

## DATA REPOSITORY ITEM 2002018

TABLE DR1: MAJOR, TRACE ELEMENT AND ISOTOPE DATA FOR V. VILLARRICA AND SEC BASALTS

U	0.48	0.27	0.70	0.59	0.78	0.55	0.86
	V. Villarrica	Small Eruptive Centers <sup>1</sup>					
	1971 flow *	San Jorge	Caburgua	La Barda	Huelemolle	C. Redondo	Huililco
Sample #	210181-1	140194-1	150194-1	150194-6	110194-3	140194-9	240394-6A
SiO <sub>2</sub>	52.60	50.39	50.91	50.35	50.98	51.55	51.76
TiO <sub>2</sub>	1.15	0.75	1.10	1.06	1.18	1.01	1.09
Al <sub>2</sub> O <sub>3</sub>	16.79	15.70	18.15	17.82	17.76	17.96	17.67
Fe <sub>2</sub> O <sub>3</sub>	9.76	9.46	9.30	9.59	9.42	9.37	9.12
MnO	0.16	0.16	0.15	0.16	0.16	0.15	0.15
MgO	6.05	10.40	6.45	7.62	5.74	6.49	5.98
CaO	9.62	10.00	9.18	9.60	8.95	8.83	9.10
Na <sub>2</sub> O	3.12	2.54	3.48	3.21	3.46	3.32	3.33
K <sub>2</sub> O	0.65	0.42	0.71	0.67	1.07	0.84	1.11
P <sub>2</sub> O <sub>5</sub>	0.22	0.12	0.31	0.30	0.41	0.31	0.34
Total	100.12	99.94	99.74	100.38	99.13	99.83	99.65
Ni	74	257	70	94	75	144	70
Cr	183	904	293	348	213	434	252
Sc	33.7	32.8	25.8	27.2	27.0	23.9	27.1
B	25	6.9	4.3	11.0	3.1	8.9	9.5
Be	0.64	0.39	0.75	0.77	1.06	0.93	1.05
Cs	1.60	0.66	0.54	0.52	0.95	0.71	1.28
Rb	15.7	8.6	9.8	9.6	22.3	16.1	29.0
Ba	206	139	288	273	382	327	384
Sr	433	379	837	709	621	598	576
Th	1.25	0.64	2.50	2.12	2.90	1.82	2.8
Pb	7.33	4.70	7.46	8.11	9.45	8.12	8.86
La	7.9	4.90	13.2	14.0	22.3	17.4	18.0
Sm	3.58	2.27	4.30	4.17	5.57	4.40	4.75
Yb	2.41	1.52	1.84	1.84	2.34	1.92	2.12
Zr	102	58.3	97.4	99.6	166	128	147
Nb	2.2	1.42	3.20	3.85	7.57	5.59	7.54
<sup>87</sup> Sr/ <sup>86</sup> Sr	0.70406	0.70400	0.70374	0.70373	0.70393	0.70388	0.70399
<sup>143</sup> Nd/ <sup>144</sup> Nd	0.512893	0.512909	0.512852	0.512838	0.512784	0.512835	0.512866
<sup>206</sup> Pb/ <sup>204</sup> Pb	18.58	18.57	18.59	18.53	18.55	18.55	18.58
<sup>207</sup> Pb/ <sup>204</sup> Pb	15.59	15.63	15.60	15.61	15.59	15.60	15.61
<sup>208</sup> Pb/ <sup>204</sup> Pb	38.46	38.52	38.46	38.44	38.43	38.45	38.51

Note: \*Major element and Nd, Sr and Pb -isotope data for this sample are from Hickey-Vargas et al. (1989).

Trace element data are from Sun (2001)

<sup>1</sup> Data for major elements, trace element and isotopes for all SECs are from Sun (2001). Major elements and Ni, Cr, Sc, Zr and Sr were determined by inductively coupled plasma emission spectrometry (ICP-ES) at Florida International University. Trace elements Cs, Rb, Ba, U, Th, Pb, La, Sm, Yb and Nb were determined by inductively coupled plasma mass spectrometry (ICP-MS) at the University of Kansas. Be and B abundances were measured by direct current plasma atomic emission spectrometry (DCP-AES) at the University of South Florida, following methods outlined in Ryan and Langmuir (1988) and Ryan et al. (1996), respectively. Pb, Sr and Nd -isotopes were determined by thermal ionization mass spectrometry (TIMS) at the National High Magnetic Field Laboratory at Florida State University.