

# Society of Petroleum Evaluation Engineers

## Monograph 4

### Estimating Ultimate Recovery of Developed Wells in Low-Permeability Reservoirs

2016

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## Errata

A few figures were formatted incorrectly in the first printing of Monograph 4. This document contains the corrected images. Newer revisions also contain minor changes in wording and punctuation.

The upper image in **Fig. 7.20** (Page 178) was incorrect. The correct figure appears at right.

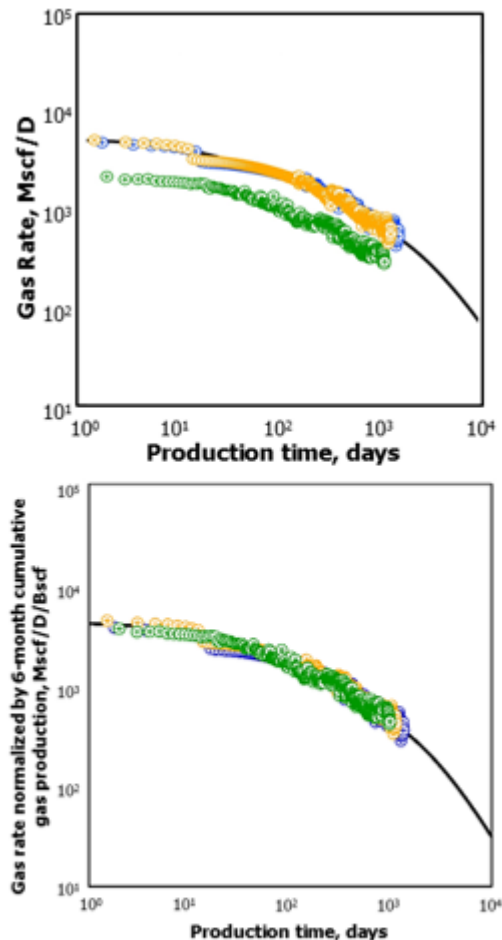


Fig. 7.20—Initial history match for the seed model forecast matched two of three wells in the group (top). After scaling (bottom), it matched all three wells.

The following figures from Chapter 9 have been improved.

Figs. 9.5 and 9.6, Page 214.

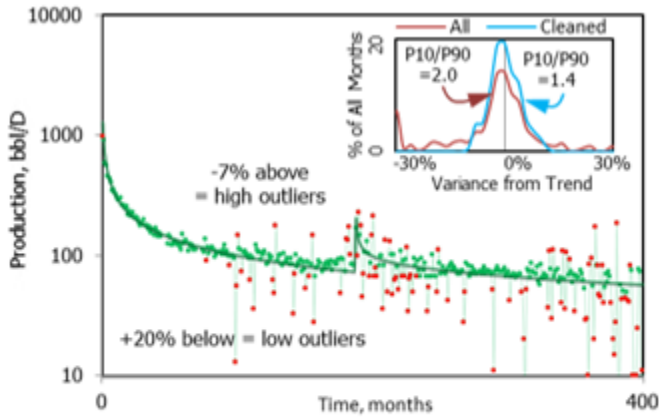


Fig 9.5. Semilog plot of production data, Reagan County, Texas, well with outliers statistically flagged. Removing outliers from the data improved the shape of the histogram, leading to better certainty in the estimates.

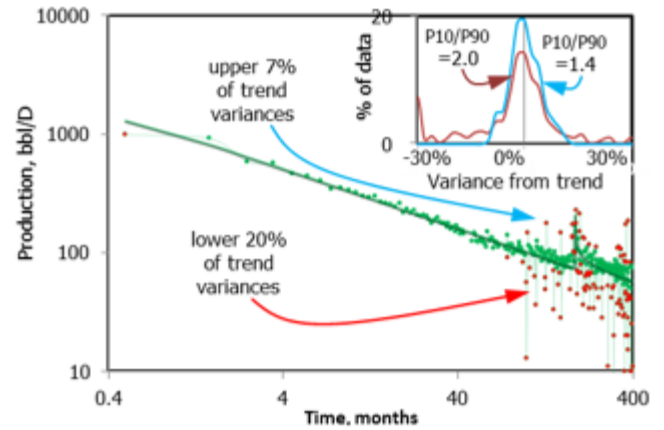


Fig 9.6. Log-log plot of production data, Reagan County, Texas, well with outliers statistically flagged. Removing outliers improved the shape of the histogram and brought the trends of variances closer together.

