Calculated

\[ f = 0.2485 + 0.029[Z] + 0.091[Z]^2 \]

\[ Z = P^{0.667} \bar{V}^{0.518} \]

\[ \phi = 0.05\% \text{ (Mass fraction)} \]

\[ \text{A.D} = 4\% \]

\[ \text{S.D} = 4\% \]

Lubricant: Racer 4+0.05 \% TiO₂ nano particles

No of data points - 114

40 < V < 60 KMPH

19.62 < L < 78.48 N

\[ \phi = 0.05\% \text{ (Mass fraction)} \]

\[ \text{A.D} = 4\% \]

\[ \text{S.D} = 4\% \]

Fig. 10 Validation of correlation