

Water-Data Report 2007

353127080253401 Local number RO-150, Piedmont Major Aquifer Study, Site 13

 Piedmont and Blue Ridge crystalline-rock aquifers
 Metavolcanic Rock Undifferentiated

Rowan County, NC

LOCATION.--Lat 35°31'27", long 80°25'34" referenced to North American Datum of 1983, Rowan County, NC, Hydrologic Unit 03040103, private residence, Rockwall, NC.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.--Depth 145 ft. Upper casing diameter 6 in, top of first opening 40 ft, bottom of last opening 145 ft.

PERIOD OF RECORD.--August 2007.

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

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 1 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Time	Depth to water level, feet below MP, LSD (72019)	Water level, depth below MP, feet (61055)	Baro-metric pressure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif-ic conduc-tance, µS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calci-um, water, mg/L (00915)	Magnes-iun, water, mg/L (00925)	Potas-sium, water, mg/L (00935)
Aug 14...	1330	28.35	28.80	748	7.7	82	6.3	150	17.3	58	13.5	5.75	1.06

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**

Part 2 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incr. titr., field, mg/L (00453)	Chlor-ide, water, fltrd, mg/L (71870)	Fluor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt	Ammonia water, mg/L as N (70300)	Nitrite + water, mg/L as N (00608)	Nitrate water, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitro-gen, wat flt by anal ysis, mg/L (62854)
Aug 14...	8.63	40	49	.03	8.98	<.10	41.3	4.42	134	<.020	2.84	<.002	2.91

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 3 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Ortho-phosphate, water, mg/L as P	Colipge F-spec, Organic	Colipge som, Ec	CN13hst	E coli, MI MF	Total coliform, MI MF	Alum-inum, water, col/	Anti-mony, water, fltrd,	Arsenic, water, fltrd,	Barium, water, fltrd,	Beryll-ium, water, fltrd,	Boron, water, fltrd,	Cadmium, water, fltrd,	
	(00671)	(00681)	(99335)	(99332)	(90901)	(100 mL)	(90900)	(01106)	(01095)	(01000)	(01005)	(01010)	(01020)	(01025)
Aug 14...	.100	E.2	U	U	<1	E340	4.4	<.06	E.07	17	<.06	<8	E.02	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 4 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Chromium, water, µg/L	Cobalt, water, µg/L	Copper, water, µg/L	Hydrogen sulfide	Iron, water, mg/L	Lead, water, µg/L	Lithium, water, µg/L	Manganese, water, µg/L	Molybdenum, water, µg/L	Nickel, water, µg/L	Selenium, water, µg/L	Silver, water, µg/L	Strontium, water, µg/L	
	(01030)	(01035)	(01040)	(71875)	(01046)	(01049)	(01130)	(01056)	(01060)	(01065)	(01145)	(01075)	(01080)	
Aug 14...	2.9	.04	7.3	U	8	.40	<.6	.9	E.1	1.0	1.1	<.1	172	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 5 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Thallium, water, µg/L	Vanadium, water, µg/L	Zinc, water, µg/L	1-Naphthol, 0.7u GF	2,6-Diethyl-aniline, 0.7u GF	2-Chloro-acet- -2',6'-diethyl -CIAT, anilide	2-Ethyl-methyl-aniline, wat flt	4-Chloro- -6-chloro-aniline, fltrd,	3,4-Di-chloro-aniline, fltrd,	3,5-Di-chloro-aniline, fltrd,	4-Chloro- -2methyl-phenol, fltrd,	Aceto-chlor, water, µg/L	Ala-chlor, water, µg/L
	(01057)	(01085)	(01090)	(49295)	(82660)	(61618)	(61620)	(61625)	(61627)	(61633)	(49260)	(46342)	
Aug 14...	<.04	7.1	12.1	<.09	<.006	<.006	E.007	<.010	<.004	<.012	<.005	<.006	<.005

