$$TRE = \frac{1}{E_{TOC}}\left[a + b\left(Q_s\right)^{0.88} + c\left(Q_s\right) + d\left(Q_s\right)\left(H_T\right) + e\left(Q_s\right)^{0.88}\left(H_T\right)^{0.88} + f\left(Y_s\right)^{0.5}\right]$$