TEXAS CALGARY COMPANY
320 PETROLEUM BUILDING
ABILENE, TEXAS

December 4, 1957

Oil Conservation Commission
State of New Mexico
State Capitol
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Re: Order No. A-97 and Proration of Hospah Field, McKinley County, New Mexico.

Gentlemen:

We respectfully request exemption from proration in the Hospah Field, McKinley County, New Mexico. The bases for our request are submitted in the context presented below.

The Hospah Field was discovered in August of 1927 and from that date to the present time 44 wells were drilled, 41 of which have been and still are productive. Production is from the Hospah sand at approximately 1700 ft. -- correlative to the Gallup sand further north. The field had produced a total of 3,754,000 barrels of oil through October 31, 1957. The structure of the Hospah Field is a faulted anticline and well spacing is generally on 10 acre spacing. Deviation from regular 10 acre spacings is the result of structural location and faulting.

Texas Calgary Company owns and operates all of the productive leases in the Hospah Field. Production from the Hospah Field is given below for October, 1957:

No. Wells	Avg. Prod. per well per day Oil Bbls.	Avg. Prod. per well per mo. Oil Bbls.	Total Field Prod. per day Oil Bbls.	Total Field Prod. October Oil Bbls.
41	8.62	267.22	353.5	10,960

A ready market exists for all of the Hospah crude at the El Paso Natural Gas Refinery near Ft. Wingate, New Mexico. The oil is transported by a 40-mile pipeline from the field to Prewitt, New Mexico.

Although there are six proration units, consisting of a total of 25 wells, capable of exceeding the Commission's unit allowable of 868 barrels per month, it is our contention that the field as a whole is in a "stripper" stage and any curtailment of production will result in the ultimate loss of recoverable oil. An active water drive producing mechanism is the

sole displacing energy in the Hospah Field. Total water production for the field is seventy per cent of total fluid. The entire producing acreage is a low pressure area and at this late life in the productive history flow channels and water influx have been firmly established. It is our belief that curtailment of production will in effect create back pressures at the well head thus (1) diverting the water influx into new less permeable channels, (2) creating back water blocks, and (3) bypassing of less permeable oil saturated zones. As a consequence, the many isolated oil saturated areas will not be drained.

The Hospah sand aquifer is sufficiently large to maintain a relatively constant water influx into the producing area and at this late stage the field can be likened to a secondary recovery water injection project at a water breakthrough stage. These processes are practically identical in productive characteristics.

Although accurate and sufficient engineering data are lacking in this old field for a thorough reservoir study, past production history indicates efficient use of reservoir energy. Decline curves of oil production and percentage of water in total fluid follow the basic concepts of conservation of reservoir energy in a field in which a water drive producing mechanism is the dominant displacing energy.

In summary we base our request for exemption from statewide proration in the Hospah Field on the following criteria:

1. Available market for Hospah crude.

2. Hospah Field is stripper production.

3. Curtailment of production would create reservoir waste in the form of unrecoverable oil due to the isolation of saturated areas by water blocks.

We would appreciate hearing from you at your earliest convenience in connection with our request for exemption from the statewide proration order.

Thank you for your consideration of this matter.

Yours very truly,

Mark P. Autry

Mark P. Autry
Geologist

MPA/nb