

## KATORI JHIRIYA BLOCK MINERAGRAPHIC STUDY RESULTS

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.	MP-KJ/M/1 Bedrock sample near Chorpinkepar Village	9	Psilomelane (60) Goethite (26) Jacobsite/ Magnetite (11)	Limonite (3)	Pyrrhotite Chalcopyrite	....	Psilomelane and goethite together occur as intermixed and as well as separated fine to medium anhedral patches and very fine to fine fillings. Jacobsite/ magnetite are seen present as fine subhedral to anhedral grains being cut across by psilomelane-goethite fillings. Limonite is present as reddish fillings and stains in areas. Pyrrhotite and chalcopyrite are noted as very fine specks in accessories.
2.	MP-KJ/M/2 Bedrock sample near Chorpinkepar Village	12	Psilomelane (72) Jacobsite/ Magnetite (18) Goethite (8)	Pyrrhotite (2)	Pyrolusite Chalcopyrite	....	Psilomelane is present as patches and very fine to fine dendritic fillings. Jacobsite/ magnetite are noted as fine subhedral to anhedral grains being replaced by psilomelane in areas. Goethite fillings are seen associated with psilomelane fillings. Pyrrhotite occurs as very fine disseminated specks, often segregating in pockets. Pyrolusite is noted as very fine aggregates in patchy pockets. Chalcopyrite occurs as very fine specks in association with pyrrhotite.
3.	MP-KJ/M/3 Bedrock sample near Shankar Pipariya Village	5	Psilomelane-Goethite (90) Jacobsite/ Magnetite (8)	Pyrrhotite (2)	Chalcopyrite	....	Psilomelane-goethite is present intermixed very fine to fine dendritic fillings. Jacobsite/ magnetite are present as fine subhedral to anhedral grains. Pyrrhotite and chalcopyrite are seen present as very fine specks.
4.	MKJM-01 (MKJ-01 Depth 26.60-26.70m )	18	Psilomelane (65) Jacobsite/ Magnetite (15) Goethite (11) Pyrrhotite (8)	Chalcopyrite (1)	Digenite- Chalcocite Covellite Limonite	....	Psilomelane and goethite are present as patches and patchy fillings, often being intermixed with each other. Jacobsite/ magnetite are present as medium to moderately coarse anhedral patches being cut across by psilomelane-goethite fillings. Pyrrhotite occurs as fine

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							disseminated grains and anhedral patches showing bird's eye texture in areas. Chalcopyrite is seen present as very fine to fine grains in association with pyrrhotite and also seen segregated in pockets. Digenite-chalcocite and covellite are present and patches, seen replacing chalcopyrite. Limonite is noted as reddish amorphous aggregates along pores and cavities.
5.	MKJM-02 (MKJ-02 Depth 29.90-27.00m)	3	Ilmenite/ Magnetite (96)	Psilomelane-Goethite (4)	....	....	Ilmenite/ magnetite occur as very fine to fine subhedral to anhedral grains and blades aligned along the foliation and also seen being included within garnet. Psilomelane-goethite together occurs as intermixed patchy fillings.
6.	MKJM-03 (MKJ-03 Depth 13.70-13.80m)	3	Ilmenite/ Magnetite (97)	Psilomelane-Goethite (3)	Pyrrhotite	....	Ilmenite/ magnetite occur as very fine bladed dissemination showing parallel alignment along the foliation. Psilomelane-goethite is present as fine fillings intruding along the foliation. Pyrrhotite is noted as very fine specks in accessories
7.	MKJM-04 (MKJ-04 Depth 42.30-42.40m)	2	Psilomelane-Goethite (64) Ilmenite/ Magnetite (36)	....	Pyrrhotite	....	Psilomelane-goethite together occurs as intermixed patchy fillings showing colloform texture. Magnetite/ ilmenite are present as very fine disseminated blades. Pyrrhotite is noted as very fine specks in accessories.
8.	MKJM-05 (MKJ-05 Depth 43.25-43.35m)	2	Ilmenite/ Magnetite (88) Psilomelane-Goethite (12)	....	Pyrrhotite	....	Ilmenite/ magnetite occur as very fine to fine subhedral to anhedral and bladed disseminated grains showing crude alignment. Psilomelane-goethite together occurs as intermixed very fine to fine fillings intruding along the foliation. Pyrrhotite is noted as very fine specks in accessories
9.	MKJM-06 (MKJ-06 Depth 36.56-	7	Psilomelane (74) Goethite (24)	Jacobsite/ Magnetite (2)	Pyrrhotite	....	Psilomelane occurs as very fine to fine dendritic fillings and anhedral patches. Goethite occurs as fillings and patches in association with and often being intermixed with psilomelane. Jacobsite/ magnetite are present as

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	36.66m)						fine anhedral grains. Pyrrhotite is noted as very fine specks in accessories.
10.	MKJM-07 (MKJ-07 Depth 23.10-23.20m)	2	Ilmenite/ Magnetite (97)	Psilomelane-Goethite (3)	Pyrrhotite Chalcopyrite	....	Ilmenite/ magnetite occur as very fine to fine blades showing alignment along the foliation. It also seen present as subhedral to anhedral grains and patches. Psilomelane-goethite together occurs as intermixed very fine fillings. Pyrrhotite and chalcopyrite are noted as very fine specks in accessories.