



WATER-RIGHT DOCKET

Blue Ridge Parkway

Docket No: 17

FANCY GAP RESIDENTIAL AREA

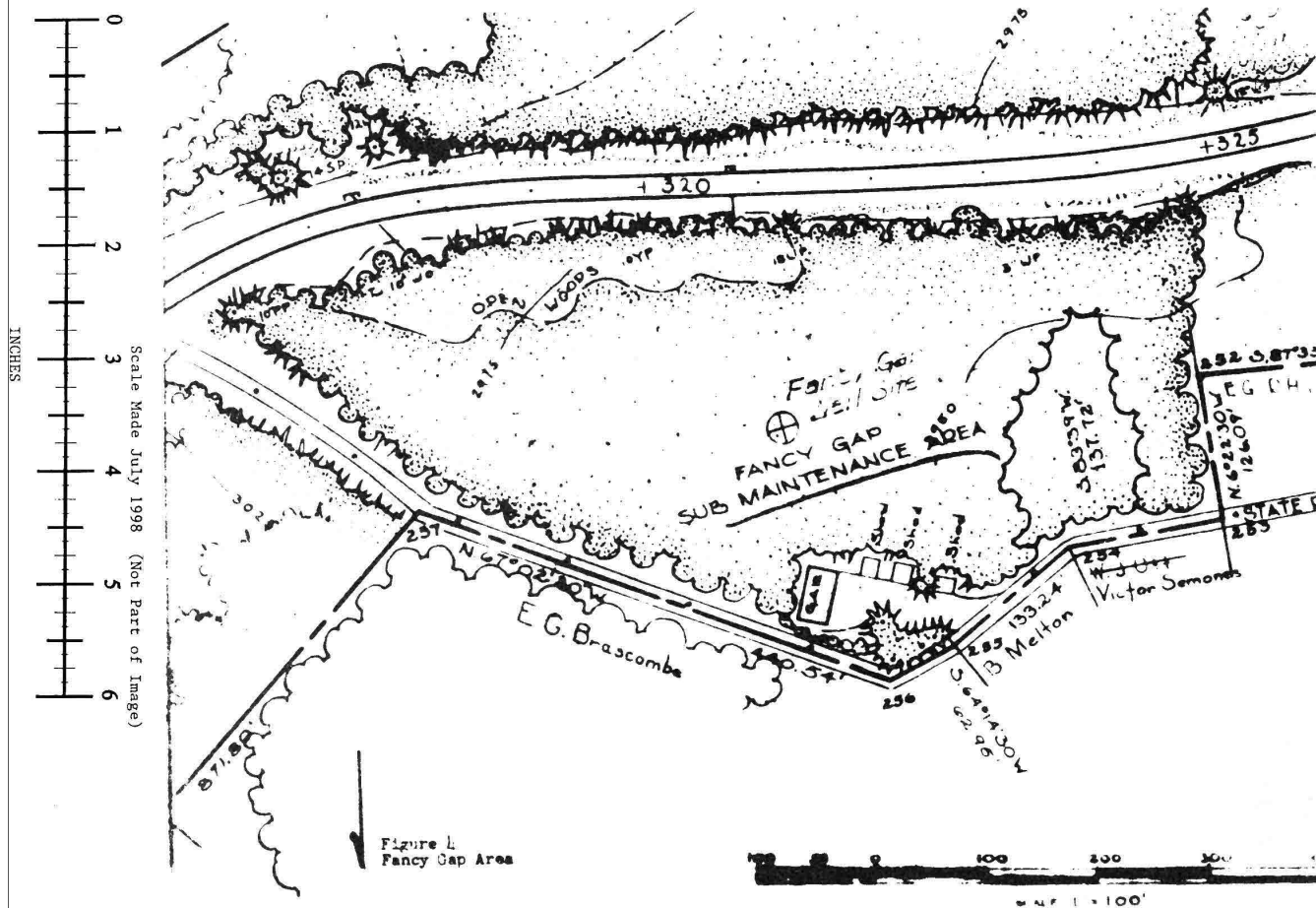
Supporting Hydro Data

00-00-0000: fancy gap

Fancy Gap

Subdued terrain prevails at the Fancy Gap area. The Blue Ridge front lies about half a mile south of the Fancy Gap sub-maintenance area. This locality is underlain by mica gneiss with foliation which strikes N 60°-70° E and dips 40°-60° SE. Fracture systems strike N 40°-50° E and N 30°-40° W.

