



Statement showing Mineragraphic Study Results of boreholes drilled by MECL in Salaiya Phatak Block (G-3) for Copper, Lead, Zinc and associated metals, Dist.- Katni, 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.	MBSM-1	5	Ilmenite (60) Pyrite (38)	Chalcopyrite (2)	....	....	Ilmenite occurs as very fine skeletal grains disseminated throughout the specimen. Pyrite occurs as fine subhedral to anhedral grains in dissemination. Chalcopyrite is noted as very fine specks in accessories.
2.	MBSM-2	Accessories	Goethite Pyrite Chalcopyrite Chalcocite	....	....	....	Goethite occurs as patchy fillings. Pyrite, chalcopyrite and chalcocite are noted as very fine specks, where chalcocite is seen replacing chalcopyrite.
3.	MBSM-3	1	Goethite (90) Pyrite (6)	Ilmenite (4)	Chalcopyrite Digenite- Chalcocite Limonite	....	Goethite occurs as very fine hairline fillings, associating reddish limonitic patches, fillings and stains. Pyrite occurs as very fine to fine anhedral grains. Ilmenite is noted as very fine anhedral and skeletal grains. Chalcopyrite is present as very fine specks, often being replaced by thin digenite-chalcocite rim.
4.	MBSM-4	8	Pyrite (65) Tetrahedrite (20) Chalcopyrite (15)	....	Digenite- Chalcocite Covellite	....	Pyrite occurs as thin to moderately thick patchy veins/veinlets and as fine stringers. Tetrahedrite and chalcopyrite together occur as veinlets, patches and fillings often being intermixed with each other and cutting across pyrite veinlets. It also occurs as very fine disseminations. Digenite-chalcocite patches are seen associated with chalcopyrite at places. Covellite is noted as very thin rim around chalcopyrite in areas.
5.	MBSM-5	6	Goethite (78) Pyrite (8) Chalcopyrite (7)	Digenite (3) Chalcocite (2) Limonite (2)	Covellite	....	Goethite occurs as patches and patchy fillings showing colloform texture. Pyrite occurs as fine to very fine relicts within goethite patches. Chalcopyrite is present as very fine specks, mostly seen segregated in pockets. Digenite, chalcocite and covellite are seen present as patches and thin fillings, mostly replacing chalcopyrite from periphery. Limonite is noted as reddish amorphous aggregates dispersed throughout the specimen.



ANNEXURE-VI/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%	
6.	MBSM-6	Accessories	Pyrite Chalcopyrite Hematite/ Anatase	....	....	....	Pyrite occurs as very fine to fine subhedral to anhedral grains. Chalcopyrite is present as very fine specks in association with pyrite. Hematite/ anatase are noted as very fine specks along fractures as fillings.
7.	MBSM-7	Accessories	Pyrite Chalcopyrite Magnetite/ Ilmenite	....	....	....	Pyrite occurs as fine to very fine subhedral to anhedral grains and as very fine specks. Chalcopyrite and magnetite/ ilmenite are noted as very fine specks in traces.
8.	MBSM-8	4	Chalcopyrite (40) Sphalerite (30) Pyrite (28)	Silver (2)	Goethite Covellite Limonite	....	Chalcopyrite occurs as fine to very fine disseminations, patches and veinlets. Sphalerite is present as veinlets and patches showing very fine inclusions of chalcopyrite. Pyrite occurs as fine to medium subhedral to euhedral grains and patches being cut across by chalcopyrite veinlets. Silver is noted as very fine specks/ blades, often seen segregated in pockets. Goethite occurs as very fine filings associating reddish ferruginous patches, at places. Covellite is noted as very fine bluish rim around chalcopyrite in areas.
9.	MBSM-9	8	Sphene (43) Pyrite (35) Ilmenite (15) Magnetite (7)	....	Hematite	....	Sphene occurs as fine pseudomorphic patches throughout the specimen. Pyrite occurs as coarse patches and fine streaks/ veinlets. Ilmenite is present as very fine relicts within sphene. Magnetite occurs as fine subhedral grains showing martitisation in areas. Hematite is seen developing after martitisation of magnetite.
10.	MBSM-10	1	Chalcopyrite (75) Magnetite/ Ilmenite (23)	Rutile/ Anatase (2)	Pyrite Tetrahedrite	....	Chalcopyrite occurs as very fine disseminated grains often segregated in pockets and also occurs as fine patches. Magnetite/ ilmenite are present as very fine specks, blades and anhedral grains. Rutile/ anatase are seen present as very fine specks/ blades. Pyrite and tetrahedrite are noted as very fine specks in accessories.