

Table 1 - Tested parameters and results obtained with Rhyolite-MELTS modelling

	Eruptive Fissure (EF) magmas	Monogenetic Scoria Cones (MSC)
Range of tested parameters		
Temperature range (°C)	1331-1000	1151-1000
Temperature step (°C)	2	2
Pressure (MPa)	350-900	350-200
Dissolved H ₂ O content (wt%)	1 - 2	0.2-1.5
<i>f</i> O ₂ (log units relative to QFM)	QFM-2 - QFM+1	QFM - QFM -1
Runs	250	200
Rhyolite-MELTS best-fit		
Pressure (MPa)	510	300
H ₂ O content (wt%)	1.5	1
<i>f</i> O ₂ (log units relative to QFM)	QFM -2	QFM -1
Petrological constraints	I) Lack of Eu negative anomaly suggests absence of plagioclase crystallized from the melt; II) Aphyric III) Most undegassed olivine-hosted melt inclusions present 500 MPa and H₂O = 1.5wt%	Porphyritic (15-35 vol%) and plagioclase-dominated. Shallower conditions of crystallization are suggested from petrography.