

Details of Mineragraphic Study Results

Sl. No.	Sample Number & Location	% of ore minerals in polished section	ORE MINERAL COMPOSITION				Description
			Major >5%	Minor <5% – >1%	Accessory <1% – 0.1%	Traces <0.1%	
1.	MUM01	1	Sphene (95)	Magnetite/ Ilmenite (2) Pyrrhotite (2) Pyrite (1)	....	Chalcopyrite	Sphene occurs as very fine to fine wedges, anhedral patches and fillings. Magnetite/ ilmenite are seen present as very fine blades and fillings, especially in association with mica minerals. Pyrrhotite and pyrite occur as very fine specks, often seen segregated in pockets. Chalcopyrite is noted as very fine specks in association with pyrrhotite.
2.	MUM02	2	Sphene (93) Digenite- Chalcocite (5)	Magnetite/ Ilmenite (1) Pyrite (1)	Chalcopyrite Hematite	....	Sphene occurs as fine to medium wedges, anhedral patches and fillings. Digenite-chalcocite is present as intermixed fine patches, often showing very fine relicts of pyrite and chalcopyrite within it. Pyrite and chalcopyrite are also seen present as very fine grains/ specks. Magnetite/ ilmenite occur as very fine bladed grains along cleavage traces of mica minerals.

							Hematite is noted as very fine specks intruding as fracture fillings.
3.	MUM03	2	Magnetite (84) Sphene (13)	Hematite (3)	....	Pyrrhotite Chalcopyrite	Magnetite occurs as fine to moderately coarse subhedral to anhedral grains showing martitisation in areas. Hematite is also noted as very fine specks and fracture fillings. Sphene occurs as fine wedges and anhedral patches. Pyrrhotite and chalcopyrite are noted as very fine specks in traces.
4.	MUM04	2	Magnetite (82) Sphene (15)	Ilmenite (2) Hematite (1)	....	Pyrite	Magnetite occurs as fine to medium subhedral to anhedral grains in dissemination. Sphene occurs as fine to very fine wedges, anhedral grains and as segregated patches in pockets. Ilmenite is seen present as very fine lamellar exsolutions within magnetite in areas. Hematite is seen developing after martitisation of magnetite, at places. Pyrite is noted as very fine specks in traces.
5.	MUM05	1	Magnetite (92) Ilmenite (6)	Chalcopyrite (2)	....	Pyrite Hematite	Magnetite occurs as fine to medium subhedral to anhedral grains, patches and patchy fillings. Ilmenite occurs as very fine bladed grains, mostly along the cleavage traces of mica minerals. Chalcopyrite is present as very fine

							anhedral grains and as fracture fillings. Pyrite and hematite are noted as very fine specks in traces.
6.	MUM06	2	Sphene (100)	....		Hematite	Sphene occurs as fine to very fine disseminated wedges, anhedral patches and as very fine hairline fillings. Hematite is noted as very fine specks in traces.
7.	MUM07	4	Pyrite (48) Sphene (45)	Magnetite/ Ilmenite (4) Chalcopyrite (2) Digenite- Chalcocite (1)	....	....	Pyrite occurs as fine to medium subhedral to anhedral grains and patches. Sphene occurs as fine wedges, anhedral patches and as streaks/ streaky fillings. Magnetite/ ilmenite are present as fine subhedral to anhedral grains and as relicts within sphene. Chalcopyrite is noted as very fine grains/ specks, often in association with pyrite. Digenite-chalcocite occurs as intermixed patches and fillings replacing pyrite and chalcopyrite from periphery.
8.	MUM08	1	Magnetite (98)	Hematite (2)	....	Pyrite	Magnetite occurs as fine subhedral grains and as medium subrounded patches showing minor martitisation. Hematite is also seen present as very fine specks as fracture fillings. Pyrite is noted as very fine specks in traces.
9.	MUM09	2	Sphene (94)	Pyrite (3) Digenite-	....	Hematite	Sphene occurs as fine to medium wedges

				Chalcocite (3)			and anhedral patches, often seen segregated in pockets. Pyrite is present as fine anhedral grains being replaced by digenite-chalcocite patches from periphery. Hematite is noted as very fine specks as fracture fillings.
10.	MUM10	5	Magnetite (80) Hematite (16)	Pyrite (4)	Chalcopyrite	....	Magnetite occurs as fine to medium subhedral to anhedral patchy and bladed grains showing martitisation. Hematite is seen developing after martitisation of magnetite. Pyrite occurs as fine subhedral to anhedral grains and as very fine fillings. Chalcopyrite is noted as very fine specks, often in association with pyrite. The specimen is showing feeble magnetism.