



Water-Data Report 2011

**351019077184102 Local number CR-543, NCDENR COVE CITY RESEARCH STATION R23x2, NEAR COVE CITY, NC**

Castle Hayne aquifer  
Castle Hayne Limestone

Craven County, NC

LOCATION.--Lat 35°10'19", long 77°18'41" referenced to North American Datum of 1927, Craven County, NC, Hydrologic Unit 03020202, on Secondary Road 1232, .6 mi east of Secondary Road 1001 and 2 mi south of Cove City. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

**GROUNDWATER RECORDS**

WELL CHARACTERISTICS.--Depth 98 ft. Upper casing diameter 2.5 in; top of first opening 88 ft, bottom of last opening 98 ft.

DATUM.--Land-surface datum is 46 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1.34 ft above land-surface datum, April 10, 2007 to present.

PERIOD OF RECORD.--March 1985, June 1986, October 2002, October 2004 to current year.

GAGE.--Measured periodically with electric and steel tape.

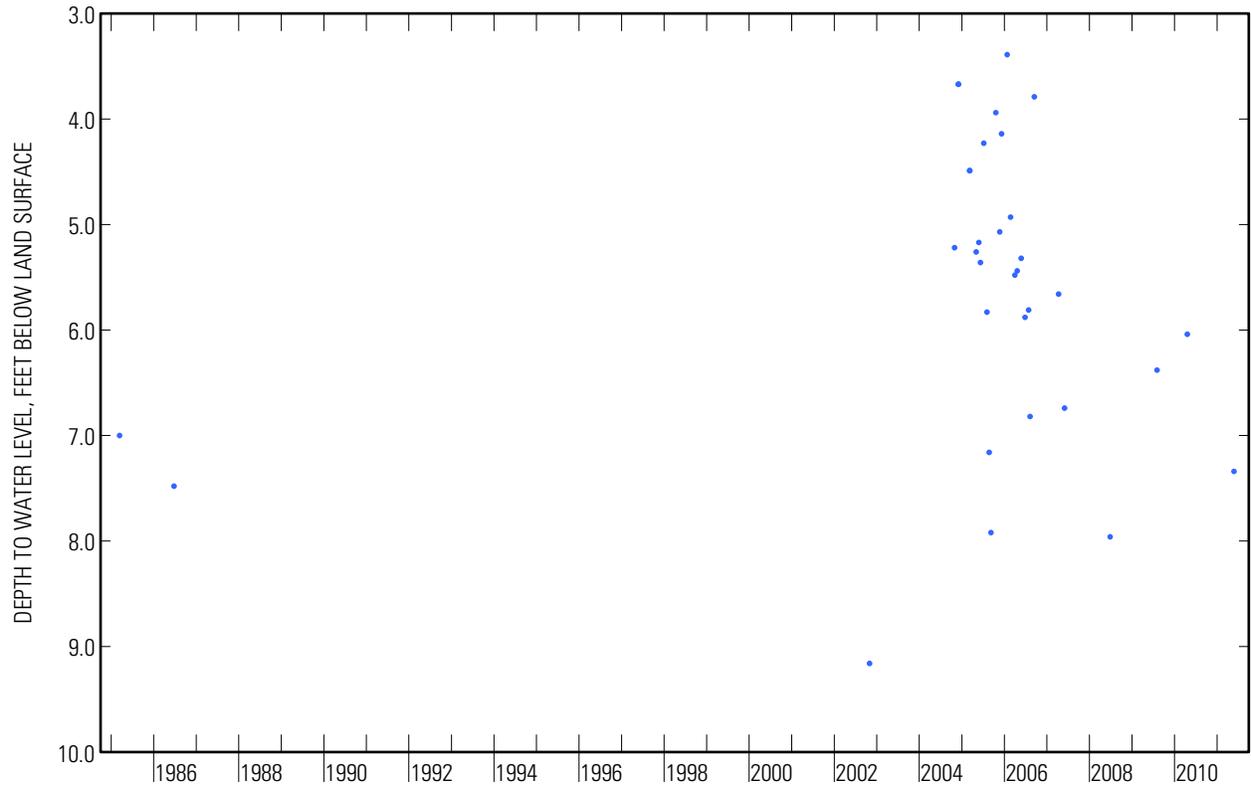
REMARKS.--Well measured as part of the National Water Quality Assessment (NAWQA) program.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.39 ft below land-surface datum, January 24, 2006; lowest water level measured, 9.16 ft below land-surface datum, October 30, 2002.

**WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM**

<b>Date</b>	<b>Water level</b>
May 26, 2011	7.34

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**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2003, 2005, 2007, 2009, 2011.

REMARKS.--Well sampled as part of the National Water-Quality Assessment (NAWQA) Program.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Depth to water level, ft below land surface (72019)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)
05-26-2011	1330	Groundwater	Regular	759	31.6	7.34	.5	5	6.7	564

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Water level, depth below measuring point, feet (61055)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)
05-26-2011	1330	18.3	1.6	8.68	365	307	120	2.21	1.05

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO <sub>3</sub> (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Bromide, water, filtered, mg/L (71870)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, filtered, mg/L (00945)
05-26-2011	1330	3.46	289	352	.02	5.66	.09	12.3	< .09

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 4 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Total nitrogen, water, filtered, analytically determined, mg/L (62854)	Iron, water, filtered, μg/L (01046)	Manganese, water, filtered, μg/L (01056)	1,2,3-Trichloropropane, water, unfiltered, recoverable, μg/L (77443)
05-26-2011	1330	.044	.02	< .001	.372	.28	1,360	61.3	< .12

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	1,2-Dibromo-3-chloro-propane, water, unfiltered, recoverable,	1,2-Dibromo-ethane, water, unfiltered, recoverable,	1,2-Dichloro-ethane, water, unfiltered, recoverable,	1,2-Dichloro-propane, water, unfiltered, recoverable,	1,3-Di-chloro-propane, water, unfiltered, recoverable,	1,4-Dichloro-benzene, water, unfiltered, recoverable,	1-Naphthol, water, (0.7 micron glass fiber filtered), recoverable,	2,6-Diethyl-aniline, water, (0.7 micron glass fiber filtered), recoverable,	2-Chloro-2',6'-diethyl-acetanilide, water, filtered, recoverable,
		µg/L (82625)	µg/L (77651)	µg/L (32103)	µg/L (34541)	µg/L (77173)	µg/L (34571)	µg/L (49295)	µg/L (82660)	µg/L (61618)
05-26-2011	1330	< .4	< .03	< .1	< .03	< .1	< .03	< .036	< .006	< .010

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 6 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable,	2-Ethyl-6-methyl-aniline, water, filtered, recoverable,	3,4-Dichloro-aniline, water, filtered, recoverable,	3,5-Di-chloro-aniline, water, filtered, recoverable,	3-Chloro-propene, water, unfiltered, recoverable,	4-Chloro-2-methyl-phenol, water, filtered, recoverable,	Aceto-chlor, water, filtered, recoverable,	Acrylo-nitrile, water, unfiltered, recoverable,	Alachlor, water, filtered, recoverable,
		µg/L (04040)	µg/L (61620)	µg/L (61625)	µg/L (61627)	µg/L (78109)	µg/L (61633)	µg/L (49260)	µg/L (34215)	µg/L (46342)
05-26-2011	1330	< .006	< .010	< .004	< .004	< .08	< .005	< .010	< 0.8	< .008

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 7 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	alpha-Endo-sulfan, water, filtered, recoverable, µg/L (34362)	Atrazine, water, filtered, recoverable, µg/L (39632)	Azinphos-			Carbaryl, water, filtered, recoverable, µg/L (82680)	Carbofuran, water, filtered, recoverable, µg/L (82674)
				methyl oxygen analog, water, filtered, recoverable, µg/L (61635)	methyl, water, filtered, recoverable, µg/L (82686)	Benfluralin, water, filtered, recoverable, µg/L (82673)		
05-26-2011	1330	<.006	<.008	<.04	<.120	<.014	<.2	<.060

