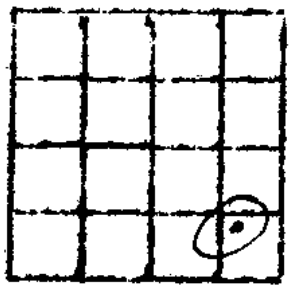
County Jackson



sec. 14 T. 47 R. 30

Owner Lone Jack O&G

Elev. 1032 MGS# 2578

Farm Shawhan, W. D. Lee No. 6 TD 1265 Shows gas* Spls. ✓

Status _____ Date Completed [redacted] June 1932 Fm TD Jeff. City

Remarks: *gas prod. — 1,100,000 ft³

[redacted] R.P. 79#

0015 / ~~0023~~

THE

# Oil and Gas Resources

*of*

## CASS AND JACKSON COUNTIES MISSOURI

*by*

JOSEPH R. CLAIR

Vol. XXVII, Second Series

1943

MISSOURI
GEOLOGICAL SURVEY AND WATER RESOURCES

H. A. BUEHLER
DIRECTOR AND STATE GEOLOGIST
ROLLA, MISSOURI

**Martin and Reiser, Anne Perrin No. 1—Continued.**

| *Stratum* | *Thickness feet* | *Depth feet* |
|---|---|---|
| Pre-Cambrian: | | |
| Granite wash: | | |
| Sandstone, coarse angular fragments of pyrite, feldspar grading into coarse quartz feldspar gravel | 50 | 2,275 |
| Granite; | | |
| Angular fragments of quartz pink feldspar, hornblende, biatite, etc., grading down into granite composed salmon pink feldspar with minor amounts of quartz | 1,925 | 4,200 |

Note:—Pre-Pennsylvanian section from sample determination of insoluble residues by M. Hundhausen, E. McCracken, and J. Grohskopf.

**Log of Lone Jack Oil and Gas Company, D. L. Shawhan No. 6. Location: NW. corner SE. SE. Sec. 14, T. 47, R. 30. Elevation: 1,028. Map No. 23.**

| *Stratum* | *Thickness feet* | *Depth feet* |
|---|---|---|
| Quaternary series: | | |
| Soil and clay | 11 | 11 |
| Pennsylvanian system: | | |
| Kansas City formation: | | |
| Lime | 3 | 14 |
| Blue shale | 4 | 18 |
| Dark shale | 2 | 20 |
| Lime (Winterset) | 22 | 42 |
| Shale | 7½ | 49½ |
| Lime (Bethany Falls) | 17½ | 67 |
| Dark shale | 9 | 76 |
| Light shale | 19 | 95 |
| Lime (Hertha) | 3 | 98 |
| Pleasanton formation: | | |
| Dark shale | 11 | 109 |
| Red rock | 5 | 114 |
| Shale | 136 | 250 |
| Lime | 3 | 253 |
| Shale | 15 | 268 |
| Brown lime and sand | 4 | 272 |
| Sand | 6 | 278 |
| Dark shale | 6 | 284 |
| Henrietta formation: | | |
| Lime (Pawnee) | 2 | 286 |
| Shale | 14 | 300 |
| Lime (Lexington "Cap Rock") | 8 | 308 |
| Slate (gas) | 4 | 312 |
| Lime | 4 | 316 |
| Shale | 21 | 337 |
| Lime | 2 | 339 |
| Black slate | 2 | 341 |
| Shale | 14 | 355 |
| Lime (Bottom of Fort Scott) | 2 | 357 |
| Cherokee formation: | | |
| Shale | 13 | 370 |
| Sand (gas) (top of squirrel) | 3 | 373 |
| Sandy shale | 5 | 378 |
| Gas sand | 36 | 414 |
| Shale | 41 | 455 |
| Lime (Ardmore) | 2 | 457 |

