

Table 5S - Olivine inclusions averaged major element compositions

Sample	16OM07B	16OM09A	16OM10	16OM16A	16OM18	16OM25	16OM38B	16OM41B
Lithology	pure dunite	pure dunite	cpx-dunite	opx/pl/cpx dunite	amph-bearing dunite (\pm pl/cpx)	opx/pl/cpx dunite	chromitite	pure dunite with chromite schlieren
Longitude	57.934897	57.935664	57.935957	57.937188	57.937525	57.938641	57.931841	57.933308
Latitude	23.128860	23.129051	23.128747	23.129348	23.129352	23.128824	23.129961	23.129253
Elevation (m)	814	837	849	918	940	1016	748	772
n analyses	1	1	4	1	1	1	5	2
SiO ₂	40.56	41.90	41.88	41.55	40.64	40.74	41.87	41.81
TiO ₂	0.00	0.01	0.01	0.00	0.00	0.02	0.00	0.00
Al ₂ O ₃	0.00	0.02	0.07	0.01	0.05	0.03	0.03	0.03
Cr ₂ O ₃	0.43	0.52	0.27	0.56	0.46	0.01	0.25	0.40
FeO (tot)	9.21	8.17	8.45	7.00	8.66	11.04	5.24	5.22
MgO	49.32	50.57	48.77	51.59	49.27	48.51	52.69	52.85
MnO	0.16	0.16	0.13	0.11	0.13	0.19	0.08	0.08
NiO	0.14	0.16	0.07	0.00	0.02	0.04	0.09	0.10
CaO	0.00	0.02	0.02	0.00	0.00	0.01	0.00	0.01
Na ₂ O	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01
K ₂ O	0.27	0.32	0.28	0.35	0.34	0.25	0.53	0.44
Total	100.09	101.85	99.96	101.17	99.57	100.85	100.78	100.95
Fo	90.52	91.69	91.14	92.93	91.03	88.68	94.72	94.75

$$Fo = 100 \times \text{Mg}/(\text{Mg} + \text{Fe}_{\text{total}})$$