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Chromium isotope fractionations resulting from electroplating, chromating and anodizing: Implications for groundwater pollution studies

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ACCEPTED MANUSCRIPT

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2324 HIGHLIGHTS

• δ^{53} Cr(VI) of plating baths sampled at 9 industrial sites averages 0.2 ‰

• Electroplating and chromating cause an extremely small Cr isotope fractionation

• δ^{53} Cr(VI) in aquifers >1 % may indicate natural attenuation due to Cr(VI) reduction

33 *Keywords*: Chromium isotopes, electroplating, chromating, isotope fractionations

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