

INTERVAL SHEET

WWCR 461

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VDMR Well No.: Well No. 966

Date 3/30/64

Sample Interval: from 0 to 745

PROP: Ashby Heights Well #4

Total depth 745

COMP: C. R. Moore

Oil  Gas  Water  Exploratory

COUNTY: Rockingham (Harrisonburg)

Cuttings  Core  Other

VDMR Well No.: W-966

Washed samples - only

From-To	From-To	From-To	From-To	From-To
-	0 - 5	240 - 250	540 - 550	-
-	5 - 10	250 - 260	550 - 560	-
-	10 - 15	260 - 270	560 - 570	-
-	15 - 20	270 - 280	570 - 580	-
-	20 - 25	280 - 290	580 - 590	-
-	25 - 30	290 - 300	590 - 600	-
-	30 - 35	300 - 310	600 - 610	-
-	35 - 40	310 - 320	610 - 620	-
-	40 - 45	320 - 330	620 - 630	-
-	45 - 50	330 - 340	630 - 640	-
-	50 - 60	340 - 350	640 - 650	-
-	60 - 70	350 - 360	650 - 660	-
-	70 - 80	360 - 370	660 - 670	-
-	80 - 90	370 - 380	670 - 680	-
-	90 - 100	380 - 390	680 - 690	-
-	100 - 110	390 - 400	690 - 700	-
-	110 - 120	400 - 410	700 - 710	-
-	120 - 130	410 - 420	710 - 720	-
-	130 - 140	420 - 430	720 - 730	-
-	135 -	430 - 440	730 - 740	-
-	140 - 150	440 - 450	740 - 745 no sample	-
-	150 - 160	450 - 460	-	-
-	160 - 170	460 - 470	-	-
-	170 - 180	470 - 480	-	-
-	180 - 190	480 - 490	-	-
-	190 - 200	490 - 500	-	-
-	200 - 210	500 - 510	-	-
-	210 - 220	510 - 520	-	-
-	220 - 230	520 - 530	-	-
-	230 - 240	530 - 540	-	-

OWNER: John C. Horsley  
(Ashby Heights Subdivision - Well #4)  
DRILLER: C. R. Moore  
COUNTY: Rockingham (Harrisonburg)

VDMR #966  
WWCR #461  
TOTAL DEPTH: 745'

### GEOLOGIC LOG

- 0-5 Overburden — unconsolidated material; brown clay; brown, rounded sandstone pebbles; white to milky, rounded quartz grains and pebbles; white and gray, angular chert fragments; brown, rounded iron stone (iron oxide) pebbles.
- 5-10 Dolomite — medium-dark-gray, medium- to fine-crystalline; minor white, medium- to fine-crystalline, vein dolomite; minor finely disseminated pyrite; minor clay covered iron oxide pebbles.
- 10-15 Dolomite — gray, finely crystalline, minor buff, leached, impure, styalitic dolomite; minor white, finely crystalline, vein dolomite.
- 15-20 Dolomite — gray, finely crystalline, minor white, finely crystalline, vein dolomite.
- 20-25 Dolomite — gray, finely crystalline and light-gray to dark-gray-brown, finely crystalline, pyrite.
- 25-30 As above.
- 30-35 Dolomite — light-gray, finely crystalline, abundant, clear to milky, small (0.1/5 mm average size), well rounded, completely frosted, quartz grains; finely disseminated pyrite.
- 35-40 Dolomite — medium- to dark-gray, finely crystalline, pyrite bearing; and light-gray-brown, finely crystalline (granular), calcareous with medium-gray, finely crystalline, pyritiferous, spots, very minor quartz grains.
- 40-45 Dolomite — medium- to dark-gray, medium- to fine-crystalline; minor white, finely crystalline vein dolomite, pyrite, medium- to dark-gray-brown chert.
- 45-50 Dolomite — medium- to dark-gray very finely crystalline; and gray, finely crystalline; white, finely crystalline, slightly calcareous, vein dolomite; minor disseminated pyrite.
- 50-60 As above.
- 60-70 Dolomite — gray, finely crystalline, pyrite ( 2 mm across); minor white, medium- to fine-crystalline vein dolomite.

