

DR2003021

TABLE DR1. TRACE ELEMENT ABUNDANCES IN WHOLE ROCK SAMPLES

Volcano	Jumiltepec	Las Tetillas	Tuxtepec	Tepetlapa	Xitle
Rb	26	20	26	24	23
Sr	809	378	1153	815	519
Ba	519	214	1078	382	337*
Zr	141	134	153	237	282
Nb	5	5	2	16	23
La	24	11	48	29	27
Ce	55	27	113	63	60
Sm	5.94	3.93	13.6	7.5	6.8
Eu	1.67	1.30	3.41	2.05	2.02
Tb	0.60	0.55	1.13	1.01	0.89
Yb	1.67	1.80	2.04	2.59	2.56
Lu	0.26	0.31	0.29	0.38	0.37
Hf	3.78	3.58	5.71	5.71	4.76
Ta	0.21	0.26	0.12	1.04	1.33
Th	3.45	1.60	4.92	3.11	2.44
U	1.23	0.47	1.48	1.14	0.84

Data are in ppm. All trace elements except Rb, Ba, Zr, and Nb were measured in bulk tephra samples by instrumental neutron activation analysis (INAA) at Texas A&M University using an on-campus TRIGA reactor for irradiation, and counting facilities in the Center for Chemical Characterization and Analysis. Detailed descriptions of the analytical procedures are given by Allan (1995). One standard deviation uncertainties based on replicate analysis of standards BHVO-1 and AGV-1 are equal to the following percentages of the amount present: Sr (5.6%), La (1.9%), Ce (1.8%), Sm (2.1%), Eu (2.4%), Tb (11%), Yb (2.2%), Lu (4.2%), Hf (3.7%), Ta (7.7%), Th (6.9%), U (14%). Rb, Ba, Zr, and Nb were measured on dense lava samples by X-ray fluorescence (XRF), and the values were previously reported in Wallace and Carmichael (1999), where complete analytical details are given. One standard deviation uncertainties are Rb (3%), Ba (1.4%), Zr (0.7%), and for Nb, approximately $\pm 10\%$ for samples with >10 ppm Nb and ± 1.5 ppm for samples with <10 ppm.

* measured by INAA on bulk tephra.