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Carbon disulfide, water, unfiltered, µg/L (77041)	Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636)	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	cis-1,3-Dichloro-propene, water, unfiltered, recoverable, µg/L (34704)	cis-Permethrin, water, filtered, recoverable, µg/L (82687)	cis-Propiconazole, water, filtered, recoverable, µg/L (79846)	Cyanazine, water, filtered, recoverable, µg/L (04041)	Cyfluthrin, water, filtered, recoverable, µg/L (61585)	Cypermethrin, water, filtered, recoverable, µg/L (61586)

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)	Desulfinyl-fipronil amide, water, filtered, recoverable, µg/L (62169)	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170)	Diazinon, water, filtered, recoverable, µg/L (39572)	Dichlorvos, water, filtered, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)	Dieldrin, water, filtered, recoverable, µg/L (39381)	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662)	Disulfoton sulfone, water, filtered, recoverable, µg/L (61640)
05-26-2011	1330	< .008	< .029	< .012	< .006	< .04	< .08	< .008	< .006	< .01

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82677)	Endosulfan sulfate, water, filtered, recoverable, µg/L (61590)	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82668)	Ethion monoxon, water, filtered, recoverable, µg/L (61644)	Ethion, water, filtered, recoverable, µg/L (82346)	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82672)	Fenami-phos sulfone, water, filtered, recoverable, µg/L (61645)	Fenami-phos sulfoxide, water, filtered, recoverable, µg/L (61646)	Fenami-phos, water, filtered, recoverable, µg/L (61591)
05-26-2011	1330	< .04	< .016	< .006	< .02	< .008	< .016	< .054	< .08	< .03

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)	Fipronil, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexazinone, water, filtered, recoverable, µg/L (04025)	Iodomethane, water, unfiltered, recoverable, µg/L (77424)	Iprodione, water, filtered, recoverable, µg/L (61593)	Isofenphos, water, filtered, recoverable, µg/L (61594)	lambda-Cyhalothrin, water, filtered, recoverable, µg/L (61595)
05-26-2011	1330	< .012	< .024	< .018	< .005	< .008	< .26	< .014	< .006	< .010

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Malaoxon, water, filtered, recoverable, µg/L (61652)	Malathion, water, filtered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recoverable, µg/L (61596)	Methidathion, water, filtered, recoverable, µg/L (61598)	Methyl paraoxon, water, filtered, recoverable, µg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Metolachlor, water, filtered, recoverable, µg/L (39415)	Metribuzin, water, filtered, recoverable, µg/L (82630)	Molinate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82671)
05-26-2011	1330	< .022	< .016	< .014	< .012	< .01	< .008	< .020	< .012	< .004

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Myclobutanil, water, filtered, recoverable, µg/L (61599)	Oxyfluorfen, water, filtered, recoverable, µg/L (61600)	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82683)	Phorate oxygen analog, water, filtered, recoverable, µg/L (61666)	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82664)	Phosmet oxygen analog, water, filtered, recoverable, µg/L (61668)	Phosmet, water, filtered, recoverable, µg/L (61601)	Prometon, water, filtered, recoverable, µg/L (04037)	Prometryn, water, filtered, recoverable, µg/L (04036)
05-26-2011	1330	< .010	< .006	< .012	< .03	< .020	< .05	< .140	< .012	< .006

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Propanil, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82685)	Propyz-amide, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82676)	Simazine, water, filtered, recoverable, μg/L (04035)	Tebu-thiuron, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82670)	Tefluthrin, water, filtered, recoverable, μg/L (61606)	Terbufos oxygen analog sulfone, water, filtered, recoverable, μg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82675)	Terbuthyl-azine, water, filtered, recoverable, μg/L (04022)
05-26-2011	1330	< .010	< .02	< .004	< .006	< .03	< .010	< .04	< .02	< .01

