



Water-Data Report 2009

**0204243830 BOATSWAIN CREEK AT WEST BOUNDARY NEAR HIGHLAND SPRINGS, VA**

James Basin  
Lower James Subbasin

LOCATION.--Lat 37°34'21.93", long 77°17'49.34" referenced to North American Datum of 1983, Hanover County, VA, Hydrologic Unit 02080206.

DRAINAGE AREA.--1.11 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

**WATER-QUALITY DATA**

**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	Time	Medium name	Sample type	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conduc-tance, wat unf μS/cm @ 25 degC (00095)	Temper-ature, deg C (00010)	Turbid-ity, IR LED light, 90 deg, FNU (63680)
<b>Aug</b>								
11...	1320	Surface water	Regular	7.0	6.3	56	26.0	8.0
13...	1200	Surface water	Regular	7.0	6.3	50	24.0	13
13...	1201	<i>QC sample - Surface water</i>	<i>Replicate</i>	--	--	--	--	--

**WATER-QUALITY DATA**

**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 2 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	E coli, m-TEC MF, water, col/ 100 mL (31633)	1,4-Di-chloro-benzene water, unfltrd μg/L (34571)	Atra-zine, water, unfltrd μg/L (39630)	Broma-cil, water, unfltrd μg/L (30234)	Camphor water, unfltrd μg/L (62817)	Car-baryl, water, unfltrd μg/L (39750)	Carba-zole, water, unfltrd μg/L (77571)	Chlor-pyrifos water, unfltrd μg/L (38932)	DEET, water, unfltrd μg/L (61947)	Diazi-non, water, unfltrd μg/L (39570)	Di-chlor-vo-s, water, unfltrd μg/L (30218)	Metal-axyl, water, unfltrd μg/L (04254)	Metola-chlor, water, unfltrd μg/L (82612)
<b>Aug</b>													
11...	2,100	<.2	<.20	<.8	Mt	Mmtc	<.2	<.2	<.2	<.2	<.2	<.2	<.2
13...	780	--	--	--	--	--	--	--	--	--	--	--	--
13...	770	--	--	--	--	--	--	--	--	--	--	--	--

## 0204243830 BOATSWAIN CREEK AT WEST BOUNDARY NEAR HIGHLAND SPRINGS, VA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 3 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	p-Cresol, water, unfltrd µg/L (77146)	Penta-chloro-phenol, water, unfltrd µg/L (39032)	Prome-ton, water, unfltrd µg/L (39056)	1-Methyl-naphth-alene, water, unfltrd µg/L (81696)	2,6-Di-methyl-naphth-alene, water, unfltrd µg/L (62805)	2-Methyl-naphth-alene, water, unfltrd µg/L (30194)	3,4-Di-chloro-phenyl iso-cyanate wat unf µg/L (63145)	3-beta-Copros-tanol, water, unfltrd µg/L (62806)	3-Methyl-1H-indole, water, unfltrd µg/L (62807)	3-tert-Butyl-4-hy-droxy-anisole wat unf µg/L (61702)	4-Cumyl-phenol, water, unfltrd µg/L (62808)	4-n-Octyl-phenol, water, unfltrd µg/L (62809)	4-Nonyl-phenol, all isomers wat unf µg/L (62829)
Aug 11...	<.2	<.8mc	<.2	<.2	<.2	<.2	<1.6mc	<2mc	Mt	<.2mc	<.2	<.2	<2mc
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 4 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	4-Nonyl-phenol di-ethox-ylate, wat unf µg/L (61703)	4-Nonyl-phenol mono-ethox-ylate, wat unf µg/L (61704)	4t-Octy-lphenol di-ethox-ylate, wat unf µg/L (62486)	4t-Octy-lphenol mono-ethox-ylate, wat unf µg/L (62485)	4-tert-Octyl-phenol, water, unfltrd µg/L (62810)	5-Meth-yl-1H-benzo-azole, wat unf µg/L (61944)	9,10-Anthra-quinone water, unfltrd µg/L (62813)	Aceto-phenone water, unfltrd µg/L (62811)	AHTN, water, unfltrd µg/L (62812)	Anthra-cene, water, unfltrd µg/L (34220)	BDE congenr 47, water, unfltrd µg/L (63147)	Benzo-[a]-pyrene, water, unfltrd µg/L (34247)	Benzo-phenone water, unfltrd µg/L (62814)
Aug 11...	<3mc	<1.6mc	<.5mc	<1mc	<.4	<2mc	<.2	<.4	<.2	<.2	<.3mc	<.2	<.2
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 5 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	beta-Sitos-terol, water, unfltrd µg/L (62815)	beta-Stigmas-tanol, water, unfltrd µg/L (61948)	Bis(2-ethyl-phthal-ate, wat unf µg/L (39100)	Bisphe-nol A, water, unfltrd µg/L (62816)	Caf-feine, water, unfltrd µg/L (81436)	Choles-terol, water, unfltrd µg/L (62818)	Coti-nine, water, unfltrd µg/L (61945)	Di-ethyl-phthal-ate, water, unfltrd µg/L (34336)	D-Limo-nene, water, unfltrd µg/L (62819)	Fluor-anthene water, unfltrd µg/L (34376)	HHCB, water, unfltrd µg/L (62823)	Indole, water, unfltrd µg/L (62824)	Isobor-neol, water, unfltrd µg/L (62825)
Aug 11...	<2mc	<2mc	<.2	<.4	<.2	Mmtc	<.8mc	<.2	<.2mc	<.2	<.2	<.2	<.2
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

## 0204243830 BOATSWAIN CREEK AT WEST BOUNDARY NEAR HIGHLAND SPRINGS, VA—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 6 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	Iso-phorone water, unfltrd µg/L (34408)	Iso-propyl-benzene water, unfltrd µg/L (77223)	Iso-quinoline, water, unfltrd µg/L (62826)	Menthol water, unfltrd µg/L (62827)	Methyl salicylate, water, unfltrd µg/L (62828)	Naphthalene, water, unfltrd µg/L (34696)	Phenanthrene, water, unfltrd µg/L (34461)	Phenol, water, unfltrd µg/L (34694)	Pyrene, water, unfltrd µg/L (34469)	Tetra-chloro-ethene, water, unfltrd µg/L (34475)	Tri-bromo-methane water, unfltrd µg/L (32104)	Tri-butyl phosphate, water, unfltrd µg/L (62832)	Tri-closan, water, unfltrd µg/L (61708)
Aug													
11...	<.2	<.2mc	<.2	<.2	<.2	<.2	<.2	<.2	<.2	<.4	<.2	<.2	<.2
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 7 of 7

[Remark codes: <, less than; M, presence verified but not quantified. Value qualifier codes: c, see result laboratory comment; m, value is highly variable by this method; t, below the long-term MDL.]

Date	Tri-ethyl citrate water, unfltrd µg/L (62833)	Tri-phenyl phosphate, water, unfltrd µg/L (62834)	Tris(2-butoxy-ethyl) phosphate, wat unf µg/L (62830)	Tris(2-chloro-ethyl) phosphate, wat unf µg/L (62831)	Tris-(diCl-i-Pr) phosphate, wat unf µg/L (61707)
Aug					
11...	<.2	<.2	<.3mc	<.2	<.2
13...	--	--	--	--	--
13...	--	--	--	--	--