**Lone Jack Oil and Gas Company, D. L. Shawhan No. 6—Continued.**

| *Stratum* | *Thickness feet* | *Depth feet* |
|---|---|---|
| Black shale | 2 | 459 |
| Light shale | 25 | 484 |
| Lime | 1 | 485 |
| Shale | 30 | 515 |
| Black shale | 10 | 525 |
| Gray shale | 25 | 550 |
| Lime | 2 | 552 |
| Gray shale | 92 | 644 |
| Sand | 8 | 650 |
| Gray shale | 40 | 690 |
| Water sand | 10 | 700 |
| Shale, dark | 3 | 703 |
| Mississippian system: | | |
| Osage group: | | |
| Keokuk-Burlington formation: | | |
| Limestone | 167 | 870 |
| Sedalia formation: | | |
| Limestone, cream coarsely crystalline chert, some chert, soft green pyritic shale | 20 | 890 |
| Kinderhook group: | | |
| Chouteau formation: | | |
| Dolomite, buff to brown, succrose, much included white to gray to buff, vitreous, opaque and white chalky chert | 75 | 965 |
| Compton formation: | | |
| Dolomite, buff to gray, finely crystalline with buff to gray-buff finely crystalline limestone, slightly fossiliferous | 25 | 990 |
| Kinderhook formation: | | |
| Shale and lime, some pyritic sandstone and medium to coarse angular glassy sand | 10 | 1,000 |
| Devonian system: | | |
| Limestone, cream to buff, chalky, dense finely crystalline, included sand grains, white vitreous subtranslucent chert. Lime lithographic in part, some shale | 90 | 1,090 |
| Ordovician system: | | |
| Dolomite buff to cream, finely succrose, much included sand, gray, vitreous and white chalky chert. Increasingly sandy toward bottom | 15 | 1,105 |
| St. Peter formation: | | |
| Sandstone, irregular, coarse to fine, heavily frosted, well rounded | 30 | 1,135 |
| Sand as above, grading down into dolomite; dolomite, light cream to buff, dense to succrose, with much included sand, white vitreous opaque chert. Oolitic in part. Much shale in some portions | 95 | 1,230 |
| Canadian of E. O. Ulrich: | | |
| Jefferson City, formation: | | |
| Dolomite, buff to cream, finely succrose, some white chalky chert. Chert increases toward bottom and is some white chalky chert. Chert incoarsely oolitic | 35 | 1,265—T. D. |

*ducing horizons.* Gas is found in the black shales at the Lexington, Summit and Mulky coal horizons, but practically all the wells were drilled to the Squirrel sand where the main supply of gas was found. Two holes have been drilled into the top of the Mississippian and one of them was carried to 1265 feet. The Bartlesville sand appears to be absent and the Burgess sand contained water. The followng is a typical log:

LONE JACK OIL AND GAS COMPANY.

D. Lee Shawhan No. 6.

NW. cor. SE. ¼ SE. ¼ sec. 14, T. 47 N., R. 30 W.
Elevation, 1,032 feet.

| | Thickness, Feet. | Depth, Feet. | |
|---|---|---|---|
| Soil and clay | 11 | 11 | |
| Lime | 3 | 14 | |
| Blue shale | 4 | 18 | |
| Dark shale | 2 | 20 | |
| Lime | 22 | 42 | (Winterset.) |
| Shale | 7 ½ | 49 ½ | |
| Lime | 17 ½ | 67 | (Bethany Falls.) |
| Dark shale | 9 | 76 | |
| Light shale | 19 | 95 | |
| Lime | 3 | 98 | (Hertha.) |
| Dark shale | 11 | 109 | |
| Red rock | 5 | 114 | |
| Shale | 136 | 250 | |
| Lime | 3 | 253 | |
| Shale | 15 | 268 | |
| Brown lime and sand | 4 | 272 | |
| Sand | 6 | 278 | |
| Dark shale | 6 | 284 | |
| Lime | 2 | 286 | (Pawnee.) |
| Shale | 14 | 300 | |
| Lime | 8 | 308 | (Lexington cap rock.) |
| Slate | 4 | 312 | Gas. |
| Lime | 4 | 316 | (Top of Ft. Scott.) |
| Shale | 21 | 337 | |
| Lime | 2 | 339 | |
| Black slate | 2 | 341 | |
| Shale | 14 | 355 | |
| Lime | 2 | 357 | (Bottom of Ft. Scott.) |
| Shale | 13 | 370 | |
| Sand | 3 | 373 | Gas (top of Squirrel.) |
| Sandy shale | 5 | 378 | |
| Gas sand | 36 | 414 | |
| Shale | 41 | 455 | |
| Lime | 2 | 457 | (Rich Hill.) |
| Black shale | 2 | 459 | |
| Light shale | 25 | 484 | |
| Lime | 1 | 485 | |
| Shale | 30 | 515 | |