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 6 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	alpha-Endo-sulfan, water, fltrd, µg/L (34362)	Atra-zine, water, fltrd, µg/L (39632)	Azin-phos-methyl, oxon, water, fltrd, µg/L (61635)	Azin-phos-methyl, water, fltrd, µg/L (82686)	Ben-flur-alin, water, fltrd, µg/L (82673)	Car-baryl, water, fltrd, µg/L (82680)	Carbo-furan, water, fltrd, µg/L (82674)	Chlor-pyrifos, oxon, water, fltrd, µg/L (61636)	Chlor-pyrifos, water, fltrd, µg/L (38933)	cis-Per-methrin, water, fltrd, µg/L (82687)	cis-Propi-conazole, water, fltrd, µg/L (79846)	Cyana-zine, water, fltrd, µg/L (04041)	Cyflu-thrin, water, fltrd, µg/L (61585)
Aug 14...	<.011	.008	<.04	<.080	<.010	<.060	<.020	<.06	<.005	<.010	<.013	<.018	<.053

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 7 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	lambda-Cyhalothrin, water, fltrd, µg/L (61595)	Cyper-methrin, water, fltrd, µg/L (61586)	DCPA, water, fltrd, µg/L (82682)	Desulf-inyl-fipro-nil, water, fltrd, µg/L (62170)	Diazi-non, water, fltrd, µg/L (39572)	Dicro-tophos, water, fltrd, µg/L (38454)	Diel-drin, water, fltrd, µg/L (39381)	Dimeth-oate, water, fltrd, µg/L (82662)	Disulf-oton, sulfone, water, fltrd, µg/L (61640)	Disulf-foton, water, fltrd, µg/L (82677)	Endo-sulfan, sulfate, water, fltrd, µg/L (61590)	EPTC, water, fltrd, µg/L (82668)	Ethion monoxon, water, fltrd, µg/L (61644)
Aug 14...	<.014	<.046	<.003	<.012	<.005	<.08	<.009	<.006	<.01	<.02	<.022	<.002	<.02

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 8 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Ethion, water, fltrd, µg/L (82346)	Etho-prop, water, fltrd, µg/L (82672)	Fenami-phos sulfone, water, fltrd, µg/L (61645)	Fenami-phos sulfide, water, fltrd, µg/L (61646)	Fenami-phos amide, wat flt, µg/L (61591)	Desulf-inyl-fipro-nil, water, fltrd, µg/L (62169)	Fipro-nil sulfide, water, fltrd, µg/L (62167)	Fipro-nil sulfone, water, fltrd, µg/L (62168)	Fipro-nil water, fltrd, µg/L (62166)	Fonofos water, fltrd, µg/L (04095)	Hexa-zinone, water, fltrd, µg/L (04025)	Ipro-dione, water, fltrd, µg/L (61593)	Isofen-phos, water, fltrd, µg/L (61594)
Aug 14...	<.016	<.012	<.053	<.04	<.03	<.029	<.013	<.024	<.016	<.006	<.026	<.026	<.011

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 9 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Mala-	Mala-	Meta-	Methi-	Methyl	para-	Metola-	Metri-	Moli-	Oxy-	Pendi-
	oxon,	thion,	laxyl,	althion	par-	thion,	water,	buzin,	nate,	fluor-	meth-
	water,	water,	water,	water,	oxy-	water,	chlor,	water,	butanil	fen,	algin,
	fltrd,	fltrd,	fltrd,	fltrd,	0.7u GF	water,	fltrd,	fltrd,	fltrd,	fltrd,	0.7u GF
	µg/L	µg/L	µg/L	µg/L	(61664)	µg/L	(82667)	µg/L	(82671)	µg/L	(82683)
	(61652)	(39532)	(61596)	(61598)	(61664)	(82667)	(39415)	(82630)	(61599)	(61600)	(61666)
Aug 14...	<.039	<.016	<.007	<.009	<.02	<.008	<.010	<.012	<.003	<.033	<.017
											<.020
											<.03

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 10 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Phorate	Phosmet	Prometon	Prometryn	Propyzamide	Propanil	Propargite	Simazine	Tebuthiuron	Tefluthrin	Terbufos
	water,	oxon,	water,	water,	water,	water,	water,	water,	water,	water,	water,
	filtrd	filtrd,	filtrd,	filtrd,	filtrd	filtrd	filtrd	filtrd	filtrd	filtrd,	filtrd,
	0.7u GF	µg/L	µg/L	µg/L	0.7u GF	µg/L	0.7u GF	µg/L	0.7u GF	µg/L	0.7u GF
	(82664)	(61668)	(61601)	(04037)	(04036)	(82676)	(82679)	(82685)	(04035)	(82670)	(61606)
	(61664)	(61668)	(61601)	(04037)	(04036)	(82676)	(82679)	(82685)	(04035)	(82670)	(61674)
Aug 14...	<.020	<.05	<.008	<.01	<.006	<.004	<.011	<.02	<.006	<.02	<.003
											<.04
											<.01

