

## w water viscosity McCain correlation @model

|     |                                                                                                                             |
|-----|-----------------------------------------------------------------------------------------------------------------------------|
| (1) | $\mu_w(T, p) = \mu_{w, \text{atm}}(T) \cdot (0.9994 + 4.0295 \cdot 10^{-5} p + 3.1062 \cdot 10^{-9} p^2)$                   |
| (2) | $\mu_{w, \text{atm}}(T) = (109.574 - 8.40564 S + 0.313314 S^2 + 8.72213 \cdot 10^{-5} S^3) \cdot T^A$                       |
| (3) | $A = -1.2166 + 2.63951 \cdot 10^{-2} S - 6.79461 \cdot 10^{-4} S^2 - 5.47119 \cdot 10^{-5} S^3 + 1.55586 \cdot 10^{-6} S^4$ |

|                          |                                                                               |
|--------------------------|-------------------------------------------------------------------------------|
| $\mu_w(T, p)$            | Dynamic viscosity, cp at temperature $T$ and pressure $p$                     |
| $\mu_{w, \text{atm}}(T)$ | Dynamic viscosity, cp at temperature $T$ and atmospheric pressure $p = 1$ atm |
| $T$                      | Temperature, °F                                                               |
| $p$                      | Pressure, psi                                                                 |
| $S$                      | Water salinity                                                                |

## See Also

[Petroleum Industry](#) / [Upstream](#) / [Petroleum Engineering](#) / [Subsurface E&P Disciplines](#) / [Reservoir Engineering \(RE\)](#) / [PVT correlations](#) / [PVT Water correlations](#) / [Water viscosity correlations](#)