

**Details of Mineragraphic Study Results of Jamtola-Khandapar Block, District: Balaghat, 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.	MJK/M/01 E-2427640, N-448904	Traces	Hematite Anatase Electrum?	....	....	....	Hematite and anatase are present as very fine specks along fractures as fillings. Probable electrum is noted as very fine isolated specks in traces.
2.	MJK/M/02 E-2427421, N-448743	2	Hematite (95) Ilmenite (5)	....	Pyrrhotite Limonite	....	Hematite occurs as very fine bladed dissemination, segregated patches and as very fine fillings. Ilmenite is present as very fine aggregates in patchy pockets, mostly in association with hematite. Pyrrhotite is noted as very fine granular segregation in pockets. Limonite occurs as reddish fillings and stains in areas.
3.	MJK/M/03 E-2430608, N-450514	2	Goethite (93)	Limonite (3) Hematite (2) Anatase (2)	....	....	Goethite is present as patchy fillings. Limonite is seen present as reddish patches and fillings in association with goethite fillings and also occurs as reddish amorphous aggregates along pores and cavities. Hematite and anatase are noted as very fine disseminated specks and blades.
4.	MJK/M/04 E-2427972, N-448980	4	Goethite (98)	Limonite (2)	Hematite Rutile/ Anatase Chalcopyrite	....	Goethite is present as patchy fillings associating reddish amorphous aggregates of limonite and its filling. Hematite and rutile/ anatase occur as very fine specks and blades in accessories. Chalcopyrite is noted as very fine relicts within goethite fillings.



ANNEXURE XI-A/2

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%	
5.	JHBHM-01 MJGL-01, 64.00 to 64.10m	3	Magnetite/ Ilmenite (66) Pyrite (24) Hematite (6)	Chalcopyrite (4)	....	....	Magnetite/ ilmenite occur as fine subhedral grains and as very fine blades, often seen segregated in pockets. Pyrite occurs as fine subhedral grains. Hematite is developing after martitisation of magnetite. Chalcopyrite is noted as very fine specks, often in association with pyrite.
6.	JHBHM-02 MJGL-02, 33.60m to 33.60m	2	Sphene (70) Magnetite (20) Pyrite (6)	Hematite (2) Ilmenite (1) Chalcopyrite (1)	....	....	Sphene occurs as very fine to fine disseminated wedges. Magnetite is present as fine subhedral to anhedral grains. Pyrite occurs as fine subhedral grains. Hematite is noted as very fine specks, often occurring as fracture fillings. Ilmenite occurs as very fine relicts within sphene. Chalcopyrite is found present as very fine specks.
7.	JHBHM-03 MJGL-03, 82.00m to 82.13m	3	Pyrite (85) Ilmenite/ Magnetite (15)	....	Chalcopyrite	....	Pyrite occurs as very fine to fine disseminated grains, patches and fine fillings/ stringers. Ilmenite/ magnetite are present as very fine to fine subhedral to anhedral, skeletal and bladed grains, often seen segregated in pockets. Chalcopyrite is noted as very fine specks in accessories.
8.	JHBHM-04 MJGL-04, 64.00m to	4	Magnetite/ Ilmenite (80) Pyrite (18)	Chalcopyrite (2)	....	....	Magnetite/ ilmenite occur as very fine disseminated grains, often seen segregated in zones and also occur as fine subhedral to anhedral and skeletal grains. Pyrite occurs as fine to medium subhedral



ANNEXURE XI-A/3

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%	
	64.10m						grains and anhedral patches. Chalcopyrite is noted as very fine specks, often showing association with pyrite.
9.	JHBHM-05 MJGR-03, 44.00m to 44.10m	4	Pyrite (100)	Magnetite Hematite	....	Chalcopyrite	Pyrite occurs as fine to very fine subhedral grains in dissemination. Magnetite and hematite are present as very fine specks in accessories. Chalcopyrite is noted as very fine specks in traces.
10.	JHBHM-06 MJGR-04, 18.80m to 18.90m	1	Magnetite/ Ilmenite (100)	....	Goethite Limonite	....	Magnetite/ ilmenite are present as fine subhedral to anhedral grains and as very fine bladed segregations/ fillings, especially within mica minerals. Goethite and limonite are noted as very fine fillings in accessories.