Dubois and Johnson

Consulting Geologists

432 State Bank Building • Winfield, Kansas • 316-221-0428

August 18, 1987

GEOLOGIC REPORT
SIMCO Petroleum Company #12 C. Heim
E/2 W/2 NW/4 - 30-T8S-R22E
Leavenworth County, Kansas

Daily Progress:

8-11 Moved on, rigged up, set 63' of 7" surface casing with 30 sacks cement.

8-12 Drilled out beneath surface casing 1:00 a.m., drilling.

8-13 TD 1300' at 4:00 a.m., ran open hole logs, set 4-1/2" production casing at 1298' KB with 130 sacks cement.

Service Companies:

Contractor: Glacier Drilling Company
Cementing: Sun Cementing and Acidizing
Logging: Log-Tech
Drilling Fluids: Trotter Supply Company

Formations (E-Log Depths):

	SIMCO #12 C. Heim E/2-W/2-NW/4-30 KB 886	Structural Relation to SIMCO #11 C. Heim NE NE NW-30	Cascade #19-1 Ewert NE SW SW-19
Lansing	150 (+736)	-6	-8
Base Kansas City	468 (+418)	+2	-4
Cherokee	716 (+170)	-2	-5
Coal Marker	1090 (-204)	-4	-4
Lower Cherokee SS.	1151 (-265)	-1	abs
Upper McLouth	1176 (-290)	-6	-6
Upper Burgess	1242 (-356)	-4	-12
Lower Burgess	1256 (-370)	+4	abs
Mississippian (St. Louis)	1258 (-372)	+10	-3
Spergen	1272 (-386)	+10	--
Total Depth	1301 (-415)		

Hydrocarbon Shows (E-Log Depths):

1151-1156 Lower Cherokee Sandstone
Sandstone, white to light tan, well rounded, well sorted, fair to good porosity, slight show of gas bubbles in sample

E-Logs indicate 23% porosity with neutron gas effect, 18-20 ohms resistive. Sw calculates to 42%. This unit should be gas productive.

1176-1190 Upper McLouth Sandstone Sandstone, white-brown, fine grained, well rounded, well sorted, mostly loose sand grains, few clusters with good porosity, fair show of free gassy oil, good odor, bubbles, circulated a moderate amount of oil onto pits.

E-Logs indicate 20% porosity with slight neutron gas effect, 20-30 ohms resistivity. SW calculates 38-46%.

This should be oil and gas productive.

1242-48 Upper Burgess Sandstone Sandstone, light gray, fine grained, well sorted, well rounded, fair to poor porosity, slight show of gassy oil, faint odor, scum of oil on pits with few bubbles.

E-Logs indicate 14% porosity, 10 ohms resistivity.
Non-Commercial.

Summary:

It is recommended that the Upper McLouth Sandstone be perforated from 1176-1184 with two or three shots per foot. This zone has oil and gas potential and may require a fracture treatment.

The captioned well encountered a new pay zone from 1151-1156. This is a Lower Cherokee Sandstone which has not been found to be productive previously. Sample descriptions and E-Log calculations indicate a commercial gas reservoir.

Since the Upper McLouth is likely to be mainly oil with gas, it may be advantageous to set a retrievable bridge plug above the Upper McLouth so the new pay zone can be tested. After depleting the New Pay, it could then be "squeezed", the bridge plug knocked out and the Upper McLouth would be ready to produce.

Respectfully submitted,

Daniel T. Johnson

Daniel T. Johnson MKO

DTJ:lk