

Martindale Petroleum, Webber #2

DST Interval: 9834-9920'

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1. (continued)

The indicated maximum reservoir pressure at the recorder depth is equivalent to a subsurface pressure gradient of 0.364 psi. This pressure gradient, in turn, is anomalously low 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 "sub-normal" reservoir pressure environment which may be a natural characteristic of the tested formation in the general area of this test.

2. The calculated Average Production Rate which was used in this analysis, 220 BPD, is based on the total liquid recovery of 16.8 barrels and the total flowing time of 110 minutes. It should be noted, however, in view of the nature of the recovered fluid (predominantly drilling mud) that the reliability of the calculated production rate is subject to question. Also, because the production rate is a key factor used in the basic equation to calculate numerical values for the various reservoir properties shown below and on the summary page, the reliability of these calculated results is subject to further question.
3. The calculated Damage Ratio of 3.2 indicates that significant well-bore damage was present at the time of this test. The Damage Ratio implies that the production rate should have been 3.2 times greater than that which occurred (or 704 BPD) if well-bore damage had not been present.
4. The calculated Effective Transmissibility of 201.0 md.-ft./cp. indicates an Average Permeability of 13.4 md./cp. for the estimated 15 feet of effective porosity within the total 86 feet of interval tested.
5. The evaluation criteria used in the DST Analysis System indicate that the tools and recorder functioned properly; however, as noted above, because of the anomalous character of the Final Shut-in pressure build-up curve, which indicates the presence of more than one porosity zone within the test interval, and the questionable reliability of the extrapolated Final Shut-in pressure, the interpreted slope of the extrapolation plot and the calculated production rate, the numerical results obtained in this analysis should be considered as indicators only.