

**Bromide-Assisted Catalytic Oxidation of Lead(II) Solids by Chlorine in
Drinking Water Distribution Systems**

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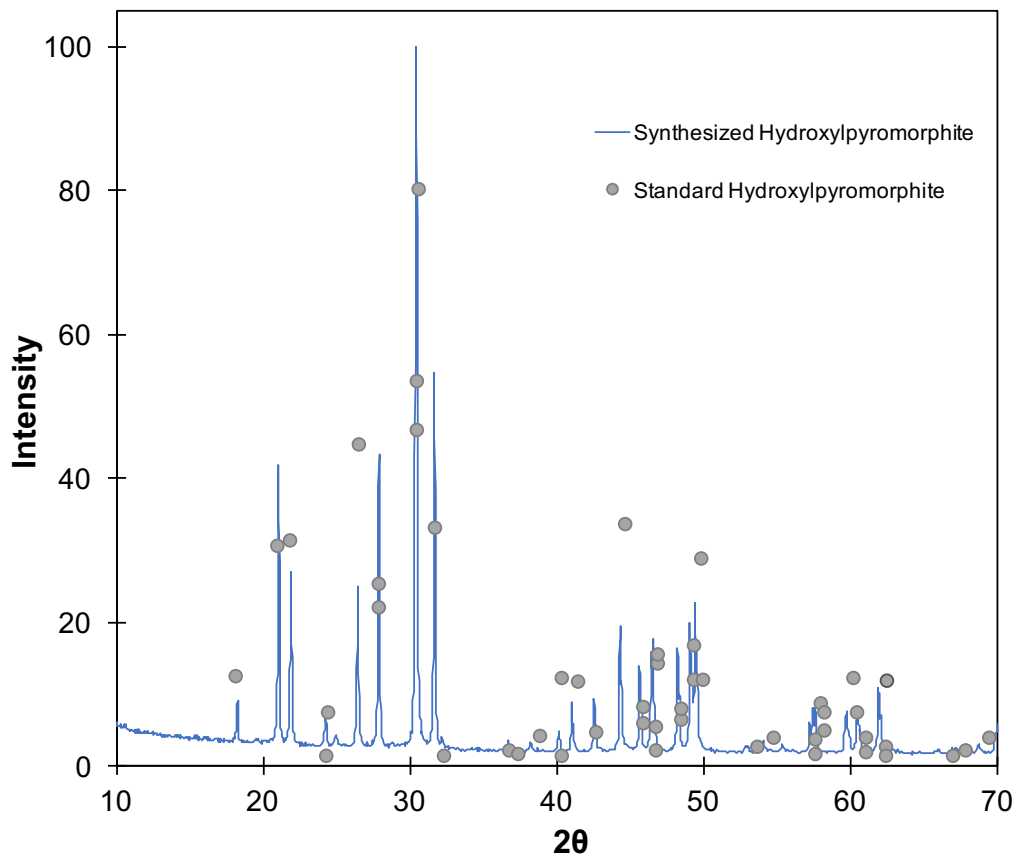


Figure S1 XRD spectra of synthesized hydroxylpyromorphite $\text{Pb}_5(\text{PO}_4)_3\text{OH}_{(s)}$.

