GEOLOGICAL REPORT ORIGINAL

Dan A. Nixon, Petroleum Geologist - Certified & Registered

Well Name:	#8-23 Sander
Location:	SW NW NE Section 30, T13S-R16W Ellis County, Kansas
Operator:	Taurus Oil Company P.O. Box 981 Hays, KS 67601-0981
Contractor:	Discovery Drilling P.O. Box 763 Hays, Kansas 67601
Elevation:	Central Kansas Surveying and Mapping 2344 Washington Great Bend, Kansas 67530 Rotary Bushing: 1979' Ground Level: 1971'
Samples:	Ten foot samples from 2900' to 3170' and five foot samples from 3170' to 3515'.
Time Log:	One foot intervals from 2900' to 3515' RTD. A copy of the time log is included in this report.
Surface Casing:	8⅝" @ 1109' w/450 sx. of 60/40 Pozmix
Production Casing:	5½" @ 3514' w/150 sacks of ASC cement
Port Collar or DV Tool:	None
Spud Date:	7-14-00
Completion Date:	7-20-00
API #:	15-051-250440000

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FORMATION TOPS:	SAMPLE DEPTH	LOG DEPTH	MINUS DATUM
Anhydrite (driller's)	1118'	1117'	+862
Anhydrite Base (driller's)	1153'	1152'	+827
Topeka	2939'	2939'	-960
Heebner Shale	3189'	3188'	-1209
Toronto Lime	3210'	3208'	-1229
Lansing	3236'	3237'	-1258
Base of the Kansas City	3463'	3462'	-1483
Arbuckle Dolomite	3480'	3482'	-1503
Total Depth	3515'	3515'	-1536

SAMPLE ANALYSIS OF ZONES OF INTEREST: (corrected to the electric log)

Toronto	3208'-12'	Fine crystalline, white, buff limestone with very poor intercrystalline porosity. Barren with a trace of rare spotty stain and no shows in the wet samples. Electric log indicated this to be wet and tight. Not worthy of testing.
Lansing	3237'-46'	Fossiliferous, buff, white limestone, poor inter-fossil porosity with rare spotty stain. Trace of spotty stain. Wet samples had a slight show of free oil and faint odor. Log calculations indicated 6-9% porosity and 37-60% water saturation, with the 60% saturation being in the top 3' of the zone. Not recommended for testing.
	3264'-68'	Cherty, buff, white, fine crystalline limestone, tight with no shows in either the wet or dry samples. Log calculations indicated 10% porosity and 62% water. Not recommended for testing.
	3280'-84'	Fossiliferous and vuggy, off-white limestone, light spotty stain with fair to good vugular porosity. Wet samples had a slight show of free oil and odor. Log calculations indicated 22% porosity and 27% water saturation. Test this zone.
	3308'-12'	Limestone as above with fair vugular porosity and spotty stain. Trace of saturated stain. Wet samples had a show of free oil and faint odor. Calculated 9% porosity and 39% water saturation on the electric log. Recommended for testing.

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Lansing (cont.)	3319'-22'	Fossiliferous, vuggy,white, fine crystalline limestone with spotty stain and fair vugular porosity. Trace of saturated stain. Wet samples had a show of free oil and faint odor. Calculated 14% porosity, 83% water saturation on electric log. Based on the high water saturation it is questionable if this zone should be tested except maybe prior to abandoning well.
	3330'-36'	Barren, white, oolicastic limestone with good oolicastic porosity. Trace of rare spotty stain and no show of free oil or odor in the wet samples. Calculated 15% porosity, 35% water saturation on the log. Not worthy of testing.
	3394'-96'	Tight, fine crystalline, fossiliferous, white limestone, poor intercrystalline and vuggy porosity, rare spotty stain with a trace of saturated stain. Wet samples had a slight show of free oil and faint odor. Electric log indicated 9% porosity and 25% water saturation. Should be considered for testing.
	3414'-17'	Barren, white oolicastic limestone, fair to good oolicastic porosity. Calculated 11% porosity and 35% water saturation on the log. Not recommended for testing.
Arbuckle Dolomite	3482'-89'	Buff, fine crystalline, sucrosic dolomite with spotty but mostly saturated stain. Fair intercrystalline porosity and occasional fair vuggy porosity. Wet samples had a show of free oil and good odor. This upper 8' calculated 13-18% porosity and 52-57% water saturation. Test the upper portion of this section.
	3489'-96'	Rhombic, coarse crystalline buff dolomite, good intercrystalline porosity and spotty to saturated stain. Scattered barren porosity. Wet samples had a show of free oil and fair odor. Calculated 20-22% porosity and 58-78% water saturation. Not recommended for testing.
	3496'-3515'	Rhombic, coarse crystalline dolomite as above with increasing percentage of barren porosity. White, beige, opaque, blocky chert pebbles. Not recommended for testing.

REMARKS:

Structurally, the Lansing top on the #8-23 Sander ran 4' high to the plugged Arbuckle producer to the north about ½ location, the #6 Sander, 6' low to the plugged Lansing and Arbuckle producer to the south about ½ location, the #5 Sander, and 1' low to the Arbuckle producer to the east 1 location, the #7 Sander.

