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## GEOLOGIC REPORT

Simco Exploration Company #1 J. and E. Stolte  
SE NE NW 20-9S-21E, Leavenworth County, Kansas

### Daily Progress:

- 3/16 Moved on location, set 7 5/8" surface casing at 45' with 20 sacks of Regular cement with 3% CaCl, plug down at 6:45 p.m.
- 3/17 Drilled out beneath surface casing at 2:45 a.m.; 257', drilling at 7:00 a.m.
- 3/18 1008', drilling at 7:00 a.m.; Rotary Total Depth of 1449' reached at 8:55 p.m.; ran E-Logs.
- 3/19 Set 4 1/2" production casing at 1435' with 100 sacks of 50/50 Pozmix with 10% gell and 50 sacks of Common with 2% gell and 2% CaCl, plug down at 7:30 a.m.

### Service Companies:

Drilling Contractor: Glacier Drilling Company  
Drilling Mud: Trotter Supply  
Electric Logs: Log Tech  
Cement: ~~Consolidated Oil Field Supply~~  
*See Cementing and Acidizing*

### Formation Tops (E-Log Depths):

<u>Formations</u>	<u>Simco #1 Stolte</u> <u>KB 1008*</u>	<u>Structural Relation to</u> <u>#1 Thiel</u> <u>W/2 NW SE 17-9S-21E</u>
Heebner	20(+988)	---
Lansing	315(+693)	+10
Base Kansas City	642(+366)	+ 2
Cherokee	880(+128)	+ 3
Burgess	1364(-356)	+ 2
Miss. surface	1398(-380)	- 3
Spergen	1398(-380)	+ 9
Total Depth	1445(-437)	---

\*A resurvey of well resulted in KB corrected elevation being 6 feet lower than in original survey which was 1014 resulting in Formations being 6 feet lower than originally thought.

Oil and Gas Shows:

Burgess Sandstone

- 1364-70 Sandstone, gray to tan, silty and shaley, poor porosity, slight odor, slight show of gas bubbles.
- 1370-81 Sandstone, gray, fine-grained, slightly shaley, fair porosity with some good porosity, fair odor, fair show of gassy oil and gas bubbles, circulated minor amount of gassy oil on pits. 1371-78 average E-Log calculations 17.5% porosity, 40 ohms resistivity, and 34% water saturation. Strong neutron/density crossover indicates presence of gas. Probably gas zone.

Mississippi

- 1425-42 Limestone, tan to light brown, medium grained, rounded fossil grains, slightly cherty, trace of poor porosity, trace of free oil.

Recommendations/Summary:

It was recommended that production casing be run in the #1 J. and E. Stolte well in order to further test the hydrocarbon shows in the Burgess sandstone. The interval from 1370 to 1373 should be perforated with 3 shots per foot.

Though the Burgess found in the captioned well was not significantly higher than it was found in the #1 Thiel well a half mile to the northeast, E-Logs indicate the Stolte well should be gas productive while the Thiel well was not. That well, yielded only water with shows of gas and oil.

Differences between the two wells' E-Logs in the Burgess include the Stolte well averaging 45 ohms resistivity to the Thiel well's 30 ohms. Presence of gas are more apparent in the #1 Stolte where there is more separation between the deep and medium induction curves, greater SP curve deflection, and, most importantly, there is good separation of the neutron and density porosity curves in the Stolte well whereas little or no separation is apparent in the Thiel well.

Should the #1 Stolte well yield gas when completed, it appears likely there is a tilted gas/oil-water contact in the Burgess reservoir that dips to the South. This should be taken into consideration in any development plans.

Respectfully Submitted,



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