

GEOGRAPHE NORTH-1

CUTTINGS LITHOLOGICAL DESCRIPTIONS

Depth	Lithology
565-630	<p>ARGILLACEOUS CALCILUTITE WITH MINOR INTERBEDS OF CALCILUTITE.</p> <p>ARGILLACEOUS CALCILUTITE (80%): light olive grey to green grey, soft to firm, sub-blocky, abundant grey argillaceous material, trace calcite cement, trace to minor calcareous silt, rare siliceous silt, rare glauconite, trace to minor skeletal fragments, trace disseminated very fine quartz sand, trace foraminifera, trace crinoids, trace coral fragments.</p> <p>CALCILUTITE (20%): white to very light grey, soft to firm, amorphous, rare calcareous silt, rare light grey argillaceous material, trace glauconite.</p>
630-670	<p>ARGILLACEOUS CALCILUTITE WITH MINOR INTERBEDS OF CALCILUTITE AND CALCARENITE.</p> <p>ARGILLACEOUS CALCILUTITE (80%): similar to above, rarely grades to Calcareous Claystone.</p> <p>CALCARENITE (10%): light yellowish brown, very light grey, friable to moderately hard, blocky, predominantly skeletal and calcilutite fragments, minor calcite cement, abundant calcilutite and calcisiltite matrix, trace very fine quartz sand, trace glauconite.</p>
670-730	<p>ARGILLACEOUS CALCILUTITE INTERBEDDED WITH CALCAREOUS CLAYSTONE.</p> <p>ARGILLACEOUS CALCILUTITE (80%): as above.</p> <p>CALCAREOUS CLAYSTONE (20%): very light grey to light grey, soft to firm, amorphous, common calcareous silt, trace glauconite.</p>
730-840	<p>SANDSTONE (100%): yellowish brown to dark yellowish brown and medium brown, loose to friable, massive, very fine to granule, predominantly medium to coarse, subangular to well rounded, slightly spherical to slightly elongate, poorly sorted, yellow to dark brown stained commonly pitted clear and rarely frosted quartz, trace calcite cement, minor dispersive clay matrix, trace to minor very dispersive dark brown to dark greyish brown silt matrix increasing in abundance with depth, trace glauconite, very good inferred intergranular porosity, no fluorescence.</p>
840-960	<p>SANDSTONE (100%): brownish grey to greyish brown, loose to rarely friable, very fine to granule, predominantly medium to coarse, subangular to well rounded, slightly spherical to slightly elongate, poorly sorted, pale yellow to light brown stained clear and rarely frosted quartz, minor to common dark greyish brown very dispersive clay and silt matrix increasing in abundance with depth, trace glauconite, moderate to good inferred intergranular porosity, no fluorescence. Rarely grades to Silty Sandstone.</p>
960-1060	<p>SILTY SANDSTONE (100%): olive grey to dark brownish grey and dark grey, loose to rarely friable, very fine to very coarse grained, predominantly medium grained, subangular to well rounded, slightly spherical, poorly sorted frosted and clear quartz, minor clay matrix, nil to 5% inferred intergranular porosity, no fluorescence. Rarely grades to Sandy siltstone.</p>
1060-1114	<p>ARGILLACEOUS SILTSTONE INTERBEDDED WITH SILTY SANDSTONE.</p> <p>ARGILLACEOUS SILTSTONE (80%): grey brown, very soft to soft, amorphous to dispersive, abundant argillaceous material and grading to silty claystone in parts, rare pyrite nodules, trace carbonaceous detritus.</p> <p>SILTY SANDSTONE (20%): very light grey, friable, very fine to fine grained minor medium grained quartz, subangular, well sorted, matrix supported, very poor visual porosity, no fluorescence.</p>
1114-1200	<p>ARGILLACEOUS SILTSTONE WITH MINOR INTERBEDDED SANDSTONE.</p> <p>ARGILLACEOUS SILTSTONE (90%): grey brown to olive grey, very soft to soft, sticky to dispersive, abundant to very abundant argillaceous material, trace disseminated and nodular pyrite, trace carbonaceous detritus, trace glauconite trace lithic fragments, trace mica, grading in parts to silty -claystone.</p> <p>SANDSTONE (10%): light grey colourless, transparent to opaque, loose, fine to medium minor coarse rare very fine and coarse grained quartz, subangular, to subrounded, moderately sorted, slightly spherical, 10% inferred porosity, no fluorescence.</p>
1200-1300	<p>ARGILLACEOUS SILTSTONE WITH RARE SANDSTONE STRINGERS.</p> <p>ARGILLACEOUS SILTSTONE (95%): as above.</p> <p>Sandstone (5%): white to very light grey, friable to loose, very fine to fine trace medium grained quartz, subangular, to subrounded, slightly spherical, moderately sorted to well sorted, trace calcareous cement, tight visual porosity, no fluorescence.</p>

