2	2	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS165-B1	NR	4/3/2003	1330	<10.0	<10.0	<10.0	<10.0	<10.0
3-4W	DS166-A1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS166-B1	NR	4/3/2003	1405	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS167-A1	NR	4/3/2003	1341	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS167-B1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS168-A1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS169-A1	NR	4/3/2003	1348	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS169-B1	NR	4/3/2003	1350	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS170-A1	NR	4/3/2003	1409	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS171-A1	1	4/3/2003	1417	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS171-A2	2	4/3/2003	1417	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS171-B1	1	4/3/2003	1419	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS171-B2	2	4/3/2003	1428	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS172-A1	NR	4/3/2003	1426	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS173-A1	NR	4/3/2003	1247	<1.0	<1.0	<1.0	<1.0	<1.0
3-4W	DS173-B1	NR	4/3/2003	1249	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS174-A1	NR	4/3/2003	1305	<10.0	<10.0	<10.0	<10.0	<10.0
3-4W	DS174-B1	NR	4/3/2003	1307	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS175-A1	NR	4/3/2003	1315	<10.0	<10.0	<10.0	<10.0	<10.0
3-4W	DS175-B1	1	4/3/2003	1317	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS175-B2	2	4/3/2003	1317	<0.5	<0.5	<0.5	<0.5	<0.5
3-4W	DS176-A1	NR	4/3/2003	1321	<1.0	<1.0	<1.0	<1.0	<1.0
3-4W	DS176-B1	1	4/3/2003	1323	<0.5	0.7	<0.5	<0.5	<0.5
3-4W	DS176-B2	2	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
-- 3c 20.9		-- 3c	1,110	718	<10.0	<10.0	284	DS163-A1
-- 3c 29.2 x		-- 3c	1,140 x	765 x	23.4 x	15.0 x	352 x	DS163-A2
-- <50.0		-- 3c	969	469	<50.0	<50.0	<50.0	DS163-B1
-- 3c 25.0 x		-- 3c	1,090 x	550 x	12.9 x	9.6 x	257 x	DS163-B2
-- <100		-- 3c	159	<100	<100	<100	<100	DS164-A1
-- 3c 104		-- 3c	145	<33.3	<33.3	<33.3	<33.3	DS164-B1
-- 3c 97.5		-- 3c	174	<50.0	<50.0	<50.0	<50.0	DS164-B2
-- <100		--	<100	<100	<100	<100	<100	DS165-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS165-A2
-- <10.0		--	<10.0	<10.0	<10.0	<10.0	<10.0	DS165-B1
-- <0.5		--	16.7	43.7	<0.5	<0.5	28.8	DS166-A1
-- <0.5		--	18.4	57.8	1.6	3.9	35.0	DS166-B1
-- <0.5		--	0.6	<0.5	<0.5	<0.5	<0.5	DS167-A1
-- <0.5		--	0.7	<0.5	<0.5	<0.5	<0.5	DS167-B1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS168-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS169-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS169-B1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS170-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS171-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS171-A2
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS171-B1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS171-B2
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS172-A1
-- <1.0		--	<1.0	<1.0	<1.0	<1.0	<1.0	DS173-A1
-- <0.5		--	<0.5	1.0	<0.5	<0.5	<0.5	DS173-B1
-- <10.0		--	<10.0	<10.0	<10.0	<10.0	<10.0	DS174-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	<0.5	DS174-B1
-- <10.0		--	<10.0	<10.0	<10.0	<10.0	<10.0	DS175-A1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	10.6	DS175-B1
-- <0.5		--	<0.5	<0.5	<0.5	<0.5	11.3	DS175-B2
-- <1.0		--	22.9	17.2	3.7	3.5	12.8	DS176-A1
-- <0.5		-- 3c	19.8	16.8	3.2	2.8	13.5	DS176-B1
-- <0.5		--	19.9	16.5	3.2	3.2	11.3	DS176-B2

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-5E	DS177-A1	NR	4/3/2003	1056	<0.5	3.6	0.9	<0.5	<0.5
3-5E	DS177-B1	NR	4/3/2003	1058	<0.5	3.5	0.6	<0.5	<0.5
3-5E	DS178-A1	NR	4/3/2003	--	<0.5	2.3	<0.5	<0.5	<0.5
3-5E	DS178-B1	NR	4/3/2003	--	<0.5	2.3	<0.5	<0.5	<0.5
3-5E	DS179-A1	1	4/3/2003	--	<0.5	230	>250	55.2	>250
3-5E	DS179-A2	2	4/3/2003	1107	<1,200	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-A3	3	4/3/2003	1107	<1,200	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-A3	3, MA	4/3/2003	1107	<1,000	<1,000	<1,000	<1,000	<1,000
3-5E	DS179-A1	1	6/16/2003	--	<2,400	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-A2	2	6/16/2003	--	<2,400	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-B1	1	4/3/2003	1109	<125	<125	413	<125	<125
3-5E	DS179-B1	1, MA	4/3/2003	1109	<1,200	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-B1	1, MA	4/3/2003	1109	<1,000	<1,000	<1,000	<1,000	<1,000
3-5E	DS179-B2	2	4/3/2003	1109	<1,000	<1,000	<1,000	<1,000	<1,000
3-5E	DS179-B2	2, MA	4/3/2003	1109	<1,200	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-B2	2, MA	4/3/2003	1109	<1,000	<1,000	<1,000	<1,000	<1,000
3-5E	DS179-B3	3	4/3/2003	1109	<1,200	<1,200	<1,200	<1,200	<1,200
3-5E	DS179-B3	3, MA	4/3/2003	1109	<1,000	<1,000	<1,000	<1,000	<1,000
3-5E	DS179-B1	NR	6/16/2003	--	<24,000	<1,200	<1,200	<1,200	<1,200
3-5E	DS180-A1	NR	4/3/2003	--	<0.5	19.8	14.4	<0.5	3.7
3-5E	DS180-B1	1	4/3/2003	1112	<25.0	<25.0	<25.0	<25.0	<25.0
3-5E	DS180-B2	2	4/3/2003	--	<50.0	<50.0	<50.0	<50.0	<50.0
3-5E	DS181-A1	NR	4/3/2003	1249	<10.0	<10.0	<10.0	<10.0	<10.0
3-5E	DS181-A1	NR, MA	4/3/2003	1249	<2.5	<2.5	<2.5	<2.5	<2.5
3-5E	DS181-B1	NR	4/3/2003	1123	<0.5	4.5	<0.5	<0.5	<0.5
3-5E	DS182-A1	NR	4/3/2003	1120	<1.0	18.4	6.4	<1.0	<1.0
3-5E	DS182-B1	NR	4/3/2003	1120	<10.0	12.8	<10.0	<10.0	<10.0
3-7E	DS183-A1	NR	4/4/2003	1310	<2.5	<2.5	<2.5	<2.5	<2.5
3-7E	DS183-B1	1	4/4/2003	1310	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS183-B2	2	4/4/2003	1310	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS184-A1	NR	4/4/2003	1315	<1.0	<1.0	<1.0	<1.0	<1.0
3-7E	DS184-B1	NR	4/4/2003	1315	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS185-A1	NR	4/4/2003	1320	<1.0	<1.0	<1.0	<1.0	<1.0

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-7E	DS185-B1	NR	4/4/2003	1320	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS186-A1	NR	4/4/2003	1325	<1.0	<1.0	<1.0	<1.0	<1.0
3-7E	DS186-B1	NR	4/4/2003	1325	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS187-A1	1	4/4/2003	1330	<1.0	<1.0	<1.0	<1.0	<1.0
3-7E	DS187-A2	2	4/4/2003	1330	<0.5	0.8	<0.5	<0.5	<0.5
3-7E	DS187-B1	NR	4/4/2003	1330	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS188-A1	NR	4/4/2003	1335	<1.7	<1.7	<1.7	<1.7	<1.7
3-7E	DS188-B1	NR	4/4/2003	1335	<0.5	<0.5	<0.5	<0.5	<0.5
3-7E	DS189-A1	1	4/4/2003	1340	<2.5	<2.5	<2.5	<2.5	<2.5
3-7E	DS189-A2	2	4/4/2003	1340	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
3-7E	DS189-B1	1	4/4/2003	1340	<1.0	<1.0	<1.0	<1.0	<1.0
3-7E	DS189-B2	2	4/4/2003	1340	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
3-7E	DS190-A1	NR	4/4/2003	1345	<2.5	<2.5	<2.5	<2.5	<2.5
3-7E	DS190-B1	NR	4/4/2003	1345	<0.5	<0.5	<0.5	<0.5	<0.5
March 2003 -- Surface-water samples [SWDS54, surface water location 54; -1, primary sample; -2, secondary sample]									
2-3E	SWDS54-1	1	4/4/2003	0940	<0.5	<0.5	<0.5	<0.5	6.4
2-3E	SWDS54-2	2	4/4/2003	0940	<0.5	<0.5	<0.5	<0.5	6.0
2-7W	SWDS65-1	NR	4/4/2003	0900	<0.5	<0.5	<0.5	<0.5	7.2
3-1E	SWDS155-1	NR	4/3/2003	0905	<0.5	<0.5	<0.5	<0.5	4.0
3-4W	SWDS164-1	1	4/3/2003	--	<0.5	2.4	2.7	6.4	16.0
3-4W	SWDS164-2	2	4/3/2003	1241	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x
3-4W	SWDS174-1	1	4/3/2003	--	<50.0	<50.0	<50.0	<50.0	<50.0
3-4W	SWDS174-2	2	4/3/2003	--	<10.0	<10.0	<10.0	<10.0	<10.0
3-5E	SWDS179-1	NR	6/16/2003	--	<50.0	<25.0	<25.0	<25.0	<25.0
3-5E	SWDS182-1	1	4/3/2003	1044	<10.0	<10.0	<10.0	<10.0	<10.0
3-5E	SWDS182-2	2	4/3/2003	1044	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x
3-7E	SWDS189-1	1	4/4/2003	1300	<10.0	<10.0	<10.0	<10.0	<10.0
3-7E	SWDS189-2	2	4/4/2003	1300	<0.5	<0.5	<0.5	<0.5	4.6
March 2003 -- Quality-Control and Quality-Assurance Samples [TB, trip blank; -1, primary sample; -2, secondary sample]									
-	TB031303-1	NR	3/13/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	TB031403-1	NR	3/14/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB032403-1	NR	3/24/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
-	TB032603-1	1	3/26/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB032603-2	2	3/26/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB032703-1	NR	3/27/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB032803-1	NR	3/28/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB033103-1	NR	3/31/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB040303-1	NR	4/3/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5
-	TB040403-1	NR	4/4/2003	0700	<0.5	<0.5	<0.5	<0.5	<0.5