LONE JACK OIL AND GAS COMPANY—Continued.

| | Thickness, Feet. | Depth, Feet. | |
|---|---|---|---|
| Black shale | 10 | 525 | |
| Gray shale | 25 | 550 | |
| Lime | 2 | 552 | |
| Gray shale | 92 | 644 | |
| Sand | 8 | 650 | |
| Gray shale | 40 | 690 | |
| Water sand | 10 | 700 | |
| Shale, dark | 3 | 703 | |
| Lime | 190 | 895 | (Miss. lime.) |
| Shale break | 2 | 895 | |
| Lime | 100 | 995 | |
| Shale break | 2 | 997 | |
| Lime | 107 | 1105 | |
| White sand | 29 | 1134 | |
| Dark green shale | 6 | 1140 | |
| Dolomite | 125 | 1265 | T. D. |

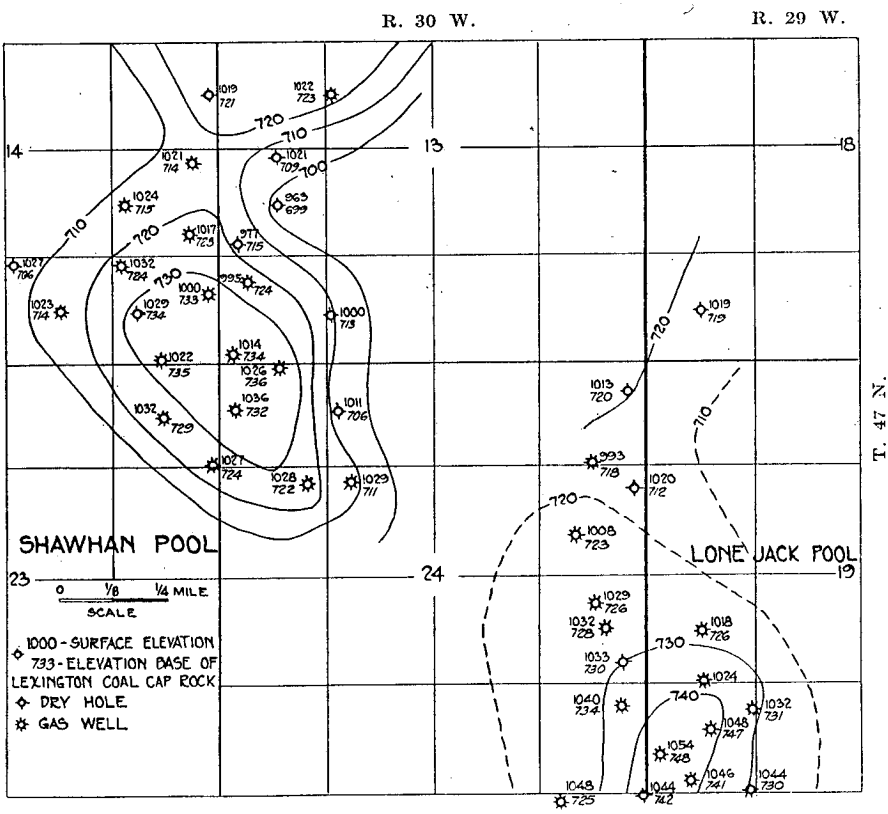



FIG. 2. Shawhan and Lone Jack Gas Pools. T. 47 N., R. 29-30 W., Jackson County, Mo. Contour interval, 10 feet.