

Water-Data Report 2009

342359077404104 Local number PE-107 TOPSAIL BEACH RESEARCH STATION 4 AT TOPSAIL, NC

Castle Hayne aquifer
Castle Hayne Formation

Pender County, NC

LOCATION.--Lat 34°23'59.9", long 77°40'41.4" referenced to North American Datum of 1983, Pender County, NC, Hydrologic Unit 03030001, .31 mi east of North Carolina Highway 210/U.S. Highway 17, at Topsail.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 160 ft. Upper casing diameter 4.0 in; top of first opening 80 ft, bottom of last opening 160 ft.

DATUM.--Land-surface datum is 59.77 ft above National Geodetic Vertical Datum of 1929. Measuring point: 1.92 ft above land-surface datum, September 1, 1983, to present.

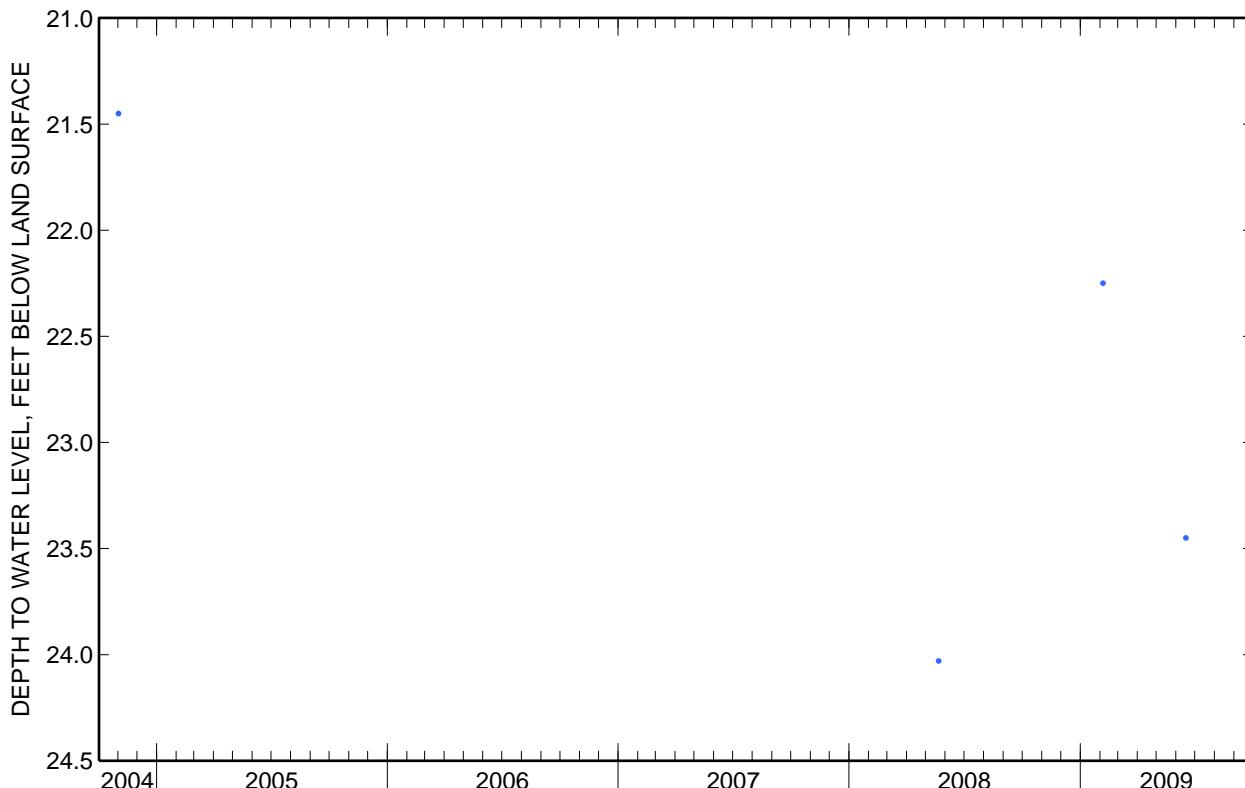
PERIOD OF RECORD.--November 2004, May 2008 to June 2009.

GAGE.--Measured periodically with electric tape.

REMARKS.--Well measured as part of the Onslow County groundwater study.

WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM

Date	Water level	Date	Water level
Feb 5, 2009	22.25	Jun 16, 2009	23.45



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 2009.

REMARKS.--Well sampled as part of the Onslow County groundwater study.

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

Part 1 of 7

[Remark codes: <, less than; E, estimated.]

Date	Time	Baro-	Dis-	pH,	Specif-	Dis-	Magnes-	Potas-	Alka-				
		metric	solved	solved	water, unfiltrd	ic			lity, wat flt				
		pres-	dis-	water,	field,	conduc-	solids	ium, water,	Gran,				
		sure,	oxy-	per-	unfiltrd	tance,	dried @	water,	field,				
			gen,	cent	std	μS/cm @	180degC	water,	mg/L as				
Date	Time	mm Hg	mg/L	(00025)	(00300)	(00301)	(00400)	water,	CaCO3				
Jun 16...	1645	756	6.8	74	11.7	3,700	18.6	960	346	<.036	.93	3.68	790

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

Part 2 of 7

[Remark codes: <, less than; E, estimated.]

