

August 26, 1966

Re: GEOLOGICAL WELL REPORT
 Brunson-Spines #3 Willems,
 HNU Tract #1, NW NE NW
 Section 33-T21S-R3W ✓
 Hollow-Nikkel Pool,
 McPherson County, Kansas
 Contractor: Blackstone Drilling, Inc.
 Spud: August 20, 1966
 13" surface casing @ 216'
 5½" production casing @ 3432'
 Rotary completion: August 26, 1966
 Total Depth: 3445 feet

Brunson-Spines
 800 Wichita Plaza
 Wichita, Kansas 67202

Gentlemen:

Listed below are the pertinent geological tops and an evaluation of the porosities encountered below the Mississippian "Chat" in the captioned well. No drill stem tests were taken and the hole was not logged electrically before being cased. I arrived at the location at a depth of 3340' and witnessed the drilling to 3445' TD. Samples were examined from 3100'-3320' and 3420'-TD.

Enclosed herewith is a copy of the plotted drilling time log which also includes lithology and other pertinent data.

Geological Tops

ELEVATION:	1467 K.B.
MISSISSIPPIAN "CHAT"	3113 (-1646)
3113-3158	Primarily a vitreous and tripolitic chert zone with varying porosities. Only minor staining exists in this section. Not considered holding commercial possibilities.
KINDERHOOK SHALE	3295 (-1828)
HUNTON	3430 (-1963)
3430-3440	Dolomite, brown, finely crystalline to sucrosic, fair to good intercrystalline porosity and fine

Brunson-Spines
#3 Willems
Page Two

cavernous porosity, good oil staining,
trace of free oil.

MAGUOKETA 3440 (-1973)

TOTAL DEPTH 3445 (-1978)

Conclusions and Recommendations

On the top of the Hunton this well has a good relative structural position, being 13 feet higher than your #2 well one location east, and 15 feet lower than the north offsetting producer. This is a normal relationship.

The Hunton "pay" is considered adequate as to thickness with 10 feet gross. The quality of the porosity is not excellent but should prove sufficient within the flood area.

It was recommended that the hole be cased to 3432', 2 feet in the Hunton.

Yours very truly,

T. G. Wright

Brunson-Spines
#3 Willem

Bit Record

Reed	YS1	Rerun	208- 865'
Reed	YS1	Rerun	865-1200'
Hughes	OSCG	Retip	1200-1740'
Smith	SV2	Retip	1740-2090'
Security	M4N	Retip	2090-2505'
Reed	YS1		2505-2810'
Reed	YS1		2810-3130'
	Button Bit	Rerun	3130-3251'
Reed	YS1		3251-3445' TD

Drilling Progress

8-20	Spud
8-21	835'
8-22	1840'
8-23	2550'
8-24	2905'
8-25	3205'
8-26	3445' TD-Rotary Completion
8-27	W.O.C.