July 2003 -- Peeper samples [WBSP1, West Branch short peeper location 1; -1A, row 1 cell A; -6B, row 6 cell B; 11A2, the second sample from row 11 cell 1; 11A3, the third sample of cell 11 primary sample; PEEPTANK, construction blank]

3-4W	WBSP1-1A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-2A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-3A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-4A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-5A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-6A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-6B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-7A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-8A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-9A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-9B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-10A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-11A	1	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-11A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-11A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-11B	2, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	26.4
3-4W	WBSP1-11B	2, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-12A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-13A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-14A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-15A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-15A	1, MA	7/7/2003	--	<500	x <25.0	x <25.0	x <25.0	x <25.0
3-4W	WBSP1-15B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	28.4
3-4W	WBSP1-15B	2, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	33.3
3-4W	WBSP1-16A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB032603-1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB032603-2
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB032703-1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB032803-1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB033103-1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB040303-1
--	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	TB040403-1
--	--	978	103	<50.0	<50.0	<50.0	<1,000	WBSP1-1A
--	--	973	81.6	<50.0	<50.0	<50.0	<1,000	WBSP1-2A
--	--	904	50.0	<50.0	<50.0	<50.0	<1,000	WBSP1-3A
--	--	920	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP1-4A
--	--	959	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP1-5A
--	--	957	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP1-6A
--	--	791	205	72.6	<25.0	<25.0	<500	WBSP1-6B
--	--	978	68.2	<50.0	<50.0	<50.0	<1,000	WBSP1-7A
--	--	774	87.6	229	<50.0	<50.0	<1,000	WBSP1-8A
--	--	227	179	304	<50.0	<50.0	<1,000	WBSP1-9A
--	--	224	159	210	<25.0	<25.0	<500	WBSP1-9B
--	--	432	102	215	<50.0	<50.0	<1,000	WBSP1-10A
--	--	657	81.7	147	<25.0	<25.0	<500	WBSP1-11A
--	--	662	78.2	144	<25.0	<25.0	<500	WBSP1-11A
--	--	647	72.6	136	<25.0	<25.0	<500	WBSP1-11A
--	--	822	104	75.4	<25.0	<25.0	<500	WBSP1-11B
--	--	804	99.5	71.2	<25.0	<25.0	<500	WBSP1-11B
--	--	724	82.6	131	<25.0	<25.0	<500	WBSP1-12A
--	--	549	79.7	162	<25.0	<25.0	<500	WBSP1-13A
--	--	567	97.6	168	<25.0	<25.0	<500	WBSP1-14A
--	--	552	108	217	<50.0	<50.0	<1,000	WBSP1-15A
--	--	444	x 88.7	x 177	x <25.0	x <25.0	x <500	WBSP1-15A
--	--	948	124	110	<25.0	<25.0	<500	WBSP1-15B
--	--	881	118	106	<25.0	<25.0	<500	WBSP1-15B
--	--	700	182	167	<25.0	<25.0	<500	WBSP1-16A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	WBSP1-17A	1	7/7/2003	--	<500	<25.0	<25.0	<25.0	43.0
3-4W	WBSP1-17B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	27.8
3-4W	WBSP1-18A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	40.7
3-4W	WBSP1-19A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP1-20A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP1-20B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	26.6
3-4W	WBSP1-21A	NR	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-1A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-1B	2	7/7/2003	--	<500	x <25.0	x <25.0	x <25.0	29.5 x
3-4W	WBSP2-2A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-2B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-3A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-3B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-4A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-5A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-5B	2	7/7/2003	--	<500	x <25.0	x <25.0	x <25.0	<25.0 x
3-4W	WBSP2-6A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-7A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-7A	1, MA	7/7/2003	--	<500	x <25.0	x <25.0	x <25.0	<25.0 x
3-4W	WBSP2-7B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-8A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-8A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-8A	1, MA	7/7/2003	--	<500	x <25.0	x <25.0	x <25.0	25.8 x
3-4W	WBSP2-8B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-9A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-10A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-10B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-11A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-12A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-13A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-14A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-15A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-16A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-16B	2	7/7/2003	--	<500	x <25.0	x <25.0	x <25.0	57.3 x
3-4W	WBSP2-17A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	Trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	1,230	89.8	48.5	<25.0	<25.0	<500	WBSP1-17A
--	--	1,180	55.8	<25.0	<25.0	<25.0	<500	WBSP1-17B
--	--	1,260	78.6	<25.0	<25.0	<25.0	<500	WBSP1-18A
--	--	923	182	61.5	<25.0	<25.0	<500	WBSP1-19A
--	--	655	182	117	<50.0	<50.0	<1,000	WBSP1-20A
--	--	700	107	39.4	<25.0	<25.0	<500	WBSP1-20B
--	--	534	72.2	55.4	<25.0	<25.0	<500	WBSP1-21A
--	--	161	57.8	248	<50.0	<50.0	<1,000	WBSP2-1A
--	--	483	x 95.7	x 34.4	x <25.0	x <25.0	x <500	WBSP2-1B
--	--	<50.0	77.0	352	<50.0	<50.0	<1,000	WBSP2-2A
--	--	365	86.3	34.6	<25.0	<25.0	<500	WBSP2-2B
--	--	<50.0	154	218	<50.0	<50.0	<1,000	WBSP2-3A
--	--	251	93.8	72.4	<25.0	<25.0	<500	WBSP2-3B
--	--	209	197	140	<50.0	<50.0	<1,000	WBSP2-4A
--	--	162	208	157	<50.0	<50.0	<1,000	WBSP2-5A
--	--	352	x 105	x <25.0	x <25.0	x <25.0	x <500	WBSP2-5B
--	--	<50.0	192	164	<50.0	<50.0	<1,000	WBSP2-6A
--	--	362	112	<50.0	<50.0	<50.0	<1,000	WBSP2-7A
--	--	339	x 85.4	x <25.0	x <25.0	x <25.0	x <500	WBSP2-7A
--	--	225	39.4	<25.0	<25.0	<25.0	<500	WBSP2-7B
--	--	411	55.8	<50.0	<50.0	<50.0	<1,000	WBSP2-8A
--	--	405	50.7	<25.0	<25.0	<25.0	<500	WBSP2-8A
--	--	375	x 42.1	x <25.0	x <25.0	x <25.0	x <500	WBSP2-8A
--	--	160	<25.0	<25.0	<25.0	<25.0	<500	WBSP2-8B
--	--	229	37.1	<50.0	<50.0	<50.0	<1,000	WBSP2-9A
--	--	227	55.8	<50.0	<50.0	<50.0	<1,000	WBSP2-10A
--	--	271	36.5	<25.0	<25.0	<25.0	<500	WBSP2-10B
--	--	145	47.3	<50.0	<50.0	<50.0	<1,000	WBSP2-11A
--	--	112	44.1	<50.0	<50.0	<50.0	<1,000	WBSP2-12A
--	--	145	47.6	<50.0	<50.0	<50.0	<1,000	WBSP2-13A
--	--	257	70.1	<50.0	<50.0	<50.0	<1,000	WBSP2-14A
--	--	242	64.4	<50.0	<50.0	<50.0	<1,000	WBSP2-15A
--	--	59.4	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP2-16A
--	--	726	x 57.0	x <25.0	x <25.0	x <25.0	x <500	WBSP2-16B
--	--	<50.0	37.1	<50.0	<50.0	<50.0	<1,000	WBSP2-17A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	WBSP2-18A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-18A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-18B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-18B	2, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-19A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-19A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-19B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-20A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-20A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-20B1	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-21A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP2-21A	1, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-21B	2	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP2-21B	2, MA	7/7/2003	--	<500	<25.0	<25.0	<25.0	<25.0
3-4W	WBSP3-1A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	55.6
3-4W	WBSP3-1B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-2A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	59.0
3-4W	WBSP3-3A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	50.0
3-4W	WBSP3-4A	1,MA	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-4B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-5A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-6A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-7A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-7B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-8A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-9A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-9B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-10A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-11A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-12A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-13A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-14A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-14B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-14B	2, MA	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-15A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	<50.0	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP2-18A
--	--	<25.0	34.5	<25.0	<25.0	<25.0	<500	WBSP2-18A
--	--	175	41.5	<25.0	<25.0	<25.0	<500	WBSP2-18B
--	--	159	35.4	<25.0	<25.0	<25.0	<500	WBSP2-18B
--	--	<50.0	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP2-19A
--	--	<25.0	45.7	<25.0	<25.0	<25.0	<500	WBSP2-19A
--	--	126	30.9	<25.0	<25.0	<25.0	<500	WBSP2-19B
--	--	<50.0	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP2-20A
--	--	<25.0	38.2	<25.0	<25.0	<25.0	<500	WBSP2-20A
--	--	202	44.8	<25.0	<25.0	<25.0	<500	WBSP2-20B1
--	--	<50.0	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP2-21A
--	--	<25.0	35.4	<25.0	<25.0	<25.0	<500	WBSP2-21A
--	--	212	49.4	<25.0	<25.0	<25.0	<500	WBSP2-21B
--	--	208	47.3	<25.0	<25.0	<25.0	<500	WBSP2-21B
--	--	1,830	70.7	<50.0	<50.0	<50.0	<1,000	WBSP3-1A
--	--	1,580	69.9	<50.0	<50.0	<50.0	<1,000	WBSP3-1B
--	--	1,780	72.6	<50.0	<50.0	<50.0	<1,000	WBSP3-2A
--	--	1,720	75.2	<50.0	<50.0	<50.0	<1,000	WBSP3-3A
--	--	1,500	65.1	<50.0	<50.0	<50.0	<1,000	WBSP3-4A
--	--	1,680	56.4	<50.0	<50.0	<50.0	<1,000	WBSP3-4B
--	--	1,540	76.0	<50.0	<50.0	<50.0	<1,000	WBSP3-5A
--	--	1,510	84.7	<50.0	<50.0	<50.0	<1,000	WBSP3-6A
--	--	1,410	130	<50.0	<50.0	<50.0	<1,000	WBSP3-7A
--	--	1,960	113	<50.0	<50.0	<50.0	<1,000	WBSP3-7B
--	--	1,180	88.6	<50.0	<50.0	<50.0	<1,000	WBSP3-8A
--	--	1,180	101	<50.0	<50.0	<50.0	<1,000	WBSP3-9A
--	--	1,160	74.3	<50.0	<50.0	<50.0	<1,000	WBSP3-9B
--	--	1,510	121	<50.0	<50.0	<50.0	<1,000	WBSP3-10A
--	--	1,590	130	<50.0	<50.0	<50.0	<1,000	WBSP3-11A
--	--	1,200	136	<50.0	<50.0	<50.0	<1,000	WBSP3-12A
--	--	1,090	280	<50.0	<50.0	<50.0	<1,000	WBSP3-13A
--	--	890	182	<50.0	<50.0	<50.0	<1,000	WBSP3-14A
--	--	1,150	61.7	<50.0	<50.0	<50.0	<1,000	WBSP3-14B
--	--	1,140	55.3	<50.0	<50.0	<50.0	<1,000	WBSP3-14B
--	--	1,000	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-15A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	WBSP3-15B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-15B	2, MA	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-16A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-17A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-18A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-19A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-19B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-20A	NR	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-21A	1	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-4W	WBSP3-21B	2	7/7/2003	--	<1,000	<50.0	<50.0	<50.0	<50.0
3-1E	WBSP4-8A	1	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-8B	2	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-9A	NR	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-10A	1	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-10B	2	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-11A	1	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-11B	2	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-12A	1	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-12B	2	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-13A	1	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-13B	2	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	4.9
3-1E	WBSP4-14A	NR	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP4-15A	NR	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	6.7
3-1E	WBSP4-16A	NR	7/11/2003	--	<50.0	<2.5	12.8	<2.5	42.7
3-1E	WBSP4-17A	1	7/11/2003	--	<50.0	<2.5	32.6	<2.5	146
3-1E	WBSP4-17B	2	7/11/2003	--	<50.0	<2.5	29.6	<2.5	206
3-1E	WBSP4-18A	1	7/11/2003	--	<50.0	<2.5	34.1	<2.5	242
3-1E	WBSP4-18B	2	7/11/2003	--	<50.0	<2.5	21.0	<2.5	271
3-1E	WBSP4-19A	NR	7/11/2003	--	<50.0	<2.5	44.9	<2.5	323
3-1E	WBSP4-20A	NR	7/11/2003	--	<50.0	<2.5	49.9	<2.5	367
3-1E	WBSP4-21A	NR	7/11/2003	--	<50.0	<2.5	49.6	<2.5	345
3-1E	WBSP5-3A	NR	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	<2.5
3-1E	WBSP5-8A	1	7/11/2003	--	<50.0	<2.5	2.7	<2.5	29.3
3-1E	WBSP5-8B	2	7/11/2003	--	<50.0	<2.5	<2.5	<2.5	13.1
3-1E	WBSP5-9A	1	7/11/2003	--	<50.0	<2.5	11.1	<2.5	158

