

Water-Data Report 2007

361646081433001 Local number WT-098, DENR Tater Hill Research Station ASU-1D (Bedrock well)

Piedmont and Blue Ridge crystalline-rock aquifers Mafic Gneiss

Watauga County, NC

LOCATION.--Lat 36°16'46", long 81°43'03" referenced to North American Datum of 1983, Watauga County, NC, Hydrologic Unit 05050001, 2.1 mi east of U.S. Highway 421, 0.1 mi north of Howards Creek Road. Owner: Appalachian State University and NCDENR (North Carolina Department of Environment and Natural Resources), Division of Water Quality.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Drilled observation well, depth 345 ft, diameter 6 in., cased to 20 ft, open hole from 20 ft to 345 ft.

DATUM.--Land-surface datum is 4,060 ft above North American Vertical Datum of 1988. Measuring point: Black mark on instrument shelter floor, 1.35 ft above land-surface datum, December 21, 2006, to present.

PERIOD OF RECORD.--December 2006 to September 2007.

GAGE.--Water-level recorder collecting data at 60-minute intervals. Satellite telemetry at station.

REMARKS.--Well is part of Piedmont/Mountains groundwater project.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 62.49 ft below land-surface datum, January 1, 2007; lowest water level recorded 65.74 ft below land-surface datum, September 30, 2007.

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DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007 DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1				62.65	63.44	63.34	63.57	63.73	63.88	63.73	63.85	65.23
2				62.72	63.47	63.04	63.66	63.69	63.65	63.83	63.91	65.19
3				62.80	63.61	63.00	63.67	63.61	63.53	63.89	63.97	65.18
4				62.85	63.63	63.13	63.63	63.54	63.61	63.95	64.05	65.21
5				62.89	63.66	63.24	63.68	63.48		63.99	64.12	65.30
6				62.96	63.63	63.32	63.69	63.53		63.95	64.20	65.36
7				63.00	63.62	63.29	63.74	63.56		63.86	64.29	65.38
8				62.80	63.68	63.36	63.82	63.60		63.88	64.37	65.39
9				62.77	63.68	63.44	63.81		63.99	63.96	64.44	65.43
10				62.95	63.72	63.45	63.82		63.98	64.03	64.49	65.47
11				63.04	63.79	63.51	63.78		64.02	64.07	64.55	65.44
12				63.08	63.75	63.53	63.78		64.07	64.16	64.60	65.50
13				63.03	63.63	63.55	63.83	63.52	64.12	64.22	64.66	65.54
14				63.02	63.56	63.56	63.77	63.55	64.11	64.26	64.71	65.45
15				63.03	63.66	63.55	63.61		63.71	64.31	64.78	65.17
16				63.12	63.65	63.26	63.62		63.56	64.37	64.83	65.16
17				63.26	63.63	62.93	63.50	63.66	63.59	64.40	64.89	65.19
18				63.20	63.72	63.05	63.43	63.67	63.66	64.37	64.96	65.19
19				63.19	63.81	63.15	63.46	63.71	63.73	64.40	64.98	65.21
20				63.31	63.75	63.23	63.38	63.73	63.59	64.44	65.02	65.23
21				63.33	63.60	63.27	63.34	63.77	63.53	64.46	65.07	65.27
22			63.69	63.15	63.45	63.27	63.36	63.80	63.60	64.51	65.12	65.31
23			63.42	63.13	63.47	63.32	63.38	63.83	63.71	64.54	65.16	65.37
24			63.40	63.16	63.50	63.40	63.42	63.86	63.83	64.37	65.16	65.40
25			63.22	63.18	63.39	63.45	63.45	63.84	63.61	63.94	65.19	65.43
26			63.06	63.27	63.35	63.48	63.49	63.67	63.49	63.41	65.23	65.44
27			63.18	63.26	63.40	63.49	63.54	63.66	63.52	63.23	65.29	65.47
28			63.24	63.26	63.44	63.52	63.62	63.74	63.58	63.34	65.32	65.54
29			63.24	63.41		63.57	63.70	63.77	63.60	63.50	65.31	65.62
30			63.21	63.41		63.53	63.74	63.83	63.66	63.64	65.30	65.65
31			63.14	63.48		63.51		63.88		63.74	65.30	
Mean			63.28	63.09	63.60	63.35	63.61	63.69	63.73	64.02	64.75	65.36
Max			63.69	63.48	63.81	63.57	63.83	63.88	64.12	64.54	65.32	65.65
Min			63.06	62.65	63.35	62.93	63.34	63.48	63.49	63.23	63.85	65.16

	Water Year 2007				
Mean	63.89				
High	62.65				
Low	65.65				

