

Dickenson County  
 Clinchfield Coal Corp.  
 David Colley #204  
 VDMR W-130  
 Index No. 14  
 Elevation: 1888'4"

\*Well location between Upper and Lower Banner coals.

Well is microscopically observed to identify Lee quartzose sands and coal intervals. The descriptions of Clark Jones have been used for all other correlations.

Summary below by Marshall S. Miller, February, 1971.

| <u>Depth</u> | <u>Thickness</u> | <u>Lithology</u>  |
|--------------|------------------|---|
| 250- 252     | 2'               | Coal, silty and impure, Kennedy coal?   |
| 508- 509     | 1'               | Coal, vitreous luster, blocky and conchoidal fracture, depth and thickness from drillers log. Raven coal?   |
| 658- 665     | 7'               | Coal, vitreous luster, blocky and conchoidal fracture, depth and thickness from drillers log. Probably Jawbone and Tiller coals together.   |
| 965-1007     | 42'              | Sandstone, white, quartzose, fine to medium grained, occasionally coarse grained, grain size gradually increases downward, from fine to medium grained, subrounded, well sorted, over 95% quartz, appears loose with little or no cementing and matrix material |
| 1007-1020    | 13'              | Missing   |
| 1020-1033    | 13'              | Sandstone, white, quartzose, over 95% quartz, fine to coarse grained, subround to subangular, conglomeratic throughout with granules up to 5 mm, little or no visible matrix material   |
| 1364-1366    | 2'               | Coal, vitreous luster, conchoidal fracture  |

|           |      |   |
|-----------|------|---|
| 1433-1435 | 2'   | Coal, vitreous luster, conchoidal and blocky fracture, scoriaceous  |
| 1572-1580 | 8'   | Coal, vitreous luster, conchoidal and blocky fracture.  |
| 1590-1592 | 2'   | Coal, estimated depth and thickness   |
| 1633-1636 | 3'   | Coal, vitreous luster, blocky and conchoidal fracture   |
| 1671-1673 | 2'   | Coal, silty, impure   |
| 1763-1797 | 34'  | Sandstone, white, quartzose, 90-100% quartz, fine to coarse grained, subround to subangular, moderately to poorly sorted, with occasional muscovite, and dark rounded rock fragments, conglomeratic (1773-1797), has some red interstitial clay present (1789-1797)   |
| 1797-1802 | 5'   | Sandstone, white to light gray, and buff, fine to medium grained, moderately to poorly sorted, subangular to subround, interstitially silty, with abundant muscovite, biotite, chlorite, and silt and coaly partings, 85 to 90% quartz                                |
| 1802-1809 | 7'   | Sandstone, white, quartzose, 95% quartz, conglomeratic (grains up to 5 mm), fine to coarse grained, subround to subangular, poorly sorted, little or no matrix material   |
| 1809-1826 | 17'  | Sandstone, light gray, white, buff, fine to coarse grained with scattered conglomerate, very poorly sorted, subangular to subround, generally silty, with abundant clay, and dark rounded argillaceous material, 80% quartz, 10 to 15% matrix                         |
| 1826-1865 | 39'  | Sandstone, white, quartzose (almost 100% quartz) fine to coarse grained, subangular to subround, conglomeratic throughout, (granules up to 10 mm), moderately to poorly sorted, little or no cement material is present. Lithology abruptly changes to a coal at 1865 |
| 1865-2165 | 300' | Pocahontas Formation. Interval consists of coal, shale, siltstones, and fine grained sandstones with relatively low quartz content, 55 to 75%. Coal beds present (1871-1875) (2094-2098) and possibly (2113-2115). Red and green calcareous shales present at 2165.   |

Operator: Clinchfield Coal Company  
 Farm: David Colley  
 Well No.: 204  
 Index No.: 14  
 Location: Dickenson County  
 12,550' S of 37°05'  
 850' W of 82°20'

DI-5φ

Elevation: 1888.4'

Total Depth: 6666'

Remarks: Elevation and location of well with reference to coal geology along McClure River and core section S-20 (Dickenson County Report) indicate that well spudded in below the upper Banner coal and above the Lower Banner coal. Correlations by Marshall Miller, 1970-74, VDMR.

| <u>Formation</u>                   | <u>Top</u> | <u>Bottom</u>                | <u>Thickness</u> |
|------------------------------------|------------|------------------------------|------------------|
| Pennsylvanian System               |            |                              |                  |
| Post Lee Formation "in at surface" |            | 965                          | 965'             |
|                                    |            | Kennedy coal 250-252         |                  |
|                                    |            | Raven coal 508-509           |                  |
|                                    |            | Jawbone coal 658-666         |                  |
| Lee Formation                      | 965        | 1865                         | 900'             |
|                                    |            | quartzose sand 965-1033      | 68'              |
|                                    |            | War Creek coal 1433-1435     |                  |
|                                    |            | quartzose sand 1763-1797     | 34'              |
|                                    |            | quartzose sand 1802-1809     | 7'               |
|                                    |            | quartzose sand 1826-1865     | 39'              |
|                                    |            | total quartzose sand         | 148'             |
| Pocahontas Formation               | 1865       | 2165                         | 300'             |
|                                    |            | Pocahontas #3 coal 1871-1875 |                  |
|                                    |            | Pocahontas #2 coal 2094-2098 |                  |
|                                    |            | Pocahontas #1 coal 2113-2115 |                  |
| Mississippian System               |            |                              |                  |
| Bluestone Formation                | 2165       | 2678                         | 513'             |
| Pride Shale                        | 2430       | 2678                         | 248'             |
| Princeton Sand                     | 2678       | 2809                         | 131'             |
| Little Stone Gap                   | 2809       | 2899                         | 90'              |
| Stony Gap Sand                     | 3266       | 3352                         | 86'              |
| Greenbrier Fm.                     | 3782       | 4356                         | 574'             |
| Maccrady                           | 4356       |                              |                  |