A proposed test-well site was located in a draw about 100 feet south of the maintenance shed (figure 4). The shallow draw is the result of differential weathering of a relatively permeable zone. A spring near the site was discharging less than 1 gpm at the time of the investigation. Required yield of the well is 10 gpm, and estimated drilling depth is +200 feet in mica gneiss. Other wells in the vicinity produce water of good quality in sufficient amounts for domestic use, motor courts, restaurants, and service stations from depths of less than 200 feet to 500 feet. No alternate site was selected due to distance and inaccessibility.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
WATER ANALYSIS

W.R. Lab. No. _____

Location <u>Fancy Gap</u>			
Source <u>Depth: 126.5 ft. Casing: 38 ft. Pump depth: 118 ft. Static water level:</u> <u>about 5 feet (reported). Yield: 8.0 gpm at 54°F.</u>			
Date of collection _____			
Gage height(ft.) _____ Discharge(cc.ft.) _____ Temp.(°F) _____			
(Parts per million)			
Silica (SiO ₂).....	8.4	Carbonate (CO ₃).....	0
Aluminum (Al).....	.0	Bicarbonate (HCO ₃).....	8
Iron (Fe).....	.03 y	Sulfate (SO ₄).....	.2
Manganese (Mn).....	.03 y	Chloride (Cl).....	3.0
Calcium (Ca).....	1.4	Fluoride (F).....	.0
Magnesium (Mg).....	.6	Nitrate (NO ₃).....	2.2
Sodium (Na).....	4.0	Phosphate (PO ₄).....	.2
Potassium (K).....	.5		
Lithium (Li).....	.0		
(Parts per million)			
Dissolved Solids:		ASH.....	
Sum.....		Color.....	2
Residue upon evapo- ration @ 180°C.....			
Hardness as CaCO ₃	6 y		
Noncarbonate.....	0		
pH.....	6.1	Specific conductance (microhm at 25°C).....	25

y In solution when analyzed.

y Includes hardness of all polyvalent cations reported.

Unpublished records subject to revision

Benge Gap

Depth: 200 feet
Casing: 38 feet
Pump depth: 193 feet
Static water level: 46.0 feet (measured)
Yield: 4.0 gpm at 57°F

Pandy Gap

Depth: 126.5 feet
Casing: 38 feet
Pump depth: 118 feet
Static water level: about 5 feet (reported)
Yield: 8.0 gpm at 54°F

Groundhog Mountain

Depth: 302 feet
Casing: 23 feet (reported)
Diameter: 6 inch
Pump depth: 200 feet (recommended)
Static water level: 9.3 feet (measured)
Yield: 1.38 gpm for 24 hours
Remarks: Yield based on 24 hours calculation with maximum
200 feet of drawdown.

Other Supporting Information

BLUE RIDGE PARKWAY

WATER SYSTEM DATA

AREA Blue Ridge Parkway DATE COLLECTED _____ COLLECTED BY _____)

1. Name of System: Fancy Gap Maintenance Area
2. Location: State Virginia County Carroll General Area MP 199.4
 Reference to permanent landmark _____
3. Source of Supply: Well Capacity 8 gpm
 (Well, spring, stream, impoundment, etc.)
4. Type of System: Pneumatic
 (Pumped, gravity, etc.)
5. Treatment: None
 (Filtration, Chlorination, Airation, etc.)
6. Distribution Mains: Size 1" Length 172'; Size _____ Length _____
 Size _____ Length _____; Size _____ Length _____
 Size _____ Length _____; Size _____ Length _____
7. Pump Unit: Make Jacuzzi; Type Submersible; Model No. 534852
 Serial No. _____; Outlet 1 in.; Inlet 1-1/2 in.
 (Size) (Size)
8. Power Source: Electric Motor: Make Jacuzzi; HP 1/2;
 (Elec., gas, generator)
 Serial No. _____; Voltage 230; Amps 4.7;
 RPM 3450; Type _____; Phase Single;
 Cycles 60; Others _____; Stages _____
9. Control: Automatic Pressure; Manual _____;
 (Float, Electrode, Pressure, Time)
 Other _____
 (Explain)

10. Pump Design: Capacity _____ gpm _____ gpm
(Actual) (Design)
Head _____ ft. _____ ft.
(Actual) (Design)
11. Pump Housing: Type Const. Monitor Fitless ; Size _____
(Walls) (Roof)
12. Storage: Pneumatic ; Type Const. Steel
(Pneumatic, elevated, underground, etc.) (concrete, wood, steel)
Size _____ ; Capacity 100 gal. ; Inlet _____ ft. _____ in.
(Elev.) (Size)
Outlet _____ ft. _____ in. ; Pressure Setting 40
(Elev.) (Size) (if pneumatic)
13. Distribution: Water Closets 1 ; Lavatory 1 ; Urinal 1 ;
Drinking Fountain 1 ; Hose Bibs 2 ; Residences _____ ;
Other _____ ; _____ ;
14. Metered or nonmetered: Nonmetered ; No. _____ ; Size _____
No. _____ ; Size _____
No. _____ ; Size _____
15. Fire Protection: Fire Hydrants _____ ; Yard Hydrants _____
16. Water Analysis: SiO₂ 8.4; Fe .03; Mn .03; Ca 1.4; Mg .6; Na 4.0;
K .5; HCO₃ 9; SO₄ .2; Cl 3.0; NO₃ 2.2; PO₄ .2; Hardness 6; Color 2;
pH 6.1; Specific Conductance 23
17. Condition of System: Good
(Repairs needed itemize)

Docket Information

Number of Documents in Docket 6

Documents Dated from to

Docket Compiled: 2/1/2011