# Lithology – Kyalla Formation

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| **Depth Interval (mMDRT)** | **Lithology** | **Description** |
| 952.5 - 980 | CLAYSTONE WITH INTERBEDDED SANDSTONE | CLAYSTONE: (70-80%) dark grey, medium dark brownish grey, silty grading to SILTSTONE, minor micro mica, moderately hard, sub blocky to sub fissile.  SANDSTONE: (20-30%) white, translucent, very fine to fine grained, well sorted, sub angular to sub rounded, strong siliceous cement, minor light brownish grey argillaceous matrix, moderately hard, tight visual porosity, no fluorescence |
| 980 - 1010 | CLAYSTONE WITH INTERBEDDED SILTSTONE AND SANDSTONE | CLAYSTONE: (70-80%) dark grey, medium dark brownish grey, medium light grey in part, silty grading to SILTSTONE, minor micro mica, moderately hard, sub blocky to sub fissile.  SILTSTONE: (10-20%) medium light grey to medium grey, medium bluish grey in part, argillaceous, trace micro mica, firm to moderately hard, dominantly sub fissile to occasionally sub blocky.  SANDSTONE: (10-20%) white, translucent, very light grey in part, very fine to fine grained, well sorted, sub angular to sub rounded, strong siliceous cement, minor light brownish grey argillaceous matrix, moderately hard, occasionally very hard, tight visual porosity, no fluorescence |
| 1010 - 1080 | CLAYSTONE WITH INTERBEDDED SANDSTONE | CLAYSTONE: (70-80%) medium dark grey, medium grey, medium dark brownish grey, silty in part grading to argillaceous SILTSTONE, rare micro mica, moderately hard, blocky to sub fissile.  SANDSTONE: (20-30%) white, very light grey, translucent, very fine to fine grained, well sorted, sub angular to sub rounded, strong siliceous cement, abundant light brownish grey to white argillaceous matrix, hard, trace micro mica, tight visual porosity, no fluorescence |
| 1080 - 1120 | CLAYSTONE WITH INTERBEDDED SANDSTONE | CLAYSTONE: (80-90%) medium dark grey to dark grey black, silty in part grading to argillaceous SILTSTONE, trace micro mica, moderately hard, blocky to sub fissile.  SANDSTONE: (10-20%) light brownish grey, very light brown, very fine grained, sub angular to sub rounded, well sorted, moderately strong siliceous cement, abundant very light brownish grey argillaceous matrix, moderately hard, very poor visual porosity, no fluorescence. |
| 1120 - 1170 | CLAYSTONE | CLAYSTONE: (100%) very dark grey, dark grey blocky, trace micro mica, moderately hard to hard, sub blocky to sub fissile |
| 1170 - 1204 | CLAYSTONE WITH INTERBEDDED SANDSTONE | CLAYSTONE: (60-80%) very dark grey, dark grey blocky, trace micro mica, moderately hard to hard, sub blocky to sub fissile.  SANDSTONE: (20-40%) light grey, very fine to fine grained, sub angular to sub rounded, well sorted, strong siliceous cement, common light grey argillaceous matrix, trace lithics, moderately hard, tight visual porosity, no fluorescence |
| 1204 - 1280 | CLAYSTONE WITH INTERBEDDED SANDSTONE | CLAYSTONE: (50-80%) medium grey, medium dark grey, occasionally greyish black, trace to locally common micro mica, moderately hard to hard, sub blocky to sub fissile, rarely fissile.  SANDSTONE: (30-50%) very light grey, translucent, clear, light brownish grey in part, very fine to medium grained, sub angular to sub rounded, moderately well sorted, strong siliceous cement in fine grained aggregates, medium grains predominantly loose / disaggregated, minor white to very light grey argillaceous matrix, moderately hard aggregates, tight visual porosity in fine grained aggregates, no fluorescence |
| 1280 - 1315 | MASSIVE CLAYSTONE WITH MINOR INTERBEDDED FINE GRAINED SANDSTONE | CLAYSTONE: (90-100%) medium dark grey to greyish black, occasionally brownish grey, slightly silty, common micro mica, moderately hard to hard, sub blocky to sub fissile.  SANDSTONE: (0-10%) light to medium grey, translucent, light brownish grey, very fine to fine grained, sub angular to sub rounded, moderately well sorted, moderately strong siliceous cement, minor white to very light brownish grey argillaceous matrix, trace to common micro mica, trace disseminated pyrite, trace lithics, moderately hard, tight to very poor visual porosity, no fluorescence. |
| 1315 - 1353 | MASSIVE CLAYSTONE WITH MINOR INTERBEDDED FINE GRAINED SANDSTONE | CLAYSTONE: (70-90%) medium dark grey to greyish black, occasionally brownish grey, slightly silty, common micro mica, moderately hard to hard, sub blocky to sub fissile.  SANDSTONE: (10-30%) medium light grey, translucent, clear, light brownish grey to brownish grey, very fine to fine grained, trace medium grains, sub angular to sub rounded, moderately well sorted, moderately strong siliceous cement, minor white to very light brownish grey argillaceous matrix, trace to locally common micro mica, trace disseminated pyrite, trace lithic grains, moderately hard, occasionally friable, very poor visual porosity, no fluorescence. |