

APPENDIX 2

Representative whole-rock geochemical analyses (ICP-MS) of minor and rare earth elements from the Chah-Bazargan mafic dykes

No. Sample		Af-295	Af-298	Af-304	Af-308	Af-309	Af-311	Af-314	Af-317	Average
	Uncertainty									
Rock type	ppm	TB	TB	TB	BTA	TB	TB	TB	BTA	no. 8
Sc / 45	1	24	30	25	36	33	41	20	38	31
V / 51	8	211	235	218	221	168	196	157	212	202
Cr / 52	11	206.0	215	198	231	187	200	168	222	203
Co / 59	0.2	26.4	30.4	29.6	34.6	19.2	37.2	21.9	30.2	28.7
Ni / 60	0.1	34.0	38	29.6	40.3	21.6	25.1	30.7	39.7	32.4
Cu / 63	0.1	87.7	80.5	66.3	71.2	53.4	33.5	77.9	74.5	68.1
Zn / 66	1	142	165	154	186	135	187	212	174	169
Ga / 71	0.5	16.1	18.5	22.3	17.5	12.2	20.2	15.6	17.8	17.5
Rb / 85	0.1	63.3	72.8	85.2	80.6	90.3	77.9	68.7	58.7	74.7
Sr / 88	0.5	434.9	554.6	635.2	594.1	662.3	589.2	423.3	565.8	557.4
Y / 89	0.1	20.9	25.6	35.3	30.7	39.3	29.4	16.6	14.3	26.5
Zr / 90	0.1	117.9	113.8	135.2	126.3	130.2	148.1	100.2	108.9	122.6
Nb / 93	0.1	9.0	8.5	10.5	8.6	7.3	13.2	6.1	11.1	9.3
Mo / 98	0.1	0.3	0.4	0.5	0.3	0.2	0.6	0.7	0.4	0.4
Sn / 120	1	1	2	1	1	2	1	2	2	2
Sb / 121	0.1	0.2	0.4	0.5	0.5	0.3	0.4	0.6	0.3	0.4
Cs / 133	0.1	1.0	1.6	1.2	1.4	0.9	1.1	0.8	1.2	1.2
Ba / 138	1	374	395	468	421.3	403	365	355	335	390
La / 139	0.1	21.0	30.5	42.3	35.2	25.3	45.3	15.3	11.3	28.3
Ce / 140	0.1	41.70	47.5	45.8	40.2	35.2	61.3	30.5	25.3	40.9
Pr / 141	0.02	5.03	7.2	8.62	7.25	8.25	8.02	4.25	4.02	6.6
Nd / 146	0.3	21.2	26.3	30.5	29.3	33.2	36.2	18.9	14.5	26.3
Sm / 147	0.05	4.29	6.02	7.91	6.28	8.12	9.02	3.79	3.25	6.09
Eu / 151	0.02	1.26	1.41	2.02	1.68	2.12	2.27	1.06	0.95	1.60
Gd / 157	0.05	4.20	5.09	6.12	5.14	5.96	6.78	3.85	3.15	5.04
Tb / 159	0.01	0.64	0.75	0.98	0.92	1.06	0.86	0.51	0.41	0.77
Dy / 163	0.05	3.57	3.98	5.09	5.58	6.32	5.26	3.15	2.66	4.45
Ho / 165	0.02	0.74	0.88	1.15	1.25	1.32	1.12	0.59	0.52	0.95
Er / 166	0.03	2.12	2.55	3.22	3.68	3.97	3.11	1.75	1.53	2.74
Tm / 169	0.01	0.31	0.37	0.5	0.61	0.65	0.46	0.25	0.22	0.42
Yb / 172	0.05	1.98	2.32	3.23	3.86	4.02	2.89	1.71	1.52	2.69
Lu / 175	0.01	0.28	0.33	0.46	0.55	0.51	0.39	0.26	0.23	0.38
Hf / 178	0.1	3.2	3.1	3.6	2.8	3.3	4.1	3.0	2.8	3.2
Ta / 181	0.1	0.60	0.5	0.7	0.4	0.3	0.7	0.4	0.6	0.5
Pb / 208	0.1	3.2	3.8	4.1	3.5	4.2	4.5	2.7	2.6	3.6
Th / 232	0.2	4.5	5.6	5.1	4.3	4.8	5.3	4.1	4.0	4.7
U / 238	0.1	1.4	2.2	2.3	1.8	1.6	1.7	1.5	1.3	1.7
La _n /Yb _n		8.08	9.96	9.91	6.90	5.34	12.51	6.36	5.31	8.05
La _n /Sm _n		3.16	3.27	3.46	3.63	2.01	3.25	2.62	2.25	2.96
Gd _n /Yb _n		1.75	1.81	1.57	1.10	1.23	1.94	1.86	1.71	1.62
Sm _n /Yb _n		2.41	2.88	2.72	1.81	2.24	3.47	2.46	2.37	2.54
Eu _n *		8.35	11.05	14.04	11.38	14.14	15.85	7.50	6.30	11.08
Eu _n /Eu _n *		0.90	0.76	0.86	0.88	0.89	0.85	0.84	0.90	0.86
Rb/St		0.15	0.13	0.13	0.14	0.14	0.13	0.16	0.10	0.14
Rb/Ba		374.0	395.0	468.0	421.3	403.6	365.7	355.2	335.7	389.8
K/Ba		59.9	60.5	62.4	52.4	68.7	72.0	86.1	80.3	67.8

All samples were analysed with an ICP-MS instrument at the ALS Chemex Company of Canada