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SECRETARY - DIRECTOR

DRAWN BY
ARTESIA

February 5, 1962

Mr. G. W. Strake
3300 Gulf Bldg.
Houston 2, Texas

Re: LeBow Federal No. 4 & 9,
Unit H, Section 25-19-30,
North Hackberry Yates
Pool.

Gentlemen:

A problem has developed concerning your wells in and around the North Hackberry Yates Pool. I shall outline, herein, the problem, the cause, what action had been taken, and what action remains to be taken.

On November 21, 1961 you completed your LeBow Federal No. 4, 2310/N and 990/E of Section 25-19-30 as a wildcat well in Seven Rivers dolomite about one hundred and twenty feet below the North Hackberry Yates pay. Cores of this interval and Sonic logs indicated a typical Seven Rivers dolomite. Subsequently, your geologist came to this office to determine if a second well could be drilled on the same unit with well No. 4. The second well was to be drilled to the regular Yates pay zone. After going over what logs were available in the area and the core description it was determined that the LeBow No. 4 was producing from the Seven Rivers and a second well to the Yates could be drilled. Well No. 4 was dry in the "Yates" sand. The LeBow Federal well No. 9, 2310/N, 330/E, was drilled to and completed in the Yates sand December 15, 1961.

The problem developed as follows. In preparing a crosssection through T-19-S, 26-E through R-31-E, I saw that the formation identified as Seven Rivers in the No. 4 LeBow was correlative time wise to the lower part of the Yates formation, however,

rather than being the usual dirty shaley section as found in more typical Yates wells, this section, as was pointed out before, was dolomite. At first I presumed that the lower part of the Yates was locally missing. Later, however, after talking to local geologists I found a more logical explanation. The area in question is in the transition zone from the Capitan Reef facies to the south to the back reef facies of the north. The Capitan reef is correlative time wise to the Tansill, Yates, Seven Rivers, Queen and Grayburg formations. The reef front and back are not uniform, there being reef tongues which project into the surrounding formations. What has been called Seven Rivers in the No. 4 LeBow now appears to actually be a tongue of Capitan dolomite, therefore, it now seems that there are two wells producing from the Yates time interval in Unit H of Section 25-19-30.

After making these findings we made them known to the Santa Fe office for their directions. Today, their answer was received, I am sending you a copy of their letter herewith.

As a result of their reply, see enclosed copy, we must reduce the allowable of the wells on Unit H, Section 25-19-30 to a maximum of 36 barrels of oil per day. Further, if you wish to have separate pools established for the Seven Rivers and Capitan wells or two allowables it will be necessary to have a hearing before the Commission. I suggest you contact Mr. Daniel S. Nutter, Chief Engineer for the Commission, about such a hearing. Further, it may be possible to obtain a full allowable on each of the subject wells until the case should be heard. Such an allowable application might be granted with the provision that if the case were heard and the application denied that amount of oil produced in excess of the top allowable should be applied to the wells future allowable.

The authority for such an allowable must necessarily come from the Santa Fe office, P. O. Box 871, Santa Fe, New Mexico.

If you have questions concerning this matter do not hesitate to call upon me.

Very truly yours,



R. L. Stamets
Geologist

RLS/hb

DOCKET: EXAMINER HEARING - TUESDAY - FEBRUARY 27, 1962

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, as alternate examiner:

CASE 2491: Application of D. W. Falls, Inc., for the promulgation of special rules governing oil wells in the Basin-Dakota Pool, San Juan and Rio Arriba Counties, New Mexico, and for four non-standard oil proration units. Applicant, in the above-styled cause, seeks the promulgation of special rules governing oil wells in the Basin-Dakota Pool, San Juan and Rio Arriba Counties, New Mexico, including a provision defining an oil well in said pool as a well having a gas-oil ratio of 30,000 to 1, or less, and producing liquid hydrocarbons with a gravity of 49° API, or less; applicant seeks rules establishing 160-acre oil proration units and fixing well location requirements for said wells. Applicant further seeks the establishment of the four following non-standard oil proration units, all in Township 28 North, Range 13 West, San Juan County:

E/2 of Section 10, comprising 137.58 acres;
W/2 of Section 10, comprising 137.78 acres;
E/2 of Section 11, comprising 137.78 acres;
W/2 of Section 11, comprising 137.58 acres.

CASE 2496: Application of Elliott, Inc. for an exception to the no-flare provisions of Order No. R-2103, Totah-Gallup Oil Pool, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-2103 prohibiting the flaring of casinghead gas from oil wells in the Totah-Gallup Oil Pool for a 30-day period for its Totah Well No. 1-A located in the NE/4 NE/4 of Section 30, Township 29 North, Range 13 West, San Juan County, New Mexico.

CASE 2497: Application of Amerada Petroleum Corporation for a waterflood project, Langlie-Mattix Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permission to institute a waterflood project in the Langlie-Mattix Pool in Sections 27, 28, 33 and 34, Township 24 South, Range 37 East, Lea County, New Mexico; the injection of water initially to be through six wells located in said sections, said project to be governed by the provisions of Rule 701.

- CASE 2498: Application of Shell Oil Company for approval of the Emerald Unit Agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Emerald Unit Agreement embracing 1200 acres, more or less, of State lands in Sections 14, 15, 22 and 23, Township 16 South, Range 32 East, Lea County, New Mexico.
- CASE 2499: Application of Shell Oil Company for approval of the Royal Unit Agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Royal Unit Agreement embracing 1078.49 acres, more or less, of State and fee lands in Sections 24 and 25, Township 10 South, Range 34 East, and Sections 19 and 30, Township 10 South, Range 35 East, all in Lea County, New Mexico.
- CASE 2500: Application of Pan American Petroleum Corporation for an order pooling all mineral interests in the Flora Vista-Mesa-verde and Basin-Dakota Gas Pools in the N/2 of Section 27, Township 30 North, Range 12 West, San Juan County, New Mexico. As an alternative, applicant requests the establishment of a 318-acre non-standard gas proration unit in the Flora Vista-Mesa-verde and Basin-Dakota Gas Pools consisting of all the N/2 of said Section 27, except two acres which comprise Lot 9, Block 3 of Flora Vista Acres subdivision in the NW/4 NE/4 of said Section 27 owned by Henry E. and Loie Irene Lindsey, P. O. Box 176, Flora Vista, New Mexico.
- CASE 2501: Application of G. W. Strake for an order creating a new oil pool, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order creating a new oil pool to be designated as either the Hackberry-Seven Rivers Pool or Hackberry-Capitan Pool, and comprising the NE/4 of Section 25, Township 19 South, Range 30 East, Eddy County, New Mexico. The discovery well is the G. W. Strake Le Bow-Federal Well No. 4, located in Unit H of said Section 25.