

Depth	Stratigraphic Units						Rock Color	Lithology Rock Column	Sedimentary Structures	Fossils	Remarks
	Members	Formations	Subgroup	Group	Stage	Series					
3299											3299.5 3300.5 Lithofacies 1--consists of laminated 3300.5 3301.5 Lithofacies 6--consists of red and green 3301.5 3303.0 Lithofacies 6--consists of structureless very fine to coarse nearly pure quartz arenite with 3303.0 3304.0 Lithofacies 7--consists of plane-laminated
3304											3304.0 3310.0 Lithofacies 6--consists of structureless very fine to coarse nearly pure quartz arenite with intraclasts. Greenish-gray shale partings are common.
3309											3310.0 3314.0 Lithofacies 6--consists of structureless very fine to coarse white nearly pure quartz arenite with intraclasts.
3314											3314.0 3315.0 Lithofacies 6--consists of structureless 3315.0 3318.0 Lithofacies 3--consists of structureless (5G8/1) greenish-gray siltstone with evidence of bioturbation. Burrowing is primarily horizontal and gives the siltstone a mottled appearance. The burrows are 1-2 mm in
3319											3318.0 3330.0 Lithofacies 4--is composed of bioturbated (5G4/1) greenish-gray dark-greenish-gray and olive-black shale (mudstone) containing white to tan very fine grained quartz sand filling the burrows. No structure is observed in the mudstone. Burrows primarily are horizontal with some short vertical burrows and are probably of the ichnogenerus Planolites. The grain size and abundance of the sand often increase upwards. This lithofacies commonly overlies the laminated mudshale (lithofacies 1) but it can be found throughout the section. Lithofacies 4 is the most abundant of all the lithofacies constituting 41% of the thickness of all the sections.
3324											
3329											
3334											3330.0 3348.0 Lithofacies 1--laminated claystone laminations 1/2-2 mm thick pyritic (5Y1/2) containing abundant inarticulate and articulate brachiopod shells and shell fragments. The mudshale is thin to medium laminated with laminations from 5 to 3 mm in thickness. Intraclasts are common and secondary pyrite is abundant. This lithofacies commonly occurs near the base of the Simpson Group but it also can be found higher up in the section. It is often overlain by bioturbated greenish-gray sandy mudstone (lithofacies 4). Planar lamination is interpreted as representing settling from suspension without traction based on the fine-grained nature of the facies.
3339											3330.0 3348.0 Lithofacies 1--laminated claystone laminations 1/2-2 mm thick pyritic (5Y1/2) containing abundant inarticulate and articulate brachiopod shells and shell fragments. The mudshale is thin to medium laminated with laminations from 5 to 3 mm in thickness. Intraclasts are common and secondary pyrite is abundant. This lithofacies commonly occurs near the base of the Simpson Group but it also can be found higher up in the section. It is often overlain by bioturbated greenish-gray sandy mudstone (lithofacies 4). Planar lamination is interpreted as representing settling from suspension without traction based on the fine-grained nature of the facies.
3344											3343.0 3348.0 Lithofacies 1--laminated claystone laminations 1/2-2 mm thick pyrite dark greenish gray lithofacies 1--containing abundant inarticulate and articulate brachiopod shells and shell fragments. The mudshale is thin to medium laminated with laminations from 5 to 3 mm in thickness. Intraclasts are common and secondary pyrite is abundant. This lithofacies commonly
3349											3348.0 3350.0 dolomite

**Primary Rock Lithology**

- Clay, Claystone
- Shale
- Silt, Siltstone
- Quartzarenite
- Limestone Dolomite
- Dolomite

**Secondary Rock Lithology**

- Silty, silt
- Sandy, sand
- Pyritic, pyrite

**Fossils**

- Fresh Water (A) Few
- Brackish Water (B) Many
- Marine (C) Broken
- Brachiopods
- Burrows

**Sedimentary Structure Symbols**

**Depositional Structures**

- Cross Bedding
- Hummocky cross-stratification
- Ripples
- Planar, Horizontal ripples
- Lamination
- Parallel Laminations

**Deformational Structures**

- Flame structure