

Table S1. Calculation of the fluid amount in diamond traps after experiments at 3.0 GPa and 750°C

Run #	G _L (trap), mg	G _{LOI} , mg	G _{LOI} , wt. %	G _M , mg	G _M + G _{LOI} , mg	G _{FM} , mg	H ₂ O+CO ₂ ***, mg	Fraction H ₂ O+CO ₂ in fluid	G _L /G _{FM}
2167_2_1	25.00	0.52	2.08	18.6	19.6	5.4	2.23	0.29	4.63
2167_2_1*	28.74	1.42	4.94	21.9	23.8	4.9	2.56	0.30	5.83
1760_1_1	15.17**	3.96	26.1	-	-	-	1.35	-	-
2103_2_3	51.79	1.01	1.95	39.7	41.1	10.7	4.61	0.34	4.85
1746_1_1	50.11	1.90	3.79	44.0	46.4	3.7	4.46	0.54	13.4

Note. The weight of the fluid material was determined by the formula $G_{FM} = G_L - (G_M + G_{LOI})$. G_L - the weight of the diamond trap and fluid material after the experiment. G_{LOI} - the sample loss on ignition at 550°C. G_M - the weight of the trap diamond after dissolution of the fluid material. G_{FM} - the weight of the fluid material. H₂O+CO₂ - the amount of the gaseous and liquid phase released during the opening of the ampoules, normalized to the weight of the diamond trap sample; * second sample from the same sample; ** G_{FM} sample was too small; *** in the calculations, the average value for four experiments - 8.9 wt. % H₂O+CO₂ in the diamond trap was used.