

GEOLOGICAL DEPARTMENT
SOUTHWESTERN GAS COMPANY
INDEPENDENCE, KANSAS

1-15-15 E

Company Lowery et al

S. T. R. 1-15-15 E
County Osage
State Kansas
Lease and Well No. Corbray

Contractor

Drilling Commenced

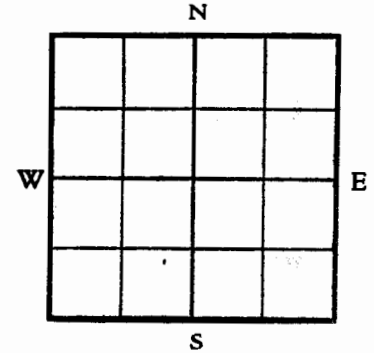
Drilling Completed

Initial Production

Initial Rock Pressure

Location

| | | |
|--------|--------|-------|
| Casing | 10" | 20' |
| | 8 1/2" | 1340' |
| | 6-5/8" | 1720' |



Driller's Record of Formations

| | | | | | |
|-------------------|--|------|------|------------------|-----------|
| soil | | 37 | | | |
| shale | | 37 | 45 | shale | 1122 1124 |
| lime | | 45 | 47 | lime | 1124 1150 |
| shale | | 47 | 55 | shale | 1150 1152 |
| lime | | 55 | 70 | sand | 1152 1172 |
| slate | | 70 | 100 | shale | 1172 1175 |
| shale white | | 100 | 150 | -lime | 1175 1222 |
| shale dark | | 150 | 190 | shale | 1222 1227 |
| shale white | | 190 | 210 | lime | 1227 1252 |
| shale dark | | 210 | 280 | dark shale | 1252 1260 |
| shale white | | 280 | 310 | lime hard | 1260 1270 |
| sandy shale | | 310 | 330 | gas sand | 1270 1275 |
| shale white | | 330 | 380 | shale | 1275 1280 |
| shale dark | | 380 | 464 | lime | 1280 1285 |
| shale white sandy | | 464 | 532 | shale | 1285 1295 |
| lime | | 532 | 536 | lime | 1295 1313 |
| shale | | 536 | 564 | black lime | 1313 1316 |
| lime | | 564 | 568 | show of oil | 1348 . |
| shale dark | | 568 | 576 | - | 1316 1344 |
| shale light | | 576 | 640 | shale and shells | 1348 1365 |
| shale white | | 640 | 660 | white lime | 1365 1440 |
| lime | | 660 | 664 | dark lime † | 1440 1500 |
| shale | | 664 | 740 | dark shale | 1500 1554 |
| shale | | 740 | 795 | lime | 1554 1556 |
| shale | | 795 | 835 | shale | 1556 1575 |
| lime | | 835 | 886 | lime | 1575 1580 |
| shale | | 886 | 910 | shale | 1580 1585 |
| sandy lime | | 910 | 915 | sandy lime | 1585 1590 |
| soft lime | | 915 | 918 | dark lime | 1590 1703 |
| shale | | 918 | 929 | brown shale | 1703 1760 |
| lime | | 929 | 982 | brown sand | 1760 1775 |
| shale | | 982 | 1018 | shell | 1775 1787 |
| shelly | | 1018 | 1040 | sand and water | 1787 1795 |
| dark shale | | 1040 | 1100 | Cherokee lime | 1795 1920 |
| lime | | 1100 | 1105 | T.D. | 1920 |
| shale | | 1105 | 1110 | | |
| lime | | 1110 | 1116 | | |
| shale | | 1116 | 1120 | | |
| lime | | 1120 | 1122 | | |