23-8-21E

Dubois and Johnson

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

March 9, 1987
GEOLOGIC REPORT
Victor J. Leis Drilling Company
#2 O. Heintzelman
W/2 E/2 SW/4 23-8S-21E
Leavenworth County, Kansas

Daily Progress:

3-4 Moved on, rigged up, set 42' of 7" surface casing, drilled out beneath surface casing 1:30 a.m.

3-5 525' Drilling, TD 1480' at 11:45 p.m., ran open hole logs.

3-6 Set 1471' of 4-1/2" production casing

Service Companies:

Contractor: McGown Drilling Company
Logging: Log-Tech Incorporated
Cementing: Consolidated Oil Well Services Incorporated

Formations (E-Log Depths):

	Vic Leis #2 O. Heintzelman W/2 E/2 SW/4 - 23 GL 1025	Structural relation to V. Leis #1 O. Heintzelman W/2 NE/4 SW/4-23	N E O & G #2 Massman SE NE SW-23
Heebner	48 (+977)	-4	-2
Lansing	336 (+689)	-6	-5
Base Kansas City	658 (+367)	-4	-3
Cherokee	906 (+119)	-6	-7
Coal Marker	1268 (-243)	-2	-3
Upper McLouth	1378 (-353)	-14	-15
Middle McLouth	1394 (-369)	-	-13
Mississippi	1440 (-415)	DNP	-7
TD	1480 (-455)		

Hydrocarbon Shows (E-Log Depths):

1378-84 Upper McLouth Sandstone
Sandstone, white, very fine grained, well sorted, well rounded, tight, very slight show of oil, no odor.

1384-1394 Upper McLouth Sandstone
Sandstone, light gray, fine grained, well sorted, well rounded, mostly tight, shaley, show of free gassy oil, fair odor, slight show of oil on pits.

1394-1412 Middle McLouth Sandstone
Sandstone, light gray, fine grained, well sorted, sub-rounded, good porosity, good show of free gassy oil, circulated fair amount of oil on top pits, good odor, gravity estimated 24-26 degrees API.

Summary:

Production casing was set to further test the Middle McLouth Sandstone. The recommended perforation interval is 1394 to 1408 E-Log depths with acid and fracture treatments as necessary.

Although the captioned well did not encounter as much "clean" sand in the McLouth interval as the #1 Heintzelman, the #2 Heintzelman should still be economic by today's standards. Eighteen feet of Middle McLouth Sandstone was encountered with 14 feet having 20-24% porosity and 20 ohms resistivity.

Initially, 25 to 35 BOPD might be expected with a stabilized rate of approximately 20 BOPD.

Respectfully submitted,

Daniel T. Johnson

Daniel T. Johnson

DTJ:lk