POGO PRODUCING COMPANY

Deceived by the OCD m 8/4/92

August 3, 1992

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New Mexico Oil Conservation Division 310 Old Santa Fe Trail Santa Fe, New Mexico 87501

Attention: Mr. Michael E. Stogner

Re: RT 34 Federal Well No. 1 1650' FEL and 660' FNL Section 34, T-22-S, R-32-E, NMPM Lea County, New Mexico Pogo's NM-607, S.E. Red Tank Prospect

Gentlemen:

Pogo/Producing Company finds it necessary to apply for and receive an unorthodox location to drill a 15,500 Morrow test on its Red Tank Prospect located in Section 34, T-22-S, R-32-E, Lea County, New Mexico. Pogo is drilling to the Morrow in this area primarily to earn a leasehold interest from Exxon Corporation. Although the ensuing discussion includes information on Morrow geology for the prospect, the geology of the Brushy Canyon formation of the Delaware Mountain group compels Pogo to seek the above captioned unorthodox location.

Within the area of the enclosed "Morrow Clastics Marker Structure" map, the only Morrow wells which are economic under current conditions are the three Pogo wells shown within the "Bootleg Ridge Channel". Each of these wells has, as portrayed by the corresponding cross section, greater than 10' of 8% porosity which is considered the minimum necessary for an economic producer. The proposed Morrow test is speculative and will seek the updip edge of the porous "Bootleg Ridge Channel" pinching out against the flank of a Morrow high.

The primary zones of interest are sandstones within the lower portion of the Brushy Canyon formation. The enclosed "Brushy Canyon 'A' Structure" map indicates the proposed Morrow location (orange dot) as well as a recently drilled and currently testing lower Brushy Canyon well (green dot). The Pogo Federal "27" #1, located 330' FSL and 2310' FWL of Section 27, T-22-S, R-32-E, was drilled to look for porous oil bearing sandstones on a lower Brushy Canyon structural high. Porosity was anticipated to be similar to that encountered in the Maralo Prohibition Federal Unit #1 well, located in Section 12 of the same township and displayed on the north end of the north-south (green line) cross-section. Density porosity greater than the 14% cutoff is colored red and is substantial in the Maralo well with some sands exceeding 20% New Mexico Oil Conservation Division August 3, 1992 Page 2

By contrast, the Pogo Federal "27" #1 well, density porosity. which is shown on the northwest-southeast (orange line) cross section and also provided in large scale form, had poor shows and almost no porosity in the perforated zone of interest. After a frac, the Pogo well is surprisingly producing a large amount of fluid with oil rates ranging from 100-150 BOPD and water rates ranging from 300-400 BWPD for total fluid rates of 400-550 BFPD. This indicates that the "27" #1 was drilled at the boundary between a very good reservoir and a very "tight" but probably narrow nonreservoir. Pogo does not know the direction of the "tight" section with respect to the "27" #1 wellbore. Drilling the proposed Morrow test at an orthodox location of 660' FNL and 1980' FEL would force Pogo to assume substantial risk of drilling a "tight" section of lower Brushy Canyon and missing the reservoir. Drilling the Morrow test at the proposed unorthodox location will somewhat alleviate this concern even though the proposed move is only 330'. location is not being moved toward any producing well in any adjacent or diagonally offsetting section.

Pogo requests that all information and exhibits relative to the Brushy Canyon be held <u>CONFIDENTIAL</u>. All of the offset operators or interest owners have been notified of this application by certified mail.

