

Erratum

U, Th, and K partitioning between metal, silicate, and sulfide and implications for Mercury’s structure, volatile content, and radioactive heat production by A. Boujibar, M. Habermann, K. Richter, D.K. Ross, K. Pando, M. Richter, B.A. Chidester, L.R. Danielson (September, vol. 104, p. 1221–1237, 2019). Article DOI: <https://doi.org/10.2138/am-2019-7000>. Erratum DOI: <https://doi.org/10.2138/am-2020-E105513>.

The f_{O_2} data reported for some samples in Table 2 are incorrect. The new Table 2 below gives corrected values for these f_{O_2} . In all models presented in the manuscript, we used correct f_{O_2} values. Our results on the thermodynamic model and bulk Mercury composition are therefore still correct. The colored curves in Figure 7b underestimate Fe/Si for models with a FeS layer. These curves are corrected in the updated figure below. (Complete Table 2 is available as a supplemental file¹.)

TABLE 2. Oxygen fugacity of experimental charges

K-bearing samples		U-Th-bearing samples	
Run no.	$\log f_{O_2}$ (relative to IW)	Run no.	$\log f_{O_2}$ (relative to IW)
#922	-3.82	#924	-3.52
#925	-3.51	#923	-3.82
#306	-3.25	#910	-3.23
#921	-3.93	#907	-3.14
#919	-3.95	#974	-3.16
#916	-3.83	#904	-3.2
#1027	-2.84	#909	-4.19
#1026	-2.98	#975	-3.59
#999	-3.83	#420	-3.89
#1001	-4.44	#305	-3.9
#1029	-5.52	#967	-4.29
#1000	-5.22	#1030	-5.4
PR1577	-6.46	#972	-5.39
PR1578	-6.05	PR1527	-5.37

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¹ Deposit item AM-20-5E105513, Supplemental Materials. Deposit items are free to all readers and found on the MSA website, via the specific issue’s Table of Contents (go to http://www.minsocam.org/MSA/AmMin/TOC/2020/May2020_data/May2020_data.html).