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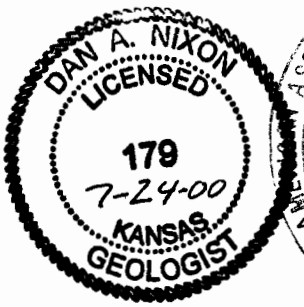
REMARKS:
(cont.)

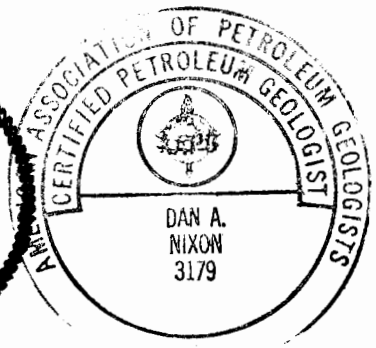
The Arbuckle top on the #8-23 Sander came in 7' high to the same #6 Sander to the north, 3' low to the same #5 Sander to the south, and 2' low to the same #7 Sander to the east.

Based on its structural position to surrounding production, shows in the Lansing and Arbuckle formations, and calculations of those shows on the electric log, 5½" casing was cemented at 3514' with 100 sacks for further testing.

Respectfully Submitted,

Dan A. Nixon, Petroleum Geologist
AAPG Certification #3179
Kansas Registration #179





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DRILLING TIME LOG

2900'-2925'	2-2-2-2-1	2-2-2-2-2	2-1-2-2-2	2-3-2-2-2	3-2-1-2-2
2925'-2950'	2-2-1-1-2	2-3-3-3-3	2-2-2-2-4	3-3-4-3-3	3-4-3-3-3
2950'-2975'	2-3-3-4-3	4-4-3-3-4	3-3-2-2-1	1-1-2-2-3	4-4-3-3-4
2975'-3000'	4-4-3-3-4	3-3-4-3-3	4-4-2-2-2	3-2-3-2-3	3-2-3-3-3
3000'-3025'	2-4-3-3-3	3-3-4-2-3	3-3-3-3-4	3-3-3-2-3	3-3-2-3-3
3025'-3050'	3-3-2-3-3	2-4-3-2-3	3-3-3-2-3	3-3-2-2-3	2-4-3-3-3
3050'-3075'	4-3-2-4-4	3-4-2-2-2	2-2-3-3-3	4-4-3-3-3	3-2-3-3-3
3075'-3100'	4-3-3-3-3	2-3-3-3-3	3-3-4-3-4	4-4-2-2-2	2-2-4-3-3
3100'-3125'	4-3-4-3-4	3-2-3-2-2	4-3-4-3-3	3-3-3-3-3	3-3-2-3-2
3125'-3150'	3-3-2-1-1	1-4-2-3-2	3-3-3-3-4	4-3-3-3-3	2-2-1-2-2
3150'-3175'	2-2-3-2-2	2-2-1-2-2	2-2-1-1-1	2-2-2-2-2	2-3-3-2-2
3175'-3200'	2-2-2-3-2	3-3-3-2-3	3-3-3-3-2	1-2-2-4-3	3-3-2-3-3
3200'-3225'	3-4-3-2-2	2-2-3-2-2	3-3-2-2-3	3-3-3-3-3	3-3-3-3-2
3225'-3250'	3-3-2-1-1	2-1-1-1-1	1-2-3-2-2	2-2-2-2-2	2-3-2-2-2
3250'-3275'	3-3-3-3-3	3-4-4-3-3	3-3-2-3-2	2-2-2-2-3	4-3-3-4-3
3275'-3300'	4-3-4-4-2	2-3-1-1-2	3-3-3-3-3	3-3-2-3-3	3-4-3-3-3
3300'-3325'	4-2-4-3-4	3-4-3-2-3	3-3-5-4-4	3-4-2-2-3	2-2-1-2-3
3325'-3350'	3-3-4-3-3	1-1-1-1-1	2-1-3-3-4	4-3-3-4-4	5-5-4-4-4
3350'-3375'	4-4-4-3-4	5-5-5-4-5	5-4-4-5-4	5-5-5-5-4	5-5-5-5-5
3375'-3400'	4-5-5-4-4	5-5-4-4-4	5-5-5-4-5	5-4-3-4-3	3-3-3-5-4
3400'-3425'	4-5-5-4-4	4-4-3-3-3	4-5-5-3-2	2-3-4-4-4	4-5-4-4-5
3425'-3450'	5-4-4-4-5	4-5-4-4-3	4-4-5-4-5	5-4-5-3-5	5-5-3-4-4
3450'-3475'	5-4-4-5-5	4-3-4-5-4	4-4-4-3-2	3-4-3-4-4	4-5-3-5-3
3475'-3500'	2-2-2-2-2	3-2-2-3-3	2-1-1-2-2	1-2-2-1-2	1-1-2-1-2
3500'-3515'	1-1-1-2-2	2-½-½-2-1	3-2-1-2-2		

CFS @ 3515' - 60" 3515' RTD