# Lithology - Middle Velkerri Member

|  |  |  |
| --- | --- | --- |
| **Depth Interval (mMDRT)** | **Lithology** | **Description** |
| 2100 - 2115 | SILTSTONE WITH INTERBEDDED CLAYSTONE AND SANDSTONE | CLAYSTONE: (Trace-10%) medium to dark grey, occasionally light grey, light brown grey in part, silty in part, moderately hard to occasionally firm, sub blocky to occasionally blocky, minor fissile.  SILTSTONE: (70-95%) medium to dark grey, minor grey brown, dominantly arenaceous to minor argillaceous, grading to very fine Sandstone in part, commonly micro micaceous, trace lithics, hard, occasionally moderately hard, sub fissile to sub blocky.  SANDSTONE: (Trace-20%) light grey to minor off white, very fine to fine, well sorted, sub angular, moderate to strong siliceous cement, minor light grey argillaceous matrix, hard, occasional dis-aggregated loose grains, tight visual porosity, very poor inferred porosity, no fluorescence. |
| 2115 - 2166 | SILTSTONE WITH MINOR INTERBEDDED CLAYSTONE | CLAYSTONE: (Trace-30%) medium to dark brown grey, silty in part, minor lithics, moderately hard to firm, sub blocky to occasionally blocky, minor fissile.  SILTSTONE: (70-100%) dark to occasionally very dark grey, dark grey brown, argillaceous to arenaceous, commonly micro micaceous, minor localised disseminated pyrite, trace lithics, hard to very hard, sub fissile to dominantly sub blocky. |
| 2166 - 2193 | SILTSTONE WITH MINOR INTERBEDDED CLAYSTONE AND RARE SANDSTONE | CLAYSTONE: (10-40%) medium to occasionally dark grey, occasionally very dark grey brown, minor silty in part, minor lithics, common micro micaceous, moderately hard to firm in part, sub fissile to occasionally sub blocky.  SILTSTONE: (70-80%) dark to occasionally very dark grey, dark grey brown, argillaceous to dominantly arenaceous, commonly micro micaceous, trace lithics, moderately hard to hard, sub fissile to sub blocky.  SANDSTONE: (Trace-10%) off white to light grey, very fine, very well sorted, sub angular to minor sub rounded, strong siliceous cement, minor off white argillaceous matrix, hard to very hard, tight visual porosity, no fluorescence. |
| 2193 - 2239 | CLAYSTONE GRADING TO AND INTERBEDDED WITH SILTSTONE | CLAYSTONE: (50-100%) very dark grey to black, very dark greyish brown in part, minor silty, rare micro micaceous, trace to common nodular and disseminated pyrite, hard to very hard, sub blocky, minor sub fissile.  SILTSTONE: (trace - 50%) dark grey, minor very dark grey, dark grey brown in part, argillaceous to minor arenaceous, commonly micro micaceous, minor localised disseminated pyrite, trace lithics, moderately hard to hard, sub fissile to sub blocky |
| 2239 - 2269 | MASSIVE CLAYSTONE | CLAYSTONE: (100%) very dark grey to dark grey black, occasionally very dark brownish grey, trace silty, trace micro mica, rare disseminated pyrite, hard to very hard, sub blocky to sub fissile. |
| 2269 – 2275 | Not circulated to surface after coring. | |
| 2275 - 2283 | MASSIVE CLAYSTONE | CLAYSTONE: (100%) very dark grey, very dark grey black, trace micro mica, trace disseminated pyrite, moderately hard to hard, sub blocky to sub fissile. |
| 2283 - 2295 | SILTSTONE WITH INTERBEDDED CLAYSTONE | SILTSTONE: (0-40%) light to medium grey, medium brownish grey, argillaceous, trace calcareous fragments, trace micro mica, firm to moderately hard, blocky to sub blocky.  CLAYSTONE: (60-100%) medium dark grey, slightly silty, trace nodular pyrite, trace micro mica, moderately hard to hard, blocky to sub fissile |
| 2295 - 2367 | INTERBEDDED CLAYSTONE AND SILTSTONE | SILTSTONE: (20-80%) medium grey, medium dark brownish grey, argillaceous in part, trace nodular pyrite, rare micro mica, friable to moderately hard, blocky to sub blocky.  CLAYSTONE: (20-80%) light to medium grey, medium brownish grey, slightly silty, trace nodular pyrite, firm to moderately hard, blocky to sub blocky. |
| 2367 - 2421 | CLAYSTONE GRADING TO AND INTERBEDDED WITH SILTSTONE | SILTSTONE: (0-30%) light to medium grey, very finely arenaceous in part, trace micro mica, moderately hard, blocky to sub blocky.  CLAYSTONE: (70-100%) light to medium grey, dark grey in part, trace micro mica, moderately hard, sub blocky to sub fissile |
| 2421 - 2460 | CLAYSTONE GRADING TO AND INTERBEDDED WITH SILTSTONE | SILTSTONE: (0-20%) medium dark grey to dark brownish grey, rarely medium to light grey, argillaceous, siliceous in part, minor micro mica, hard to very hard, sub blocky to blocky.  CLAYSTONE: (80-100%) very dark grey to greyish black, dark brownish grey in part, minor micro micaceous, slightly silty in part, trace nodular pyrite, moderately hard to hard, sub blocky to sub fissile. |
| 2460 - 2532 | CLAYSTONE WITH TRACE INTERBEDDED SILTSTONE | SILTSTONE: (0-20%) light to medium grey, very finely arenaceous, trace calcareous fragments, moderately hard, blocky  CLAYSTONE: (80-100%) very dark grey black, trace micro mica, rare nodular pyrite, moderately hard to hard, sub blocky to sub fissile. |
| 2532 - 2560 | CLAYSTONE WITH MINOR INTERBEDDED SILTSTONE | SILTSTONE: (0-10%) medium grey, very finely arenaceous, trace calcite fragments, moderately hard, blocky.  CLAYSTONE: (90-100%) very dark grey black, trace micro mica, trace nodular pyrite, moderately hard to hard, sub blocky to sub fissile. |