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Thioben-carb, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82681)	trans-1,3-Dichloro-propene, water, unfiltered, recoverable, μg/L (34699)	trans-Propicon-azole, water, filtered, recoverable, μg/L (79847)	Tribuphos, water, filtered, recoverable, μg/L (61610)	Trifluralin, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82661)	1,1,1,2-Tetra-chloro-ethane, water, unfiltered, recoverable, μg/L (77562)	1,1,1-Tri-chloro-ethane, water, unfiltered, recoverable, μg/L (34506)	1,1,2,2-Tetra-chloro-ethane, water, unfiltered, recoverable, μg/L (34516)	1,1,2-Tri-chloro-1,2,2-trifluoro-ethane, water, unfiltered, recoverable, μg/L (77652)
05-26-2011	1330	< .016	< .14	< .01	< .018	< .018	< .04	< .03	< .14	< .03

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	1,1,2-Trichloroethane, water, unfiltered, recoverable, µg/L (34511)	1,1-Dichloroethane, water, unfiltered, recoverable, µg/L (34496)	1,1-Dichloroethene, water, unfiltered, recoverable, µg/L (34501)	1,1-Dichloropropene, water, unfiltered, recoverable, µg/L (77168)	1,2,3,4-Tetramethylbenzene, water, unfiltered, recoverable, µg/L (49999)	1,2,3,5-Tetramethylbenzene, water, unfiltered, recoverable, µg/L (50000)	1,2,3-Trichlorobenzene, water, unfiltered, recoverable, µg/L (77613)	1,2,3-Trimethylbenzene, water, unfiltered, recoverable, µg/L (77221)	1,2,4-Trichlorobenzene, water, unfiltered, recoverable, µg/L (34551)
05-26-2011	1330	< .03	< .04	< .02	< .04	< .1	< .080	< .1	< .060	< .1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	1,2,4-Trimethylbenzene, water, unfiltered, recoverable, µg/L (77222)	1,2-Dichlorobenzene, water, unfiltered, recoverable, µg/L (34536)	1,3,5-Trimethylbenzene, water, unfiltered, recoverable, µg/L (77226)	1,3-Dichlorobenzene, water, unfiltered, recoverable, µg/L (34566)	2,2-Dichloropropane, water, unfiltered, recoverable, µg/L (77170)	2-Chlorotoluene, water, unfiltered, recoverable, µg/L (77275)	2-Ethyltoluene, water, unfiltered, recoverable, µg/L (77220)	4-Chlorotoluene, water, unfiltered, recoverable, µg/L (77277)	4-Iso-propyltoluene, water, unfiltered, recoverable, µg/L (77356)
05-26-2011	1330	< .03	< .03	< .03	< .02	< .06	< .03	< .03	< .04	< .06

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Acetone, water, unfiltered, recoverable, µg/L (81552)	Benzene, water, unfiltered, recoverable, µg/L (34030)	Bromobenzene, water, unfiltered, recoverable, µg/L (81555)	Bromochloromethane, water, unfiltered, recoverable, µg/L (77297)	Bromodichloromethane, water, unfiltered, recoverable, µg/L (32101)	Bromoethene, water, unfiltered, recoverable, µg/L (50002)	Chlorobenzene, water, unfiltered, recoverable, µg/L (34301)	Chloroethane, water, unfiltered, recoverable, µg/L (34311)	Chloromethane, water, unfiltered, recoverable, µg/L (34418)
05-26-2011	1330	< 3	< .03	< .02	< .06	< .03	< .1	< .03	< .1	< .140

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**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

