

|                             |      |      |                                                                                                                                                                                                                                                                                   |
|-----------------------------|------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shale and anhydrite         | 7754 | 7801 |                                                                                                                                                                                                                                                                                   |
| Shale                       | 7801 | 8698 |                                                                                                                                                                                                                                                                                   |
| Shale and chert             | 8698 | 8735 |                                                                                                                                                                                                                                                                                   |
| Dolomite                    | 8735 | 9065 | 3/4" @ 7815, 1" @ 7990, St. @ 8350.<br>1/4" @ 8710.<br>1/2" @ 9015.                                                                                                                                                                                                               |
|                             |      |      | <u>Top Perm Penn. @ 9055, 136' low to</u><br><u>T. Batenhouse #1.</u>                                                                                                                                                                                                             |
| Lime                        | 9065 | 9354 | By samples, 9339-54 trace edge porosity, drilling break 18-19--to 8-9. MFT.                                                                                                                                                                                                       |
| Attempted Drill Stem Test   | 9324 | 9354 | Packer failed.                                                                                                                                                                                                                                                                    |
| Drill Stem Test             | 9329 | 9354 | Perm Penn. 2 packers, 1 hr. 44 min. 5/8" BHC and 1" SC, No WC, Rec. 30' drilling mud, no show BFP 175# 15 min. S-I BHP 300# NH 5300-5000#.                                                                                                                                        |
| Lime                        | 9354 | 9571 |                                                                                                                                                                                                                                                                                   |
| 8-3/4 Dia. Core Perm Penn.  | 9571 | 9595 | Rec. 24',<br>Top 8' finely crystalline tan limestone w/stylolitic shale partings, 11' finely crystalline shaley limestone w/gray shale partings, 5' dark gray shale.                                                                                                              |
| Lime                        | 9595 | 9614 |                                                                                                                                                                                                                                                                                   |
| Lime and shale              | 9614 | 9620 |                                                                                                                                                                                                                                                                                   |
| Lime                        | 9620 | 9815 | 1/4" @ 9715.<br><br>Circ. for samples @ 9776 for 2 hrs. no shows, and 9815 for 2-1/2 hrs. little inter crystalline porosity in lime.                                                                                                                                              |
| Attempted Drill Stem Test   | 9763 | 9815 | Perm Penn, 2 packers, 22 min. 5/8" BHC and 1" SC, no WC, Packer failed, Rec. 590' drilling mud, no shows, BHP 300-300#, 15 min. S-I, BHP 0#. NH 5600-5400#.                                                                                                                       |
| 8-3/4 Dia. Core Perm Penn   | 9815 | 9855 | Rec. 40'.<br>Shaley lime, bottom 3' finely crystalline brown limestone w/trace chert.                                                                                                                                                                                             |
| 8-3/4 Dia. Core Perm Penn.  | 9855 | 9891 | Rec. 36',<br>4' finely crystalline brown limestone, 2' dark gray shaley limestone, 3' black shale, 15' finely crystalline tan to brown limestone, 12' finely crystalline brown limestone w/vuggy porosity.                                                                        |
| Attempted Drill Stem Test   | 9850 | 9891 | Perm Penn, 2 Packers, 1 hr. 5/8" BHC and 1" SC, no WC, Rec. lost tools (Dropped) BHP 0-25# 15 min. S-I BHP 1225#, NH 5465-5250#.                                                                                                                                                  |
| Drill Stem Test             | 9854 | 9891 | Perm Penn. 2 packers, 1 hr. 5/8" BHC and 1" SC, No WC, Rec. 120' drilling mud no shows, BHP 0-0#, 15 min. S-I BHP 1225#, NH 5465-5250#.                                                                                                                                           |
| Lime                        | 9891 | 9892 |                                                                                                                                                                                                                                                                                   |
| 8-3/4" Dia. Core Perm Penn. | 9892 | 9925 | Rec. 33',<br>9892-94 finely crystalline brown limestone, 9894-99 black shale, 9899-9904 very finely crystalline siliceous limestone, 9904-07 gray shaley, 19907-9911-gray shaley limestone, 9911-14 gray shale, 9914-16 red limy shale, 9916-25 finely crystalline tan limestone. |
| 8-3/4" Dia. Core Perm Penn. | 9925 | 9967 | Rec. 42',                                                                                                                                                                                                                                                                         |