Derby Oil Co. Conf.

## SAMPLE RECORD

State Kansas CoEllsworth Farm Kasper No. 1 Sec. 6 Twp. 14 Rge. 9w Company Milton & Sites Date Drilled Elevation Total Depth Sample determination by E. A. Koester, Aug. 21, 1931 3200-3205 Gray-blue shale; trace of weathered chert. Gray-blue shale, 50%; white chert; trace of lime and 3205-3210 fine rounded sand. Missing. 3210-3217 Yellow, red, and white chert; some medium rounded sand. 3217-3223 3223-3228 Blue-gray shale, 50%; Coarse white chert and tripoli. 3228-3237 Missing. Coarse white chert and tripoli, 95%; gray shale, 5%. 3237 - 3247 3247-3250 Coarse white chert. 60%; gray shale. 40%. 3248-3253 3253-3258 Same; chert 40%; shale, 60%. A trace of dolomite or dolomitic lime is found in all the above chert samples. 3258-3262 Missing. 3262-3286 Greenish-gray muddy shale; trace of chert. 3286-3315 Blue gray fissile shale; partially light greenish-gray. 3315-3335 Blue-gray fissile shale, 70%; light gray to white. finely crystalline dolomite; a trace white chert. 3335-3353 Missing. Dolomite, as above, 50%; shale, 50%. 3353-3358 3358-3362 Missing. 3362-3370 Mostly dolomite and dolomitic lime, similar to above. Light gray, gray, and translucent finely crystalline and crystalline lime; not so dolomitic as above; pyrite. 3370-3450 The sample on first glance looks like gray shale. 3450-3472 White and translucent crystalline and finely crystalline limestone; some black limestone; some fine angular fresh chert; some fine angular and subrounded quartz. The sample 3450-3472 is much whiter than the sample just above. It also appears to be more cherty. A cherty zone appears between 3425 and 3450. **3482-348**7 White crystal, partly porous lime, trace of chert. White cryst. lime, 50%; gray dense dolomite, 50%; 3499-3503 some chert and shale. White cryst. lime, 50%; gray clay-shale, 50%. 3503-3507 White finely crystalline lime, with fine embedded sand. 3507 - 3523 50%; gray clay-shale, 50%. Gray fissile shale, 60%; white cryst. lime. 40%; some fine 3523-3527 sand. 3527-3531 Gray-green dolomitic shale, 90%; white cryst. lime, 10%. Same, with very little lime; bryozoans. 3531-3543 Same; with med, to coarse, well rounded frosted sand, 5%. Same; sand, as above, 30%; pyrite, bryozoans. 3543**-**35<del>4</del>7 3547-3550 3550-3555 Same; sand, fine to coarse, as above, (pieces), 20%; some dol. 3555-3559 Same; trace of dolomite; pyrite, bryozoans. Same, with 20% fine sand and dolomite, both well drilled up. Fine; fine dolomite and sand, 30%; dark gray shale, 70%; **3559-3**567 **35**67**-35**76

trace of white vitreous chert.