Martin K. Dubois

Consulting Geologist

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December 6, 1984

GEOLOGIC REPORT
SIMCO Petroleum 1-1 Theis
70' East of NE NE NW
19-8S-22E
Leavenworth County, Kansas

Daily Progress:

12-3	Moved on, set 7" at 48' with 30 sacks, plug down at 11:45 p.m.
12-4	Drilled out beneath surface casing at 7:45 a.m.
12-5	1080', drilling at 7:00 a.m., TD reached at 1:45 p.m., ran 4 1/2" casing
12-6	Casing set at 1287' with 169 sacks, plug down at 1:10 a.m.

Service Companies:

Contractor: McGown Drilling Company
Drilling Mud: Hughes Drilling Fluids
Electric Logs: Great Guns
Cement: Consolidated Oil Well Services

Formation Tops (E-Log):

	SIMCO 1-1 Theis 70' E NW SW NW 19-8S-22E	Structural Relation to #1 Hund C SW SW 18-8S-22E	Lingenfelser C SW SE 18-8S-22E
Formations	GL865		
Lansing	140 (+725)		
B. Kansas City	464 (+401)		
Cherokee	706 (+159)		
Coal Marker	1080 (-215)	-6	-19
Upper McLouth SS	1168 (-303)	+1	-19
Lower McLouth SS	1202 (-337)	+6	-20
Upper Burgess SS	1240 (-375)	+3	-
Lower Burgess SS	1262 (-397)	-	-39
Miss. St. Louis	1272 (-407)	-6	-29
Spergen	1280 (-415)		
Total Depth	1288 (-423)		

Oil and Gas Shows (E-Log Depths):

1094-1103 Lower Cherokee Sandstone
Sandstone, white, medium grained, well sorted, subrounded, good porosity, trace of tar at top. E-Logs indicate the zone is wet.

1168-1183 Upper McLouth Sandstone
Sandstone, light brown (oil stain), fine grained, well sorted, good porosity, faint odor, slight scum of oil increasing downward, few gas bubbles. E-Log calculations: 26-30% porosity, 35-48 ohms resistivity, 20-24% water saturation, strong gas effect on N/D porosity log. Gas pay.

1183-1188 Sandstone, as above, brown, fair show of free gassy oil, good odor, circulated a minor amount of oil on pits. E-Log calculations: 28-32% porosity, 40-42 ohms resistivity, 20-22% water saturation, strong gas effect on N/D porosity log. Gas pay.

1202-1208 Lower McLouth Sandstone
Sandstone, brown (oil stain), fine grained, well sorted, subrounded, good porosity, good odor, very good show of free gassy oil, circulated a moderate amount of oil on pits. E-Log calculations: 18-26% porosity, 14-25 ohms resistivity, 34-46% water saturation, no gas effect on N/D porosity log. Oil pay.

1240-1246 Upper Burgess Sandstone
Sandstone, medium to coarse grained, moderately sorted, subangular, mostly loose grains, good porosity, fair odor, fair show of very tarry oil (estimated 16° API). Log calculations: 23-27% porosity, 20-28 ohms resistivity, 30-38% water saturation, moderate gas effect on N/D porosity log. E-Logs indicate pay, however, samples indicate the oil present is too heavy to be produced.

1262-1272 Lower Burgess Sandstone
Sandstone, as above, slight to fair show of very tarry oil (estimated 16° API), show decreasing downward. E-Logs indicated this zone is wet.

Summary and Recommendation:

Casing was run to 1287', one foot off bottom to further test oil and gas shows in the McLouth Sandstones. The 20 foot Upper McLouth Sandstone (1168-88) will likely produce gas, the 6 foot Lower McLouth Sandstone (1202-08) will likely be oil productive, and the Upper Burgess Sandstone (1240-46) will likely be non-commercial.

Though the Upper Burgess Sandstone at 1240(-375) appears to be prospective on the E-Logs from 1240-46, it is likely, however, to be non-commercial. The lower portion (1246-52) had no show in the samples and calculates wet, and the show in the upper portion was heavy tarry oil that appears too low gravity to be produced. This zone should remain behind pipe for evaluation at a later date.

It is recommended that the Lower McLouth be tested first and completed as follows: perforate with 2 to 4 shots per foot from 1202 to 1208, acidize with 250 gallons of MCA, swab test, and use a conventional hydraulic fracture treatment with 3,000 pounds of sand. Production is likely to be oil with a minor amount of gas.

It is recommended that the Upper McLouth remain behind pipe until the Lower McLouth Sandstone is depleted or the market for gas is solidified.

Respectfully Submitted,

Martin K. Dubois

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Geologist

MKD:md

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December 7, 1984

Mr. Fred Blume
P.O. Box 504
Cheyenne, Wyoming 82003

Re: SIMCO #1-1 Theis
Casing, float equipment,
cementing, and completion

Dear Fred,

Following is information for your records and for your completion engineer.

Casing and Float Equipment:

Total depth: 1288
Casing: new 4 1/2" 9.5# casing set at 1287
Float equipment: Hollow guide shoe on bottom, Arrow insert float at 1261, centralizers and collars at 1261, 1229, 1197, 1166, metal pedal cement basket at 880 feet.

Cementing by Consolidated Oil Well Services:

Wireline TD found at 1262' (insert float at top of 1st joint); ran preflush; ran 80 sacks of Portland A lightened with lignite; ran 86 sacks of Consolidated Oil Well Cement; maximum pressure while cementing was 250#; pump rubber wiper plug down and pressured up to 1000#; wireline TD 1262'.

Recommended Completion:

Zones to be tested:

Upper McLouth (1168-1188) - likely gas pay
Lower McLouth (1202-1208) - likely oil pay
Lower Burgess (1240-1246) - likely noncommercial

Recommended procedure:

Perforate Lower McLouth with 2 to 4 shots per foot from 1202 to 1208; acidize with 250 gallons of MCA by breaking the formation down very gently and very slowly then feeding at a slow rate, shut in for four hours, swab test; treat with conventional hydraulic fracture with 3000# of sand, shut in, swab test.

Respectfully submitted,

Martin K. Dubois

MKD:md