

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

Introduction of Exhibits

EXHIBIT NO. I

Q. I hand you what has been marked as Exhibit I and ask you to tell the Commission what this Exhibit represents?

A. Exhibit I is a structural map contoured on the top of the Yates formation, the contour interval is 5 feet.

Q. Will you explain to the Commission what is represented by the area outlined in red?

A. The area outlined in red on the map is the outline of the proposed Falby-Yates pool which incorporates a part of the Cooper-Jal Pool and a part of the Langlie Mattix Pool.

Q. Will you show to the Commission the present common boundary of the Cooper-Jal and Langlie-Mattix pools.

A. The common boundary between the two pools runs North and South through Sections 24 and 25 and is represented by a light blue line on the map.

Q. Where was the information obtained in order to ~~prepare this~~ prepare this Exhibit?

A. This information was obtained from Commission files and correlation of electric log data throughout this area.

Q. From this data will you explain to the Commission the geological features involved.

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A. It will be noted from the map that a structural low exists, the center of which is in Section 24 with a continued secondary low in the W/2 of Section 19. It is my opinion that this structural low in the Yates section has reversed the trend of regional gas accumulation which is typical of this formation in the area and has instead resulted in a favorable oil accumulation.

Q. I hand you what has been marked Exhibit II and ask you to tell the Commission what this map represents.

A. Exhibit II is a gas-oil ratio contour map showing the relatively low gas-oil ratios encountered within the designated low structural area with rapidly rising ratio upstructure, which increase to infinity or relatively high values in the direction of the gas wells completed up the structure.

Q. Will you tell the Commission the status of the wells in Section 18 as to their production capabilities and their producing formation.

A. Many of the wells in Section 18 are completed in the Queen section. It is typical of the low production area in the Queen section.

Q. Will you explain the status of a typical well located in Section 18 which has been originally a Queen producer and which has subsequently been plugged back and recompleted in the Yates section.

A. A typical well is the R. Olsen No. 1 Blankenship located in the NW/4 SE/4 of Section 18. The well was completed in 1946 producing from the Queen zone, the original total depth being 3601 feet with casing set at 3425 feet. This well produced approximately 11,400 barrels of oil and by December 1950 had declined to less than five barrels of oil per day and

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and no water. The well was plugged back to 3425 feet and the 5 1/2 inch casing perforated in the Yates Zone from 3152 feet to 3205 feet and the formation hydraulically fractured. At present the well is capable of producing gas at the rate of 1171 MCF and 533 pounds back pressure.

Q. What does this illustrate?

A. It illustrates the tremendous difference in the producing characteristics of each zone.

Q. I hand you what has been marked Exhibit III and ask you to explain to the Commission what this Exhibit shows?

A. Exhibit 3 is a map of the area showing the monthly oil production by 40 acre units.

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Q. Will you explain to the Commission what the different colors represent.

A. The green indicates a production of 1,000 barrels per month or over. The Blue represents 500 to 1,000 barrels per month while the uncolored area is production from either the Queen zone or from dry gas wells located upstructure.

Q. From your actual field experience and the information available to you can you ~~explain~~ express an opinion as to whether the Yates and the Seven-Rivers-Queen Zone are from separate reservoirs in this area?

A. From my actual field experience and information available to me it is my opinion that the Yates section and the lower Seven Rivers-Queens sections are two separate reservoirs in the Falby area.

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Q. Do you have any further recommendation to make in regard the area.

A. For further proof that the two sections are completely separate reservoirs it is recommended that a bottom-hole pressure survey be conducted in this area with special emphasis placed on surveying adjoining wells completed in the Queens zone so that a direct comparison of pressures can be made of the two zones in question.

Q. How would this bottom-hole pressure survey be accomplished?

A. It is suggested that efforts be made to have Mr. Staley's organization, the New Mexico Oil and Gas Engineering Committee run the pressures on all flowing wells in the area after a 48 hour shutin. In the event it is impossible for Mr. Staley's Unit to do the work, it is suggested that an independent survey unit be employed and the work coordinated with the help of the operators.

Q. In the event that a marked pressure differential is noted what are your recommendations?

A. In that event it would be my recommendation that the Falby-Yates Pool be delineated as advertised. Secondly, it would be my ~~XXXXXX~~ recommendation that the Yates zone be considered as one reservoir and the Seven Rivers-Queen Zone considered as a separate reservoir and the ~~XXXXXXXXXX~~ combining of the two zones for production of oil and gas through one well bore not be permitted in this area. It is further recommended that there be no gas-oil ration limit. My reason for this is that since the original Yates section is principally a gas producing zone, the present

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practice of producing the gas wells should remain on a dry gas well productive status and not be penalized on the basis of volumetric withdrawal due to their proximity to the small oil trap in the Falby-Yates pool.

Q. Would it therefore be in line for you to recommend that this case be continued for thirty days pending the results of the bottom-hole pressure surveys.

A. Yes, sir that is my recommendation.

See notes on page 5 of the report

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