COMMONWEALTH OF VIRGINIA

C-14

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT

MAILING ADDRESS:

DIVISION OF MINERAL RESOURCES

JAMES L. CALVER, COMMISSIONER B 3667

OFFICE ADDRESS: McCormick Road

lottesville, VA 22903 WATFR WELL COMPLETION REPORT Charlottesville, Virginia OWNER: U. S. Department of Agriculture Mailing Address: Roanoke, Virginia TENANT: National Forest Service Work Center Mailing Address: Newcastle, Virginia DRILLER: Frank W. Martin Drilling Company Mailing Address: Roanoke, Virginia WELL LOCATION: County Craig Approx 2.3 miles northeast (direction) of Newcastle, Virginia and 250 feet north (direction) of State Route 615 (GIVE DIRECTION AND DISTANCE IN FEET OR MILES FROM TWO REFERENCE POINTS - ROADS, TOWNS, RIVERS, ETC. - ON COUNTY HIGHWAY OR OTHER MAP.) DATE STARTED: 7/8/71 _____DATE COMPLETED: 7/25/71 TYPE OF DRILL RIG USED: cable tool ______TOTAL DEPTH ____136 _____feet Stands 56 feet below surface OR WATER LEVEL: has NATURAL flow of______gallons per minute. YIELD TEST: Method __pumped HOLE SIZE: 10 inches from 0 to 72 feet Drawdown 4 1/2 feet _____6_inches from ___72__to ___136_feet Rate 35 gal. per min. _____inches from _____to ____feet Duration 24 hrs. 0 min. SCREEN SIZE:_____inches from _____to ____feet WATER ZONES: from 115 to 117 feet ____inches from ____to ___feet from to feet ____inches from ____to____feet CASE SIZE: 6 inches from +1 to 73 feet from ______to___ WATER: Color clear Toste good ____inches from___to___feet Odor__none____Temp.____? ____or ___inches from ____to___feet GROUTING: Method ____ pumped WELL TO SUPPLY: (check one) Home _ Material cement Depth 72 feet Farm _____ Town ____ School ____ Industry____Other_Gov't. work center Type_submersible PUMP: Capacity____35 WATER ANALYSIS AVAILABLE: Yes _____No_X ____gal per min Depth of intake ____112 Yes_15_No____ DRILL CUTTINGS SAVED: (DRILL CUTTINGS SHOULD BE COLLECTED AT 10 FOOT INTERVALS. THESE SAMPLES MAY BE SHIPPED TO THIS OFFICE EXPRESS COLLECT, SAMPLE BAGS ARE FURNISHED FREE OF CHARGE UPON REQUEST.) ARKS:

FURNISHED BY: Frank W. Martin DATE: 7/26/71

Secondary Road		JAMES L CALVER, SUNMISSIONER		REMARKS AV , ollivastici
(feet) FROM TO		TYPE OF ROCK OR SOIL PENET	TYPE OF ROCK OR SOIL PENETRATED (gravel, clay, etc., hardness, color, etc.)	
	sin	Molling Address Newcastle, Virgi	lork Center	TENANT. National Forces Service /
0	62 si	Sand		ORKLER Frank W. Martin Drilling
62	65	Sloping rock - hard		WELL LOCATION Coomy Orsig
65	95			New castle, Varginia
95	136			
	DATE COMPLETED: 7/25/11			water of brownish material
TEST	136	107AU DEPTH		TYPE OF DRILL RIG USED Cable
				WATER LEVEL: Stands_56
		storm reg sheller		
(3) S	87 0	HOLE SIZE 10 modes from		YIELD TEST Method pumper
1901_08		inches trem	150	(1/2)
1091		menas from	VT. 1/2	O Note 35 gal per o
1931	61	SCREEN SIZE:troms_ from		Duracion 2.4 firs , U .r.
Test	st	mon sedan		VATER ZONES from 115 te
		most soluni		mos1
10-1_8	11_10_1	CASE SIZE 6		
1007	o(nort sudon;	hoo	VATER: Color clear Tosio
To 91		mont central		Odor none Temp
		GROUTING Method pumper		ELL TO SUPPLY Lichard one) Rome
lee!lee!	72	Moterial centent Det		Form Town Scacol
		PUMP! Type submersible		Industry Other Crov'ts v
nim 100	100	de35		ATER ANALYSIS AVAILABLE Pus
Feet.		Derit of minke 11	оиб	EILL OUTTINGS SAVED; YELL
SIHT D	SHIPPED TO	MIERVALE THUSE SAMPLET MAY BE	AT 10 FOOT IN	DRILL CUTTINGS SHOULD BE COLLECTED OFFICE EXPRESS COLLECT, SAMPLE BAGS
				DARKS

