**JAHARITOLA AND MUNDATOLA BLOCK**

**PETROGRAPHIC STUDY RESULTS**

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| **Sl. No.** | **Sample**  **Number** | **Texture** | **Mineral Composition** | | | **Description** |
| **Major**  **>5%** | **Minor**  **<5%->1%** | **Accessory**  **<1%** |
| 1 | MMLP01 | It is a very fine grained light grey coloured massive rock. It reacts very slowly with cold and dilute HCl. | Dolomite  Quartz  Sericite | Feldspar  Biotite/ Phlogopite | Opaques | Dolomite occurs as very fine anhedral to subhedral grains. Quartz and feldspar are showing bimodal grain size distribution, occurring as very fine subangular grains and as well as fine to medium subhedral clasts. Sericite and biotite/ phlogopite are present as very fine flaky aggregates showing parallel alignment. Opaques are noted as very fine specks in accessories.  The specimen is a **shaly dolostone/ dolomitic shale.** |
| 2 | MMLP02 | It is a very fine grained light grey coloured massive rock. It reacts very slowly with cold and dilute HCl. | Dolomite  Sericite  Quartz | Phlogopite | Opaques | Dolomite is present as very fine anhedral to subhedral grains. Sericite occurs as very fine flaky aggregates showing parallel alignment. Quartz occurs as very fine disseminated clasts. Phlogopite is seen present as very fine flakes in association with sericite. Opaques are noted as very fine specks in accessories.  The specimen is a **shaly dolostone/ dolomitic shale.** |
| 3 | MMLP03 | It is a very fine grained light grey coloured massive rock. It reacts very slowly with cold and dilute HCl. | Dolomite  Quartz  Sericite | Biotite/ Phlogopite | Opaques  Chlorite | Dolomite occurs as very fine anhedral to subhedral grains. Quartz occurs as very fine to fine subangular to subrounded clasts. Sericite and biotite/ phlogopite are present as very fine disseminated flakes showing parallel alignment. Opaques are noted as very fine specks in accessories. Chlorite occurs as very fine flakes and patches in pockets.  The specimen is a **shaly dolostone/ dolomitic shale.** |
| 4 | MMLP04 | It is a very fine grained dark grey coloured massive rock showing whitish lenses. It reacts very slowly with cold and dilute HCl. | Dolomite  Quartz  Sericite  Biotite/ Phlogopite | Feldspar  Opaques | Tourmaline | Dolomite is present as very fine subhedral to anhedral grains. Quartz occurs as very fine anhedral grains and also occurs as medium to moderately coarse lensoidal porphyro-clasts. Sericite and biotite/ phlogopite are seen present as very fine mutually interleaved flakes showing parallel alignment and often segregated in zones. Feldspar is noted as very fine to fine subhedral to anhedral grains, often clustering in pockets. Opaques occur as fine to medium patches, fine subhedral to anhedral grains and as very fine specks. Tourmaline is noted as very fine subhedral prismatic grains in accessories.  The specimen is a **shaly dolostone/ dolomitic shale.** |
| 5 | MMLP05 | It is a very fine grained dark grey coloured massive rock. It is showing fast reaction with cold and dilute HCL on particular spots. | Quartz  Biotite/ Phlogopite  Calcite/ Dolomite | Feldspar | Opaques  Tourmaline | Quartz and feldspar occur as very fine to fine anhedral grains, feldspar grains are mostly microcline in nature. Biotite/ phlogopite are present as very fine flaky aggregates showing parallel alignment. Calcite/ dolomite occur as very fine to fine grains, medium to moderately coarse patches showing inclusions of very fine quartz within it and also occur as fine rhombs in dissemination. Opaques are noted as very fine specks in accessories. Tourmaline is found present as very fine subhedral prismatic grains in areas.  The specimen is a **carbonate rich shale.** |