

Statement showing Petrographic studies of bed rock samples, Kalasapura Block, Chikkamagaluru District, Karnataka

KALASAPURA BLOCK
PETROGRAPHIC STUDY RESULTS

Sl. No.	Sample Number & Location	Texture	Mineral Composition			Description
			Major >5%	Minor <5%->1%	Accessory <1%	
1	MKBPS01	It is a greenish grey coloured medium to coarse grained rock showing granular texture.	Plagioclase Augite Opaques	Sericite Uralite Chlorite	Epidote Quartz	<p>Plagioclase occurs as medium to coarse subhedral prismatic grains showing intense sericitization. Augite occurs as medium to coarse subhedral prismatic grains being replaced by uraltite and chlorite from periphery in areas. Opaques are present as fine to medium subhedral and anhedral patchy grains in dissemination. Sericite occurs as cloudy patches comprising very fine flaky aggregates, seen developing after plagioclase alterations. Uralite is present as fine to very fine aggregates and anhedral patches replacing augite from periphery. Chlorite is noted as patchy pockets comprising very fine flaky aggregates and seen replacing plagioclase and pyroxenes. Epidote is seen present as very fine granular aggregates and anhedral patches developing after plagioclase alterations. Quartz occurs as fine granular aggregates in pockets, indicating minor silicification.</p> <p>The specimen is an <u>altered gabbro</u>.</p>

2	MKBPS02	It is a greenish grey colored very fine to fine grained massive rock.	Actinolite Plagioclase Hornblende Quartz	Opagues Chlorite	<p>Actinolite occurs as very fine to fine acicular grains. Plagioclase is present as very fine to fine subhedral to anhedral grains and as medium blasto-porphyritic grains in areas. Hornblende occurs as fine rhombic grains and anhedral patches in association with actinolite. Quartz occurs as fine anhedral grains, often clustering in pockets and also seen present as fine fillings/ veinlets. Opagues are present as fine anhedral to subhedral disseminated grains. Chlorite is noted as fine to very fine flakes replacing amphiboles.</p> <p>The specimen is an <u>amphibolite</u>.</p>
3	MKBPS03	It is a medium to coarse grained rock showing hypidiomorphic granular texture.	Microcline Plagioclase Quartz Biotite	Sericite/ Muscovite Epidote Sphene	Opagues Calcite Chlorite Apatite Zircon	<p>Microcline occurs as coarse to medium subhedral prismatic grains showing perthitic exsolutions. Plagioclase is present as medium subhedral prismatic grains showing saussuritization. Quartz occurs as medium to fine anhedral grains, often clustering in pockets. Biotite is seen present as fine flakes and flaky aggregates. Sericite/ muscovite are present as very fine to fine flaky aggregates, mostly developing after plagioclase alterations. Epidote occurs as very fine to fine subhedral prismatic to anhedral patchy grains developing after plagioclase alterations. Sphene is present as anhedral patches showing relicts of opagues within it. Opagues occur as fine subhedral grains and anhedral patches, often showing association with biotite. Calcite fillings have seen intruded in areas. Chlorite occurs as fine to very fine flakes and flaky aggregates in association with epidote and biotite. Apatite occurs as fine subrounded grains in accessories. Zircon is noted as very fine inclusions within biotite, around which</p>

						<p>pleochroic haloes are observed.</p> <p>The specimen is a <u>granite</u>.</p>
4	MKBPS04	It is a fine to medium grained rock showing granular texture and mineralization.	Quartz Opaques Fuchsite	Ferruginous matter	Sphene Rutile	<p>Quartz occurs as fine to medium anhedral grains and moderately coarse porphyro-clasts showing tight quartzitic texture and recrystallization in areas. Opaques occur as fine anhedral to subhedral grains in dissemination. Fuchsite is present as very fine flaky aggregates in zones. Reddish ferruginous patches are seen associated with opaque dissemination. Sphene is noted as fine to medium anhedral patches. Rutile is seen present as very fine blades in accessories.</p> <p>The specimen is a <u>mineralized fuchsite quartzite</u>.</p>
5	MKBPS05	It is a fine to medium grained rock showing granular texture.	Quartz	Sericite/ Fuchsite	Opaques Rutile	<p>It is a monomineralic rock, composed of fine to medium anhedral to subhedral quartz grains showing tight quartzitic contacts. Grains are poorly sorted and tightly packed. Quartz recrystallization is noted in areas. Sericite/ fuchsite are seen present as very fine flakes and flaky aggregates along quartz grain contacts, at places. Opaques and rutile are noted as very fine grains and blades in accessories.</p> <p>The specimen is a <u>quartzite</u>.</p>
6	MKBPS06	It is a greenish grey coloured fine grained rock showing schistosity.	Actinolite Plagioclase Calcite	Epidote Opaques Chlorite	<p>Actinolite occurs as fine acicular aggregates showing parallel alignment. Plagioclase occurs as fine subhedral to anhedral and subrounded patchy grains showing parallel alignment. Calcite is present as streaky aggregates and patches aligned along the foliation and comprising fine to medium anhedral to subhedral</p>

			Quartz			<p>aggregates. Quartz occurs as clustered pockets, often showing association with calcite streaks and aligned along the foliation. Epidote occurs as fine subhedral to anhedral grains, possibly developing after plagioclase alterations. Opaques are seen present as fine anhedral to subhedral and skeletal grains in dissemination. Chlorite occurs as fine flakes and flaky aggregates, seen replacing amphiboles.</p> <p>The specimen is an <u>actinolite-plagioclase-calcite-quartz schist.</u></p>
7	MKBPS07	It is a greenish grey colored very fine to fine grained massive rock.	<p>Tremolite-actinolite</p> <p>Plagioclase</p> <p>Zoisite/ Epidote</p>	<p>Opaques</p> <p>Chlorite</p>	<p>Biotite</p> <p>Quartz</p>	<p>Tremolite-actinolite occurs as very fine to fine flaky/ acicular grains and its aggregates. Plagioclase occurs as turbid patches altering to zoisite/ epidote. Zoisite/ epidote are present as very fine granular aggregates developing after plagioclase alterations. Opaques occur as fine anhedral to subhedral and skeletal grains in dissemination and as very fine segregations in pockets. Chlorite and biotite are seen present as flakes and patches replacing amphiboles. Quartz is noted as fine anhedral grains clustering in pockets.</p> <p>The specimen is an <u>amphibolite</u></p>