

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
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Structurally, the Tilley #3 was 21' lower than the Dickman #2, and 13' lower than the Tilley #2 on the top of the Mississippian.

ONES OF INTEREST: All zones of significant porosity and/or shows of oil below the top of the Lansing are described below.

LANSING TOP @ 3843

3923-42: Limestone, white to buff, very finely to finely crystalline, with some pinpoint vug porosity, no shows.

3951-59: Limestone, buff, very finely crystalline with good oolitic porosity, no staining, no cut, dull yellow mineral fluorescence. No fluorescence in oolitic casts.

4053-72: Limestone, buff to light brown, finely crystalline with excellent oolitic porosity, with light yellow mineral fluorescence in crystalline matrix around oolitic casts, no fluorescence in oolitic casts, no show oil or cut.

FORT SCOTT TOP @ 4346

4346-59: Limestone, tan to light buff, cryptocrystalline, dense, no visible porosity, no shows, no fluorescence, partly slightly fossiliferous, soft; a few pieces recrystallized. Tested because of proximity to oil.

D.S.T. #1: 4330'-4370', Open 1/2 hour with very weak blow and died, flushed tool in 20 minutes, no help. Recovered 20' mud, no shows, no water. ISIP 129#/30'', FSIP 90#/30'', FP 23-31#, BHT 118 degrees.

CHEROKEE TOP @ 4370

4410-18: Limestone, white to light buff, finely to very finely crystalline with rare inter-crystalline porosity, partially recrystallized, mostly tight and compact, with scattered rare light oil staining and traces light brown free oil.

CONGLOMERATE TOP @ 4420

4420-40: Chert, varicolored white, cream, yellow, orange, buff, sharp and splintery to vuggy, weathered and partly tripolitic, some vesicular and fossil-cast porosity, some slightly dolomitic in acid, all with more or less dark brown to black rather tarry free oil and dark staining, some dead oil; entire section carries some varicolored clay shale.

D.S.T. #2: 4390-4446, Open 1/2 hour, very weak blow, dead in 2 minutes, flushed tool, no help; recovered 15' mud, no shows, no water. ISIP 240#/30'', FSIP 244#/30'', FP 47-47#, BHT 118 degrees.

MISSISSIPPIAN (Spergen) TOP @ 4440

4440-47: Dolomite, brown to buff, finely crystalline, siliceous and cherty in part, partly somewhat vuggy with very dark to dead oil staining, most compact and tight, a few spicule casts with light oil staining.

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59: Dolomite, finely crystalline, partly "sugary" with good fossilcast and vugular porosity, some medium to finely sucrosic with intercrystalline porosity, all with good oil saturation and abundant light brown free oil, good odor, and fluorescence. Few specks of dead oil noted at base of this interval. Looks like good reservoir.

U.S.T. #3: 4446-4455, Open 3 hours, weak blow at top of bucket increasing to good blow 3/4 down into bucket in 30 minutes, recovered 60' gas, 130' clean, gassy oil, 50' muddy oil, 120' heavily oil-cut mud, no water; ISIP 1148#/30" (building), FSIP 354#/60" (building), FP 39-122#, BHT 124 degrees, total fluid recovered 2.2 barrels.

4459-62: Dolomite as above but with no intercrystalline porosity, vugs rather isolated, many vugs full of oil when broken, some scattered dead oil; probably tight. Some barren porosity.

4462-66: Dolomite, very finely crystalline, compact and dense with rare spicule casts having light oil staining. No reservoir.

4466-74 Dolomite, finely to very finely crystalline, occasionally medium crystalline, partly with "sugary" intercrystalline porosity, with scattered good fossil-cast and vugular porosity, most with no shows of oil; occasional spots free oil and light staining, scattered dead oil and brown scummy oil residue. Looks like good reservoir.

MISSISSIPPIAN (Warsaw) TOP @ 4474

4474-77: Dolomite, very finely crystalline, compact matrix with scattered fossil-cast and pinpoint vugular porosity, partly silty, with a few crystalline quartz aggregates having some dead oil; no other oil show. Fair reservoir.

U.S.T. #4: 4457-77, Open 2 hours with good blow almost off bottom of bucket, recovered 540' clean to slightly muddy salt water, no shows. ISIP 1200#/30", FSIP 1265#/60" (both almost static), FP 78-394#, BHT 121°, total fluid recovered 6.7 barrels.

ROTTARY TOTAL DEPTH @ 4477

CONCLUSIONS AND RECOMMENDATIONS:

In the Tilley #3 the oil-water contact was found to be between 4455 and 4457, or at an average datum of (-1981), which is in close agreement with information from other wells in the Dickman Pool. Only nine feet of porosity was found above this oil-water contact at this location, and U.S.T. #3 indicates this section to have lower permeability and productive capacity than the water-bearing dolomite immediately below. With this information, it is the opinion of the undersigned that a commercial well cannot be made of the Tilley #3.

There are no other prospective pay zones above the Mississippian at this location.

Respectfully submitted,

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