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1300-1380	<p>ARGILLACEOUS SILTSTONE WITH SANDSTONE.</p> <p>ARGILLACEOUS SILTSTONE (75%): as above. SANDSTONE (25%): white, very light grey, colourless, clear to opaque friable to loose, very fine to fine minor medium grained quartz, subangular, to subrounded, moderately to well sorted, slightly spherical, weak calcareous cement in parts, minor to common brownish grey silt matrix, minor light grey argillaceous matrix, trace glauconite, trace lithic fragments, 5% intergranular porosity, no fluorescence.</p>
1380-1435	<p>ARGILLACEOUS SILTSTONE AND SILTY SANDSTONE</p> <p>ARGILLACEOUS SILTSTONE (80%): similar to above, minor disseminated very fine quartz sand, rare very fine carbonaceous material, rarely grades to Silty Claystone. SILTY SANDSTONE (20%): very light grey to very light greenish grey to olive grey, very soft to soft, rarely friable to loose, very fine to medium grained, predominantly very fine to fine grained, subangular to subrounded, slightly spherical, poorly to moderately sorted, minor argillaceous matrix, trace glauconite, trace lithic fragments, no visible porosity, no fluorescence.</p>
1435-1670	<p>ARGILLACEOUS SILTSTONE INTERBEDDED WITH SILTY CLAYSTONE.</p> <p>ARGILLACEOUS SILTSTONE (50%): similar to above, dark yellowish brown to reddish brown, greenish grey to olive grey, very soft to soft, sticky, dispersive, trace to rare to minor very fine subangular to subrounded quartz grains, rare carbonaceous matter, trace pyrite, trace glauconite, trace lithic fragments, trace mica. SILTY CLAYSTONE (50%): dark brownish grey to reddish brown, soft to very firm, very dispersive, rare very fine carbonaceous matter.</p>
1670-1790	<p>SILTY CLAYSTONE (100%): dark yellow brown to dark brown grey, soft to firm, sticky to dispersive, abundant quartz silt, trace very fine grained quartz, subangular, to subrounded, trace carbonaceous detritus, trace micro mica, trace nodular and disseminated pyrite, trace glauconite becoming more common towards base, trace siderite, trace light to dark brown lithic fragments.</p>
1790-1797	<p>SILTY CLAYSTONE (100%): brown grey to olive grey, soft, to firm, sticky to dispersive, common to abundant quartz silt, trace very fine quartz grains, subangular, to subrounded, minor glauconite, trace carbonaceous detritus, trace micro mica, trace disseminated pyrite.</p>
1790-1817	<p>SILTY CLAYSTONE (100%): brownish grey to olive grey, soft to firm, sticky to dispersive, common to abundant quartz silt, trace very fine quartz grains, subangular, to subrounded, minor glauconite, trace carbonaceous detritus, trace micro mica, trace disseminated pyrite.</p>
1817-1844	<p>SILTY CLAYSTONE (99%): as above.</p> <p>ARGILLACEOUS SANDSTONE (1%): very light grey, light brown-grey, friable, very fine grained quartz, subangular to subrounded, well sorted, slightly spherical, trace sideritic cement, abundant light grey argillaceous material, common silty quartz, trace carbonaceous detritus, tight visual porosity, no fluorescence.</p>
1844-1865	<p>SILTY CLAYSTONE AND MINOR ARGILLACEOUS SANDSTONE.</p> <p>SILTY CLAYSTONE (85%): brown grey to medium grey, soft rare firm, sticky to dispersive, abundant quartz silt, trace carbonaceous detritus, trace micro mica, trace disseminated pyrite, trace to rare glauconite. ARGILLACEOUS SANDSTONE (15%): very light to medium grey, friable, predominantly very fine common fine grained quartz, subangular to subrounded, well sorted, slightly spherical, abundant light grey argillaceous matrix, minor quartz silt, trace siliceous cement, trace very fine carbonaceous detritus, trace glauconite, 5% visual intergranular porosity, no fluorescence.</p>
1865-1895	<p>SILTY CLAYSTONE AND MINOR SANDSTONE.</p> <p>SILTY CLAYSTONE (80%): as above. SANDSTONE (20%): very light grey rare medium grey, friable, predominantly very fine minor fine grained quartz, subangular, to subrounded, well sorted, slightly spherical, trace siliceous cement, common light grey argillaceous matrix, minor quartz silt, trace lithic fragments, trace carbonaceous detritus, trace disseminated pyrite, 10% visual porosity, no fluorescence.</p>