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	1,130	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-15B
--	--	1,090	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-15B
--	--	877	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-16A
--	--	929	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-17A
--	--	853	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-18A
--	--	911	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-19A
--	--	1,040	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-19B
--	--	889	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-20A
--	--	1,150	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-21A
--	--	887	<50.0	<50.0	<50.0	<50.0	<1,000	WBSP3-21B
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP4-8A
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP4-8B
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP4-9A
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP4-10A
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP4-10B
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP4-11A
--	--	<2.5	<2.5	86.2	51.6	<2.5	402	WBSP4-11B
--	--	<2.5	<2.5	9.7	3.6	<2.5	<50.0	WBSP4-12A
--	--	<2.5	<2.5	139	246	<2.5	364	WBSP4-12B
--	--	<2.5	<2.5	52.8	32.0	<2.5	150	WBSP4-13A
--	--	<2.5	4.0	188	433	<2.5	263	WBSP4-13B
--	--	<2.5	<2.5	101	172	<2.5	314	WBSP4-14A
--	--	<2.5	10.1	111	358	<2.5	280	WBSP4-15A
--	--	<2.5	19.2	121	454	<2.5	252	WBSP4-16A
--	--	<2.5	22.8	61.4	167	<2.5	153	WBSP4-17A
--	--	<2.5	32.0	98.9	255	<2.5	55.0	WBSP4-17B
--	--	<2.5	24.9	46.8	35.7	<2.5	109	WBSP4-18A
--	--	<2.5	25.5	49.5	78.4	<2.5	<50.0	WBSP4-18B
--	--	<2.5	33.4	54.1	54.6	<2.5	35.6	WBSP4-19A
--	--	<2.5	33.0	49.6	39.1	<2.5	32.2	WBSP4-20A
--	--	<2.5	29.8	50.3	33.7	<2.5	31.9	WBSP4-21A
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP5-3A
--	--	<2.5	9.6	98.4	55.6	<2.5	>500	WBSP5-8A
--	--	<2.5	5.1	50.7	94.4	<2.5	175	WBSP5-8B
--	--	<2.5	12.4	141	47.5	<2.5	480	WBSP5-9A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-1E	WBSP5-9B	2	7/11/2003	--	<50.0	<2.5	6.2	<2.5	76.3
3-1E	WBSP5-10A	NR	7/11/2003	--	<50.0	<2.5	8.7	<2.5	85.6
3-1E	WBSP5-11A	NR	7/11/2003	--	<50.0	<2.5	12.0	<2.5	104
3-1E	WBSP5-12A	NR	7/11/2003	--	<50.0	<2.5	12.4	<2.5	119
3-1E	WBSP5-13A	NR	7/11/2003	--	<50.0	<2.5	8.7	<2.5	65.6
3-1E	WBSP5-14A	1	7/11/2003	--	<50.0	<2.5	10.0	<2.5	82.1
3-1E	WBSP5-14B	2	7/11/2003	--	<50.0	<2.5	12.2	<2.5	146
3-1E	WBSP5-15A	NR	7/11/2003	--	<50.0	<2.5	8.4	<2.5	65.2
3-1E	WBSP5-16A	NR	7/11/2003	--	<50.0	<2.5	13.2	<2.5	94.1
3-1E	WBSP5-17A	NR	7/11/2003	--	<50.0	<2.5	12.7	<2.5	164
3-1E	WBSP5-18A	NR	7/11/2003	--	<50.0	<2.5	9.0	<2.5	145
3-1E	WBSP5-19A	1	7/11/2003	--	<50.0	<2.5	11.2	<2.5	163
3-1E	WBSP5-19B	2	7/11/2003	--	<50.0	<2.5	8.6	<2.5	134
3-1E	WBSP5-20A	NR	7/11/2003	--	<50.0	<2.5	6.5	<2.5	148
3-1E	WBSP5-21A	NR	7/11/2003	--	<50.0	<2.5	9.1	<2.5	148
3-7E	WBSP6-1A	1	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-1B	2	7/17/2003	--	<100	<2.5	<2.5	<2.5	<2.5
3-7E	WBSP6-2A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-3A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-4A	1	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-4B	2	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-5A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-6A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-7A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-8A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-9A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-10A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-11A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-12A	1	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-12B	2	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-13A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-14A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-15A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-16A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-17A	NR	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	<2.5	13.0	79.2	130	<2.5	275	WBSP5-9B
--	--	<2.5	6.9	43.7	26.6	<2.5	134	WBSP5-10A
--	--	<2.5	8.2	51.8	31.1	<2.5	168	WBSP5-11A
--	--	<2.5	9.0	72.6	32.9	<2.5	199	WBSP5-12A
--	--	<2.5	6.3	24.4	27.1	<2.5	94.8	WBSP5-13A
--	--	<2.5	7.0	29.5	24.1	<2.5	116	WBSP5-14A
--	--	<2.5	14.4	61.4	79.3	<2.5	243	WBSP5-14B
--	--	<2.5	5.8	24.0	19.8	<2.5	101	WBSP5-15A
--	--	<2.5	8.6	35.0	28.0	<2.5	170	WBSP5-16A
--	--	<2.5	12.4	26.5	30.0	<2.5	79.7	WBSP5-17A
--	--	<2.5	26.4	20.3	25.7	<2.5	<50.0	WBSP5-18A
--	--	<2.5	12.5	21.0	26.5	<2.5	<50.0	WBSP5-19A
--	--	<2.5	9.9	22.1	23.8	<2.5	62.0	WBSP5-19B
--	--	<2.5	10.1	17.7	21.6	<2.5	<50.0	WBSP5-20A
--	--	<2.5	12.6	21.6	23.8	<2.5	<50.0	WBSP5-21A
--	--	<1.7	<1.7	<1.7	<1.7	<1.7	<33.3	WBSP6-1A
--	--	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP6-1B
--	--	<1.7	<1.7	<1.7	<1.7	<1.7	<33.3	WBSP6-2A
--	--	<1.7	<1.7	<1.7	<1.7	<1.7	<33.3	WBSP6-3A
--	--	<1.7	<1.7	<1.7	<1.7	<1.7	<33.3	WBSP6-4A
--	--	<1.7	<1.7	<1.7	<1.7	<1.7	<33.3	WBSP6-4B
--	--	<1.7	<1.7	<1.7	<1.7	<1.7	<33.3	WBSP6-5A
--	--	<1.7	<1.7	6.1	<1.7	<1.7	<33.3	WBSP6-6A
--	--	<1.7	<1.7	6.5	<1.7	<1.7	<33.3	WBSP6-7A
--	--	<1.7	<1.7	6.0	<1.7	<1.7	<33.3	WBSP6-8A
--	--	<1.7	<1.7	23.5	<1.7	<1.7	52.4	WBSP6-9A
--	--	<1.7	<1.7	41.5	<1.7	<1.7	95.3	WBSP6-10A
--	--	<1.7	<1.7	91.4	<1.7	<1.7	157	WBSP6-11A
--	--	<1.7	<1.7	154	<1.7	<1.7	187	WBSP6-12A
--	--	<1.7	<1.7	53.2	<1.7	<1.7	106	WBSP6-12B
--	--	<1.7	<1.7	236	<1.7	<1.7	200	WBSP6-13A
--	--	<1.7	<1.7	294	<1.7	<1.7	173	WBSP6-14A
--	--	<1.7	<1.7	371	<1.7	<1.7	138	WBSP6-15A
--	--	<1.7	<1.7	389	<1.7	<1.7	108	WBSP6-16A
--	--	<1.7	<1.7	388	<1.7	<1.7	83.4	WBSP6-17A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-7E	WBSP6-18A	1	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-18B	2	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-19A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-19B	2	7/17/2003	--	<33.3	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-20A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-20B	2	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP6-21A	NR	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	<1.7
3-7E	WBSP7-1A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	4.2
3-7E	WBSP7-1B	2	7/17/2003	--	<100	<2.5	<2.5	<2.5	14.1
3-7E	WBSP7-2A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	10.7
3-7E	WBSP7-2B	2	7/17/2003	--	<100	<2.5	<2.5	<2.5	16.9
3-7E	WBSP7-3A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	17.0
3-7E	WBSP7-3B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	29.6
3-7E	WBSP7-4A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	29.7
3-7E	WBSP7-4B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	43.4
3-7E	WBSP7-5A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	41.6
3-7E	WBSP7-5B	2	7/17/2003	--	<100	<2.5	<2.5	<2.5	43.0
3-7E	WBSP7-6A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	21.6
3-7E	WBSP7-6B	2	7/17/2003	--	<100	<2.5	<2.5	<2.5	34.5
3-7E	WBSP7-7A	NR	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	23.6
3-7E	WBSP7-8A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	22.6
3-7E	WBSP7-8B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	58.4
3-7E	WBSP7-9A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	33.5
3-7E	WBSP7-9B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	48.9
3-7E	WBSP7-10A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	36.4
3-7E	WBSP7-10B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	58.0
3-7E	WBSP7-11A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	22.0
3-7E	WBSP7-11B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	56.1
3-7E	WBSP7-12A	NR	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	30.4
3-7E	WBSP7-13A	NR	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	28.3
3-7E	WBSP7-14A	NR	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	10.2
3-7E	WBSP7-15A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	24.8
3-7E	WBSP7-15B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	3.2
3-7E	WBSP7-16A	1	7/17/2003	--	<66.7	<1.7	<1.7	<1.7	19.7
3-7E	WBSP7-16B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	6.1

