

Section 8, Adams Ranch Prospect

Because of complexity of predicting successful drilling locations in this general area, I have enclosed a series of map displays of my interpretation of the geological structural and stratigraphic situation of the southwesterly most 36 sections of land in Meade County, Kansas, 12 sections in the southeastern Seward County, Kansas and 24 offsetting sections in Beaver County, Oklahoma. The displays shown in this proposal will remain the same, except for new data gained from any "new" holes drilled in the area, for the forthcoming development of the area shown on the map. There are ^{Two}~~three~~ areas of interest displayed on the acreage map. The present one of interest is outlined by red colored lines. The next proposal is outlined in green, ~~the third by blue~~. This is done because of the fact that wells currently producing in this general area are often similar in their indications on logs, etc., but significantly different when a detailed study of the area is made. It is interesting to note that in the area covered by the map there have been ~~153~~ holes drilled. ~~Seventy-nine~~ of these have been productive. This is an encouraging ratio.

Because of the relatively low amount of structural relief and the apparent rapid, concentrated structural and stratigraphic changes in this area, the prediction of successful drilling sites has been attractive to some successful operators.

This interpretation can be heard in an entirely different way. Some geologists are not enthusiastic about the potential of this area. The lack of enthusiasm is sometimes helpful to those of us attracted to the area. An example of this situation is our next proposal, the exploratory well to be drilled in the SW/4 of Section 8, Township 35 South, Range 30 West, Meade County, Kansas.

The proposed location in Section 8 is based not on its proximity to our Adams 1-17 producer, but on my interpretation of the probable existence of additional and different productive intervals in the proposed well.

The original discovery, the Adams #1-17 located in the NW/4 Section 17, Township 35 South, Range 30 West, has produced a surprising and successful amount of oil. I originally proposed this prospect as being gas bearing because the only other known occurrence of production from this interval in this general area produces only gas.

Because of the obvious thinness of the Marmaton porosity in the Adams 1-17 our proposed location in ~~SE/4~~ SE/4 SW/4 Section 8 is not based upon discovering additional production from this formation interval. The zone could be productive, however, in the event that there is porous rock of the type found in the #1-17 developed in the proposed Adams #1-8. This possibility is substantiated by the fact that there are some

four feet of porous material indicated by the Lane Wells log run on the well drilled in 1957, by Pan American Petroleum Corporation, on the SW/4 SW/4 SW/4 of Sec. 8. Although ~~this~~ log interpretation indicates that this zone is approximately ⁸ ft. structurally ^{higher} ~~lower~~ than our well in Section 17. I am encouraged by the possibility of this zone extending some 1/4 of a mile north of the producing well in Section 17 to include our proposed location. Additionally, the top Marmaton productive zone is present in Section 8, Township 6 North, Range 23 ECM, Beaver County, Oklahoma. This is encouragement that the reservoir being drained by the #1-17 well is of a significant size. The calculation of the electric log of the well in Section 8 in Oklahoma suggests top Marmaton productivity similar to that of our Adams #1-17.

The Oklahoma well is ^{46'} ~~70'~~ structurally lower than our producing well in Sec. 17. The only explanation of the presence of oil to exist at this lower structural level is that the "openness" and permeability of the productive formation is limited to this specific area. Oil will always travel upward, above the heavier salt water, to shallower depths until it reaches a trap, or lack of permeability.

Evidence that the productive ability of the Marmaton "topmost" interval results from stratigraphic effects, rather than structural positioning is supported by the fact that if the Adams 1-17 were higher structurally there would have been shows in many other intervals known to be productive in this general area. This was not the case.

Due to this analysis I am predicting that there is a structurally higher position existing at our proposed location in Section 8, in Meade County. The possibility that a structural high at the proposed drillsite exists is apparent on the enclosed structural maps. In the event a significant amount of structurally higher porosity is discovered, production could be developed in several different intervals.

The shows in the Council Grove and the St. Louis formations in the two abandoned holes in the NE 1/4 of Sec. 8 are encouraging even though the wells were not economically successful. Without stratigraphic effect these shows might have not been present at all because of their relatively low structural positioning. If my structural interpretation of the area proves to be correct, production can be developed in the same intervals at the structurally higher levels at our proposed drilling location.

Approximately 1.5 billion cubic feet of natural gas was produced from the old Pan American Petroleum Corporation well in the SW corner of Sec. 8. This probably represents most of the recoverable gas from the Morrow and Chester formations in this specific area. However, because these intervals are extremely unpredictable and the apparent partial development of porosity in these intervals in nearby wells, there is a chance that the proposed exploratory well might have production in the Morrow and Chester intervals.