

Water-Data Report 2013

355559079122101 Local number OR-688 COL-4 NEAR WHITE CROSS, NC (TRANSITION ZONE)

 Piedmont and Blue Ridge crystalline-rock aquifers
 Transition Zone

Orange County, NC

LOCATION.--Lat 35°55'58.94", long 79°12'20.81" referenced to North American Datum of 1983, Orange County, NC, Hydrologic Unit 03030002, near Oaks, NC. Owner: NCDENR (North Carolina Department of Environment and Natural Resources).

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 32 ft. Upper casing diameter 4 in; top of first opening 17 ft, bottom of last opening 32 ft.

DATUM.--Land-surface datum is 501.86 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of casing, 3.00 ft above land-surface datum.

PERIOD OF RECORD.--May 2011 to March 2013 (discontinued).

REMARKS.--Measured quarterly by U. S. Geological Survey and/or NCDENR personnel.

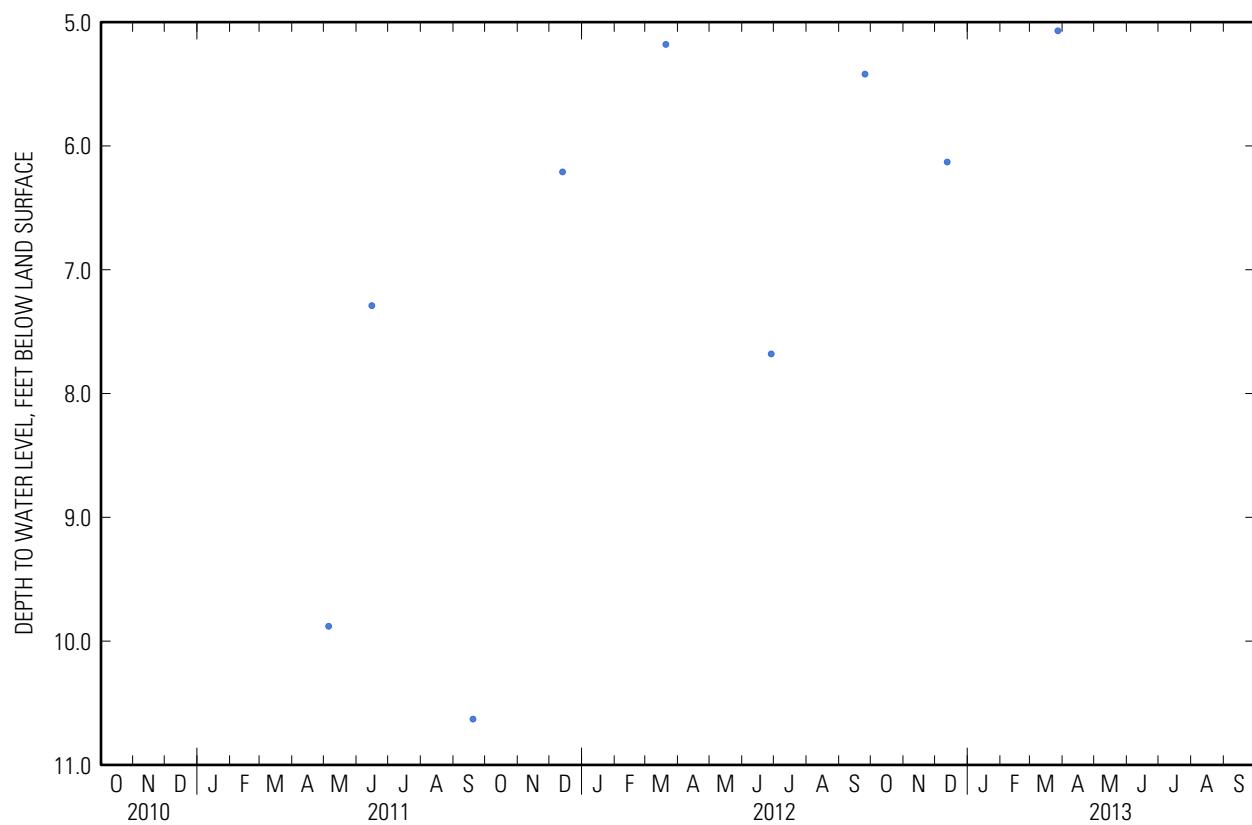
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.07 ft below land-surface datum, March 27, 2013; lowest water level measured, 10.63 ft below land-surface datum, September 19, 2011.

WATER LEVELS IN FEET BELOW LAND-SURFACE DATUM

[Measurement method: T, electric tape. Water-level status: --, static.]

Date	Water level	Measure- ment method	Water- level status	Date	Water level	Measure- ment method	Water- level status
Dec 12, 2012	6.13	T	--	Mar 27, 2013	5.07	T	--

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355559079122101 Local number OR-688 COL-4 NEAR WHITE CROSS, NC (TRANSITION ZONE)—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 2011 to March 2013 (discontinued).

REMARKS.--Station operated to evaluate effects of land-applied municipal biosolids on water quality.

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 1 of 4

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; MF, membrane filter; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Depth to water level, ft below land surface (72019)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25°C (00095)	Temperature, water, °C (00010)	Calcium, water, filtered, mg/L (00915)
12-12-2012	1340	Groundwater	Regular	770	6.13	2.6	5.4	204	15.6	17.8
03-27-2013	1520	Groundwater	Regular	--	5.07	2.7	5.4	194	13.5	17.5

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**

Part 2 of 4

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; MF, membrane filter; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Magne-sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	ANC, water, unfiltered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (00419)	Alkalinity, water, filtered, fixed endpoint titration, laboratory, mg/L as CaCO ₃ (29801)	carbonate, water, unfiltered, inflection-point, (pH 4.5) titration, mg/L as CaCO ₃ (00450)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)
12-12-2012	1340	7.47	0.60	6.66	23	29.3	28	10.7	<.04
03-27-2013	1520	7.75	.59	6.49	26	28.5	31	9.91	E .05

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 4

[ANC, acid neutralizing capacity; CaCO₃, calcium carbonate; MF, membrane filter; MPN/100 mL, most probable number per 100 milliliters; N, nitrogen; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Sulfate, water, filtered,	Ammonia, water, filtered,	Nitrate plus nitrite, water, filtered,	Orthophosphate, water, filtered,	Phosphorus, water, filtered,	Total nitrogen, water, filtered, analytically determined,	Escherichia coli, Defined Substrate	Fecal coliform, M-FC MF
		mg/L (00945)	mg/L as N (00608)	mg/L as N (00631)	mg/L as P (00671)	mg/L as P (00666)	mg/L (62854)	MPN/100 mL (50468)	water, method, col/100 mL (31616)
12-12-2012	1340	11.0	< .010	10.2	0.048	0.047	9.81	2	< 2
03-27-2013	1520	12.1	< .010	11.1	.048	.045	11.0	< 10	< 4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO
SEPTEMBER 2013

Part 4 of 4

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Date	Sample start time	Iron, water, filtered, µg/L (01046)
12-12-2012	1340	13.7
03-27-2013	1520	16.3