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—
Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dicloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	<1.7	<1.7	414	3.5	<1.7	86.0	WBSP6-18A
--	--	<1.7	<1.7	352	<1.7	<1.7	130	WBSP6-18B
--	--	<1.7	<1.7	391	4.2	<1.7	73.0	WBSP6-19A
--	--	<1.7	<1.7	364	<1.7	<1.7	147	WBSP6-19B
--	--	<1.7	1.9	359	3.4	<1.7	71.7	WBSP6-20A
--	--	<1.7	<1.7	391	<1.7	<1.7	63.2	WBSP6-20B
--	--	<1.7	<1.7	352	3.4	<1.7	81.6	WBSP6-21A
--	--	12.2	31.8	118	8.0	<1.7	<33.3	WBSP7-1A
--	--	34.7	52.7	86.7	<2.5	<2.5	<50.0	WBSP7-1B
--	--	25.5	36.0	36.6	5.1	<1.7	<33.3	WBSP7-2A
--	--	62.2	56.1	44.5	<2.5	<2.5	<50.0	WBSP7-2B
--	--	41.7	38.4	34.2	1.9	<1.7	<33.3	WBSP7-3A
--	--	67.7	37.2	11.2	<2.5	<2.5	<50.0	WBSP7-3B
--	--	109	62.4	35.0	3.3	<1.7	<33.3	WBSP7-4A
--	--	144	48.8	13.1	<2.5	<2.5	<50.0	WBSP7-4B
--	--	194	64.3	30.3	2.4	<1.7	<33.3	WBSP7-5A
--	--	253	71.1	18.1	<2.5	<2.5	<50.0	WBSP7-5B
--	--	116	64.0	46.4	2.4	<1.7	<33.3	WBSP7-6A
--	--	183	97.0	30.9	<2.5	<2.5	<50.0	WBSP7-6B
--	--	85.3	58.6	26.1	<1.7	<1.7	<33.3	WBSP7-7A
--	--	65.5	39.8	15.7	<1.7	<1.7	<33.3	WBSP7-8A
--	--	227	65.7	5.6	<2.5	<2.5	<50.0	WBSP7-8B
--	--	65.3	47.0	9.6	2.8	<1.7	<33.3	WBSP7-9A
--	--	172	77.8	5.3	<2.5	<2.5	<50.0	WBSP7-9B
--	--	53.7	47.7	6.5	2.8	<1.7	<33.3	WBSP7-10A
--	--	168	50.2	<2.5	<2.5	<2.5	<50.0	WBSP7-10B
--	--	23.6	27.3	5.1	1.8	<1.7	<33.3	WBSP7-11A
--	--	200	46.0	<2.5	<2.5	<2.5	<50.0	WBSP7-11B
--	--	60.2	49.6	4.9	2.1	<1.7	<33.3	WBSP7-12A
--	--	58.7	31.9	2.5	<1.7	<1.7	<33.3	WBSP7-13A
--	--	13.4	12.8	<1.7	<1.7	<1.7	<33.3	WBSP7-14A
--	--	46.7	31.7	2.6	2.3	<1.7	<33.3	WBSP7-15A
--	--	5.3	<2.5	<2.5	<2.5	<2.5	<50.0	WBSP7-15B
--	--	29.0	23.5	2.5	2.0	<1.7	<33.3	WBSP7-16A
--	--	8.6	3.4	<2.5	<2.5	<2.5	<50.0	WBSP7-16B

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-7E	WBSP7-17A	NR	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	13.4
3-7E	WBSP7-18A	NR	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	18.1
3-7E	WBSP7-19A	NR	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	12.4
3-7E	WBSP7-20A	1	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	12.2
3-7E	WBSP7-20B	2	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	52.7
3-7E	WBSP7-21A	NR	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	11.6
3-7E	WBSP7-22A	NR	7/17/2003	--	<50.0	<2.5	<2.5	<2.5	9.0
-	PEEPTANK	NR	6/27/2003	--	<10.0	<0.5	<0.5	<0.5	<0.5

August 2003 -- Surface-water samples [31H1, surface water at seep 3-1 high tide during AM; H1, high tide during the AM; H2, high tide during the PM; HM, high-mid tide during the AM; L, low tide; LM, low-mid tide; M1, mid-AM tide; M2, mid-PM tide; MH, mid-high tide; ML, mid-low tide; X, cross-section sample; -1A, site 1 primary sample; -2A, site 2 primary sample; -1B, site 1 secondary sample; -2B2, second sample from site 2 secondary sample; -2B3, third sample from site 2 secondary sample; 34X1A, primary sample (A) at the first location (1) along a cross-section (X) at seep 3-4 (34); CF-BL, C-Flex tubing blank; DI BLANK, deionized water blank; PT, tubing blank; TB, trip blank; TF-BL, Teflon tubing blank; TY-BL, tygon tubing blank]

