



ANNEXURE-V/1

**Petrographic study results by MECL, Hiwardhara-Ganeshpura Block, District: Yavatmal, Maharashtra**

Sl. No.	Sample Number & Location	Texture	Mineral Composition			Description
			Major >5%	Minor <5%->1%	Accessory <1%	
1	HG/PET/01	It is a dark grey coloured thinly laminated rock showing granular texture. It reacts slowly with cold and dilute HCl.	Dolomite	Opakes/ Ferruginous matter Illite/ Sericite Calcite Quartz	Gypsum	Dolomite occurs as fine subhedral rhombic and anhedral grains showing granular texture and grain size coarsening in areas. Stylolitic cracks are common in the specimen and are mostly filled with opakes/ ferruginous matter. Opakes/ ferruginous matter are also present as fillings along grains contacts, very fine specks, patches and as stains over dolomite, at places. Illite/ sericite and quartz, together occur as very fine shaly aggregates in lenses and also seen intruded as fillings. Thin calcite fillings have seen intruded in areas comprising fine anhedral grains. Gypsum is noted as very fine flaky grains in accessories. The specimen is a <b><u>dolostone</u></b> .
2	HG/PET/02	It is a dark grey coloured medium to fine grained rock showing hypidiomorphic granular texture, pores and cavities.	Plagioclase Augite Volcanic glass Opakes	Carbonates	Chalcedony	Plagioclase occurs as medium to fine subhedral prismatic laths and augite occurs as medium to fine subhedral to anhedral grains, together showing subophitic and intergranular texture. Medium to moderately coarse brownish volcanic glass are seen present in the specimen. Opakes occur as fine to medium subhedral to anhedral patchy disseminated grains. Pores and cavities are noted, mostly filled by carbonate and chalcedony patches. The specimen is a <b><u>dolerite</u></b> .
3	HG/PET/03	It is a light grey coloured fine to medium grained rock	Dolomite	Gypsum	Opakes	The specimen is made up of fine to medium subhedral rhombic and anhedral grains showing compact contacts and leaving pores and cavities in-between.



# ANNEXURE-V/2

Sl. No.	Sample Number & Location	Texture	Mineral Composition			Description
			Major >5%	Minor <5%->1%	Accessory <1%	
		showing granular texture. It reacts slowly with cold and dilute HCl.				Gypsum is present as fine to medium subhedral prismatic and patchy grains, replacing dolomite. Opaques are noted as very fine specks and fillings in accessories. The specimen is a <b><u>dolostone</u></b> .
4	HG/PET/04	It is a light grey coloured fine grained rock showing granular texture. It reacts slowly with cold and dilute HCl.	Dolomite	Ferruginous matter Gypsum Opaques	Quartz	The specimen is composed of fine to very fine subhedral rhombic and granular aggregates of dolomite showing grains size coarsening in areas. Ferruginous matter is present as very fine reddish fillings and patches. Gypsum is noted as very fine granular aggregates in patchy pockets. Opaques occur as very fine specks, often segregated in pockets and leaching ferruginous patches. Quartz is seen present as very fine to fine grains in accessories. The specimen is a <b><u>dolostone</u></b> .
5	HG/PET/05	It is a dark grey coloured thinly laminated rock showing granular texture. It reacts slowly with cold and dilute HCl.	Dolomite	Ferruginous matter Calcite Opaques	Gypsum Quartz	The specimen is made up of fine to very fine subhedral, rhombic and anhedral aggregates of dolomite. Stylolitic cracks are noted in areas. Ferruginous matter is present as very thin hairline fillings and as patches along laminations/ in zones. Calcite fillings have seen intruded, mostly across the laminations. Opaques occur as fine to very fine grains, patches and as specks. Gypsum and quartz are noted as very fine grains in accessories. The specimen is a <b><u>dolostone</u></b> .