Date	Bicar-	Ammonia				Nitrate	Ortho-	Phos-	Mangan-				
	bonate,	Chlor-	Fluor-	Silica,	org-N,	Ammonia	nitrite	Nitrite					
	wat flt	Gran	ide,	water,	Sulfate	water,	water	water,	Iron,				
	titr.,	water,	water,	filtrd,	water,	unfiltrd	filtrd,	filtrd,	water,				
	field,	filtrd,	filtrd,	mg/L as	filtrd,	mg/L	mg/L	mg/L	water,				
Date	mg/L	mg/L	mg/L	SiO2	mg/L	as N	mg/L	mg/L	water,				
	(63786)	(00940)	(00950)	(00955)	(00945)	(00625)	(00608)	(00631)	filtrd,				
Jun 16...	964	12.2	<.08	3.07	5.34	.29	.113	<.016	E.001	<.008	E.006	E3	<.6

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

Part 3 of 7

[Remark codes: <, less than; E, estimated.]

Date	1,2,3-	Dibromo	1,2-Di-	1,2-Di-	1,3-Di-	1,4-Di-	Acrylo-	Bromo-	cis-	trans-	1,1,1,2	1,1,1-
	Tri-	chloro-	propane	propane	ethane,	ethane,			nitrile	methane	propene	-Tetra-
	chloro-	chloro-	bromo-	bromo-	chloro-	chloro-	benzene	water,	chloro-	chloro-	chloro-	Tri-
	propane	propane	ethane,	ethane,	propane	propane	water,	water,	propene	propene	chloro-	chloro-
	water,	water,	water,	water,	water,	water,	unfiltrd	unfiltrd	water,	water,	chloro-	chloro-
	unfiltrd	chloro-	chloro-									
Date	μg/L	μg/L	μg/L									
	(77443)	(82625)	(77651)	(32103)	(34541)	(77173)	(34571)	(34215)	(34413)	(34704)	(34699)	(77562)
Jun 16...	<.2	<.5	<.2	<.2	<.1	<.2	<.1	<2.5	<.4	<.2	<.2	<.1

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 7

[Remark codes: <, less than; E, estimated.]

Date	1,1,2,2-Tetra-chloro-ethane, water, unfltrd	CFC-113	1,1,2-Tri-chloro-ethane, water, unfltrd	1,1-Di-chloro-ethane, water, unfltrd	1,1-Di-chloro-ethene, water, unfltrd	1,1-Di-chloro-propene	1,2,3-Tri-chloro-benzene	1,2,4-Tri-chloro-benzene	1,2,4-Tri-methyl-benzene	1,2-Di-chloro-benzene	1,3,5-Tri-methyl-benzene	1,3-Di-chloro-benzene	2,2-Di-chloro-propane	
	µg/L (34516)	µg/L (77652)	µg/L (34511)	µg/L (34496)	µg/L (34501)	µg/L (77168)	µg/L (77613)	µg/L (34551)	µg/L (77222)	µg/L (34536)	µg/L (77226)	µg/L (34566)	µg/L (77170)	
Jun 16...	<.2	<.1	<.2	<.1	<.1	<.2	<.2	<.2	<.2	<.2	<.1	<.2	<.1	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 7

[Remark codes: <, less than; E, estimated.]

Date	2-Chloro-toluene	4-Chloro-toluene	4-Iso-propyl-toluene	Benzene	Bromo-chloro-benzene	Bromo-chloro-methane	Bromo-di-chloro-methane	Chloro-ethane, water, unfltrd	Chloro-methane	cis-1,2-Di-chloro-ethene, water, unfltrd	Di-bromo-chloro-methane	Di-bromo-methane	Di-chloro-fluoromethane	
	µg/L (77275)	µg/L (77277)	µg/L (77356)	µg/L (34030)	µg/L (81555)	µg/L (77297)	µg/L (32101)	µg/L (34311)	µg/L (34418)	µg/L (77093)	µg/L (32105)	µg/L (30217)	µg/L (34668)	
Jun 16...	<.2	<.2	<.2	<.1	<.2	<.2	<.1	<.2	<.2	<.2	<.1	<.2	<.2	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 7

[Remark codes: <, less than; E, estimated.]

Date	Di-chloro-methane	Ethyl-benzene	Hexa-chloro-butadiene, water, unfltrd	Iso-propyl-benzene	Methyl-t-butyl-ether, water, unfltrd	Naphth-alene, water, unfltrd	n-Butyl-benzene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	Tetra-chloro-ethene, water, unfltrd	Tetra-chloro-methane		
	µg/L (34423)	µg/L (34371)	µg/L (39702)	µg/L (77223)	µg/L (78032)	µg/L (34696)	µg/L (77342)	µg/L (77224)	µg/L (77350)	µg/L (77128)	µg/L (77353)	µg/L (34475)	µg/L (32102)	
Jun 16...	<.2	<.1	<.2	<.2	<.2	2.5	<.2	<.2	<.2	<.1	<.2	<.1	<.2	<.2

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 7 of 7

[Remark codes: <, less than; E, estimated.]

Date	trans-	Tri-					Vinyl chloride, Xylene, water, unfiltrd	
	1,2-Di- chloro- Toluene water, unfiltrd	Tri- bromo- methane	Tri- chloro- ethene	chloro- fluoro- methane	Tri- chloro- methane	Vinyl chloride, water, unfiltrd		
	μg/L (34010)	μg/L (34546)	μg/L (32104)	μg/L (39180)	μg/L (34488)	μg/L (32106)	μg/L (39175)	μg/L (81551)
Jun 16...	<.1	<.1	<.2	<.1	<.2	<.1	<.2	<.2