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CUTTINGS LITHOLOGICAL DESCRIPTIONS

Depth	Lithology
1895-1934	<p>SILTY CLAYSTONE AND SANDSTONE.</p> <p>SILTY CLAYSTONE (75%): as above. SANDSTONE (25): very light grey rare medium grey, friable to loose, very fine to fine minor medium and rare coarse grained quartz, subangular, to subrounded, poorly sorted, slightly spherical, trace to minor pyritic cement, trace siliceous cement, minor light grey argillaceous matrix, minor quartz silt, trace lithic fragments, trace carbonaceous detritus, trace disseminated pyrite, 10% visual porosity 15% inferred porosity, no fluorescence.</p>
1934-2000	<p>SILTY CLAYSTONE AND SANDSTONE.</p> <p>SILTY CLAYSTONE (50%): brown grey to medium grey, soft to firm, sticky, to dispersive, abundant silty quartz, grading in parts to Argillaceous Siltstone, trace carbonaceous detritus and microlaminae, trace micro mica, trace disseminated and nodular pyrite. SANDSTONE (50%): very light grey, colourless, clear to translucent, loose minor friable aggregates, very fine to coarse minor very coarse and rare very fine quartz grains (rare coarse to very coarse quartz shards - conglomerate?), subangular, to subrounded, poorly sorted, slightly spherical, trace aggregates with weak siliceous cement, rare pyrite cement, rare light grey argillaceous matrix, trace quartz silt, trace carbonaceous detritus, 10% to 20% inferred porosity, no fluorescence</p>
2000-2156	<p>SANDSTONE AND MINOR SILTSTONE.</p> <p>SANDSTONE (85%): predominantly clear, minor very light grey to very light brownish grey, also colourless, clear to opaque, loose to minor friable, fine to pebble predominantly medium to coarse grained, subangular, to minor subrounded, slightly spherical, poorly sorted, commonly fractured quartz grains, trace silica and pyrite cements, rare clay and silt matrix, trace carbonaceous material, trace mica, trace glauconite, trace fluorescent amber, 20% to 25% inferred intergranular porosity. No shows. SILTSTONE (15%): light brownish grey to medium grey, soft to friable, also moderately hard, predominantly quartzose, minor micaceous, common to abundant clay matrix, minor disseminated very fine quartz grains, minor to common carbonaceous streaks, rare mica, trace pyrite, trace glauconite, trace fluorescent amber, rarely grades to carbonaceous siltstone.</p>