3-1E	31H1-1A	NR	8/12/2003	0845	<2.5 x	<2.5 x	<0.5 x	<2.5 x	<2.5 x
3-1E	31H1-2A	1	8/12/2003	0900	<10.0	<0.5	<0.5	<0.5	<0.5
3-1E	31H1-3A	NR	8/12/2003	0900	<10.0	<0.5	<0.5	<0.5	1.0
3-1E	31H2-1A	NR	8/12/2003	2120	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x
3-1E	31H2-2A	NR	8/12/2003	2130	<10.0	<0.5	<0.5	<0.5	1.1
3-1E	31H2-3A	1	8/12/2003	2140	<10.0	<0.5	<0.5	<0.5	1.4
3-1E	31H2-3B	2	8/12/2003	2140	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.8 x
3-1E	31HM-1A	NR	8/12/2003	1055	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.0 x
3-1E	31HM-2A	NR	8/12/2003	1100	<10.0	<0.5	<0.5	<0.5	0.7
3-1E	31HM-3A	1	8/12/2003	1105	<10.0	<0.5	<0.5	<0.5	0.5
3-1E	31HM-3B	2	8/12/2003	1105	<0.5 x	<0.5 x	<0.5 x	<0.5 x	0.6 x
3-1E	31L-1A	NR	8/12/2003	1630	<2.5 x	<2.5 x	<2.5 x	<2.5 x	7.0 x
3-1E	31L-2A	NR	8/12/2003	1640	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
3-1E	31L-3A	NR	8/12/2003	1650	<0.5 x	<0.5 x	<0.5 x	<0.5 x	3.2 x
3-1E	31LM-1A	NR	8/12/2003	1740	<2.5 x	<2.5 x	<2.5 x	<2.5 x	2.6 x
3-1E	31LM-2A	NR	8/12/2003	1745	<10.0	<0.5	<0.5	<0.5	<0.5
3-1E	31LM-3A	NR	8/12/2003	1750	<10.0	<0.5	<0.5	<0.5	2.7
3-1E	31M1-1A	1	8/12/2003	1255	<2.5 x	<2.5 x	<2.5 x	<2.5 x	24.8 x
3-1E	31M1-1B	2	8/12/2003	1255	<0.5 x	<0.5 x	1.2 x	<0.5 x	23.4 x
3-1E	31M1-2B	NR	8/12/2003	1300	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dicloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dicloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	16.5	11.5	<2.5	<2.5	<2.5	<50.0	WBSP7-17A
--	--	20.6	14.5	<2.5	<2.5	<2.5	<50.0	WBSP7-18A
--	--	17.1	10.8	<2.5	<2.5	<2.5	<50.0	WBSP7-19A
--	--	14.7	9.7	<2.5	<2.5	<2.5	<50.0	WBSP7-20A
--	--	98.4	41.9	<2.5	<2.5	<2.5	<50.0	WBSP7-20B
--	--	17.3	10.8	<2.5	<2.5	<2.5	<50.0	WBSP7-21A
--	--	25.4	16.0	5.4	<2.5	<2.5	<50.0	WBSP7-22A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	PEEPTANK
--	--	<0.5	x	<2.5	x	<2.5	x	31H1-1A
--	--	<0.5		<0.5		<0.5	<0.5	31H1-2A
--	--	1.3		<0.5		<0.5	<0.5	31H1-3A
--	--	<2.5	x	<2.5	x	3.9	x	31H2-1A
--	--	<0.5		<0.5		<0.5	<0.5	31H2-2A
--	--	1.8		<0.5		<0.5	<0.5	31H2-3A
--	--	1.1	x	<0.5	x	<0.5	x	31H2-3B
--	--	<0.5	x	<0.5	x	0.6	x	31HM-1A
--	--	<0.5		<0.5		<0.5	<0.5	31HM-2A
--	--	1.6		<0.5		<0.5	<0.5	31HM-3A
--	--	0.6	x	<0.5	x	<0.5	x	31HM-3B
--	--	<2.5	x	<2.5	x	4.8	x	31L-1A
--	--	<0.5	x	<0.5	x	<0.5	x	31L-2A
--	--	<0.5	x	0.5	x	<0.5	x	31L-3A
--	--	<2.5	x	<2.5	x	4.1	x	31LM-1A
--	--	<0.5		<0.5		<0.5	<0.5	31LM-2A
--	--	<0.5		0.6		<0.5	<0.5	31LM-3A
--	--	<2.5	x	2.5	x	11.3	x	31M1-1A
--	--	<0.5	x	5.2	x	12.8	x	31M1-1B
--	--	<0.5	x	<0.5	x	<0.5	x	31M1-2B

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-1E	31M1-3A	NR	8/12/2003	1305	<10.0	<0.5	<0.5	<0.5	2.2
3-1E	31M2-1A	NR	8/12/2003	1840	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x
3-1E	31M2-2B	NR	8/12/2003	1850	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
3-1E	31M2-3A	1	8/12/2003	1900	<10.0	<0.5	<0.5	<0.5	1.4
3-1E	31M2-3B	2	8/12/2003	1900	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.4 x
3-1E	31MH-1A	NR	8/12/2003	2015	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x
3-1E	31MH-2A	NR	8/12/2003	2020	<10.0	<0.5	<0.5	<0.5	<0.5
3-1E	31MH-3A	1	8/12/2003	2025	<10.0	<0.5	<0.5	<0.5	1.6
3-1E	31MH-3B	2	8/12/2003	2025	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.7 x
3-1E	31ML-1A	NR	8/12/2003	1355	<2.5 x	<2.5 x	<2.5 x	<2.5 x	24.6 x
3-1E	31ML-2B	NR	8/12/2003	1400	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
3-1E	31ML-3B	NR	8/12/2003	1405	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.9 x
3-4W	34H1-1A	1	8/12/2003	0850	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34H1-1B	2	8/12/2003	0850	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34H1-2A	1	8/12/2003	0900	<100	10.1	9.5	29.1	60.7
3-4W	34H1-2B	2	8/12/2003	0900	<50.0 x	<50.0 x	<50.0 x	<50.0 x	51.8 x
3-4W	34H1-2B	2, MA	8/12/2003	0900	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
3-4W	34H1-3A	1	8/12/2003	0930	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34H1-3B	2	8/12/2003	0930	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.0 x
3-4W	34H2-1A	NR	8/12/2003	1050	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34H2-2A	1	8/12/2003	2125	<100	12.7	12.1	36.5	75.3
3-4W	34H2-2B	2	8/12/2003	--	<50.0 x	<50.0 x	<50.0 x	<50.0 x	76.0 x
3-4W	34H2-2B	2, MA	8/12/2003	2125	<50.0 x	<50.0 x	<50.0 x	<50.0 x	77.0 x
3-4W	34H2-3A	NR	8/12/2003	2120	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34HM-1A	NR	8/12/2003	1115	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34HM-2A	1	8/12/2003	1100	<100	<5.0	<5.0	<5.0	<5.0
3-4W	34HM-2B	2	8/12/2003	1100	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
3-4W	34HM-2B	2, MA	8/12/2003	1100	<5.0 x	<5.0 x	<5.0 x	<5.0 x	<5.0 x
3-4W	34HM-3A	NR	8/12/2003	1050	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34L-1B	NR	8/12/2003	1640	<10.0	<0.5	<0.5	<0.5	2.1
3-4W	34L-2A	1	8/12/2003	1650	<50.0 x	<50.0 x	<50.0 x	<50.0 x	70.2 x
3-4W	34L-2B	2	8/12/2003	1650	<50.0 x	<50.0 x	<50.0 x	<50.0 x	68.6 x
3-4W	34L-2B	2, MA	8/12/2003	1650	<50.0 x	<50.0 x	<50.0 x	<50.0 x	75.3 x
3-4W	34L-3A	NR	8/12/2003	1710	<10.0	<0.5	<0.5	<0.5	2.2

