Table S1: Quantitative X-ray Diffraction (XRD) analyses

COMPOUND NAME	BOREHOLE							
	JAP1					*AMA1*		
	3.50 m	7.50 m	9.00 m	11.00 m	14.50 m	1.80 m	4.50 m	8.00 m
	(%)							
Albite	14.4	15.0	11.6	13.7	23.1	7.5	17.3	15.8
Cristobalite	8.1	9.5	7.4	8.7	6.4	4.2	6.9	5.6
Quartz	7.3	7.9	8.2	0.9	1.9	1.4	4.1	5.7
Diopside	9.0	6.9	4.2	5.0	5.7	1.4	6.6	9.4
Augite	12.1	5.8	8.1	9.5	32.3	-	5.7	10.3
Pyrite	1.5	2.1	1.6	1.9	2.6	2.2	1.2	1.1
Tremolite	7.7	15.8	10.2	7.0	17.8	9.4	21.8	27.9
Calcite	2.0	1.5	1.4	2.3	1.7	0.6	0.5	0.9
Chlorite	4.8	3.2	1.6	2.9	3.9	0.9	3.0	-
Biotite	1.8	2.4	0.4	0.7	1.3	0.5	0.7	1.3
Clinoenstatite	3.6	3.6	2.1	3.2	0.6	2.7	2.7	4.6
Anorthite	25.2	26.2	40.8	44.2	2.6	69.2	27.1	14.2
Montmorillonite	2.6	-	2.2	-	-	-	2.1	1.6
Kaolinite	-	-	-	-	-	-	-	1.5

Relative errors: 25% for higher values (>15%), 50% for lower values (<15%).