

## **Supplementary Read-Me File: Instructions for Supplementary Table 1**

### **An evolutionary system of mineralogy, Part VII: The evolution of the igneous minerals (> 2500 Ma)**

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Supplementary Table 1 is an xlsx file that records information related to 1665 IMA-approved mineral species proposed to occur as primary phases in igneous rocks. Mineral species are listed in Rows 3 to 1667.

Columns A and J give the name of the 1665 mineral species, as approved by the IMA-CNMNC, while column K provides the chemical formula.

Columns B through I represent 8 major types of igneous rocks: UMA = ultramafic; MAF = mafic; GRA = intrusive acidic rocks; RHY = extrusive acidic rocks; CGP = complex granite pegmatites; AGP = alkaline/afgapitic rocks; CAR = carbonatites; LAY = layered intrusions (see text for details). Under each of these columns a “1” indicates that the corresponding mineral has been identified from that host lithology. Note that these 8 columns correspond to paragenetic modes 7, 8, 19, 20, 34, 35, 36, and 37 in Hazen and Morrison (2022) on the paragenetic modes of minerals (as indicated in Row 1). The matrix elements highlighted in red indicate revisions to the Supplementary Table 1 of Hazen and Morrison (2022), based on new information from the survey of mineral modes in this study.

Row 2 of Columns B through I provide the total number of species recorded for each of the 8 major igneous rock groups.

#### Reference:

Hazen, R.M., and Morrison, S.M. (2022) On the paragenetic modes of minerals: A mineral evolution perspective. *American Mineralogist*, 107,1262-1287.