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Correction to: On the P-T-fO_2 stability of Fe_4O_5, Fe_5O_6 and Fe_4O_5-rich solid solutions

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There were regrettably a few typos that appeared in the published version of Myhill et al (2016). Equation 8 should have read:

$$K_D = \frac{x^{\mathrm{ol}}_{\mathrm{Fe}} x^{\mathrm{ox}}_{\mathrm{Mg}}}{x^{\mathrm{ol}}_{\mathrm{Mg}} x^{\mathrm{ox}}_{\mathrm{Fe}}} \quad (1)$$

There were also a number of sign errors introduced during revision and type-setting of Table 3 and Supplementary Table 1. The correct values which we used in all of our calculations are given in Tables 1 and 2. All values are reported in SI units.

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References

Holland TJB, Powell R (2011) An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new

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Name	Fe_4O_5	Fe_5O_6	FeO	$Fe_{2/3}O$	$Mg_2Fe_2O_5$
H_0 [J/mol]	-1.342e+06	-1.592e+06	-2.65453e+05	-2.55168e+05	-2.008e+06
S_0 [J/K/mol]	2.3e+02	3.e+02	5.8e+01	3.8501e+01	1.55e+02
V_0 [m^3/mol]	5.376e-05	6.633e-05	1.2239e-05	1.10701e-05	5.305e-05
K_0 [Pa]	1.857e+11	1.73e+11	1.52e+11	1.52e+11	1.7e+11
K_0'	4.e+00	4.e+00	4.9e+00	4.9e+00	4.e+00
a_0 [1/K]	2.38e-05	1.435e-05	3.22e-05	2.79e-05	2.38e-05
Cp (a) [J/K/mol]	306.9	351.3	42.638	54.6333	284.9
Cp (b) [J/K^2/mol]	0.001075	0.009355	0.00897102	0.0	0.000724
Cp (c) [JK/mol]	-3140400.0	-4354600.0	-260780.8	-752400.0	-3328800.0
Cp (d) [$J/K^{0.5}$/mol]	-1470.5	-1285.3	196.6	-219.2	-1256.0

Table 1 Thermodynamic table for the iron-bearing oxides using the Holland and Powell (2011) modified Tait equation of state. The Cp parameters represent a polynomial for the heat capacity at 1 bar: $\text{Cp} = a + bT + cT^{-2} + dT^{-0.5}$.

Name	Mo	MoO_2	Re	ReO_2
H_0 [J/mol]	0	-5.915e+05	0	-4.4514e+05
S_0 [J/K/mol]	2.859e+01	5.0016e+01	3.653e+01	4.782e+01
V_0 [m^3/mol]	9.391e-06	1.9799e-05	8.862e-06	1.8779e-05
K_0 [Pa]	2.608e+11	1.8e+11	3.6e+11	1.8e+11
K_0'	4.46e+00	4.05e+00	4.05e+00	4.05e+00
a_0 [1/K]	1.44e-05	4.4e-05	1.9e-05	4.4e-05
Cp (a) [J/K/mol]	33.9	56.1	23.7	76.89
Cp (b) [J/K^2/mol]	0.006276	0.02559	0.005448	0.00993
Cp (c) [JK/mol]	38859.7	-17.6	68.0	-1207130.0
Cp (d) [$J/K^{0.5}$/mol]	-12.0	18.9	0.0	-208.0

Table 2 Thermodynamic table for the metal-metal oxides using the Holland and Powell (2011) modified Tait equation of state. The Cp parameters represent a polynomial for the heat capacity at 1 bar: $\text{Cp} = a + bT + cT^{-2} + dT^{-0.5}$.

equation of state for solids. Journal of Metamorphic Geology 29(3):333–383, DOI 10.1111/j.1525-1314.2010.00923.x

Myhill R, Ojwang DO, Ziberna L, Frost DJ, Ballaran TB, Miyajima N (2016) On the P-T-fO_2 stability of Fe_4O_5, Fe_5O_6 and Fe_4O_5-rich solid solutions. Contributions to Mineralogy and Petrology 171:51, DOI 10.1007/s00410-016-1258-4