Table 5 Mean free-energy changes for the partial and complete aerobic oxidation of sulfur and its compounds (calculated from the ranges of values in Table 4)

Reaction	ΔG° (mean ± SE) [kJ (mol S-substrate) ⁻¹]
Thiosulfate to sulfate	-750.1 ± 16.1
Sulfide to sulfate	-701.8 ± 31.4
Sulfide to sulfur	-168.6 ± 28.9
Sulfur to sulfate	-537.9 ± 43.7
Sulfur to sulfite	-280.2 ± 22.2
Sulfite to sulfate	-230.1 ± 22.0