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

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Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	<i>cis</i> -1,2-Dichloro-ethene (µg/L)	<i>Trans</i> -1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	0.9	0.6	<0.5	<0.5	<0.5	<0.5	31M1-3A
--	--	<2.5 x	<2.5 x	2.2 x	<2.5 x	<2.5 x	5.5 x	31M2-1A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	31M2-2B
--	--	2.8	1.0	<0.5	<0.5	<0.5	<0.5	31M2-3A
--	--	2.0 x	0.7 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	31M2-3B
--	--	<2.5 x	<2.5 x	3.9 x	<2.5 x	<2.5 x	7.3 x	31MH-1A
--	--	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	31MH-2A
--	--	2.4	0.5	<0.5	<0.5	<0.5	<0.5	31MH-3A
--	--	1.1 x	0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	31MH-3B
--	--	<2.5 x	4.7 x	12.5 x	18.1 x	<2.5 x	18.3 x	31ML-1A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	31ML-2B
--	--	0.6 x	0.6 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	31ML-3B
--	--	2.6	0.7	<0.5	<0.5	<0.5	<0.5	34H1-1A
--	--	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	34H1-1B
--	--	1,780	77.1	<5.0	<5.0	<5.0	<5.0	34H1-2A
--	--	1,450 x	68.6 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34H1-2B
--	--	1,480 x	64.1 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34H1-2B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	34H1-3A
--	--	0.7 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34H1-3B
--	--	1.8	<0.5	<0.5	<0.5	<0.5	<10.0	34H2-1A
--	--	1,900	90.7	<5.0	<5.0	<5.0	<5.0	34H2-2A
--	--	1,740 x	81.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34H2-2B
--	--	1,810 x	86.8 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34H2-2B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	34H2-3A
--	--	0.8	<0.5	<0.5	<0.5	<0.5	<10.0	34HM-1A
--	--	19.4	<5.0	<5.0	<5.0	<5.0	<5.0	34HM-2A
--	--	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34HM-2B
--	--	12.2 x	<5.0 x	<5.0 x	<5.0 x	<5.0 x	<5.0 x	34HM-2B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	34HM-3A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	34L-1B
--	--	1,760 x	78.4 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34L-2A
--	--	1,620 x	76.4 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34L-2B
--	--	1,620 x	74.5 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	34L-2B
--	--	1.7	0.5	<0.5	<0.5	<0.5	<0.5	34L-3A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	34LM-1A	NR	8/12/2003	1725	<10.0	<0.5	<0.5	<0.5	2.4
3-4W	34LM-2A	1	8/12/2003	1735	<100	12.1	11.1	35.8	68.0
3-4W	34LM-2B	2	8/12/2003	1735	<50.0 x	<50.0 x	<50.0 x	<50.0 x	63.1 x
3-4W	34LM-2B	2, MA	8/12/2003	1735	<50.0 x	<50.0 x	<50.0 x	<50.0 x	70.4 x
3-4W	34LM-2B	2, MA	8/12/2003	1735	<50.0 x	<50.0 x	<50.0 x	<50.0 x	68.0 x
3-4W	34LM-3A	NR	8/12/2003	1740	<10.0	<0.5	<0.5	<0.5	2.0
3-4W	34M1-1B	NR	8/12/2003	1310	<10.0	<0.5	<0.5	<0.5	1.2
3-4W	34M1-2A	1	8/12/2003	1250	<100	<5.0	<5.0	<5.0	<5.0
3-4W	34M1-2B	2	8/12/2003	1250	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
3-4W	34M1-2B	2, MA	8/12/2003	1250	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.0 x
3-4W	34M1-3B	NR	8/12/2003	1240	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34M2-1A	1	8/12/2003	1830	<10.0	<0.5	<0.5	<0.5	2.0
3-4W	34M2-1B	2	8/12/2003	1830	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.8 x
3-4W	34M2-2A	1	8/12/2003	1835	<100	11.5	11.3	33.7	75.1
3-4W	34M2-2B	2	8/12/2003	1835	<50.0 x	<50.0 x	<50.0 x	<50.0 x	78.5 x
3-4W	34M2-2B	2, MA	8/12/2003	1835	<50.0 x	<50.0 x	<50.0 x	<50.0 x	68.6 x
3-4W	34M2-3A	NR	8/12/2003	1855	<10.0	<0.5	<0.5	<0.5	1.8
3-4W	34MH-1A	NR	8/12/2003	2000	<10.0	<0.5	<0.5	<0.5	<0.5
3-4W	34MH-2A	1	8/12/2003	2005	<100	<5.0	<5.0	28.1	59.8
3-4W	34MH-2B	2	8/12/2003	2005	<50.0 x	<50.0 x	<50.0 x	<50.0 x	54.1 x
3-4W	34MH-2B	2, MA	8/12/2003	2005	<0.5 x	10.8 x	11.0 x	31.7 x	55.7 x
3-4W	34MH-3A	NR	8/12/2003	2015	<10.0	<0.5	<0.5	<0.5	1.2
3-4W	34ML-1A	1	8/12/2003	1402	<10.0	<0.5	<0.5	<0.5	2.1
3-4W	34ML-1B	2	8/12/2003	1402	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.0 x
3-4W	34ML-2A	1	8/12/2003	1355	<100	12.6	9.5	35.9	67.9
3-4W	34ML-2B	2	8/12/2003	0900	<100 x	<100 x	<100 x	<100 x	<100 x
3-4W	34ML-2B	2, MA	8/12/2003	1355	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
3-4W	34ML-2B	2, MA	8/12/2003	1355	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
3-4W	34ML-2B	2, MA	8/12/2003	1355	<25.0 x	<25.0 x	<25.0 x	<25.0 x	49.4 x
3-4W	34ML-3A	1	8/12/2003	1345	<10.0	<0.5	<0.5	<0.5	1.8
3-4W	34ML-3B	2	8/12/2003	1345	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.0 x
3-4W	34X1A	NR	8/12/2003	1430	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x
3-4W	34X2A	1	8/12/2003	1435	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dicloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	5.8	1.0	<0.5	<0.5	<0.5	<0.5	34LM-1A
--	--	1,850	88.8	<5.0	<5.0	<5.0	<5.0	34LM-2A
--	--	1,730	x	79.6	x	<50.0	x	34LM-2B
--	--	1,640	x	75.7	x	<50.0	x	34LM-2B
--	--	1,640	x	74.4	x	<50.0	x	34LM-2B
--	--	1.3	0.5	<0.5	<0.5	<0.5	<0.5	34LM-3A
--	--	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	34M1-1B
--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	34M1-2A
--	--	<50.0	x	<50.0	x	<50.0	x	34M1-2B
--	--	17.5	x	1.0	x	<0.5	x	34M1-2B
--	--	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	34M1-3B
--	--	3.0	0.8	<0.5	<0.5	<0.5	<0.5	34M2-1A
--	--	2.8	x	0.7	x	<0.5	x	34M2-1B
--	--	1,770		81.6	<5.0	<5.0	<5.0	34M2-2A
--	--	1,430	x	71.3	x	<50.0	x	34M2-2B
--	--	1,610	x	78.8	x	<50.0	x	34M2-2B
--	--	1.0	0.5	<0.5	<0.5	<0.5	<0.5	34M2-3A
--	--	1.2	<0.5	<0.5	<0.5	<0.5	<10.0	34MH-1A
--	--	1,790		81.9	<5.0	<5.0	<5.0	34MH-2A
--	--	1,570	x	64.7	x	<50.0	x	34MH-2B
--	--	>250	x	78.4	x	2.3	x	34MH-2B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	34MH-3A
--	--	0.6	0.5	<0.5	<0.5	<0.5	<0.5	34ML-1A
--	--	0.7	x	0.6	x	<0.5	x	34ML-1B
--	--	1,800		93.2	6.4	<5.0	<5.0	34ML-2A
--	--	1,390	x	<100	x	<100	x	34ML-2B
--	--	1,100	x	55.2	x	<50.0	x	34ML-2B
--	--	1,180	x	56.0	x	<50.0	x	34ML-2B
--	--	1,040	x	52.5	x	<25.0	x	34ML-2B
--	--	2.2	0.5	<0.5	<0.5	<0.5	<0.5	34ML-3A
--	--	1.8	x	0.5	x	<0.5	x	34ML-3B
--	--	<2.5	x	<2.5	x	<2.5	x	34X1A
--	--	<2.5	x	<2.5	x	<2.5	x	34X2A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	34X2B	2	8/12/2003	1435	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.9 x
3-4W	34X3A	NR	8/12/2003	1440	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.9 x
3-4W	34X4A	NR	8/12/2003	1445	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.2 x
3-4W	34X5A	NR	8/12/2003	1450	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.0 x
3-4W	34X6A	NR	8/12/2003	1455	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.3 x
3-4W	34X7A	1	8/12/2003	1500	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.2 x
3-4W	34X7B	2	8/12/2003	1500	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.0 x
3-4W	34X8A	NR	8/12/2003	1505	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.8 x
3-7E	37H1-1A	NR	8/12/2003	0900	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37H1-2A	1	8/12/2003	0900	<50.0	<2.5	<2.5	<2.5	38.7
3-7E	37H1-2B	2	8/12/2003	0900	<2.5 x	<2.5 x	<2.5 x	<2.5 x	41.4 x
3-7E	37H1-3A	NR	8/12/2003	0900	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37H2-1A	1	8/12/2003	2140	<10.0	<0.5	<0.5	<0.5	1.0 NV
3-7E	37H2-1B	2	8/12/2003	2140	<0.5 x	<0.5 x	<0.5 x	<0.5 x	0.9 x
3-7E	37H2-2A	1	8/12/2003	2140	<50.0	<2.5	<2.5	<2.5	36.4
3-7E	37H2-2B	2	8/12/2003	2140	<2.5 x	<2.5 x	<2.5 x	<2.5 x	43.4 x
3-7E	37H2-3A	NR	8/12/2003	2140	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37HM-1A	NR	8/12/2003	1115	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37HM-2A	1	8/12/2003	1115	<50.0	<2.5	<2.5	<2.5	25.2
3-7E	37HM-2B	2	8/12/2003	1115	<2.5 x	<2.5 x	<2.5 x	<2.5 x	28.2 x
3-7E	37HM-3A	NR	8/12/2003	1115	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37L-1A	NR	8/12/2003	1640	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37L-2A	NR	8/12/2003	1640	<2.5 x	<2.5 x	<2.5 x	<2.5 x	12.1 x
3-7E	37L-3A	NR	8/12/2003	1640	<10.0	<0.5	<0.5	<0.5	<0.5
3-7E	37LM-1A	NR	8/12/2003	1730	<10.0	<0.5	<0.5	<0.5	2.1
3-7E	37LM-2A	NR	8/12/2003	1730	<0.5 x	0.8 x	<0.5 x	<0.5 x	17.6 x
3-7E	37LM-3A	1	8/12/2003	1730	<10.0	<0.5	<0.5	<0.5	2.1
3-7E	37LM-3B	2	8/12/2003	1730	<0.5 x	<0.5 x	<0.5 x	<0.5 x	2.0 x
3-7E	37M1-1A	1	8/12/2003	1320	<10.0	<0.5	<0.5	<0.5	1.2
3-7E	37M1-1B	2	8/12/2003	1320	<0.5 x	<0.5 x	<0.5 x	<0.5 x	0.9 x
3-7E	37M1-2A	NR	8/12/2003	1350	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x
3-7E	37M1-3A	1	8/12/2003	1320	<10.0	<0.5	<0.5	<0.5	1.2
3-7E	37M1-3B	2	8/12/2003	1320	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.1 x
3-7E	37M2-1A	1	8/12/2003	--	<10.0	<0.5	<0.5	<0.5	1.8