Fig. 9.25, Page 232

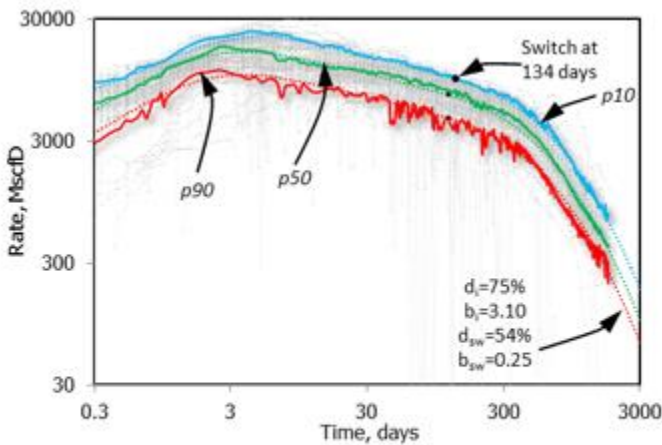
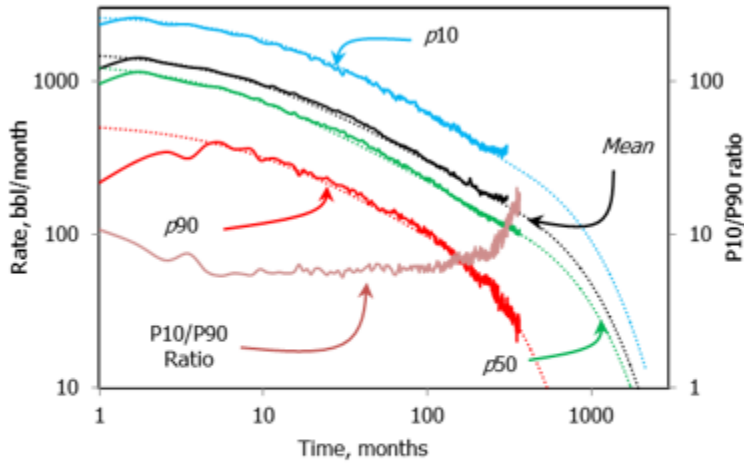
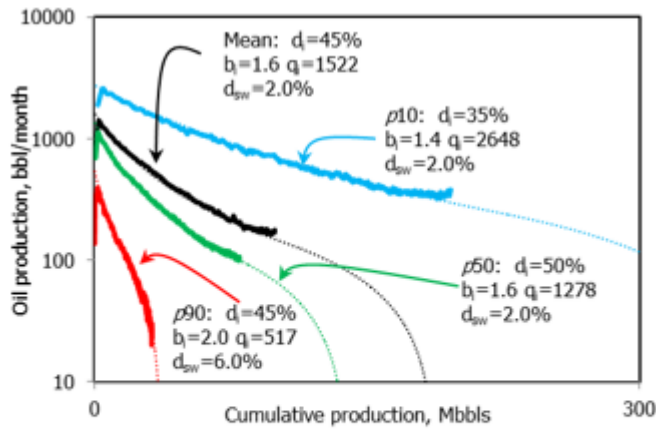


Fig. 9.25 Statistical trends for 87 Haynesville wells. In this relatively ductile, highly overpressured shale, the switch time is actually about half a log cycle earlier than it appears on the plot.

Figs. 9.36 and 9.37, Page 239



**Fig. 9.36.** Statistical type wells for Permian Basin 1981-85 trend area wells and hyperbolic forecasts. The steep P90 decline after 100 months indicates that this group should not be modeled using a single type well.



**Fig. 9.37.** Semilog plot of rate vs. cumulative production for Permian Basin 1981-85 trend area wells and hyperbolic forecasts. Poorer wells (P90) should be modeled separately from the others.

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Note that terms in this list may not appear on every page in a range, and the range may not be solely about that term. The committee makes no claim to the completeness of the list.

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