Erratum to: Correlation for Estimating the Effects of Temperature on the Viscosity of Light Hydrocarbon Solvents

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In Section 2 of this article, Correlation Development, there is an error in the Puttagunta et al. correlation for calculating viscosity, especially the calculation of C and S factors. The correlation of Puttagunta et al. (Ref 1) and also Singh et al. (Ref 2) is based on the same principle as their heavy oil correlation. The correlation is given as:

$$\log \eta = \frac{b}{(1 + \frac{T-37.78}{310.93})^S} + C \quad (\text{Eq 1})$$

where η is the kinematic viscosity in cSt and T is the temperature in °C. The correlation requires only one viscosity measurement, at 37.78 °C (100 °F) in this case, to make viscosity

predictions at other temperatures. Thus, b , is derived from the equation $b = \log \eta_{37.78^\circ\text{C}} - C$. The values of the parameters were obtained by regression techniques and are $C = -0.86960$ and $S = 0.28008b + 1.6180$. The average absolute deviation obtained with the correlation for fractions of many conventional crude oils found around the world was below 1 per cent.

References

1. V.R. Puttagunta, A. Miadonye, and B. Singh, Viscosity-Temperature Correlation for Prediction of Kinematic Viscosity of Conventional Petroleum Liquid, *Chem. Eng. Res. Des.*, 1992, **70**, p 627–631
2. B. Singh, S. Mutyala, and V.R. Puttagunta, Viscosity Range from One Test, *Hydrocarb. Process.*, 1990, **69**(9), p 39–41

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