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	<i>cis</i> -1,2-Dichloro-ethene (µg/L)	<i>Trans</i> -1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	1.4 x	0.6 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X2B
--	--	0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X3A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X4A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X5A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X6A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X7A
--	--	0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X7B
--	--	1.2 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	34X8A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37H1-1A
--	--	119	40.2	2.9	<2.5	<2.5	<2.5	37H1-2A
--	--	117 x	38.5 x	2.7 x	<2.5 x	<2.5 x	<2.5 x	37H1-2B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37H1-3A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37H2-1A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37H2-1B
--	--	83.6	24.5	<2.5	<2.5	<2.5	<2.5	37H2-2A
--	--	88.5 x	27.3 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	37H2-2B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37H2-3A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37HM-1A
--	--	86.4	25.3	<2.5	<2.5	<2.5	<2.5	37HM-2A
--	--	86.8 x	29.0 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	37HM-2B
--	--	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37HM-3A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37L-1A
--	--	28.9 x	9.2 x	3.2 x	<2.5 x	<2.5 x	<2.5 x	37L-2A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37L-3A
--	--	1.6	0.7	<0.5	<0.5	<0.5	<0.5	37LM-1A
--	--	37.7 x	10.6 x	1.0 x	<0.5 x	<0.5 x	<0.5 x	37LM-2A
--	--	2.0	0.9	<0.5	<0.5	<0.5	<0.5	37LM-3A
--	--	1.3 x	0.7 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37LM-3B
--	--	0.7	NV	<0.5	<0.5	<0.5	<0.5	37M1-1A
--	--	0.6 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37M1-1B
--	--	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	37M1-2A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37M1-3A
--	--	1.0 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37M1-3B
--	--	1.0	0.5	<0.5	<0.5	<0.5	<0.5	37M2-1A

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-7E	37M2-1B	2	8/12/2003	1850	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.9 x
3-7E	37M2-2A	NR	8/12/2003	1850	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x
3-7E	37M2-3A	NR	8/12/2003	--	<10.0	<0.5	<0.5	<0.5	1.8
3-7E	37MH-1A	NR	8/12/2003	2030	<10.0	<0.5	<0.5	<0.5	0.9
3-7E	37MH-2A	NR	8/12/2003	2030	<2.5 x	<2.5 x	<2.5 x	<2.5 x	13.2 x
3-7E	37MH-3A	NR	8/12/2003	2030	<10.0	<0.5	<0.5	<0.5	1.2
3-7E	37ML-1A	NR	8/12/2003	1415	<10.0	<0.5	<0.5	<0.5	1.9
3-7E	37ML-2A	NR	8/12/2003	1415	<2.5 x	<2.5 x	<2.5 x	<2.5 x	2.3 x
3-7E	37ML-3A	NR	8/12/2003	1415	<10.0	<0.5	<0.5	<0.5	1.8
3-7E	37X1A	NR	8/12/2003	1350	<10.0	<0.5	<0.5	<0.5	1.4
3-7E	37X2A	1	8/12/2003	1350	<10.0	<0.5	<0.5	<0.5	1.6
3-7E	37X2B	2	8/12/2003	1350	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.8 x
3-7E	37X3A	1	8/12/2003	1350	<10.0	<0.5	<0.5	<0.5	1.4
3-7E	37X3B	2	8/12/2003	1350	<0.5 x	<0.5 x	<1.0 x	<1.0 x	1.4 x,L
3-7E	37X4A	1	8/12/2003	1350	<10.0	<0.5	<0.5	<0.5	1.3
3-7E	37X4B	2	8/12/2003	1350	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.6 x
3-7E	37X5A	1	8/12/2003	1350	<10.0	<0.5	<0.5	<0.5	1.5
3-7E	37X5B	2	8/12/2003	1350	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.8 x
3-7E	37X6A	NR	8/12/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.4 x
3-7E	37X7A	NR	8/12/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.6 x
3-7E	37X8A	NR	8/12/2003	1350	<0.5 x	<0.5 x	<0.5 x	<0.5 x	1.8 x
-	CF-BL-5A	NR	8/11/2003	1525	<10.0	<0.5	<0.5	<0.5	<0.5
-	CF-BL-6A	NR	8/11/2003	1600	<10.0	<0.5	<0.5	<0.5	<0.5
-	DI BLANK-B	NR	8/8/2003	0714	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	DI-BLANK-A	NR	8/8/2003	0714	<10.0	<0.5	<0.5	<0.5	<0.5
-	PT-A1	NR	8/11/2003	1440	<10.0	<0.5	<0.5	<0.5	<0.5
-	PT-A2	NR	8/11/2003	1435	<10.0	<0.5	<0.5	<0.5	<0.5
-	PTB-1	NR	8/11/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	PT-BL-3	NR	8/8/2003	0810	<10.0	<0.5	<0.5	<0.5	<0.5
-	TB1-A		8/12/2003	--	<10.0	<0.5	<0.5	<0.5	<0.5
-	TB2-B		8/14/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x
-	TB3-A		8/12/2003	--	<10.0	<0.5	<0.5	<0.5	<0.5
-	TF-BL-A	NR	8/8/2003	0716	<10.0	<0.5	<0.5	<0.5	<0.5
-	TY-BL-4A	NR	8/11/2003	--	<10.0	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[$\mu\text{g/L}$, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane ($\mu\text{g/L}$)	Hexa-chloro-ethane ($\mu\text{g/L}$)	Tetra-chloro-ethene ($\mu\text{g/L}$)	Trichloro-ethene ($\mu\text{g/L}$)	<i>cis</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	<i>Trans</i> -1,2-Dichloro-ethene ($\mu\text{g/L}$)	1,1-Dichloro-ethene ($\mu\text{g/L}$)	Vinyl chloride ($\mu\text{g/L}$)	Sample name
--	--	0.9 x	0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37M2-1B
--	--	5.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	37M2-2A
--	--	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	37M2-3A
--	--	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37MH-1A
--	--	28.7 x	8.3 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	37MH-2A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	37MH-3A
--	--	0.6	0.6	<0.5	<0.5	<0.5	<0.5	37ML-1A
--	--	2.8 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	37ML-2A
--	--	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	37ML-3A
--	--	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	37X1A
--	--	0.9	0.5	<0.5	<0.5	<0.5	<0.5	37X2A
--	--	1.0 x	0.6 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X2B
--	--	1.1	0.6	<0.5	<0.5	<0.5	<0.5	37X3A
--	--	1.1 x,L	0.8 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X3B
--	--	1.0	0.7	<0.5	<0.5	<0.5	<0.5	37X4A
--	--	0.9 x	0.6 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X4B
--	--	1.0	0.6	<0.5	<0.5	<0.5	<0.5	37X5A
--	--	1.1 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X5B
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X6A
--	--	1.1 x	0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X7A
--	--	1.6 x	0.6 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	37X8A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	CF-BL-5A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	CF-BL-6A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	DI BLANK-B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	DI-BLANK-A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	PT-A1
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	PT-A2
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	PTB-1
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	PT-BL-3
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	TB1-A
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	TB2-B
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	TB3-A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	TF-BL-A
--	--	<0.5	<0.5	<0.5	<0.5	<0.5	<10.0	TY-BL-4A

