

Dubois and Johnson

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GEOLOGIC REPORT

SIMCO Petroleum Company

#8 C. Heim

NW SE NE* 19-8S-22E

Leavenworth County, Kansas

Daily Progress:

- 8-31 Moved on, Rigged up, Drilled 124' Surface Hole
9-1 Plug Down at 4:00 a.m., Drilled out beneath surface casing at 12:00 p.m.
9-2 1195' Drilling at 7:00 a.m., RTD 1260' at 9:40 a.m., Ran open hole logs set 4-1/2 production casing.

Service Companies:

Contractor: Glacier Drilling Company, Inc., Rig #1
Cementing: Sun Cementing
Logging: Great Guns Logging

Formation Tops (E-Log Depths):

	SIMCO #8 C. Heim NW SE NE 19 KB 947	Structural Relation to	
		SIMCO 1-1 Theis NE NE NW-19	SIMCO 2-19 Heim NW NE SE-19
Lansing	114 (+733)	+ 8	- 9
Base Kansas City	438 (+409)	+ 8	- 8
Cherokee	685 (+162)	+ 3	-17
Coal Marker	1046 (-199)	+16	+17
Lower Bartlesville	1056 (-219)	+20	abs
Upper McLouth	1134 (-287)	+16	+36
Lower McLouth	1172 (-325)	+12	+20
Upper Burgess	1220 (-373)	+ 2	abs
Lower Burgess	1234 (-387)	+10	-21
Mississippi St. Louis	1242 (-395)	+12	-18
RTD and LTD	1260 (-413)		

*Intent and E-Logs show N/2 S/2 NE. Actual location is NW SE NE 19-T8S-R22E.

Hydrocarbon Shows (E-Log Depths):

- 1056-1064 Lower Bartlesville Sandstone
Sandstone, Light gray, fine to medium grained, sub rounded, moderately sorted, micaceous, slightly shaley, poor to fair porosity, slight show of free oil (Est. 20 - 23 API), trace of gas bubbles, no odor, E-Logs show four feet of gas effect, 60 - 70% water saturation, possible gas zone.
- 1080-1092 Sandstone, white, fine grained, well rounded, well sorted, fair porosity, no visible show. E-Logs indicate five feet of gas effect, 70 - 80% water saturation, probably non-commercial gas zone.
- 1134-1154 Upper McLouth Sandstone
Sandstone, light brown stain, fine to medium grained, sub rounded, moderately well sorted, good to very good porosity, slightly shaley in part, scum of oil in samples, trace of gas bubbles, faint odor increasing downward.
- 1154-1163 Sandstone, as above with increasing show of free oil in samples, fair odor, gas bubbles in pit.

E-Logs show 20-28% porosity with strong gas effect throughout exception for a 2' slightly shaley streak 1141-1143. Commercial gas zone.
- 1172-1194 Lower McLouth Sandstone
Sandstone, brown oil stain and saturation, fine to medium grained, subangular, moderately sorted, very good show of free gassy oil, circulated a good amount of oil onto pits, good odor, (Est. 23 API). E-Logs show gas effect in upper 6 feet, porosities range from 24-29% porosity, 60 ohms resistivity. Oil and gas zone.
- 1220-1226 Upper Burgess Sandstone
Sandstone, light gray to green, fine to medium coarse grained, subangular, moderately sorted, poor to fair porosity, fair show of free oil at top decreasing to slight show of tarry oil at base, slight odor, trace bubbles. E-Logs indicate wet.
- 1234-1242 Lower Burgess Sandstone
Sandstone, light gray, medium grained, angular, well sorted, good porosity, trace of tarry oil.

Recommendation/Summary:

Production casing was set to further test the Upper and Lower McLouth Sandstones. Initially, it is recommended that the Lower McLouth be perforated from 1181-1190. Oil and gas production may be expected from this zone. After this zone has been depleted, the Upper McLouth sandstone from 1137 to 1139 and 1146 to 1156 should be perforated next. Gas production can be expected. Prior to abandonment, two other sandstones should be attempted. The recommended perforation intervals are 1056 to 1062 and 1180 to 1182. The latter zones may yield supplemental gas reserves.

Respectfully submitted,

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