Supplementary material for

Magmatic Material in Sandstone Shows Prospects for New Diamond Deposits within the Northern East European Platform

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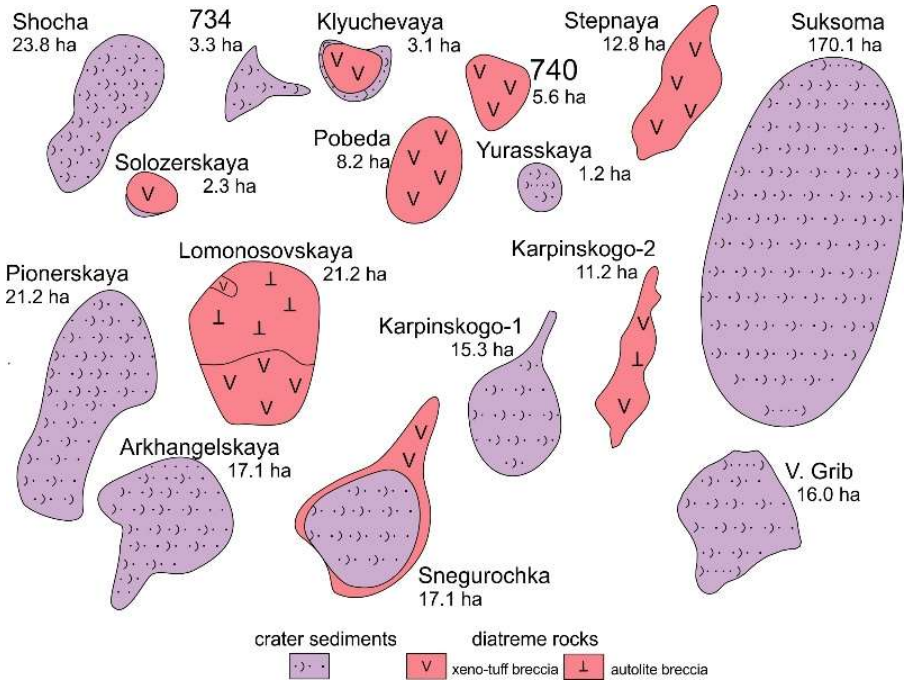

Figure. S1. Variety of the ADP pipe shapes in plan view and areal extent at the erosional surface. adapted from [2,3,16]