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

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[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Ter-	Thio-	trans-	Tri-	1,1,1,2	1,1,1-	1,1,2,2	1,1,2-	Tri-	1,1-Di-	1,1-Di-
	butyl-	bencarb	Propi-	flur-	-Tetra-	Tri-	-Tetra-	chloro-	chloro-	chloro-	chloro-
	azine,	water,	cona-	Tribu-	alin,	chloro-	chloro-	chloro-	ethane,	ethane,	propene
	water,	water,	zole,	phos,	water,	ethane,	ethane,	ethane,	water,	water,	water,
	filtrd	filtrd,	water,	water,	filtrd	water,	water,	water,	unfiltrd	unfiltrd	unfiltrd
	0.7u GF	0.7u GF	filtrd,	filtrd,	0.7u GF	unfiltrd	unfiltrd	unfiltrd	unfiltrd	unfiltrd	unfiltrd
	µg/L	µg/L	µg/L	µg/L	µg/L	(77562)	(34506)	(34516)	(77652)	(34511)	(34496)
	(04022)	(82681)	(79847)	(61610)	(82661)						
Aug 14...	<.01	<.010	<.03	<.035	<.009	<.04	<.04	<.10	<.04	<.04	<.06
											<.02
											<.04

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 12 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	1,2,3,4 -Tetra- methyl- benzene water, unfltrd	1,2,3,5 -Tetra- methyl- benzene water, unfltrd	1,2,3- Tri- chloro- benzene water, unfltrd	1,2,3- Tri- chloro- propane water, unfltrd	1,2,3- Tri- methyl- benzene water, unfltrd	1,2,4- Tri- chloro- benzene water, unfltrd	1,2,4- Tri- methyl- benzene water, unfltrd	Dibromo- propane water, unfltrd	1,2-Di- chloro- ethane, unfltrd	1,2-Di- chloro- ethane, unfltrd	1,2-Di- chloro- propane water, unfltrd	1,2-Di- chloro- propane water, unfltrd	1,3,5- Tri- methyl- benzene water, unfltrd
	µg/L (49999)	µg/L (50000)	µg/L (77613)	µg/L (77443)	µg/L (77221)	µg/L (34551)	µg/L (77222)	µg/L (82625)	µg/L (77651)	µg/L (34536)	µg/L (32103)	µg/L (34541)	µg/L (77226)
Aug 14...	<.1	<.1	<.1	<.12	<.1	<.1	<.04	<.5	<.4	<.04	<.1	<.02	<.04

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 13 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	1,3-Di- chloro- benzene water, unfltrd	1,3-Di- chloro- propane water, unfltrd	1,4-Di- chloro- benzene water, unfltrd	2,2-Di- chloro- propane water, unfltrd	2-Chloro- toluene water, unfltrd	2-Ethyl- toluene water, unfltrd	3-Chloro- propene water, unfltrd	4-Chloro- toluene water, unfltrd	4-Iso- propyl- toluene water, unfltrd	Acetone water, unfltrd	Acrylo- nitrile water, unfltrd	Benzene water, unfltrd	Bromo- benzene water, unfltrd	
	µg/L (34566)	µg/L (77173)	µg/L (34571)	µg/L (77170)	µg/L (77275)	µg/L (77220)	µg/L (78109)	µg/L (77277)	µg/L (77356)	µg/L (81552)	µg/L (34215)	µg/L (34030)	µg/L (81555)	
Aug 14...	<.04	<.1	<.04	<.06	<.04	<.04	<.08	<.04	<.08	<.04	<.6	<.4	<.02	<.02

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 14 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Bromo- Bromo- di- chloro- methane water, unfltrd	di- chloro- methane water, unfltrd	Bromo- ethene, methane water, unfltrd	Bromo- ethene, methane water, unfltrd	Carbon di- sulfide water, unfltrd	Chloro- benzene water, unfltrd	Chloro- ethane, methane water, unfltrd	Chloro- ethene, methane water, unfltrd	cis- 1,2-Di- chloro- ethene, methane water, unfltrd	cis- 1,3-Di- chloro- ethene, methane water, unfltrd	Di- bromo- chloro- methane water, unfltrd	Di- bromo- methane water, unfltrd	Di- chloro- di- fluoro- methane water, unfltrd
	µg/L (77297)	µg/L (32101)	µg/L (50002)	µg/L (34413)	µg/L (77041)	µg/L (34301)	µg/L (34311)	µg/L (34418)	µg/L (77093)	µg/L (34704)	µg/L (32105)	µg/L (30217)	µg/L (34668)
Aug 14...	<.06	<.04	<.1	<.4	<.06	<.02	<.1	<.1	<.02	<.06	<.1	<.04	<.14