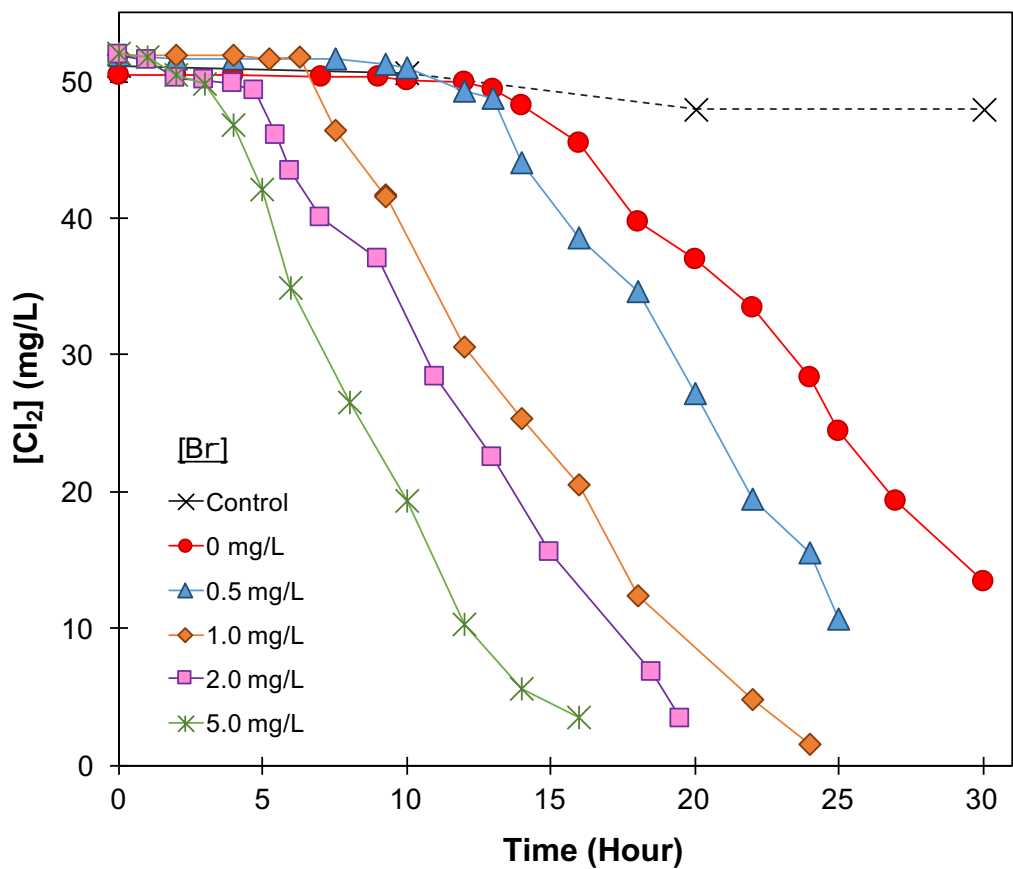


Figure S2 Consumption of chlorine during the oxidation of cerussite $\text{PbCO}_{3(s)}$ by chlorine at varying bromide concentrations. pH = 7.0, initial $[\text{Cl}_2] = 50 \text{ mg/L}$, initial $[\text{PbCO}_3] = 0.56 \text{ g/L}$, ionic strength = 10 mM, $\text{TOTCO}_3 = 1 \text{ mM}$.