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	
-	TY-BL-4B	NR	8/11/2003	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	
December 2003 -- Passive-Diffusion Samples [DS47, passive-diffusion sampler location 47; -A1, bag A primary sample; -B2, bag B secondary sample; a, second sample from bottle; b, third sample from bottle; Z, multiple analysis of sample]										
3-7E	DS301-A1	NR	12/9/2003	1239	<0.5	<0.5	0.6	<0.5	9.0	
3-7E	DS302-A1	1	12/9/2003	1245	<1.0	2.9	<1.0	1.4	62.3	
3-7E	DS302-A2	2	12/9/2003	1245	<10.0	<10.0	<10.0	<10.0	72.5	
3-7E	DS302-A2	2, MA	12/9/2003	1245	<2.5	3.0	<2.5	<2.5	65.2	
3-7E	DS303-A1	NR	12/9/2003	1253	<1.0	2.7	<1.0	<1.0	7.4	
3-7E	DS304-A1	NR	12/9/2003	1256	<0.5	2.2	0.8	<0.5	33.2	
3-7E	DS305-A1	NR	12/9/2003	1305	<1.0	2.3	1.0	<1.0	49.2	
3-7E	DS306-A1	NR	12/9/2003	1320	<0.5	0.5	<0.5	<0.5	<0.5	
3-7E	DS307-A1	1	12/9/2003	1308	<0.5	0.8	<0.5	<0.5	1.6	
3-7E	DS307-A2	2	12/9/2003	1308	<1.0	<1.0	<1.0	<1.0	1.5	
3-7E	DS308-A1	1	12/9/2003	1323	<1.7	<1.7	<1.7	<1.7	<1.7	
3-7E	DS308-A2	2	12/9/2003	1323	<0.5	<0.5	<0.5	<0.5	<0.5	
3-7E	DS309-A1	NR	12/9/2003	1326	<0.5	<0.5	<0.5	<0.5	<0.5	
3-7E	DS310-A1	NR	12/9/2003	1250	<1.0	<1.0	<1.0	<1.0	21.2	
3-7E	DS311-A1	NR	12/9/2003	1300	<0.5	1.8	1.4	<0.5	2.9	
3-7E	DS312-A1	1	12/9/2003	1315	<0.5	1.9	<0.5	<0.5	<0.5	
3-7E	DS312-A2	2	12/9/2003	1315	<1.0	2.0	<1.0	<1.0	<1.0	
3-7E	DS313-A1	1	12/9/2003	1330	<0.5	1.1	<0.5	<0.5	<0.5	
3-7E	DS313-A2	2	12/9/2003	1330	<1.0	1.2	<1.0	<1.0	1.1	
3-4W	DS317-A1	1	12/9/2003	1134	<10.0	<10.0	<10.0	<10.0	37.4	
3-4W	DS317-A1	1, MA	12/9/2003	1134	<50.0	<50.0	<50.0	<50.0	<50.0	
3-4W	DS317-A1	1, MA	12/9/2003	1137	<25.0	<25.0	<25.0	<25.0	<25.0	
3-4W	DS318-A1	1	12/9/2003	1137	<10.0	<10.0	<10.0	<10.0	13.1	
3-4W	DS318-A2	2	12/9/2003	1137	<1.0	<1.0	1.7	<1.0	9.7	
3-4W	DS319-A1	NR	12/9/2003	1140	<10.0	<10.0	<10.0	<10.0	<10.0	
3-4W	DS320-A1	1	12/9/2003	1145	<10.0	<10.0	<10.0	<10.0	<10.0	
3-4W	DS320-A2	2	12/9/2003	1145	<0.5	0.7	<0.5	<0.5	<0.5	
3-4W	DS321-A1	1	12/9/2003	1148	<10.0	11.2	13.5	22.7	84.6	
3-4W	DS321-A1	1, MA	12/9/2003	1148	<50.0	<50.0	<50.0	<50.0	<50.0	
3-4W	DS322-A1	NR	12/9/2003	1115	<100	<100	<100	<100	105	
3-4W	DS323-A1	1, MA	12/9/2003	1154	<50.0	<50.0	<50.0	<50.0	<50.0	

Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Penta-chloro-ethane (µg/L)	Hexa-chloro-ethane (µg/L)	Tetra-chloro-ethene (µg/L)	Trichloro-ethene (µg/L)	<i>cis</i> -1,2-Dicloro-ethene (µg/L)	<i>Trans</i> -1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethene (µg/L)	Vinyl chloride (µg/L)	Sample name
--	--	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	<0.5 x	TY-BL-4B
<0.5	<0.5	33.9	247	37.3	17.9	1.9	3.2	DS301-A1
6.6	11.8	127	56.1	3.3	1.7	<1.0	<1.0	DS302-A1
<10.0	<10.0	128	58.7	<10.0	<10.0	<10.0	<10.0	DS302-A2
4.3	8.7	125	59.4	<2.5	<2.5	<2.5	<2.5	DS302-A2
<1.0	<1.0	18.9	42.0	35.6	5.0	<1.0	27.6	DS303-A1
<0.5	<0.5	59.4	57.6	173	8.9	3.0	29.8	DS304-A1
2.2	1.8	89.4	60.0	24.5	6.4	<1.0	1.7	DS305-A1
<0.5	<0.5	<0.5	2.0	194	1.3	2.3	148	DS306-A1
<0.5	<0.5	0.8	67.0	>250	3.9	3.5	144	DS307-A1
<1.0	<1.0	<1.0	63.3	253	2.2	2.9	135	DS307-A2
<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	DS308-A1
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	DS308-A2
<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5	2.9	DS309-A1
2.2	3.5	172	234	101	12.3	4.0	1.4	DS310-A1
<0.5	<0.5	36.4	68.7	70.0	6.3	4.0	13.6	DS311-A1
<0.5	<0.5	<0.5	53.5	>250	6.5	11.7	62.0	DS312-A1
<1.0	<1.0	<1.0	47.7	354	5.4	9.9	62.5	DS312-A2
<0.5	<0.5	<0.5	42.6	>250	7.4	3.9	31.1	DS313-A1
<1.0	<1.0	<1.0	44.4	438	7.8	3.8	31.5	DS313-A2
46.2	130	972	298	75.1	<10.0	<10.0	<10.0	DS317-A1
<50.0	<50.0	832	271	<50.0	<50.0	<50.0	<50.0	DS317-A1
41.3	117	773	252	70.2	<25.0	<25.0	<25.0	DS317-A1
<10.0	<10.0	<10.0	283	369	11.6	<10.0	65.6	DS318-A1
<1.0	<1.0	8.0	273	334	8.2	9.3	64.1	DS318-A2
<10.0	<10.0	<10.0	16.1	458	<10.0	<10.0	39.1	DS319-A1
<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	DS320-A1
<0.5	<0.5	<0.5	0.6	2.0	0.9	<0.5	9.2	DS320-A2
107	366	2,660	263	45.1	<10.0	<10.0	<10.0	DS321-A1
<50.0	302	2,620	257	<50.0	<50.0	<50.0	<50.0	DS321-A1
<100	222	2,880	191	<100	<100	<100	<100	DS322-A1
<50.0	<50.0	575	1,300	<50.0	<50.0	<50.0	<50.0	DS323-A1

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Appendix 3A. Concentrations of chlorinated ethane and ethene constituents for passive-diffusion bag samples, peepers, and surface-water samples in the West Branch Canal Creek study area, Aberdeen Proving Ground, Maryland, March 2002 to December 2003.—Continued

[µg/L, micrograms per liter; NR, no replicate sample analyzed; <, less than; >, greater than; MA, multiple analyses from the same sample (see footnote D at bottom of table); see laboratory qualifiers description at bottom of table; --, compound was not analyzed in the sample; NA, not applicable; WB PDS, West Branch Canal Creek passive-diffusion bag sample; WB PEEPER, West Branch Canal Creek peeper sample; WB SW, West Branch Canal Creek surface-water sample.]

Seep	Sample name	Replicate	Collection date	Collection time	Chloro-ethane (µg/L)	1,2-Dichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)
3-4W	DS323-A1	1, MA	12/9/2003	1154	<25.0	<25.0	<25.0	<25.0	43.7
3-4W	DS324-A1	1	12/9/2003	1157	<10.0	<10.0	<10.0	<10.0	<10.0
3-4W	DS324-A2	2	12/9/2003	1157	<1.0	1.6	<1.0	<1.0	<1.0
3-4W	DS325-A1	NR	12/9/2003	1200	<10.0	<10.0	12.3	21.5	85.9
3-4W	DS325-A1	NR, MA	12/9/2003	1200	<25.0	<25.0	<25.0	<25.0	89.7
3-4W	DS326-A1	NR	12/9/2003	1203	<100	<100	<100	<100	113
3-4W	DS327-A1	NR	12/9/2003	1206	<100	<100	<100	<100	110
3-4W	DS328-A1	NR	12/9/2003	1210	<10.0	<10.0	<10.0	<10.0	32.1
3-4W	DS329-A1	1	12/9/2003	1213	<0.5	4.4	5.6	1.1	20.0
3-4W	DS329-A2	2	12/9/2003	1213	<2.5	4.8	5.9	<2.5	24.6
3-4W	DS330-A1	1	12/9/2003	1216	<0.5	1.6	1.6	<0.5	12.1
3-4W	DS330-A2	2	12/9/2003	1216	<1.7	<1.7	1.8	<1.7	12.4
3-4W	DS331-A1	1	12/9/2003	1219	<0.5	8.2	11.0	11.1	77.8
3-4W	DS331-A2	2	12/9/2003	1219	<50.0	<50.0	<50.0	<50.0	<50.0
3-4W	DS331-A2	2, MA	12/9/2003	1219	<25.0	<25.0	<25.0	<25.0	80.4
3-4W	DS332-A1	NR	12/9/2003	1222	<0.5	<0.5	<0.5	<0.5	<0.5
-	WBCC-TB	NR	12/9/2003	--	<0.5	<0.5	<0.5	<0.5	<0.5

^D MA indicates that multiple samples have been analyzed from the same sample bottle. Concentrations of samples marked as multiple analysis samples may have lower concentrations due to volatilization of constituents out of the water sample and into head space introduced into the sample bottle after the first aliquot is removed from the sample bottle.

Laboratory Qualifiers:

B indicates compound was detected in the associated field (equipment) blank. Concentrations in the sample may be biased high based on the analyte concentration in the blank.

x indicates that the recommended 14-day holding time was exceeded for this sample, which could result in losses for some or all compounds.

V indicates possible positive bias due to suspected laboratory contamination.

H 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 indicates possible negative bias based on an unacceptably low response for this compound in one or more calibration checks for this batch of samples.

E indicates estimated concentration.

NV indicates that library check was performed but did not verify compound identity based on criteria of greater than or equal to 40 percent quality match.

3c See Appendix 3C for combined pentachloroethane and tetrachloroethene values.

