



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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OCT 23 1985

O. C. D.
ARTESIA, OFFICE

Lease No. NM-9987

Date: 10/16/85

Well Name/No.: 7-Up Federal No. 1

To: Chief of Operations, Branch of Fluids, Roswell District

From: Geologist, Carlsbad Resource Area

Subject: Geologic Review of Application for Permit to Drill

Lease No.: NM-9987

Date Received: 10/15/85

Well Location: SW/4 SW/4 Sec. 19, T. 16 S., R. 29 E., County: Eddy, NM

Well Name & No.: 7-Up Federal No. 1

Surface Elev.: 3658 feet GL

Quadrangle: Basin Well

Proposed TD: 2500 feet

Operator: J. T. Haile Petroleum, Ltd.

Our records indicate the data reviewed is consistent with the geology of the area. Additional information related to the drill site is noted below.

- (1) Fresh-water formations:
To a maximum depth of approximately 250-300 feet in sandstones of the Triassic Dockum group and Permian Rustler formation.
- (2) Other mineral-bearing formations:
Salt in the Salado group.
- (3) Known potential geologic hazards:
Possible lost circulation in the Grayburg and San Andres formations.
Possible brine flows in the Salado and water flows in the Queen.
- (4) Remarks:
Approximate depths to geologic markers in nearby wells are as follow:

<u>GEOLOGIC MARKER</u>	<u>MEASURED DEPTH BELOW SURFACE</u>	<u>MEASURED DEPTH FROM SEA LEVEL</u>
Anhydrite	100'	---
Top of Salt	300' \pm 40'	3323' \pm 57'
Base of salt	576' \pm 89'	3054' \pm 55'
Yates	720' \pm 42'	2897' \pm 30'
Seven Rivers	909'	2721'
Queen	1469' \pm 34'	2144' \pm 18'
Penrose	1745'	1885'
Grayburg	1870' \pm 38'	1743' \pm 22'

Operator expects to encounter oil in the Seven Rivers, Queen, and Grayburg.

Gerald W. Queen