$$K_{w1} = \frac{1.608 \times \left[H_d \times \left(1 - {}^{1}_{DF}\right) + H_a \times \left({}^{1}_{DF}\right) \right]}{1000 + \left\{ 1.608 \times \left[H_d \times \left(1 - {}^{1}_{DF}\right) + H_a \times \left({}^{1}_{DF}\right) \right] \right\}} +$$