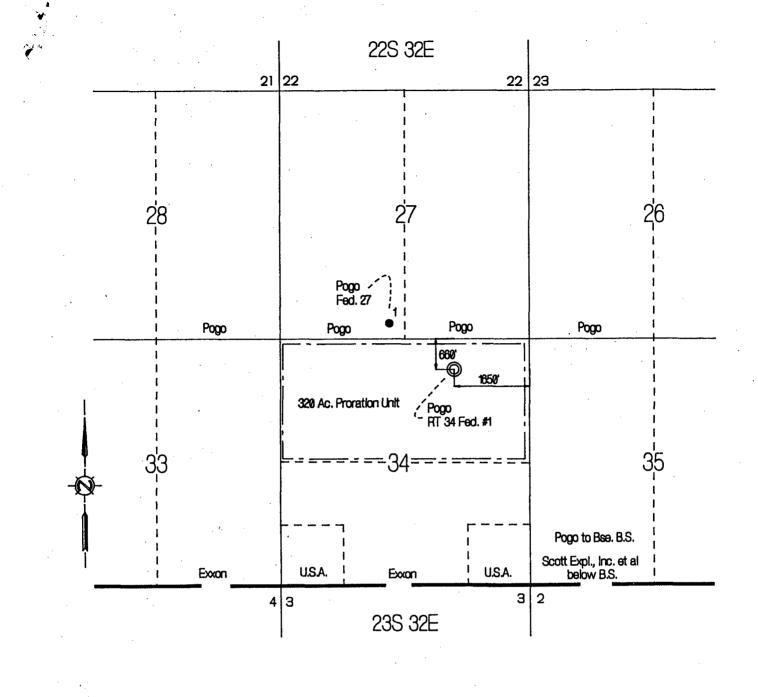
Yours very truly,

POGO PRODUCING COMPANY

Gary J. Hoose 🤷 🗍 Division Geologist

GJH:bt\G1\nmocd

Enclosures





- Proration Unit Outline
- O Location
- Brushy Canyon Producer



August 3, 1992



POGO PRODUCING COMPANY

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

SEE ADDRESSEE LIST ATTACHED

Re: RT 34 Federal Well No. 1 1650' FEL and 660' FNL Section 34, T-22-S, R-32-E, NMPM Lea County, New Mexico Pogo's NM-607, S.E. Red Tank Prospect

Gentlemen:

Enclosed for your information is a copy of an Application for an Unorthodox Well Location regarding the N/2 of Section 34, Township 22 South, Range 32 East, Lea County, New Mexico, which was filed with the New Mexico Oil Conservation Division on behalf of Pogo Producing Company. Records indicate you own mineral or leasehold interests offsetting the above acreage. This Application will be heard by the Oil Conservation Division on Thursday, August 20, 1992, at 8:15 a.m., at the Division's offices at 310 Old Santa Fe Trail, Santa Fe, New Mexico 87501. Failure to appear at that time will preclude you from contesting this matter at a later date.

If you do not have any objection to this Application, please execute a copy of this letter and return it to me.

Yours very truly,

Pogo Producing Company

R. Scott McDaniel Senior Landman

Enclosure

I hereby waive objection to the unorthodox location.

Terry S. Kramer 8-19-92 Date:

ADDRESSEE LIST ATTACHED TO LETTER DATED AUGUST 3, 1992

Scott Exploration, Inc. Suite 648 Petroleum Building Roswell, New Mexico 88201

Leonard Resource Investment Corporation P. O. Box 3422 Midland, Texas 79702-3422

Worrall Investment Corporation Suite 648 Petroleum Building Roswell, New Mexico 88201

Sealy H. Cavin, Jr. 3235 Calle de Deborah N.W. Albuquerque, New Mexico 87104-3001

Pete T. Balog and wife, Gail Balog, as Joint Tenants with right of Survivorship 25812 S. Dartford Drive Sun Lakes, Arizona 85248

Jack V. Walker and wife Edna Mae Walker, as Joint Tenants with right of Survivorship P. O. Box 102256 Anchorage, Alaska 99510-2256

Centennial P. O. Box 1837 Roswell, New Mexico 88202-1837

Los Alamos Tool Company P. O. Box 2422 Santa Fe, New Mexico 87504-2422

Terry S. Kramer 5108 Irving Boulevard NW Albuquerque, New Mexico 87114