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- 70-80 Dolomite — medium- to dark-gray, finely crystalline; minor white, finely crystalline, pyrite bearing dolomite.
- 80-90 Dolomite — medium- to dark-gray, finely crystalline; very minor white, finely crystalline, vein dolomite.
- 90-100 Dolomite — medium- to dark-gray, finely crystalline, minor disseminated pyrite.
- 100-110 Dolomite — gray, finely crystalline, pyritiferous; minor white, finely crystalline, vein dolomite.
- 110-120 As above.
- 120-130 As above.
- 130-140 As above.
- 135 Dolomite — light-brownish-gray, finely crystalline; driller reports water zone.
- 140-150 Dolomite — light-brownish-gray finely crystalline; minor white, medium- to fine-crystalline, vein dolomite; tannish-brown, siliceous material (chert ?).
- 150-160 As above.
- 160-170 Dolomite and Chert — light-tannish-gray dolomite; abundant light-tannish-brown, translucent chert; minor gray, translucent, small, rounded, frosted quartz grains.
- 170-180 Dolomite — medium-gray, finely crystalline, and tannish-brown, finely crystalline dolomite; minor tannish-brown chert; minor euhedral pyrite.
- 180-190 Dolomite — argillaceous, tannish-brown and medium- to dark-gray, finely crystalline; and light-gray, very finely crystalline; minor gray, translucent chert.
- 190-200 Dolomite and Chert — medium-gray and tannish-brown, finely crystalline dolomite; yellow-brown chert fragments; minor white, finely crystalline, vein dolomite.
- 200-210 Dolomite and Chert — medium-gray, finely crystalline dolomite; brownish-yellow and blackish-gray chert; white, medium-crystalline, vein dolomite.
- 210-220 Dolomite — medium- to dark-gray, finely crystalline, slightly pyritiferous dolomite; minor white, medium crystalline, vein dolomite.

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- 220-230 Dolomite — medium- to dark-gray, finely crystalline, slightly pyritiferous dolomite; minor white, medium crystalline, vein dolomite.
- 230-240 As above.
- 240-250 Dolomite — light-gray, finely crystalline dolomite; minor white, finely crystalline, vein dolomite; euhedral pyrite.
- 250-260 As above.
- 260-270 Dolomite — gray, finely crystalline, slightly sandy dolomite (sand grains are gray to clear, rounded, frosted quartz); and whitish-light gray (bleached looking), finely crystalline (grainy), highly pyritiferous dolomite; light-gray, highly pyritiferous chert.
- 270-280 Dolomite and Calcite — tannish-gray to medium-gray, finely crystalline dolomite; 75% white to clear, medium- to coarse crystalline, dolomitic calcite, some of which has iron oxide coatings which is suggestive of a ground water origin.
- 280-290 Dolomite — light- to medium-gray, finely crystalline; minor white, finely crystalline, vein dolomite; minor pyrite.
- 290-300 Dolomite — medium- to dark-gray, finely crystalline; very minor white, finely crystalline vein dolomite; minor pyrite.
- 300-310 As above.
- 310-320 As above — with dark-gray chert.
- 320-330 As above.
- 330-340 Dolomite — medium- to dark-gray, finely crystalline.
- 340-350 Dolomite — gray, finely crystalline, with dark-gray and light-gray chert, pyrite; white, medium- to fine-crystalline, vein dolomite.
- 350-360 Dolomite and Chert — medium-gray, finely crystalline, dolomite; abundant dark-gray chert; minor pyrite and white, finely crystalline, vein dolomite.
- 360-370 Dolomite — medium-gray, finely crystalline, minor dark-gray chert; minor pyrite and white, medium- to fine-crystalline, vein dolomite.