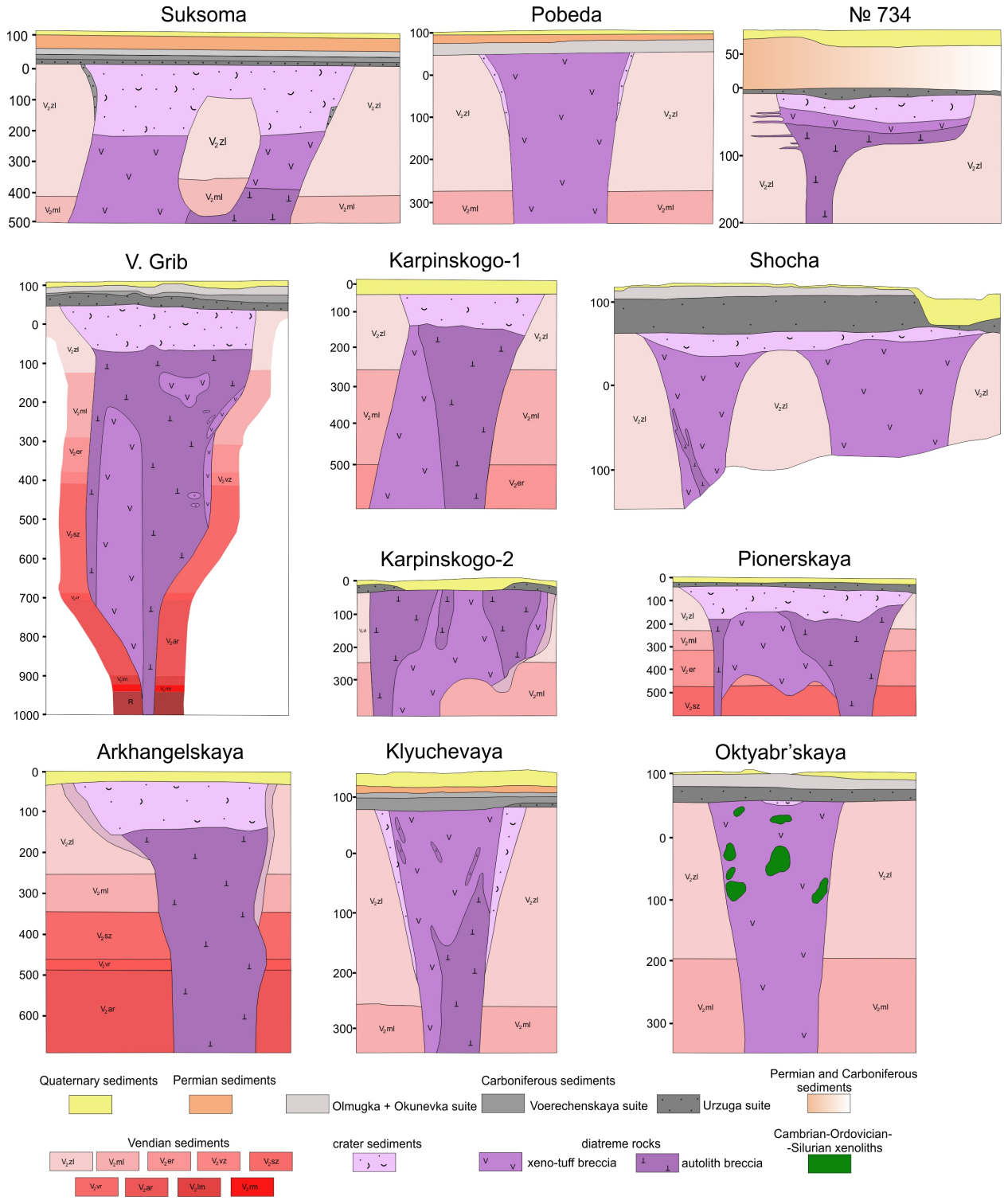

Figure S2. Schematic sections of the typical ADP magmatic pipes. adapted from [3,16,17]

