

BEFORE THE INDUSTRIAL COMMISSION  
OF THE STATE OF NORTH DAKOTA

CASE NO. 5933  
ORDER NO. 6893

IN THE MATTER OF A HEARING CALLED ON A MOTION OF THE COMMISSION TO CONSIDER THE PETITION OF CONOCO INC. FOR AN ORDER PROVIDING FOR THE UNITIZED MANAGEMENT, OPERATION, AND FURTHER DEVELOPMENT OF THE DICKINSON-LODGEPOLE UNIT AREA, CONSISTING OF LANDS WITHIN THE DICKINSON FIELD IN STARK COUNTY, NORTH DAKOTA; FOR APPROVAL OF THE UNIT AGREEMENT AND UNIT OPERATING AGREEMENT CONSTITUTING THE PLAN OF UNITIZATION FOR THE DICKINSON-LODGEPOLE UNIT AREA; FOR APPROVAL OF THE PLAN OF OPERATION; VACATING THE APPLICABLE SPACING ORDERS; AND FOR SUCH FURTHER AND ADDITIONAL RELIEF AS THE COMMISSION DEEMS APPROPRIATE.

ORDER OF THE COMMISSION

On June 16, 1994, the Industrial Commission issued Order No. 6861 in this case. Two interested parties have asked the Commission to reconsider its decision. Placid Oil Company and the Andrea Singer Pollack Revokable Trust (hereafter "the Trust") have filed petitions for reconsideration. On July 18, 1994, Conoco Inc. filed a response to the petitions. On July 21st the Trust filed a reply to Conoco. Accompanying the Trust's reply are a number of journal articles discussing the use of 3D seismic data.

In their submissions, Placid and the Trust set forth the reasons why they believe the Commission erred in granting Conoco's request to unitize the Dickinson-Lodgepole Unit Area. The Commission has studied each of Placid's and the Trust's arguments and reviewed the record of the case. The Commission believes that its decision in Order No. 6861 is the fairest interpretation of the evidence. It declines, therefore, to withdraw or stay Order No. 6861, or to reopen the record to take additional evidence. The petitions are denied. Our reasoning follows.

The Trust argues that Findings 14 and 16 in Order No. 6861 are wrong because the Trust used not only seismic interpretation to delineate the productive boundaries of the reservoir but also well data, and that Finding 17 is wrong because seismic interpretation can identify a reservoir's productive boundaries. Findings 14 and 16 refer to the specific location of the productive reservoir, and the Commission reaffirms that the Trust interpreted, and testified that it interpreted, only seismic data to specifically identify the location of the boundaries of the productive reservoir. The Commission was persuaded by Conoco's witness that seismic data is an unreliable method to locate the Dickinson-Lodgepole reservoir boundary primarily because there is little velocity contrast between the productive and nonproductive Lodgepole. Furthermore, seismic data requires interpretation before it can be applied and Placid and the Trust merely submitted maps based on their seismic interpretations and did not submit the raw seismic data. The interpretative nature and unreliability of seismic data to delineate the boundaries of the productive reservoir is shown by the dissimilarity in the maps Placid and the Trust prepared using the same seismic data.

Placid, like the Trust, argues that Findings 16 and 17 are erroneous. It believes Finding 16 is wrong, asserting that Placid did introduce seismic information to identify the productive reservoir. Perhaps Finding 16 should

have been written more clearly, for Placid (and the Trust) seems to misunderstand it. Finding 16 states that the Commission did not receive evidence sufficient to prove that seismic data can successfully identify the productive reservoir. The evidence accepted by the Commission was just the opposite, as expressed in Finding 17. Placid believes that Finding 17 is inconsistent with the basis upon which Conoco proposed the unit. Placid's argument misinterprets the word "mound" to be synonymous with "reservoir." The Commission, however, uses the word "mound" to include not only the reservoir quality rock, but also any associated deposition found around the perimeter of the reservoir quality rock.

Placid challenges Finding 24 and its conclusion that the allocation of the unit is fair. Placid did not propose what it believes would be a fair allocation. More importantly, the allocation is based on Conoco's interpretation of the geology and it is that interpretation that the Commission has found to be more reliable than Placid and the Trust's.

The Trust argues in Paragraph 7 of its petition as well as in its reply to Conoco, that the Commission erred in relying on characteristics of the Fryburg Interval to locate the boundaries of the Lodgepole Pool reservoir. In particular, the Trust states that the Fryburg map is based on only two additional wells and that it has nothing to locate its western edge. The map has three additional wells and the Frenzel 79 and Walton 84 wells provide data points to help identify the western edge. The Trust states that use of the Fryburg map is inappropriate because the Fryburg thickens to the northeast. No evidence was presented to show this. The Trust claims Conoco's Fryburg map is unreliable because had it been prepared in another way it would have a different result. The Trust could have prepared a Fryburg map using the method it believes appropriate. It didn't, and to state as a fact what that method would have produced is speculative.

The Trust argues that Findings 19 and 20 "are totally without basis." Placid also challenges Findings 19 and 20, as well as Finding 18. Conoco adequately explained the relationship between the Fryburg Interval and the Lodgepole Pool and how data from the Filipi No. 76 can aid in locating the eastern boundary of the productive reservoir. We will not repeat Conoco's arguments, which we found persuasive.

The Trust argues that Finding 22 "is essentially irrelevant" and Placid says Finding 22 is unsupported. While a volumetric calculation is not definitive in locating a reservoir, it can confirm geologic interpretations and the volumetric calculation here confirms Conoco's interpretation. Its use in this way was supported by testimony from Conoco.

The Trust asks that Conoco's 3D seismic data be produced and made part of the record. This is a red herring. Since seismic data cannot identify the productive reservoir there is no purpose in requiring Conoco to produce it for consideration in this case. The Trust, in its reply brief, states that the Wyoming Conservation Commission used only seismic data to delineate the edge of a reservoir in the Little Missouri Field. The Trust does not support this assertion with a copy of the Wyoming order or the case record, nor does it explain whether the characteristics of Wyoming's Little Missouri Field are similar with those of the Dickinson-Lodgepole Field or even the Williston Basin. The Trust also refers to a use of seismic in Saskatchewan but again fails to supply documentation to support its assertion.

The Trust submitted with its reply brief copies of a number of journal articles concerning the use of 3D seismic. There is no evidence that the areas discussed in the articles bear any similarity to the characteristics of the Dickinson-Lodgepole Pool. Without such evidence the articles are unhelpful, if not irrelevant. Furthermore, there is no reason why these articles could not have been submitted into evidence at the hearing. The Commission declines to reopen the case to make these part of the record.

Placid argues that the Commission erred by failing to set forth

equitable terms for development outside the unit. Existing spacing outside the unit remains in effect and any adjustments to that spacing were not properly before the Commission in this case.

Dated this 3rd day of August, 1994.

INDUSTRIAL COMMISSION  
STATE OF NORTH DAKOTA

/s/ Edward T. Schafer, Governor

/s/ Heidi Heitkamp, Attorney General

/s/ Sarah Vogel, Commissioner of Agriculture