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- 370-380 Dolomite — medium- to light-gray, finely crystalline; minor white, finely crystalline, vein dolomite.
- 380-390 As above.
- 390-400 Dolomite and Chert — medium-gray, finely crystalline; abundant dark-gray chert; pyrite; white, finely crystalline, vein dolomite.
- 400-410 Dolomite — light- to medium-gray, finely crystalline; light- to dark-gray chert; white, medium-grained, vein dolomite; minor pyrite.
- 410-420 As above.
- 420-430 As above.
- 430-440 Dolomite — medium- to dark-gray and medium- to light-gray, finely crystalline; medium- to dark-gray chert; white, medium crystalline, vein dolomite; pyrite.
- 440-450 Dolomite — medium-gray, finely crystalline, pyrite, chert; white finely crystalline, vein dolomite.
- 450-460 Dolomite — medium-gray, finely crystalline; white, medium crystalline, vein dolomite; pyrite.
- 460-470 Dolomite — medium- to dark-gray, finely crystalline; white, medium crystalline, vein dolomite; pyrite.
- 470-480 Dolomite — medium-gray, finely crystalline; minor white, medium crystalline, vein dolomite; dark-gray-smoky chert; pyrite.
- 480-490 Dolomite — medium- to dark-gray, finely crystalline; minor white, medium crystalline, vein dolomite.
- 490-500 Dolomite — medium- to dark-gray, finely crystalline; white, medium crystalline, vein dolomite.
- 500-510 As above.
- 510-520 Dolomite — medium- to dark-gray, finely crystalline; white, medium crystalline, vein dolomite; pyrite.
- 520-530 Dolomite — medium-gray, finely crystalline, slightly sandy (sand grains are gray, small, rounded, frosted quartz); white, medium-grained, vein dolomite; dark-gray to smoky chert; pyrite.

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- 530-540 Dolomite — dark-gray, finely crystalline; minor white, medium-crystalline, vein dolomite; pyrite.
- 540-550 Dolomite — medium-to dark-gray, very finely crystalline; minor white, finely crystalline, vein dolomite; pyrite.
- 550-560 Dolomite — medium-gray, finely crystalline; minor white, finely crystalline, vein dolomite and pyrite.
- 560-570 Dolomite — medium-gray, finely crystalline; dark-gray to smoky chert; minor pyrite; white, medium crystalline, vein dolomite.
- 570-580 Dolomite — medium-gray, finely crystalline; minor white, medium crystalline, vein dolomite; pyrite.
- 580-590 As above.
- 590-600 Dolomite — light-gray, finely crystalline, pyritiferous; medium-gray-smoky chert.
- 600-610 Dolomite — medium-gray, finely crystalline; minor white, medium crystalline, vein dolomite.
- 610-620 Dolomite — medium-light-gray, finely crystalline sandy dolomite (sand grains are gray to clear, rounded, frosted quartz); white to tannish, clear, medium-to coarse-crystalline, dolomitic calcite.
- 620-630 Dolomite — medium-gray, medium-fine-to fine crystalline; some cuttings contains gray to clear, frosted, rounded quartz; sand grains which are white, medium crystalline, calcareous, vein dolomite; milky to clear, angular and euhedral quartz; pyrite ? (up to 1 mm); honey brown sphalerite on dolomite matrix.
- 630-640 Dolomite — medium-gray, finely crystalline; minor white, finely crystalline, vein dolomite; dark-gray-smoky chert; pyrite and sphalerite (sphalerite in this sample much less than preceding one.)
- 640-650 Dolomite — medium-gray, finely crystalline with minor rounded fine-to very-coarse sand, dolomite often more coarsely crystalline where sand is concentrated; minor white, coarsely crystalline, dolomite veins.
- 650-660 Dolomite — medium-dark-gray, finely crystalline; very minor fine-to coarse-grained, rounded quartz sand; trace white dolomite veins.
- 660-670 Dolomite — dark-gray, finely crystalline; trace rounded, frosted sand, trace pyrite.

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- 670-680 Dolomite — dark-gray, finely crystalline; trace rounded, frosted sand; trace pyrite; more coarsely crystalline.
- 680-690 As above, finely crystalline; trace pale-orange chert.
- 690-700 Dolomite — dark-gray, finely crystalline; trace very light gray - yellow chert; white, coarsely crystalline, dolomite vug, trace pyrite.
- 700-710 Dolomite — medium dark-gray, finely crystalline; traces pyrite, chert.
- 710-720 Dolomite — medium dark-gray, slightly bluish, finely crystalline; minor pyrite, dark-gray, translucent chert, vein dolomite.
- 720-730 Dolomite — medium-gray, faintly brownish, finely crystalline; minor dark-to -very-pale-gray chert; trace rounded quartz sand and pyrite.
- 730-740 As above, slightly darker.
- 740-745 No sample.

GEOLOGIC SUMMARY

ROCK UNIT

TIME ROCK UNIT

0-745 Beekmantown Formation

Ordovician

Virginia Division of Mineral Resources  
F. B. Fitzgerald and H. N. Walker,  
Geologists  
July 2, 1965