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[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	cis-1,2-Dichloroethene, water, unfiltered, recoverable, µg/L (77093)	Dibromochloromethane, water, unfiltered, recoverable, µg/L (32105)	Dibromomethane, water, unfiltered, recoverable, µg/L (30217)	Dichlorodifluoromethane, water, unfiltered, recoverable, µg/L (34668)	Dichloromethane, water, unfiltered, recoverable, µg/L (34423)	Diethyl ether, water, unfiltered, recoverable, µg/L (81576)	Diisopropyl ether, water, unfiltered, recoverable, µg/L (81577)	Ethyl methacrylate, water, unfiltered, recoverable, µg/L (73570)	Ethyl methyl ketone, water, unfiltered, recoverable, µg/L (81595)
05-26-2011	1330	< .02	< .1	< .05	< .10	.07	< .1	< .06	< .2	< 1.6

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 20 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Ethylbenzene, water, unfiltered, recoverable, µg/L (34371)	Hexachlorobutadiene, water, unfiltered, recoverable, µg/L (39702)	Hexachloroethane, water, unfiltered, recoverable, µg/L (34396)	Isobutyl methyl ketone, water, unfiltered, recoverable, µg/L (78133)	Isopropylbenzene, water, unfiltered, recoverable, µg/L (77223)	Methyl acrylate, water, unfiltered, recoverable, µg/L (49991)	Methyl acrylonitrile, water, unfiltered, recoverable, µg/L (81593)	Methyl methacrylate, water, unfiltered, recoverable, µg/L (81597)	Methyl tert-butyl ether, water, unfiltered, recoverable, µg/L (78032)
05-26-2011	1330	< .04	< .1	< .2	< .3	< .04	< .8	< .3	< .2	< .10

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 21 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than]

Date	Sample start time	Methyl tert-pentyl ether, water, unfiltered, recoverable, µg/L (50005)	m-Xylene plus p-xylene, water, unfiltered, recoverable, µg/L (85795)	Naphthalene, water, unfiltered, recoverable, µg/L (34696)	n-Butyl methyl ketone, water, unfiltered, recoverable, µg/L (77103)	n-Butylbenzene, water, unfiltered, recoverable, µg/L (77342)	n-Propylbenzene, water, unfiltered, recoverable, µg/L (77224)	o-Xylene, water, unfiltered, recoverable, µg/L (77135)	sec-Butylbenzene, water, unfiltered, recoverable, µg/L (77350)	Styrene, water, unfiltered, recoverable, µg/L (77128)
05-26-2011	1330	< .06	< .08	< .2	< .4	< .1	< .04	< .03	< .03	< .04

## 351019077184102 Local number CR-543, NCDENR COVE CITY RESEARCH STATION R23x2, NEAR COVE CITY, NC—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 22 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	tert-Butyl ethyl ether, water, unfiltered, recoverable, μg/L (50004)	tert-Butyl benzene, water, unfiltered, recoverable, μg/L (77353)	Tetra-chloro-ethene, water, unfiltered, recoverable, μg/L (34475)	Tetra-chloro-methane, water, unfiltered, recoverable, μg/L (32102)	Tetra-hydro-furan, water, unfiltered, recoverable, μg/L (81607)	Toluene, water, unfiltered, recoverable, μg/L (34010)	trans-1,2-Dichloro-ethene, water, unfiltered, recoverable, μg/L (34546)	trans-1,4-Dichloro-2-butene, water, unfiltered, recoverable, μg/L (73547)	Tribromo-methane, water, unfiltered, recoverable, μg/L (32104)
05-26-2011	1330	< .03	< .06	< .03	< .06	< 1	< .02	< .02	< .4	< .10

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 23 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than]

Date	Sample start time	Trichloro-ethene, water, unfiltered, recoverable, μg/L (39180)	Trichloro-fluoro-methane, water, unfiltered, recoverable, μg/L (34488)	Trichloro-methane, water, unfiltered, recoverable, μg/L (32106)	Vinyl chloride, water, unfiltered, recoverable, μg/L (39175)
05-26-2011	1330	< .02	< .06	< .03	< .1