

INTERVAL SHEET

WWCR 48

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VDMR Well No.: Well No. 1310

Date 5/19/65

Sample Interval: from 0 to 398

PROP: VDMR (Hungry Mother State Park, Well #2)

Total depth 398

COMP: Sydnor Pump & Well Co.

Oil  Gas  Water  Exploratory

COUNTY: Smyth (Marion)

Cuttings  Core  Other

VDMR Well No: W-1310

Washed samples

From-To	From-To	From-To	From-To	From-To
-	-	0 - 10	290 - 300	-
-	-	10 - 20	300 -	-
-	-	20 - 30	300 - 310	-
-	-	30 - 40	310 - 320	-
-	-	40 - 50	320 - 330	-
-	-	20 - 50	330 - 340	-
-	-	50 - 55	340 - 350	-
-	-	50 - 60	350 - 360	-
-	-	60 - 70	360 - 370	-
-	-	70 - 80	370 - 380	-
-	-	80 - 90	380 - 390	-
-	-	90 - 100	390 - 398	-
-	-	100 - 110	-	-
-	-	110 - 120	-	-
-	-	120 - 130	-	-
-	-	130 - 140	-	-
-	-	140 - 150	-	-
-	-	150 - 160	-	-
-	-	160 - 170	-	-
-	-	170 - 180	-	-
-	-	180 - 190	-	-
-	-	190 - 200	-	-
-	-	200 - 210	-	-
-	-	210 - 220	-	-
-	-	220 - 230	-	-
-	-	230 - 240	-	-
-	-	240 - 250	-	-
-	-	250 - 260	-	-
-	-	260 - 270	-	-
-	-	270 - 280	-	-
-	-	280 - 290	-	-

OWNER: Virginia Division of Mineral Resources  
Hungry Mother State Park, Well #2  
DRILLER: Sydnor Pump & Well Co., Inc.  
COUNTY: Smyth (Marion)

VDMR #1310  
WWCR #48  
TOTAL DEPTH: 398'

### GEOLOGIC LOG

#### Overburden (0-18')

0-10 Sandstone fragments — pale-brown and red-gray to brownish-gray, subrounded, porous, arkosic; light-colored sandstone; medium- to very-coarse-grained; reddish-brownish gray sandstone, fine- to very-fine-grained often shaly; minor gray-brown chert.

#### Millboro Shale (18-240')

10-20 Shale — medium-dark-blue-gray, very fissile, slightly micaceous; minor amount sandstone contamination from above.

20-30 As above — more sandstone contamination.

30-40 As above.

40-50 As above.

20-50 Shale — medium-blue-gray, very fissile, dull; minor mica.

50-55 As above.

50-60 As above — with much sandstone contamination; minor slickensides on shale.

60-70 As above — less contamination.

70-80 Shale — medium-dark-blue-gray; hard, dull, fissile; slightly micaceous.

80-90 As above.

90-100 As above — slightly darker.

100-110 Shale — medium-gray, fissile, hard, dull.

110-120 Shale — medium-dark-gray, fissile, hard, dull; abundant fragments showing highly polished slickensides.

120-130 Shale — medium-blue-gray, hard, fissile, dull, slightly micaceous, trace calcite veins.

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- 130-140 Shale — medium-blue-gray, hard, fissile, dull, slightly micaceous, trace calcite veins, slickensides.
- 140-150 As above.
- 150-160 As above — more slickensides.
- 160-170 Shale — very-dark-brownish-gray; fissile very carbonaceous, breaks with a shiny conchoidal fracture, almost supports combustion.
- 170-180 As above.
- 180-190 Shale — brownish-dark-gray, fissile, dull, very carbonaceous, slight reddish tint, abundant slickensides with minor pyrite.
- 190-200 As above.
- 200-210 As above.
- 210-220 As above — calcareous.
- 220-230 Calcareous Shale — medium-dark-gray, fissile, dull, slightly micaceous, abundant dusty pyrite.
- 230-240 As above — less pyrite, more calcareous.
- Needmore Shale ? (240-250')
- 240-250 Argillaceous Cherty Limestone — medium-dark-gray, very-fine-grained, slightly fissile, uneven bumpy fracture abundant medium-gray chert.
- Huntersville Chert (250-290')
- 250-260 Chert — dark-gray, gnarly, minor veins and disseminated grains calcite.
- 260-270 As above — minor shaly layers.
- 270-280 As above.
- 280-290 As above — more fissile, grains of rounded, medium-size quartz sand, common within the chert.

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Keefer Sandstone ? (290-340)

- 290-300 Chert and Shale — dark-gray, gnarly chert with disseminated grains quartz sand, minor vein calcite; dark-gray, fissile shaly layers.
- 300 As above — more quartzite.
- 300-310 As above.
- 310-320 Orthoquartzite — nearly white with greenish sericite partings, poorly sorted, fine- to coarse-grained; silica cement, overgrowths prevent observation of degree of rounding; contamination from above: chert, limestone, carbonaceous shale.
- 320-330 As above — less contamination.
- 330-340 Orthoquartzite — light-olive-gray, very-fine- to coarse-grained; minor sericite and chlorite, trace pyrite; minor contamination from above.

Rosehill Formation (340-398')

- 340-350 Siltstone and Sandstone — medium-greenish-gray sericitic siltstone; very-fine- to coarse-grained nearly white friable sandstone and grayish-red, medium- to very-fine-grained, subrounded, lithic, hematitic sandstone and siltstone.
- 350-360 As above — less grayish-red.
- 360-370 Siltstone and Sandstone — medium-greenish-gray, sericite siltstone; nearly white coarse- to medium-grained, friable sandstone, both with minor pyrite; minor red-gray siltstone and shale; minor chert and shale contamination.
- 370-380 Shaly Siltstone — dark-reddish-gray, silt to very-fine-sand with occasional grain medium-sized sand; clay, silt, hematite, mica; trace pyrite, slight fissility; minor amount greenish siltstone and quartzite as above.
- 380-390 Sandstone — dark-reddish-gray, fine-grained, poorly sorted, lithic; silt, sand, clay, mica, hematite; slightly fissile; minor greenish siltstone from above.
- 390-398 As above.

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GEOLOGIC SUMMARY

	<u>ROCK UNIT</u>	<u>TIME ROCK UNIT</u>
0-18	Overburden	Recent
18-240	Millboro Shale	Devonian
240-250	Needmore Shale ?	Devonian
250-290	Huntersville Chert	Devonian
290-340	Keefer sandstone ?	Silurian
340-398	Rosehill Formation	Silurian

Virginia Division of Mineral Resources  
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