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 15 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Di-chloro-methane water, unfltrd	Di-ethyl ether, water, unfltrd	Diiso-propyl ether, water, unfltrd	Ethyl methacrylate, water, unfltrd	Ethyl methyl ketone, water, unfltrd	Ethyl benzene	Hexa-chlorobutadiene, water, unfltrd	Hexa-chloroethane, water, unfltrd	Iodo-methane	Iso-butyl methyl ketone, water, unfltrd	Iso-propylbenzene	Methyl acrylonitrile, water, unfltrd	Methyl acrylate, water, unfltrd
	µg/L (34423)	µg/L (81576)	µg/L (81577)	µg/L (73570)	µg/L (81595)	µg/L (34371)	µg/L (39702)	µg/L (34396)	µg/L (77424)	µg/L (78133)	µg/L (77223)	µg/L (81593)	µg/L (49991)
Aug 14...	<.04	<.1	<.06	<.1	<1.6	<.02	<.1	<.1	<.40	<.2	<.04	<.4	<.4

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 16 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Methyl methacrylate, water, unfltrd	tert-pentyl ether, water, unfltrd	meta-+ para-Xylene, water, unfltrd	Naphth-alene, water, unfltrd	Methyl ketone, water, unfltrd	n-butyl benzene	n-Butyl benzene	propyl benzene	o-Xylene, water, unfltrd	sec-Butyl benzene	Styrene	t-Butyl ethyl ether, water, unfltrd	Methyl t-butyl ether, water, unfltrd	tert-Butyl benzene
	µg/L (81597)	µg/L (50005)	µg/L (85795)	µg/L (34696)	µg/L (77103)	µg/L (77342)	µg/L (77224)	µg/L (77135)	µg/L (77350)	µg/L (77128)	µg/L (50004)	µg/L (78032)	µg/L (77353)	
Aug 14...	<.2	<.04	<.08	<.4	<.4	<.1	<.04	<.04	<.04	<.04	<.04	<.04	<.1	<.08

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 17 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Tetra-chloro-ethene, water, unfltrd	Tetra-chloro-methane	Tetra-hydro-furan, water, unfltrd	Toluene	trans-1,2-Di-chloro-ethene, water, unfltrd	trans-1,3-Di-chloro-propene	trans-1,4-Di-chloro-butene, water, unfltrd	Tri-bromo-methane	Tri-chloro-ethene, water, unfltrd	Tri-fluoro-methane	Tri-chloro-methane	Vinyl chloride, water, unfltrd	Di-chloro-vos, water, unfltrd
	µg/L (34475)	µg/L (32102)	µg/L (81607)	µg/L (34010)	µg/L (34546)	µg/L (34699)	µg/L (73547)	µg/L (32104)	µg/L (39180)	µg/L (34488)	µg/L (32106)	µg/L (39175)	µg/L (38775)
Aug 14...	<.04	<.08	<1	<.02	<.02	<.10	<.6	<.08	<.02	<.08	E.01	<.1	<.01

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 18 of 18

[Remark codes: <, less than; E, estimated; U, analyzed for but not detected.]

Date	Gross alpha 30 day	Gross alpha radioac	Gross beta 30 day	Gross beta radioac	Ra-226, water, filtrd,	Rn-222 Ra-228, water, unfltrd	2-sigma filtrd,	Rn-222, water, unfltrd	Uranium natural fltrd,
	wat unf Th-230, Th-230,	wat unf Th-230, Th-230,	wat unf Cs-137, Cs-137,	wat unf Cs-137, Cs-137,	method	water, unfltrd	water, unfltrd	water, unfltrd	water, unfltrd
	pCi/L (63016)	pCi/L (63014)	pCi/L (63017)	pCi/L (63015)	pCi/L (09511)	pCi/L (81366)	pCi/L (76002)	pCi/L (82303)	µg/L (22703)
Aug									
14...	.4	.1	1.2	1	.041	-.12	20	190	<.04