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Comments relative to the analysis of the pressure chart from DST # 1, Interval: 9834-9920', which was run in the Martindale Petroleum, Webber #2, SE NE Section 3, T16S-R32E, Lea County, New Mexico:

This analysis is based on the total liquid recovery only, the Horner method of pressure build-up curve extrapolation and the Horner equations applicable to liquid recovery tests. For purposes of the analysis it has been assumed that the produced gas was solution gas.

It should be noted also that the character of the Final Shut-in pressure build-up curve indicates the presence of more than one porosity zone within the test interval. This condition causes some ambiguity in the interpretation of the pressure build-up curve that was recorded and for this reason the results of the analysis should be considered as indicators rather than quantitative values.

1. The character of the Initial Shut-in pressure build-up curve and its extrapolation plot indicate that "steady-state" conditions were not attained during this shut-in period. It therefore is impossible to determine a reliable extrapolated Initial Shut-in pressure.

As noted above, the character of the Final Shut-in pressure build-up curve is anomalous and the anomaly is of the type which indicates the presence of more than one effective porosity zone within the test interval. In addition, the furnished incremental-reading data indicate a maximum reservoir pressure was recorded mechanically during the last 90 minutes of the Final Shut-in period. This condition precludes the use of the Horner analysis method as a means of calculating quantitative numerical values for the various reservoir properties which are normally calculable in a drill-stem-test analysis.

Extrapolation of that portion of the shut-in pressure build-up curve which has been interpreted to be representative of reservoir behavior of the zone which was effective in producing the majority of formation fluid that was recovered has been made by projecting a straight line through 5 points on the extrapolation plot. These 5 points are those on the extrapolation plot which precede those on the latter part of the plot which have been interpreted to have been caused by reservoir behavior of a second porosity zone.

This extrapolation of the shut-in pressure build-up curve indicates a maximum reservoir pressure of 3613 psi at the recorder depth of 9920 feet. A maximum reservoir pressure of 3609 psi was recorded mechanically, however, during the last 90 minutes of the Final Shut-in period.