NORTHEAST LYNCH UNIT
T-20-S, R-35-E
LEA COUNTY, NEW MEXICO
GEOLOGICAL REPORT

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. C
CASE NO. 2677

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PURPOSE

The various interested parties propose the formation of this unit in order to drill a 14,700' exploratory well at a location 1980' FNL and 660' FEL of Section 17, T-20-S, R-35-E, Lea County, New Mexico. This test is designed to explore for oil and/or gas in the thick sedimentary section down to and including the Devonian and will evaluate all of the known producing zones in the immediate area.

REGIONAL GEOLOGY

The Northeast Lynch Unit is located 22 miles southwest of Hobbs, New Mexico, and lies in the extreme southeastern portion of an area often designated as the Carlsbad Shelf. During all or a part of Guadalupian-Permian time, this province was a "back-reef" or shelf facies lying north of the Guadalupian reef complex and west of the Central Basin Platform. Sediments of the lower Guadalupian, Pre-Guadalupian Permian and Pennsylvanian are of a basinal environment and are typical of Delaware Basin deposition. The earlier Paleozoic rocks in this vicinity are generally similar to those found over vast areas of southeastern New Mexico and western Texas.

In the shallow beds regional dip is to the south at 100' to 150' per mile. In this immediate area dip in the deeper horizons is to the south-southwest toward the Delaware Basin trough at a rate of approximately 250-300 feet per mile. Lack of deep well control and a high concentration of Pre-Permian tests in areas of sharp local structural relief precludes accurate determination of regional dip in the earlier Paleozoics.

LOCAL GEOLOGY

This exploratory test will be located one and one-half miles south of the southern extension of the Pearl (Queen) Field and two and one-half miles east-southeast of present production in the Lea Unit producing area. Production in the Lea Unit was first obtained in 1960 by the Ohio No. 1 Lea Unit. This well was completed as a dual oil well from the Devonian and Bone Spring. To date oil production in the area has been established from two zones in the Bone Spring, and from the Devonian. Gas condensate is produced from clastic zones within the Lower Pennsylvanian (Bend). This field is still active and at present contains 10 productive wells, eight of which have been completed as dual producers. All information indicates the Lea Unit contains excellent hydrocarbon reserves.