[DOC] = [DOC-H] / F\_P - [DOC-H]

[DOC] = [DOC-H] \* (1/F\_P – 1)

…yep…that’s equivalent…not useful though

Definitions:

[DOC-HM] = Monodentate H bound to site:

[DOC-HB1HB2] = bidentate fully protonated

[DOC-HB1] = bidentate partial protonated (site 2 deprotonated)

[DOC-HB2] = bidentate partial protonated (site 1 deprotonated)

= fprB

= site density of DOC binding site i

= abundance denominator of DOC binding site i

= total (g HS / L) of humic substance H

Monodentate protonation fractions: