

August 15, 1977

GEOLOGICAL WELL REPORT

Brunson=Spines, Inc. & Magnum Land Corp.
#3 W. Jones SW NW NW Section 6-T19S-R15E
Last Chance Pool, Coffey County, Kansas
Alco Drilling Co., Inc. - Contractor
Spud: August 9, 1977
7" Surface Casing @ 46'
4 1/2" Production Casing @ 1739'
Rotary Completion: August 12, 1977
Total Depth: Rotary 1740'

BRUNSON-SPINES, INC.
615 Fourth Financial Center
Wichita, Kansas 67202

Gentlemen:

Listed below are the pertinent geological tops and an evaluation of the porosities encountered. No drill stem tests were taken and the hole was not logged mechanically before being cased.

I arrived at the location at a depth of 1190' and witnessed the drilling from that point to TD 1740'. Samples were examined from 900-1740' TD.

Enclosed herewith is a copy of the plotted drilling time log from 600-1740' TD which also includes lithology, porous zones, tops, and other pertinent data. A diamond core was cut in the Bartlesville Sand, core description included below.

GRN LOG TOPS

ELEVATION	1117 (Private Elevation)
BASE OF KANSAS CITY	1003 (+ 114)
PAWNEE	1166 (- 49)
CHEROKEE	1283 (- 166)
CATTLEMEN ZONE	1380 (- 263)
1400-06 & 1415-24	Fine, dirty, calcareous sandstone.

1977
G. WRIGHT
DONATION

BARTLESVILLE
SANDSTONE

1467 (- 350)

1467-70 Sandstone, medium fine, clustered, some fair porosity, streaked staining and fluorescence, no odor.

DIAMOND CORE #1

1470-1496 Rec. 26' / 26' (100%)

1470-71 Sandstone, medium fine, fairly clean, friable, fair to good porosity, slight bleeding of free oil, good staining, fair odor, shale inclusions, good golden fluorescence.

1471-72 Much as above but more shale streaks, staining more broken with shale, good golden fluorescence.

1472-73½ Gray, hard, tight sandy limestone.

1473½-74½ Greenish, compact, silty, micaceous, calcareous shale.

1474½-76 Sandstone, fine, fairly clean, fair porosity, oil stained, good fluorescence, fair odor, slight bleeding.

1476-80 Sandstone, greenish, dirty, very fine, streaks of oil staining.

1480-83½ Greenish, silty, calcareous shale.
Very micaceous 1482-83.

1483½-94 Sandstone, medium grained, much coarser than above. Well oil stained, friable, good porosity, good fluorescence and odor.

1494-95 Sandstone, fine, fairly clean, oil stained.

1495-96 Greenish, silty, micaceous shale.

1496-1591 Sandstone, clean, white, medium fine, porous, no stains, no fluorescence.

BASE OF BARTLESVILLE

1591 (- 474)

BURGESS SANDSTONE

1705 (- 588)

1705-23 Sandstone, coarse rounded, loose grains to tightly cemented, quartzitic. No show.

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#3 W. Jones - Coffey Co., Kansas

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MISSISSIPPIAN LIMESTONE

1723 (- 606)

1723-40.

Cherty, finely sucrosic to medium crystalline, dolomitic limestone and dolomite. Good cavernous porosity, no show.

TOTAL DEPTH:

1740'

CONCLUSIONS AND RECOMMENDATIONS

From the #2 Jones one location north, we lost 12 feet of elevation on the top of the Bartlesville sand. On the basis of the diamond core by visual comparison it would appear that the better looking sand in #3 starts @ -366 while the better sand at #2 was topped at -350. This represents a loss of 16 feet of elevation on this zone. It appears that the #3 has a relatively good reservoir but the structural position leaves some questions as to productivity. The chances seemed favorable enough to justify casing to test the Bartlesville.

We drilled ahead after coring the Bartlesville and penetrated the Mississippian Limestone. On the Mississippian, this well is 46 feet lower than the #1 well two locations south. More structure is demonstrated here than was expected.

Yours very truly,

T. G. Wright

TGW:wlr

DRILLING PROGRESS

8/9/77	Spud		
8/10/77	834		
8/11/77	1450		
8/12/77	1740'	TD	4½" casing

BIT RECORD

Williams	(Retip)	46	-	612
Smith	F ₂ (Rerun)	612	-	1740' TD