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Comments relative to the analysis of the pressure chart from DST #5, Interval: 11433-11490', which was run in the Arco Oil & Gas Company, State 19 #1, SW SE Section 19, T16S-R34E, Lea County, New Mexico:

This analysis is based on the net liquid recovery only. In addition, because it is apparent that "steady-state" conditions were probably not attained during either shut-in period, the McKinley analysis method, which is applicable to pressure build-up behavior that is dominated by "afterflow", has been used to calculate numerical values for the various reservoir properties shown below and on the summary page. For purposes of this analysis, it has been assumed that the produced gas was solution gas.

1. Extrapolation of the Initial Shut-in pressure build-up curve indicates a maximum reservoir pressure of 5800 psi at the recorder depth of 11490 feet. As noted above, the character of the Initial Shut-in pressure build-up curve and its extrapolation plot indicate that "steady-state" conditions were probably not attained during this shut-in period. The quantitative reliability of the extrapolated pressure is therefore subject to question. This extrapolated pressure, however, has been used as the maximum reservoir pressure in making the McKinley analysis.

The extrapolated Initial Shut-in pressure at the recorder depth is equivalent to a subsurface pressure gradient of 0.505 psi/ft. This pressure gradient, in turn, is anomalously high compared to a "normal" hydrostatic pressure gradient which ranges from about 0.43 to 0.47 psi/ft., depending upon formation water salinity. It therefore is indicated that the tested reservoir has a "super-normal" reservoir pressure environment.

2. The calculated Average Production Rate which was used in this analysis, 156.1 BPD, is based upon the net fluid recovery of 8.67 barrels (excludes the water cushion) and the total flowing time of 80 minutes.
3. The calculated Damage Ratio of 0.53 indicates that no significant well-bore damage was present at the time of this formation test. It should be noted, also, that the character of the McKinley plot indicates that well-bore stimulation rather than well-bore damage was present at the time of this test.