

Details of Mineragraphic studies of borehole core samples of Murara-Devendrapura Block (G-3), District- Niwari, Madhya Pradesh

Sl. No.	Sample No. & Location	% of ore minerals in polished section	ORE MINERAL COMPOSITION				Description
			Major >5%	Minor <5% - >1%	Accessory <1% - >0.1%	Traces <0.1%	
1.	MDM-01 (BH. MMDB-06 at 63.65m depth)	Accessories	Sphene Magnetite/ Ilmenite Hematite Chalcopyrite Pyrite	....	....	....	Sphene is present as fine to very fine wedges, granular aggregates in pockets, anhedral patches and as fillings. Magnetite/ ilmenite occur as fine subhedral to anhedral grains and as very fine bladed fillings. Hematite, chalcopyrite and pyrite are noted as very fine specks in traces.
2.	MDM-02 (BH. MMDB-08 at 88.05m depth)	1	Chalcopyrite (72) Covellite (18) Digenite (6)	Ilmenite (2) Chalcocite (2)	Tennantite Anatase Pyrite	Hematite	Chalcopyrite occurs as very fine to fine disseminated grains, anhedral patches and as fine fillings. Covellite, digenite and chalcocite are seen present as intermixed patches, replacing chalcopyrite from periphery. Ilmenite occurs as fine fillings along fractures. Tennantite occurs as very fine inclusions within chalcopyrite. Anatase is noted as very fine secondary fillings. Pyrite and hematite are seen present as very fine specks.
3.	MDM-03 (BH. MMDB-09 at 21.10m depth)	4	Pyrite (54) Sphene (37) Chalcopyrite (6)	Ilmenite (3)	....	....	Pyrite occurs as very fine disseminated grains, anhedral patches and patchy fillings. Sphene occurs as very fine to fine wedges and anhedral patches. Chalcopyrite is seen present as very fine specks, often segregated in pockets. Ilmenite is noted as very fine relicts within sphene.
4.	MDM-04 (BH. MMDB-09 at 24.60m depth)	3	Sphene (53) Pyrite (42)	Chalcopyrite (3) Ilmenite/ Magnetite (2)	Scheelite		Sphene occurs as very fine disseminated wedges and anhedral patches. Pyrite occurs as fine to very fine subhedral to anhedral grains in dissemination. Chalcopyrite is noted as very fine specks, in association with pyrite in areas. Ilmenite/ magnetite occur as very fine bladed fillings along cleavage traces of mica minerals and as subhedral to anhedral grains. Scheelite is seen present as fine to very fine subhedral grains and as anhedral patches.

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5.	MDM-05 (BH. MMDB-09 at 26.10m depth)	4	Pyrite (58) Sphene (36) Chalcopyrite (5)	Ilmenite (1)			Pyrite occurs as fine to medium subhedral to anhedral grains and patches in dissemination. Sphene occurs as very fine disseminated wedges, patches and as fillings. Chalcopyrite is seen present as very fine grains in association with pyrite and often seen being included within it. Ilmenite is noted as very fine bladed fillings in areas.
6.	MDM-06 (BH. MMDB-09 at 41.40m depth)	1	Sphene (80) Pyrite (16)	Magnetite/ Ilmenite (4)	Hematite Chalcopyrite Pyrrhotite	Pentlandite Electrum ?	Sphene occurs as very fine to fine disseminated wedges and anhedral patches. Pyrite occurs as fine to very fine subhedral to anhedral grains. Magnetite/ ilmenite are present as fine fillings and as very fine blades. Hematite occurs as very fine specks in accessories. Chalcopyrite is noted as very fine specks in association with pyrite. Pyrrhotite occurs as very fine grains associating very fine pentlandite patches within it. Probable electrum is observed as very fine isolated specks in traces.
7.	MDM-07 (BH. MMDB-02 at 63.50m depth)	2	Magnetite/ Ilmenite (100)	....	Hematite Pyrite	....	Magnetite/ ilmenite are present as very fine bladed and subhedral to anhedral grains in dissemination, often seen segregated in pockets. Hematite and pyrite are seen present as very fine specks in accessories.
8.	MDM-08 (BH. MMDB-02 at 99.20m depth)	Accessories	Hematite Anatase Scheelite Pyrite Chalcopyrite	....	....	....	Hematite and anatase are present as very fine specks, often segregating together in pockets and also occurring as fracture fillings. Scheelite occurs as very fine grains and as xenomorphic patches, often seen intruding along fractures as fillings. Pyrite and chalcopyrite are noted as very fine specks in traces.