

January, 1935.

<sup>1</sup>  
Marathon #2 Mohr (Account #2)  
Center NW 1, 10-189-16W.  
Elevation 1980'

**Pennsylvanian conglomerate 3502-3536'**

- 3502-3508 Coarse sand and red and green clay shale.
- 3508-3514 Lime, sugary, algal, nodular; with abundant medium to coarse sand.
- 3514-3520 Sandy clay shales and loose grains of medium to coarse sand.
- 3520-3536 Sand, medium, friable. Clay shales. Flowline sample.

**Pre-Cambrian Top 3536'**

Sub-sea, minus 1556'

- 3536-3540 Weathered granitic and schistose material. Abundant clay shale cavings. This Pre-Cambrian material may be granite wash or residuum, certainly it is not fresh granite in place. Flowline sample.
- 3540-3552 Weathered granitic material. Granite wash or residuum.
- 3552-3561 Weathered granitic and schistose material. Weathered layer, probably in place.
- 3561-3581 Granite in place. Ferro-Magnesian minerals somewhat altered at top and relatively fresh at base.

The top of the Pre-Cambrian is placed on the contact of quartzose and sand and arkosic sand. Production is obtained in the quartzose sand and, from the samples, one would not be certain that the arkosic sand was porous. It is probable that a mantle of residuum overlies Pre-Cambrian, as it does the various formations of the Ordovician; and that this residuum was not greatly disturbed by the encroaching Pennsylvanian seas. The occurrence of cherts and the absence of arkose in the upper part of the conglomerate indicates as much.