**PETROGRAPHIC STUDIES CARRIED OUT ON SAMPLES COLLECTED FROM CORE IN**

**AKAPUR BLOCK, YAVATMAL DISTRICT, MAHARASHTRA**

| **Sl. No.** | **Sample**  **Number & Location** | **Texture** | **Mineral Composition** | | | **Description** |
| --- | --- | --- | --- | --- | --- | --- |
| **Major**  **>5%** | **Minor**  **<5%->1%** | **Accessory**  **<1%** |
| 1 | MK-PET-01 | It is a dark grey coloured very fine grained massive rock showing slow reaction with cold & dilute HCl. | Dolomite | Quartz | Ferruginous matter  Opaques | The specimen is composed of very fine granular aggregates of dolomite. Quartz occurs as very fine disseminated grains. Stylolitic cracks are noted and often filled up by ferruginous/ opaque fillings. Ferruginous matter also occurs as patches and fillings in zones. Opaques are also seen present as very fine disseminated specks.  The specimen is a **dolostone.** |
| 2 | MK-PET-02 | It is a light grey coloured fine grained rock showing granular texture and cavity fillings. It reacts very slowly with cold & dilute HCl. | Dolomite  Chert | Calcite  Ferruginous matter  Quartz | Opaques | Dolomite occurs as fine subhedral rhombic aggregates, showing grain size coarsening in areas. Chert is present as patchy fillings along pores and cavities. Calcite has intruded as thin to moderately thick criss-cross veins/ veinlets. Ferruginous matter occurs as reddish patches and fillings, often seen intruding along possible stylolitic cracks. Quartz and opaques are noted as very fine disseminated grains.  The specimen is a **dolostone with cherty fillings.** |
| 3 | MK-PET-03 | It is a grey coloured fine grained rock showing granular texture. It reacts very slowly with cold & dilute HCl. | Dolomite | Calcite | Ferruginous matter  Opaques  Gypsum  Quartz | The specimen is made up of fine to medium subhedral rhombic aggregates of dolomite showing sugary texture. Thin to moderately thick calcite veins have seen intruded Sparry patches are also seen present in areas. Reddish ferruginous fillings and patches are noted in the specimen. Opaques occur as very fine specks. Gypsum occurs as very fine prismatic grains replacing dolomite. Quartz is noted as very fine grains in accessories.  The specimen is a **dolostone.** |
| 4 | MK-PET-04 | It is a dark grey coloured fine grained rock showing granular texture. It is showing very slow reaction with cold & dilute HCl. | Dolomite | Calcite  Quartz  Opaques | Ferruginous mater | It is composed of fine subhedral rhombic aggregates of dolomite, showing grain size coarsening in areas. Calcite is found present as sparry patches and as very thin criss-cross veins/ veinlets. Quartz occurs as very fine to fine disseminated grains. Opaques are present as patches and patchy fillings associating reddish ferruginous patches and stains. It also occurs as very fine specks.  The specimen is a **dolostone.** |
| 5 | MK-PET-05 | It is a light grey coloured very fine grained thinly laminated rock showing slow reaction with cold & dilute HCl. | Dolomite | Opaques | Quartz  Ferruginous matter  Sericite | The specimen is made up of very fine granular aggregates od dolomite. Opaques and quartz occur as very fine disseminated grains/ specks. Reddish ferruginous patches and stains are seen present, often along the laminations. Sericite is noted as very fine flakes in accessories.  The specimen is a **dolostone.** |