

Sanders

58-62-65

↓
no rec

58-61 fin Cr. dol
Cherty to teal
Por. except fractures
abundantly

61-65 No core - Cons Crs
dol. hqly por dol.
Suggestive of Zone P₆
" of 30%



June, 1940.

Gulf #1 Sander,
C N $\frac{1}{2}$ SW SE, 30-13S-16W,
Elevation 1944'.

Pennsylvanian conglomerate Samples not examined.

Arbuckle Top 3450' Penetration 8' Sub-sea, minus 1506'

3450-3451 Not examined.

3451-3458 Dolomite, fine to medium crystalline, cherty;
with some fractures near top. The fractures,
together with the dip of some core fragments,
suggests a brecciated zone of solution in
which cobble-sized solution fragments have
been compacted. Porosity appears to be
limited to fractures and a few solution vugs.
There is not enough section to make determination
certain. Cotter seems the most probable
identification but there is a chance that this
dolomite is a part of the Purcell.

Gulf #1 Sander,
C NL SW SE, 30-13S-16W.

Core description

Cored 3451-56', recovered 38 inches.

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| 3 | inches. | Chert, gray and white banded. |
| 5 | " | Brecciated dense dolomite with matrix of secondary dolomite crystals and barite. Oilstained throughout and with some free oil. |
| 3 | " | Dolomite, finely crystalline, white and light brown. Abundant white chert which has been fractured. Chert contains oolites. Oilstained throughout and with some free oil. |
| 10 | " | Dolomite, fine to medium, light brown. Has many fractures and some solution porosity. Some parts of core broke along fractures. There was probably some core loss here. Spotted oilstain and traces of free oil. |
| 11 | " | Dolomite, dense, white to greenish, shaly. Non-porous. Not fractured. Has dip of approximately 45 degrees. Slight staining at top and base. |
| 6 | " | Dolomite, white to light brown, finely crystalline. Mainly doloclastic, with soft white silica in the interstices between the crystals. One fragment shows slight intercrystalline porosity and saturation. |

This cored section is in a slumped and brecciated zone and much of both the fracture and solution porosity is plugged with secondary dolomite, silica, and barite. Such a situation gives low initials, even in established producing areas. This test will not make a commercial well at the present total depth of 3456'.

The dolomite is not Miller. It may be Purcell and probably is Cotter, the available section not being long enough to be absolutely certain. If it is Purcell, it is probable that better porosity will be encountered as the test is deepened. If it is Cotter, it is probable that little or no porosity will be found for the next thirty or forty feet, unless a heavy chert zone is found.

Despite the fact that the test does not appear promising, it would be advisable to set pipe and test during deepening. This for the reasons that considerable acreage is involved, the exact identity of the dolomite is doubtful, and that some saturation is present.

Max Littlefield.