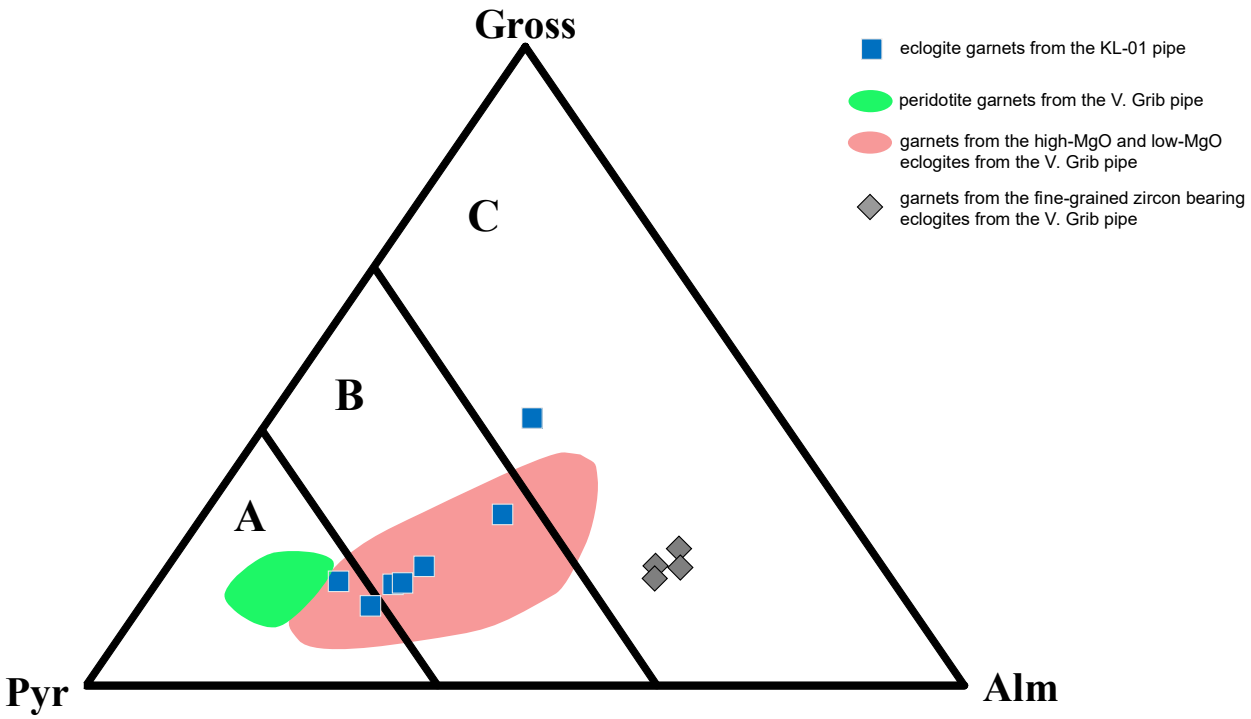

Figure S3. Ca-Fe-Mg (mol. %) diagram for garnet (according to [6]); A, B, C groups according to [4] classification; Pyr – pyrope, Gross – grossular, Alm – almandine. The V. Grib pipe high-MgO and low-MgO eclogites [18] fine-grained zircon bearing eclogites [19].

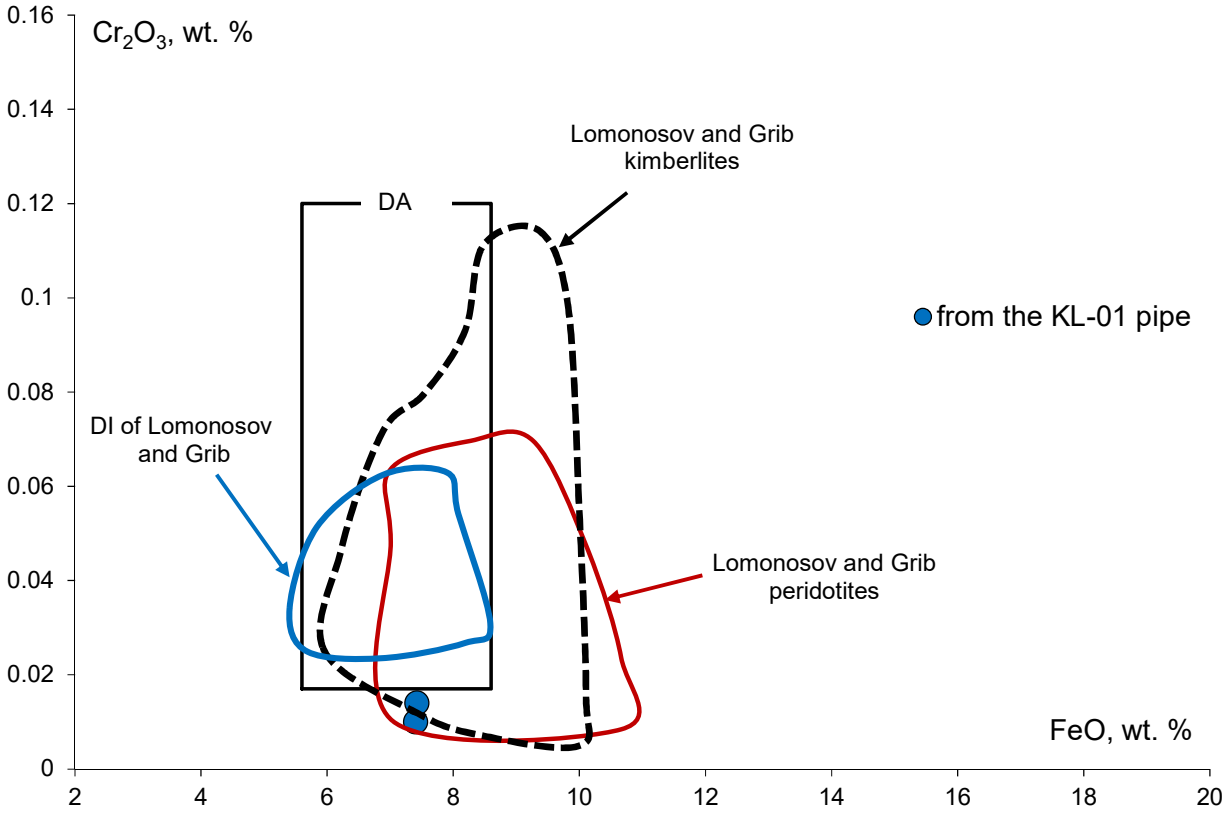

Figure S4. Position of the KL-01 pipe olivines on the Cr_2O_3–FeO diagram. DA, diamond association [15], Lomonosov and Grib kimberlites and peridotites [1,10,11,13] DI (inclusion in diamonds) from the Lomonosov and Grib [1,7].

