

APPENDIX 1

Results of chemical analyses of unaltered igneous rocks (16 analyses from 51 samples) for major oxides [wt.%) and trace elements [ppm] in the study area

Sample No.	MSI1	MSI2	MSI3	MSI4	MSI5	MSI22	MSI28	MSI29	MSI39	MSI43	MSI44	MSI46	MSI48	MSI52	MSI55	MSI60
SiO ₂ [wt.%)	52.9	56.5	59.7	68.34	59.3	68.94	64.2	62.6	66.07	72.18	70.35	67.12	73.61	62.17	59.98	67.22
Al ₂ O ₃	21.8	19	13.5	16.99	14.2	13.96	11.13	17.89	15.91	18.65	12.83	20.22	15.72	18.16	19.08	14.66
T FeO	5.51	4.91	6.53	7.68	6.52	7.66	9.98	6.96	9.7	2.36	5.6	4.12	5.93	6.65	9.1	4.36
CaO	8.17	7.81	5.84	0.14	5.84	0.17	5.25	1.65	1.51	0.19	2.06	4.52	0.37	3.01	2.28	5.18
MgO	4.38	4.95	5.62	0.37	5.31	1.74	1.11	2.11	1.2	0.3	1.82	0.16	0.17	3.42	4.08	2.07
Na ₂ O	2.52	3.1	2.55	0.51	2.55	2.67	4.45	3.25	0.61	0.9	1.55	0.06	0.19	3.99	2.87	0.63
K ₂ O	2.88	2.48	2.89	2.43	2.99	0.9	0.17	3.4	1.67	1.41	2.01	0.11	0.89	0.79	0.56	2.23
TiO ₂	0.63	0.6	0.64	0.46	0.62	0.83	0.33	0.72	0.77	0.86	0.62	0.52	0.27	0.53	0.95	0.47
MnO	0.13	0.14	0.09	0.002	0.09	0.051	0.329	0.107	0.05	0.003	0.084	0.049	0.004	0.198	0.088	0.03
P ₂ O ₅	0.21	0.21	0.13	0.28	0.14	0.23	0.13	0.2	0.2	0.2	0.14	0.18	0.34	0.2	0.23	0.12
Cr ₂ O ₃	n.d	n.d	0.04	0.004	0.04	0.004	0.003	0.002	0.002	0.001	0.002	0.002	0.004	0.002	0.003	0.003
LOI	0.81	0.28	2.21	2.72	1.38	2.7	2.87	0.85	2.2	2.61	2.83	2.89	2.35	0.74	0.94	2.21
Total	99.9	100	99.8	99.93	99	99.85	99.95	99.74	99.89	99.66	99.9	99.95	99.85	99.86	100.2	99.18
Nb [ppm]	n.d	n.d	12.5	5.1	13.6	8.2	2.3	5.5	7.1	6.5	6.1	9.6	4.6	6.7	9.9	5.8
Rb	n.d	n.d	63.5	55.5	66.2	31.5	4.7	101	37.3	29.8	113	1.7	18.6	20.1	11	57
Sr	n.d	n.d	261	676	255	203	110	239	186	338	143	950	1050	349	330	183
Y	n.d	n.d	25.4	12.1	32.1	6.98	26.7	12.1	4.71	6.66	16	4.1	3.37	20.4	7.48	7.66