

May 18, 1979

GEOLOGICAL WELL REPORT

Brunson-Spines, Inc.

#2 Born SE NE SE Section

1-T19S-14E, Last Chance Pool,

Coffey County, Kansas

Contractor: Alco Drilling Co., Inc.

Spud: May 14, 1979

7" Surface Casing @ 62'

4-1/2" Production Casing @ 1624'

Rotary Completion: May 17, 1979

Total Depth: Rotary 1625'

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 1250' and witnessed the drilling from that point to TD 1625'. Samples were examined from 1250-1625 TD.

Enclosed herewith is a copy of the plotted drilling time log from 1000 - 1625' TD which also includes lithology, porous zones, tops, and other pertinent data. Diamond cores were cut in the Bartlesville Sand, core descriptions included below.

SAMPLE TOPS

ELEVATION	1144	G.L. Est. from Well #1
BASE OF KANSAS CITY	1030	(+ 114)
PAWNEE	1195	(- 51)
CHEROKEE	1313	(- 169)
CATTLEMEN ZONE	1410	(- 266)
BARTLESVILLE SANDSTONE	1504	(- 360)

2007  
G. WRIGHT DONATION

DIAMOND CORE      1490 - 1516

Full Recovery.

1490 - 1492	Hard, compact, greenish shale
1492 - 1493	Greenish, compact, silty shale
1493 - 1494	Silty shale, greenish, fine dirty sandstone, minor oil staining in patches.
1494 - 1497	Greenish silty shale and dirty, fine sandstone
1497 - 1500	Dirty compact, greenish silt, fine and laminated greenish shale
1500 - 1504	Shale, compact, gray-green, micaceous, silty laminations
1504 - 1505	Sandstone, fine, dirty, greenish, compact.
1505 - 1507	Sandstone, fine, compact, fairly clean and friable, well oil stained, good odor and fluorescence.
1507 - 1509	Sandstone as above except somewhat coarser, cleaner and more friable. Good oil stain and odor. Some bleeding initially, good porosity.
1509 - 1511	Greenish, dirty, compact, siltstone, no porosity, no show.
1511 - 1512	Sandstone, fairly clean and porous, fine, well oil stained and good fluorescence.
1512 - 1513	Shale, silty, greenish compact.
1513 - 1515	Sandstone, fairly clean, fair porosity, medium fine, well oil stained, good odor and fluorescence.
1515 - 1516	Sandstone as above but cleaner and coarser. Good porosity and oil staining. Good odor.

DIAMOND CORE      1516 - 1535

Full Recovery.

1516 - 1517	Greenish, fine, dirty sandstone, streaks of oil staining.
1517 - 1518	Sandstone, medium fine, fairly clean, fair porosity, good oil stain and fluorescence. Fair odor on fresh break.
1518 - 1519	Greenish, silty shale.
1519 - 1520	Sandstone, medium fine, fairly clean and porous, light oil stain, good fluorescence and fair odor.
1520 - 1523	Streaked oil stain in greenish, dirty, medium grained sandstone. Some good friable, fairly clean sandstone with good oil stains.
1523 - 1524	Greenish, dirty, barren sandstone.
1524 - 1526	Sandstone, fairly clean, fair porosity, light oil stain. Good fluorescence and odor.
1526 - 1527	Greenish, dirty, compact sandstone.
1527 - 1531	Sandstone, light gray green, friable, fairly clean, fair to good porosity, no show, no odor, a fluorescence.
1531 - 1535	Sandstone as above but more greenish and dirtier.

BARTLESVILLE SANDSTONE

1535 - 1615      Sandstone, medium grained, clustered, white to light gray, clean, porous, no show, no fluorescence.

BASE OF SAND                                      1615 (- 471)

TOTAL DEPTH:                                      1625'

Conclusions & Recommendation

On the top of the Bartlesville Sand the subject well checks 10 feet lower structurally, however, in this well the "pay zone" starts at 1505' which is 7 to 8

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feet higher structurally than the perforated "pay section" of the #1. Further the core data both visually and by analysis appears better than the #1. Considering all the alternatives, it was felt that casing the hole was justified to test the Bartlesville. This was done.

Yours very truly,

T. G. Wright

TGW:wlf

DRILLING PROGRESS

5-14-79	Spud		
5-15	735		
5-16	1375		
5-17	1625 TD	Run	4 1/2"

BIT RECORD

SMITH	SF <sub>2</sub>	62 - 1625
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