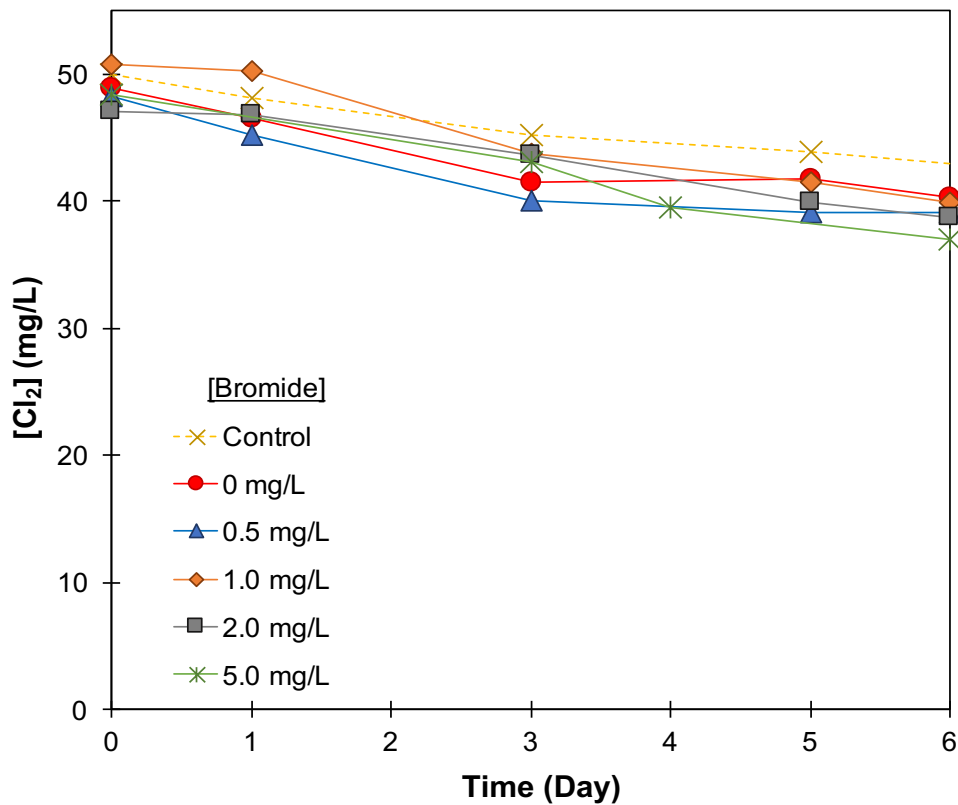


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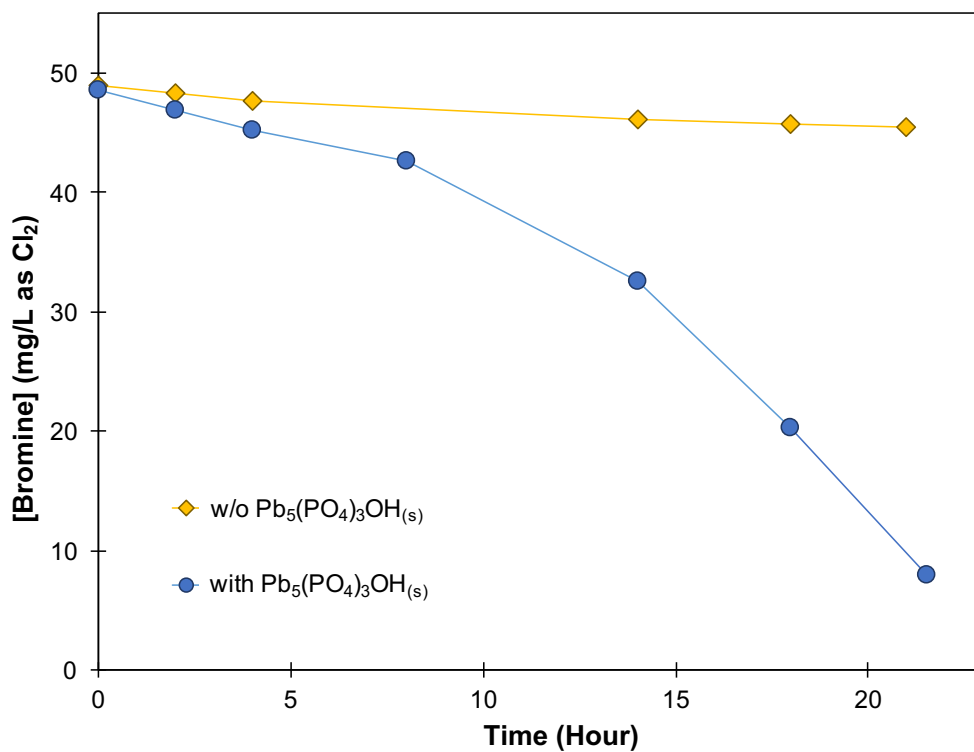


Figure S4 Oxidation of $\text{Pb}_5(\text{PO}_4)_3\text{OH}_{(s)}$ by bromine at $\text{pH} = 7.0$, initial $[\text{Br}_2] = 50 \text{ mg/L}$ as chlorine, initial $[\text{Pb}_5(\text{PO}_4)_3\text{OH}_{(s)}] = 0.56 \text{ g/L}$, ionic strength = 10 mM, $\text{TOTCO}_3 = 1 \text{ mM}$.