

Title: Quantifying Molybdenum Isotopic Speciation in Sulfidic Water: Implications for the Paleoredox Proxy

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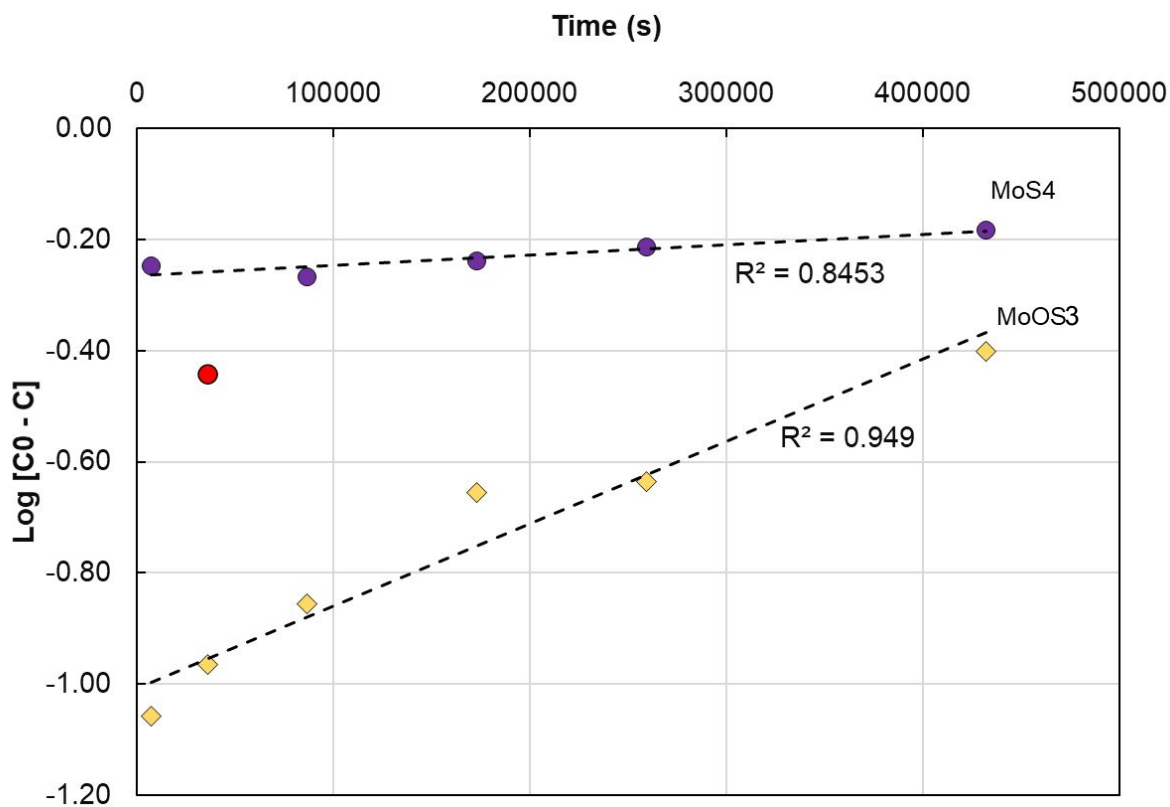
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Figure S1: Supplementary figure showing the first order relationship of our chemical kinetic data for two Mo species.



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 28 **Figure S1-Sn.** Demonstration of first order thiomolybdate species, plotted as time versus the log
 29 of concentration initial [C0] minus concentration [C] during the first 432000 seconds (120 hours).
 30 Dark circles represent tetrathiomolybdate species, while diamonds represent trithiomolybdate. The
 31 notable outlier for tetrathiomolybdate appears at 36000 seconds was not included in the calculated
 32 linear regression ($p \leq 0.05$).