Gunflint Chert

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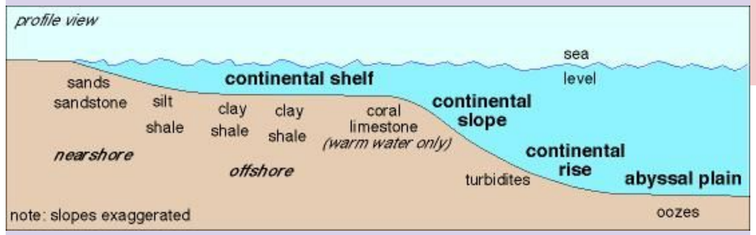
Geological age/Paleoenvironment

Using Uranium-Lead dating, the depositional age was found to be 1878.3 ± 1.3 million years old[8]



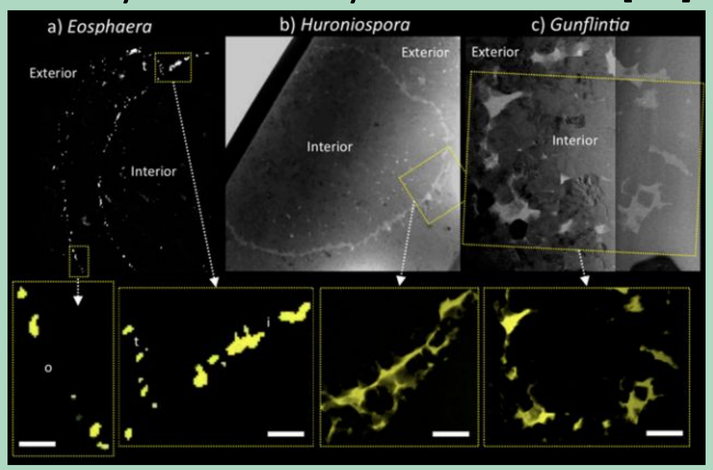
Paleoenvironment of Gunflint Chert[14]

The presence of stromatolites, as well as BIFs, indicate that the Gunflint Chert was formed on a continental shelf in the ocean during the great oxygenation event

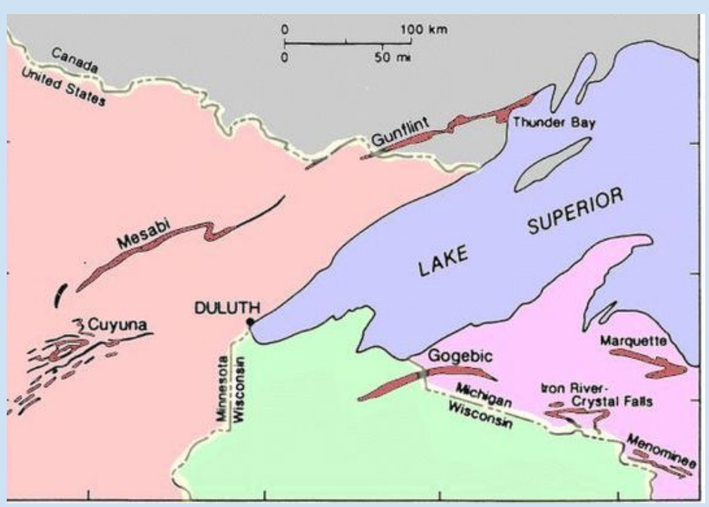
Stromatolite from Gunflint Site [4]

Why is Gunflint Chert considered important?

Gunflint Chert, 1.88-Ga Lagerstätte preserves some of the fossil cells of the Precambrian time. Therefore, it allows us to understand the very early biodiversity of our Earth. [12]



Precambrian microfossils from Gunflint Chert [12]



Map of Gunflint Range to Mesabi Range [6]

Background/Location:

Found through Northern Minnesota to Northwestern Ontario, Canada. The area is a iron ore deposit containing iron formations that is now known to contain fossils dating back to the Middle Precambrian era[7]

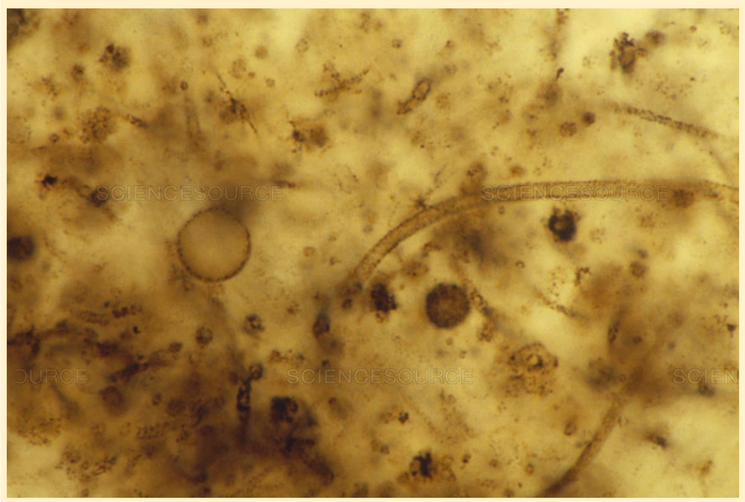
The entire deposit is found through the Gunflint and Mesabi Range.

Fossils Found

Stromatolites are a type of sedimentary rock formed by the gradual growth of layers upon layers of cyanobacteria, a photosynthesizing prokaryotic cell representing some of the earliest forms of life on Earth.

Layers of Stromatolite (1)

Thousands of tiny microfossils ranging in different shapes, like stars, spheres, and filaments, were found in these stromatolites.



Microfossils found at Gunflint Chert (2)

They are some of the oldest known microfossils discovered, as well as the most diverse communities of fossils of the Precambrian.