- Dakota Formation (Cretaceous, Turonian) – Predominantly an Albian age of the underlying conglomerate. Single-crystal to variegated mudstone and minor lignite overlying interbedded pebble conglomerate. Deposited in shallow-marine environment dominated by fine-grained clastic terrigenous matrix.

- Tropic Shale (Upper Cretaceous, Turonian) – Predominantly a marine deposit, contains a variety of foraminifera, brachiopods, and other marine invertebrates. Deposited in an Albian age of the underlying conglomerate. Single-crystal to variegated mudstone and minor lignite overlying interbedded pebble conglomerate. Deposited in shallow-marine environment dominated by fine-grained clastic terrigenous matrix.

- Co-op Creek Limestone (Jurassic, Early Triassic) – A significant geologic formation in the study area. Contains diversified fossil assemblages including corals, bryozoans, and brachiopods. Deposited in the Lower Toarcian stage of the Jurassic period.

- Jurassic erg deposits, Colorado Plateau, Utah – These deposits are important for understanding the geological history of the region. They are characterized by evaporite minerals and provide insights into the paleoenvironmental conditions of the past.

- Recent work involving regional stratigraphic correlation, palynology, and radiometric dating suggests that the red shaly zone at the base of the Co-op Creek Limestone. Deposited in coastal dune field environment. 1981-2000.


- In 1990, a partial skeleton of a large, long-necked plesiosaur (marine reptile) was discovered in the Co-op Creek Limestone formation.  The skeleton was later identified as a new species, Eolambia, and described by Dasch and others in 1996.

- Carboniferous-Permian boundary, Wyoming – The boundary is a significant stratigraphic marker that divides the Carboniferous and Permian periods. It is characterized by a significant change in the fossil assemblages and sedimentary facies.