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By DRC

THE PETROLEUM CORPORATION
OF DELAWARE
Turtle Creek Centre
3811 Turtle Creek Boulevard
DALLAS, TEXAS 75219-4419

528-5461

March 20, 1986

Mr. David Catanach
New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Request for Administrative approval to commingle the Atoka and Wolfcamp zones in the well bore in our Landlady No. 1 located in Unit letter J Section 8, T12S, R32E, Lea Co., New Mexico

Dear Sir:

The above referenced well was drilled and completed in October and November, 1981. Total depth was 11,220' but drill stem tests in the Chester formation revealed no recoverable hydrocarbons. Although the Atoka (at 10630) was not present in the Antwell Landlady one half mile to the north or any of the nearby dry holes, our logs looked good enough to justify setting 4½" casing at 10731. The Atoka was perforated (10637-10650) and tested. After being acidized and allowed to clean up, the well produced 400 Mcf gas, 48 bbls distallate, and 100 bbls salt water per day. Because of the large volume of water and lack of an immediate sale for the gas, the decision was made to complete in the Wolfcamp instead.

A permanent packer with a plug in a landing nipple was set at 9000'. The Wolfcamp zone was then perforated (8619' - 8628'). This zone was acidized and put on production. Initially the well flowed 85 bbls oil, 27 bbls water, and 90 Mcf gas per day. In less than a month, the well died and had to be put on pump. The well pumped at the rate of 65 bbls oil, 10 bbls water and a small amount of gas (not enough in all cases to furnish fuel to the pumping unit). Currently the well pumps 18 bbls oil, 3 bbls water, and a small volume of gas.

In view of the offset wells not having the Atoka interval and observing the sharp decline in production from the Wolfcamp zone it appears obvious that these reservoirs are very small. Consideration has been given to making a completion in the Atoka, but it is doubtful that the total production would justify the expense, especially as we expect to handle 100 bbls water per day. The economic limit would be reached very soon.

If the Atoka could be produced at the same time as the Wolfcamp, it would extend the economic life of both zones. The gas can now be sold by laying a line one half mile to the north.

Although no tests have been conducted, it would seem logical that additional gas and distallate would aid the Wolfcamp oil in coming to the surface. There should be no problem with non-compatibality of fluids.

Bottom hole pressures taken on drill stem tests showed shut-in pressures of 3939 psi in the Atoka at 10730 feet, and 2392 psi in the Wolfcamp at 8600 feet. 2100 feet of hydrostatic pressure would account for approximately 1000 psi leaving a differential of only 600 psi. One would expect very little cross flow with that small a difference.

We respectfully request your approval to our proposal that these two zones be commingled in the well bore and produced simultaneously.

Very truly yours,

L. E. Thomas

LET/db

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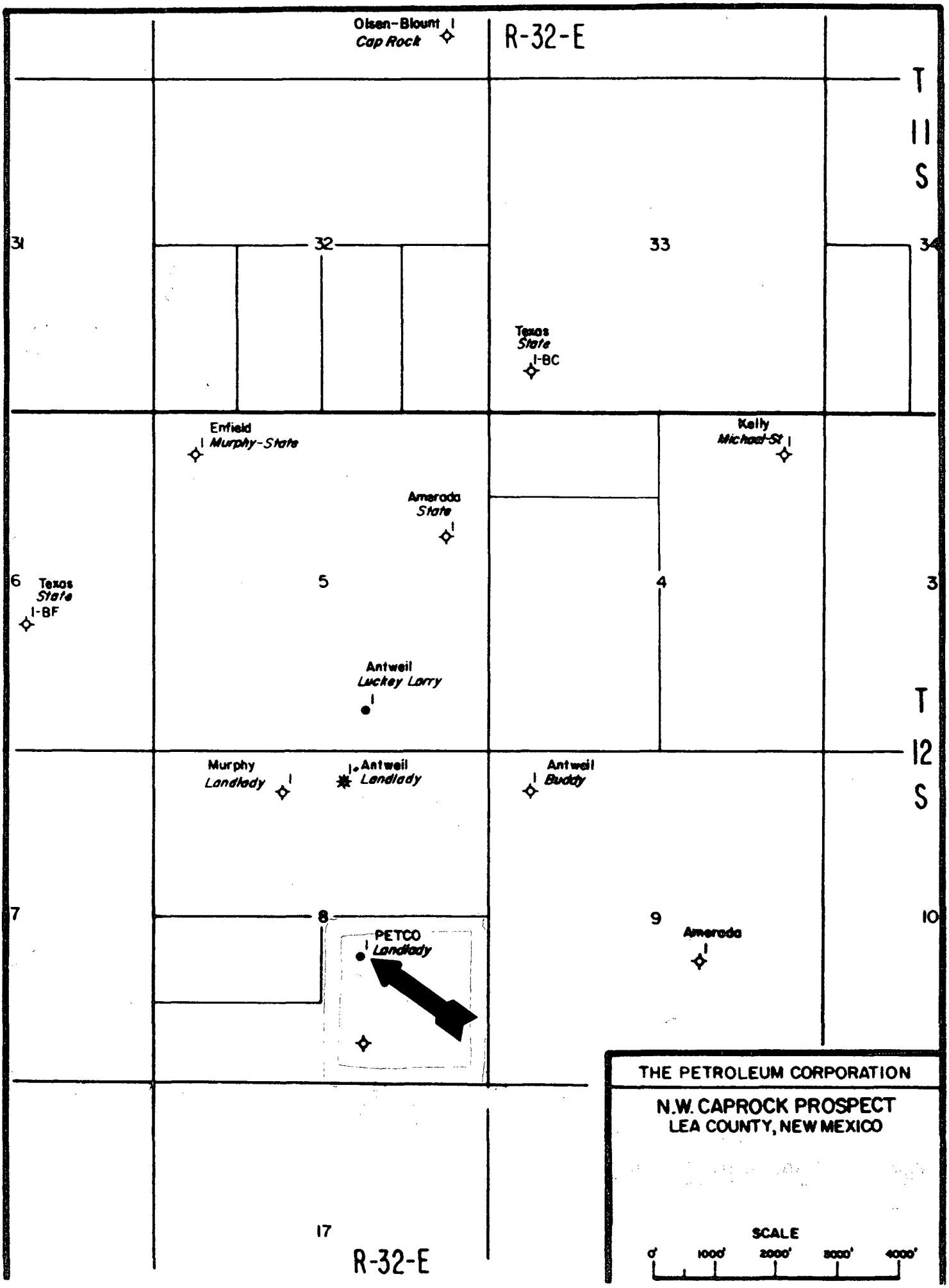
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