CONFIDENTIAL GEOLOGICAL REPORT

Proposed North Wilson Deep Unit
Lea County, New Mexico

LOCATION: South-central Lea County, New Mexico, on portions of T20S-R36E and T21S-R35E. Proposed unit is 15 miles northwest of Eunice and two miles north of the Eunice-Carlsbad Highway. Geologically, this unit is situated in the northeast quadrant of the Delaware Basin and is approximately four miles west of the faulted, western flank of the Central Basin Platform.

LAND: The British-American Oil Producing Company proposes the formation of a 2145.95-acre State of New Mexico fully participating unit for the purpose of drilling a 13,500-foot Devonian wildcat. This unit as shown on Exhibit "A" of the Unit Agreement contains acreage owned by Wilson Oil Company, Wyoming Oil Company, British-American, Gulf, Phillips, and Amerada. Rights of the proposed unit will begin at a depth of 5200 feet. Deepest producing horizon within the unit outline is approximately 4000 feet.

GEOLOGY: The attached seismic interpretation provides the basis for the subject wildcat test. Primary objective is the Siluro-Devonian dolomite which produces hydrocarbons on well-closed structures in the surrounding area.

The interpretation is based on approximately thirty miles of continuous seismic profiling, using conventional, multi-hole techniques. The data revealed a large anticlinal anomaly trending north-northeast to south-southwest. The feature is enhanced by faulting on the east and west flanks. Basis for the unit boundary is the closing contour at -9600 (Approximate Mississippian). This interpretation shows about 300 feet of structural closure which compares favorably with producing structures nearby.

Nearest Devonian subsurface control is the Pure No. 1 Wilson-Deep, located in the SE/4 NW/4 of section 13, T21S-R34E. This test was completed as a commercial Morrow discovery after salt water was recovered from the Devonian. We believe that Pure's Devonian datum is structurally low to the proposed unit, but correlation of the seismic reflections across the fault-complex between the two units are unreliable, and we are unable to offer a quantitative prediction for the structural advantage we expect to attain.

The following is a summary of all prospective horizons we expect to encounter below 5200 feet.

Delaware Sandstone

The Delaware Mountain Group from 5300 to 7800 feet provides only fair possibilities from random porosity development within the sandstone members. There is no Delaware production nearby. If production is encountered, it would probably be very limited in areal extent.

Bone Spring

Leonard-age Bone Spring formation from 7800 to 10,800 feet offers fair possibilities for two or three porous dolomite zones (40 to 50 feet thick) within the gross section which will be mostly dense basinal limestones. Proposed test is located over the Bone Spring "transition zone," where the basinal lithology grades into porous shelf dolomite facies of the Central Basin Platform.

Wolfcamp, Strawn and Atoka

This sequence from 10,800 to 12,000 feet is not expected to provide reservoir possibilities within the proposed unit. This interval of sands, limestone and shale has not produced from nearby wells.

Morrow Series

The interval from 12,000 to 12,600 feet may contain two or more thin zones of quartz conglomerate. Entrapment of oil or gas, if any, will be stratigraphic in nature, and Morrow reservoirs are too erratic to predict areal extent within a given area.

Mississippian

This section of shale and dense limestone from 12,600 to 13,400 feet contains no production possibilities.

Devonian

Dolomite below 13,400 feet is the primary reservoir objective for the proposed unit. Sufficient penetration will be allowed to obtain a conclusive test of the fluids present at this location.

CONCLUSION: Seismic data are good to fair quality over the prospect. It is our sincere opinion that the proposed unit boundary embraces a bona fide structural anomaly that will be properly developed should our efforts result in success.

LEWIS G. FEARING
New Mexico Geologist
The British-American Oil Producing Company

LGF:jcl