MORROW

The Morrow consisted of brown, fine crystalline, shaly limestone and tan to light brown, fine crystalline, fossiliferous limestone down to 11,290'. Brown to gray-brown, fine to slightly medium, angular, micaceous, tight calcareous, poorly sorted sandstone was logged over the next 30'. Limestone, shale, chert and additional sandstone was logged down to the $M_3$ unit at 11,490'. Brown to dark gray-brown oolitic limestone marked the sample top of this unit. Drilling continued in mainly fine, tight sandstones to 11,568-574' where the first drilling break occurred. Samples from this break contained clear, coarse to very coarse, angular to sub-angular loose quartz sand. Another drilling break occurred from 11,638-646' and samples contained clear, medium to coarse angular to sub-angular, loose quartz sand. The last break in the $M_3$ unit was from 11,691-712'. The well was circulated out at 11,720' and samples contained clear, medium sub-angular to angular loose quartz sand. A decision was made to drill stem test.

DST No. 2 11,500-720'. Open 2' 30", 2250' WB. 15" pre-flow - very weak blow - slight increase. Shutin 60". Reopened with good blow increasing to strong blow with ¼" choke open. Gas in 1' 20" or 65" into the 2' 15" flow test.

| Time | Pressure | Volume - MCF | Choke |
|---|---|---|---|
| 1' 30" | 65 | 117.6 | ¼" |
| 1' 40" | 95 | 154.6 | ¼" |
| 1' 50" | 125 | 205.8 | ¼" |
| 2' | 145 | 235.2 | ¼" |
| 2' 10" | 165 | 261.6 | ¼" |
| 2' 15" | 170 | 271.0 | ¼" |
| 2' 30" | 185 | 294.0 | ¼" |

15" pre-flow - IFP 1094#, FFP 1181#, 60" ISIP 4848#, 4½' FSIP 4804#, 2' 15" flow period - IFP 1181#, FFP 1421#, IHP 5995# FHP 5929#, BHT 184° F. Sample chamber R/5.5 CFG + 500 cc DF under 1100# pressure.