

TABLE 1 - Analytical results

	II 1	II 6	II 7	II 8	II 9	II 10	II 12	II 14	II 17	II 18	II 19	II 24	II 25	II 26	II 27	II 28	II 29	II 30	II 31	II 32	II 33	II 34	II 36	II 38	II 39	II 40	II 41	II 42	II 43	II 44	II 45	II 46	
SiO ₂	52.22	49.01	45.39	57.22	61.31	52.90	51.65	50.86	52.49	71.70	49.30	68.43	59.19	65.10	68.90	54.40	61.53	53.62	66.76	59.64	63.15	63.88	46.76	61.99	71.80	53.97	55.02	60.43	63.86	65.55	55.75	59.34	
TiO ₂	1.55	1.87	1.15	0.68	0.66	1.72	1.38	0.10	0.12	0.22	1.36	0.78	1.84	0.63	0.59	1.34	1.06	0.48	0.50	1.15	0.54	0.51	3.26	1.07	0.34	1.51	1.60	0.83	0.68	0.52	1.34	1.59	
Al ₂ O ₃	16.03	13.62	17.02	16.71	16.67	16.38	14.36	27.46	26.25	14.88	14.04	15.50	12.73	15.41	15.07	15.43	14.61	17.48	15.07	15.02	16.07	16.82	15.96	17.14	15.03	14.90	14.33	14.95	15.71	15.11	18.68	16.57	
Fe ₂ O ₃	3.80	5.29	5.08	2.07	2.43	2.66	7.74	0.49	0.62	0.42	4.04	0.32	1.20	0.56	0.32	1.39	1.37	0.16	0.39	0.69	2.23	1.08	2.41	1.98	0.22	0.89	1.01	0.98	0.05	4.21	1.69	0.47	
FeO	8.80	12.71	10.42	6.33	3.96	7.86	7.10	1.50	1.64	1.78	11.95	2.61	10.14	4.58	3.09	11.25	8.14	7.40	3.74	8.03	2.75	2.05	10.35	3.42	1.40	7.90	7.38	4.47	8.32	3.12	5.34	6.60	
MnO	0.195	0.243	0.196	0.138	0.095	0.301	0.191	0.035	0.039	0.030	0.205	0.121	0.187	0.077	0.043	0.202	0.131	0.125	0.100	0.108	0.079	0.035	0.329	0.075	0.025	0.146	0.135	0.088	0.171	0.051	0.133	0.137	
MgO	4.95	4.41	6.76	4.45	2.79	2.47	3.81	1.60	1.63	0.60	6.00	0.97	2.74	2.51	1.41	3.85	3.65	7.30	2.21	5.50	3.20	1.58	4.25	2.17	0.67	6.55	7.00	4.24	0.99	1.73	1.89	2.00	
CaO	8.55	9.50	12.06	8.10	5.91	5.42	8.60	13.25	10.86	2.52	9.75	3.30	6.09	4.80	2.90	6.55	4.10	8.85	3.85	2.93	5.08	2.00	7.73	4.00	2.65	6.80	7.15	4.30	4.81	2.68	5.50	4.46	
Na ₂ O	3.63	2.74	1.51	3.55	3.25	5.27	3.66	3.16	3.59	3.95	2.89	3.85	2.95	4.63	4.18	3.21	3.83	2.69	3.21	2.53	4.05	3.86	3.64	3.21	3.34	2.63	2.75	3.20	3.02	3.75	4.49	4.27	
K ₂ O	0.66	0.45	0.38	1.11	2.53	3.09	0.96	0.30	0.34	3.64	0.58	2.98	0.74	1.81	1.47	0.70	1.51	0.30	2.38	3.53	1.73	6.71	2.65	2.96	3.66	2.76	3.40	4.84	0.99	3.09	3.12	3.27	
H ₂ O+	0.20	0.26	0.42	0.08	0.53	1.28	1.21	0.66	1.42	0.17	0.19	0.90	2.02	0.26	1.26	1.02	0.28	0.68	1.40	0.82	1.30	1.32	1.98	1.02	0.68	1.71	0.45	1.06	0.62	0.41	2.29	0.74	
Total	100.58	100.10	100.39	100.44	100.14	99.35	100.66	99.41	99.00	99.91	100.20	99.76	99.93	100.37	99.23	99.34	100.21	99.08	99.61	99.95	100.18	99.84	99.32	99.03	99.80	99.77	100.23	99.39	99.22	100.12	100.22	99.45	
Total Fe (asFe ₂ O ₃)	13.57	19.40	16.65	9.10	6.82	11.38	15.62	2.15	2.44	2.40	17.30	3.22	12.45	5.64	3.75	13.88	10.40	8.37	4.54	9.60	5.28	3.35	13.90	5.78	1.77	9.66	9.20	5.94	9.28	7.67	7.62	7.80	
Li	8.1	7.1	8.6	8.5	4.8	8.9	9.6	8.0	9.5	14.1	13.8	12.9	14.8	8.4	5.6	9.3	12.5	9.8	11.6	16.8	11.1	7.5	8.2	7.3	5.9	13.9	14.5	5.3	13.9	4.8	18.3	12.3	
Rb	3.6	9.0	5.0	17.0	35.0	57.0	13.0	5.6	5.6	82.0	7.6	58.0	10.0	25.0	13.0	6.0	9.5	2.3	44.0	111.0	52.0	212.0	37.0	34.0	79.0	92.0	91.0	117.0	15.0	43.0	82.0	57.0	
Sr	500	380	385	500	480	930	200	178	215	250	170	360	180	480	780	230	395	265	570	310	1190	1520	1800	900	605	890	420	870	260	500	1160	940	
Ba	435	830	105	530	900	790	200	120	200	605	145	1250	325	500	1320	175	980	80	1490	1740	1080	3900	5400	2620	1740	2600	3130	2700	370	1530	1560	2400	
Cr	97	17	58	68	52	10	74	40	25	19	96	14	59	76	22	31	65	205	84	130	62	54	11	43	15	220	220	160	19	32	18	14	
Cu	70	65	110	44	30	13	53	19	12	30	95	27	120	37	34	25	112	96	29	38	17	40	15	16	19	18	36	20	28	37	12	10	
Zn	147	154	112	91	85	78	130	80	26	41	136	83	217	79	49	114	139	121	48	151	64	44	142	100	47	136	102	98	91	97	66	90	
Y	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	31	nd	125	21	—	52	25	—	10	nd	17	—	45	18	—	22	19	17	98	13	36	36	
Zr	165	116	68	130	185	132	138	10	18	85	98	360	325	173	480	128	210	50	142	400	228	405	188	309	166	142	284	244	695	202	218	303	
Nb	nd	nd	nd	nd	nd	nd	nd	nd	nd	—	nd	23	13	—	—	—	—	—	—	—	27	—	94	7	—	15	—	—	—	—	66	68	
K/Rb	1528	411	640	541	600	451	608	446	500	368	631	426	610	600	939	967	1316	1087	450	264	277	263	595	723	385	249	310	343	547	595	316	475	
K/Ba	12.64	4.46	30.47	17.36	23.33	32.53	39.50	20.83	14.00	49.92	33.10	19.76	18.76	30.00	9.24	33																	