

SUPPORTING INFORMATION FOR

**THE EFFECT OF ORGANIC CO-CONTAMINANTS ON TECHNETIUM AND
RHENIUM SPECIATION AND SOLUBILITY UNDER REDUCING
CONDITIONS**

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Table S1: Bulk soil XRF results, the concentration of each compound is quoted as % of total soil mass.

SiO₂	TiO₂	Al₂O₃	Fe₂O₃	MnO	MgO	CaO
57.18	1.08	13.73	5.97	0.19	0.34	0.38
Na₂O	K₂O	P₂O₅	SO₃	H₂O	CO₂	Total
0.40	1.76	2.61	0.26	4.45	11.63	99.98

Table S2. Reproducibility of the HPLC-ICP-MS analysis for triplicate samples of ReO_4^- (0.27 μM) and TcO_4^- (0.50 μM), and for Tc(IV)-EDTA following reduction of TcO_4^- (0.50 μM) by 1 mM Sn(II). The %RSD is 1 σ (n=3).

Species	Average peak integral	%RSD
ReO_4^-	22940	1.0
TcO_4^-	37560	2.9
Tc-EDTA	36360	2.8