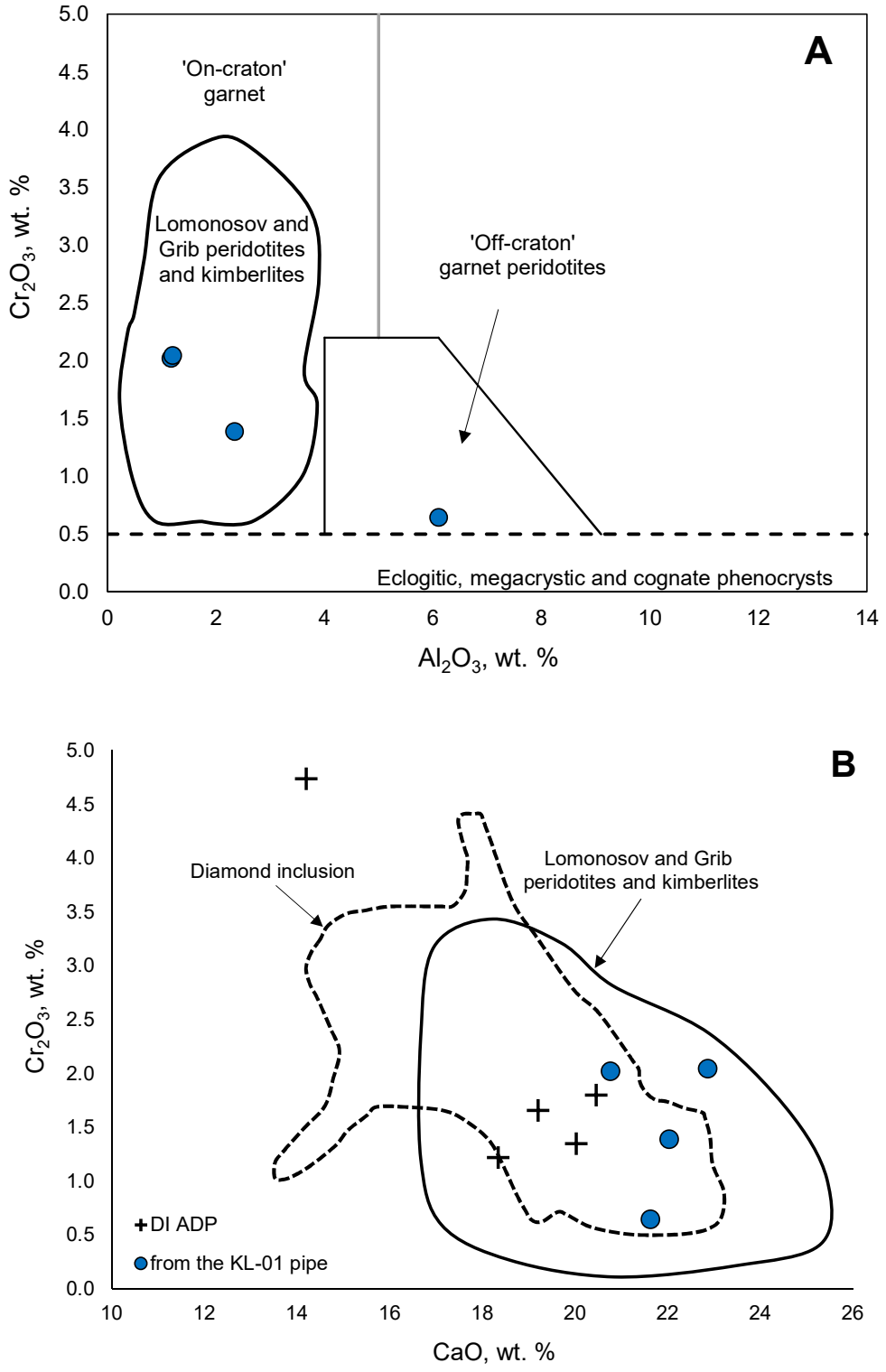

Figure S5 Major element composition of Cr-diopside xenocrysts from the KL-01 pipe. (A) Cr_2O_3–Al_2O_3 diagram [9]; (B) Cr_2O_3–CaO diagram. Lomonosov and Grib kimberlites and peridotites [1,10,12,13], diamond inclusion field [5], DI (inclusion in diamonds) from the ADP [1].

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