## VDMR Well No W-1142

Operator: J W Miloncus Farm: Browning Wynn Well No. : 1 Location: Lee County 3300' N of 36°42'30'' 1800' E of 83°05' approx Elevation: 1975' (reported altimeter elevation) Total Depth: 2000' (Trenton Limestone) Drilling Commenced: July 6, 1964 Well Completed: Result: Dry hole

## Formation Tops

(Reported from sample examination by R. L. Miller, U.S.G.S.)

0 - 399'
399 - 674'
674 - 744'
744 - 1110'
1110 - 1685'
1685 - T. D.

Remarks: No shows were reported.

Contractor: Vernon D. Jarvis, Decatur, Illinois

VDMR Well No: W-1142

Samples studied and

Stanley S. Johnson

Mineral Resources February 15, 1965

Virginia Division of

Geologic Log

described by:

Company: J. W. Miloncus Farm: Browning Wynn Well No: 1 Elevation: 1975' (altimeter) Total Depth: Location: Lee County - 3300' N. of 36°42'30" lat. 1800' E. of 83°05' long. Drilling Commenced: July 6, 1964 Well Completed: Result: Dry hole

## Geologic Log

Depth	<u>Thickness</u>	Description
0-71'	71'	No samples
Clinton Formation	(Silurian)	
71'-398'	3271	Shale and sandstone; shale is light-gray, moderately hard, brittle, poorly fissile, with mica and some fragments of light-green shale: sandstone is greenish-white to white.

shale; sandstone is greenish-white to white, fine-grained, sub-angular to sub-rounded, slightly calcareous; shale samples 91'-101' and 139'-165' contain fragments of shale that are light red-gray; shale samples 175'-398' are dolomitic and have a small amount of white dolomite present in fracture fillings; shale samples 300'-310' and 360'-370' contain pyrite; 330'-340' no sample.

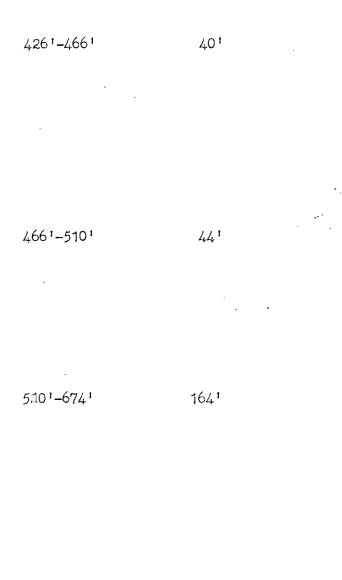
Clinch Formation

Poor Valley Ridge Sandstone Member (Silurian)

3981-4261 281

Sandstone and shale; sandstone is greenishwhite to white, fine-grained, well sorted, sub-angular to sub-rounded, hard, slightly calcareous; shale is light-green to light gray-green, hard, dolomitic, tough, has good fissility; with pyrite and mica; sandstone sample 406'-412' contains fragments of redshale.

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Clinch Formation Hagen Member (Silurian)

674'-743' 69'

Sandstone and shale; sandstone is predominantly white, fine-grained, sub-angular to sub-rounded, hard, slightly calcareous, with minor magnetite and possible specular hemanite; shale is gray to pink-gray, moderately hard, tough, and slightly dolomitic, with mica; sandstone sample 436'-446' contains, pyrite and calcite as accessory; sandstone sample 446'-456' containswhite dolomite as accessory; sandstone sample 456'-466' contains no pink-gray shale.

Shale and sandstone, shale is light-to medium-gray, soft, poorly fissile, slightly dolomitic, calcareous, with mica; sandstone is greenish-white, fine-grained, sub-angular, hard, slightly calcareous, with specular hemanite; shale sample 474'-484' contains fragments of red-gray shale; shale sample 494'-503' contains fragments of light-brown sandstone.

Sandstone and shale; sandstone is clear to white, fine-to medium-grained, well sorted, sub-angular to sub-rounded, hard, slightly calcareous, with magnetite and specular hemanite (?); shale is gray, moderately hard, brittle, has fair fissility, slightly dolomitic, with mica and pyrite; sandstone samples 516'-601' containafew fragments of pink-gray shale; sandstone samples 516'-521' and 534'-565' contain a few fragments of ferruginous sandstone; sandstone samples 521'-527', 540'-555', and 581'-585' contain no pyrite; sandstone sample 521'-527' contains. pyrite in both rock types; sandstone samples 617'-674' contain fragments of medium-gray siltstone.

Shale, siltstone, and sandstone; shale and siltstone are gray, moderately hard to hard, brittle, siliceous, slightly dolomitic, with mica; sandstone is light-green to white, finegrained, well sorted, sub-angular, slightly calcareous, with specular hemanite; shale samples 689'-724' contain no sandstone; shale samples 724'-743' contain fragments of dark purple-gray shale and pyrite; shale sample 735'-743' containswhite-to light orangepink dolomite in fracture fillings.

Sequatchie Formation (Ordovician)	• .	
743'-810	67'	Siltstone, maroon, moderately hard, tough, slightly calcareous, with mica, and calcite in fracture filling; siltstone samples 743'-755' contain fragments of pinkish- gray shale; siltstone samples 760'-810' contain pyrite.
810'-906'	961	Shale, gray, hard, brittle, calcareous, fossiliferous, with mica, and calcite in fracture fillings; shale sample 810'-818' containsfragments of dolomitic shale; shale sample 854'-863' is silty and darker.
906'-1038'	1321	Siltstone, maroon, light gray-green, hard, tough, calcareous, fossiliferous, with mica, and calcite in fracture fillings; siltstone sample 937'-944' containsfragments of quartz and pinkish-gray shale; siltstone samples 944'-975' contain no quartz or fossils; siltstone samples 975'-1038' contain fragments of sandstone; siltstone samples 1005'-1023' contain no fossils.
1038'-1110'	721	Limestone and shale; limestone is gray-to light gray-green, moderately hard, fossiliferous, microcrystalline; shale is gray, hard, tough, calcareous, with mica and calcite; limestone samples 1056'-1086' contain a slight oolitic structure in some fragments; limestone samples 1086'-1110' contain no fossils; limestone sample 1096'-1110' has a light-red tint on many fragments.
Reedville Shale (Ordovician)		
1110 <sup>•</sup> –1680 <sup>•</sup>	570'	Shale and limestone; shale is light-to medium-gray, hard, tough, calcareous, with mica; limestone is very light-gray to medium- gray, light gray-green, moderately hard, fossiliferous, fine-to medium-crystalline, with calcite veins; shale samples 1131'-1155' contain fragments of light-tan limestone and white sandstone; shale samples 1297'-1453' are siliceous; shale samples 1453'-1540' contain fragments of fine-grained sandstone or siltstone; shale sample 1461'-1469' contains pyrite.

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Trenton Limestone (Ordovician)

1680'-2000'

320'

Limestone, light-to medium-gray, mottled with gray-brown tint, moderately hard, fine-to mediumcrystalline, fossiliferous, with calcite veins and fragments of interbedded shale that are mediumgray, moderately hard, calcareous, with mica; limestone samples 1810'-1861' are dark-gray; limestone samples 1861'-1984' are moderately soft, fine-to coarsely-crystalline, and contain greater percentages of calcite; limestone samples 1907'-1955' contain light-tan dolomite.