VIRGINIA DIVISION OF MINERAL RESOURCES Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 1 Well Repository No: 3236

Date rec'd: 8/2/71; processed: 8/10/71 Sample Interval: from 0 to: 135'

PROPERTY: National Forest Service Work Center Number of samples: 15

COMPANY: F. Martin Drilling Co. Total Depth: 136'

COUNTY: Craig (Newcastle) Oil or Gas: Water: x Exploratory:

From - To	From - To	From - To	From - To
0 _ 10 10 _ 20 20 _ 30 30 _ 35 35 _ 45	- - - -	- - -	- - -
45 _ 50 50 _ 60 60 _ 70 70 _ 78 78 _ 85	-	-	-
85 _ 95 95 _105 105 _115 115 _125 125 _135	- - -	- - -	
- - - -	- - - -	- - - -	-
- - - -	- - -	- - - -	

All intervals have both washed and unwashed samples.

OWNER: U. S. Forest Service

(Newcastle Work Center)

DRILLER: F. W. Martin Drilling Co. TOTAL DEPTH: 136'

COUNTY: Craig (Newcastle)

W # 3236 C # 14

GEOLOGIC LOG

Depth (in feet)

RIDGLEY (ORISKANY) SANDSTONE (0-95')

0-10	Sand — light orange-yellow; well rounded to sub-angular, well sorted, medium to coarse grained, slightly frosted, iron-oxide-stained quartz sand with a few granule-sized grains; a few fragments of hematite-cemented, fine-grained quartzite						
10-20	II .						
20-30	" with only a trace of iron-oxide stains						
30-35	п п						
35-45	with fragments of carbonate-cemented sandstone						
45-50	п п п						
50-60	и и и						
60-70	Sandstone - medium brown; medium to coarse grained, well sorted; iron-oxide cemented; vuggy						
70-78	Sand — very light gray to white; medium grained, well rounded to sub-angular, moderately-frosted quartz sand with a trace of pyrite						
78-85	Sandstone — light gray; medium grained, sub-angular; iron- oxide or pyrite-and calcite-cemented quartz sandstone with 5% limestone clasts						
85-95	Calcareous sandstone — light to dark gray; medium grained, sub- angular to sub-rounded, well sorted; carbonate cemented; a few very dark-gray limestone inclusions						

LICKING CREEK LIMESTONE (95-105') *

95-105 Limestone - very dark gray to black; pyrite-bearing micrite with trace of vein calcite

NEW CREEK (COEYMANS) LIMESTONE * (105-135')

- Limestone light to medium gray; very coarsely-crystalline; a
 few well-rounded, 2-4 mm frosted grains; some ironoxide cemented sandstone and weathered limestone fragments; fossiliferous (brachiopod and crinoid fragments)

 Limestone dark gray; medium grained; limonite boxwork
 (80% of sample), fossiliferous limestone (10% of sample),
 and silicified spirifer brachiopod and crinoid fragments
 (10% of sample); material appears to be largely derived
 from solution-cavity debris
- 125-135 Limestone medium to dark gray fossiliferous calcarenite
- 135-136 No sample

GEOLOGIC SUMMARY

Interval	Rock Unit	Age	
0-95'	Ridgley (Oriskany) Sandstone	Early	Devonian
95-105'	Licking Creek Limestone *	11	11
105-1351	New Creek (Coeymans) Limestone*	11	11
135-136'	No sample	_	=

* The 95-135' interval could be either the Licking Creek or the New Creek limestone in its entirety as neither formation is well-represented lithologically in this area.

Virginia Division of Mineral Resources Thomas M. Gathright, II, Geologist August 23, 1971