

15-139-20025

31-18-15 E

OCTOBER 24, 1978

GEOLOGICAL WELL REPORT

Alco Drilling Co., Inc.
#3 J. S. Brandon, C E/2 SW/4
Last Chance Pool, Sec. 31-T18S-R15E.
Osage County, Kansas
Alco Drilling Co., Inc. - Contractor
Spud: October 18, 1978
7" Surface Casing @ 50'
4-1/2" Production Casing @ 1650'
Rotary Completion: October 21, 1978
Total Depth: 1650'

ALCO DRILLING CO., INC.
RFD #3
Iola, Kansas 66749

Gentlemen:

Listed below are the pertinent geologic tops and an evaluation of the porosities encountered in the Bartlesville Sand. 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 1245' and witnessed the drilling from that point to TD 1650'. Samples were examined from 1400 - 1650' TD.

Enclosed herewith is a copy of the plotted drilling time log from 1100-1650' TD which also includes lithology, porous zones, tops, and other pertinent data below 1450. A diamond core was cut in the Bartlesville Sand, core description included below.

SAMPLE TOPS

ELEVATION	1156 G.L. Est.
PAWNEE	1211 (+ 55)
CHEROKEE	1329 (- 173)
BARTLESVILLE SANDSTONE	1538 (- 382)

1538-51 (cored (described below))

DIAMOND CORE #1

1525-1551

100% Recovery

- 1525-31 Shale, gray-green, compact, micaceous.
- 1531-33 Shale, gray-green, silty, friable.
- 1533-34 Shale, gray-green, micaceous.
- 1534-37 Shale, gray-green, silty, friable, soft.
- 1537-38 Hard, gray, compact shale.
- 1538-40 Sandstone, light gray to greenish, medium grained, fairly clean, fair to good porosity, friable. No show, no fluorescence.
- 1540-42 Sandstone much as above but finer and dirtier, less porous.
- 1542-43 Sandstone as above, gray-green shale streaks.
- 1543-50½ Sandstone, medium grained, light gray-green, fairly clean, friable, fair porosity, no show, becoming cleaner and more porous downward.
- 1550½-51 Sandstone, fine, gray-green, dirty, tight.
- 1551-1646 Sandstone, light gray to white, fine to medium fine, loosely clustered to loose grained. Good porosity, no show.

TOTAL DEPTH: 1650'.

Conclusions & Recommendations

The subject well, at the top of the Bartlesville, is too low to produce when referred to production to the south and southwest and carried "no show" in the Bartlesville.

There is good development of sand from 1538-1646, and since a water in-put well is needed on the lease the hole was cased for that purpose. After logging electrically the better portion of the Bartlesville should be perforated and tested for water injection.

Yours very truly,

T. G. Wright

TGW:wlr

DRILLING PROGRESS

10/18/78	Spud	
10/19	801 -	
10/20	1419	
10/21		TD WOC

BIT RECORD

SMITH (BUTTON)	50 - 1650 TD
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