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August 19, 1985 GEOLOGIC REPORT

> Jew-Del Oil & Gas Company #1 Lee 330' FNL, 460' FEL, NE/4 30-8S-22E Leavenworth County, Kansas

Daily Progress:

8-9 Moved on, rigged up, set 60' of 7" surface casing

Drilled out beneath surface casing 8:40 a.m. 8-12

8-13 Drilling, TD 1281 at 10:10 a.m., ran open hole logs, set 4 1/2 production casing

Service Companies:

Drilling Contractor: McGown Drilling Company

Drilling Fluid:

Trotter International

Cementing:

Consolidated Oil Well Services

Logging:

Log-Tech

Formation Tops (E-Log):

	Jew - Del #1 Lee NE NE NE 30-8S-22E GL 859	-	Structural Billy Oil #4 Hoppe N/2 N/2 SW 22-8S-22E	Relationship to Petrol. Prod. #1 Richardson SW SE NE 30-8S-22E
Lansing B. Kansas City Cherokee Coal Marker U. McLouth L. McLouth Burgess Miss. St. Louis Spergen RTD	112 (+747)* 432 (+427) 680 (+179) 1050 (-191) 1140 (-281) 1169 (-310) 1222 (-363) 1238 (-379) 1254 (-395) 1281 (-422)		 +1 abs abs +6 flat	 +22 +26 +28 -4 -4

*Drillers

Hydrocarbon Shows (E-Log Depths):

- Upper McLouth Sandstone
 Sandstone, tan, even stain, fine grained, well rounded, well sorted,
 quartzose, fair to good porosity, fair odor, good show of gas bubbles,
 slight show of free oil. E-Log shows 2 feet of clean sand with seven
 feet of gas effect.
- Lower McLouth Sandstone
 Sandstone, even light brown stain, fine grained, well rounded, well sorted, quartzose, good porosity some calcite cementing, fair show of gas bubbles, trace of free oil, fair odor, E-Log shows fourteen feet of gas effect.
- Burgess Sandstone
 Sandstone, gray to white, fine to medium grained, sub angular, moderately sorted, fair to good porosity, good show of free gassy oil, fair odor.
- Burgess Sandstone
 Sandstone, as above but with decreasing oil show.

Summary:

Production casing was set to further test oil and gas shows in the Upper McLouth, Lower McLouth, and Burgess sandstones. Initially, I recommended the Burgess Sandstone be perforated first from 1222' to 1224' (-363 to -365). This interval would most likely yield gas and oil. The Gas/Oil contact being encountered locally at a subsea datum of -364 and the Oil/Water contact at -372 subsea. The relatively thin oil column in the Burgess has been found relatively difficult to produce economically by nearby operators. For these reasons, the Burgess should remain behind pipe initially and be opened at a later date.

Recommended perforation intervals are 1143 to 1144 for the Upper McLouth and 1172 to 1178 for the Lower McLouth. These two zones can be produced

simultaneously for ease of completion.

Respectfully Submitted,

Daniel T. Johnson

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