

Geology

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of the Saddle Mountain Geology A close analysis of the rock presented highlights that it is Miocene basalt. Geological research has indicated that the Saddle Mountains formed in the Miocene and a post Miocene age when the uplifting of the Miocene volcanic rocks took place. The uplifting took place in a manner that saw the folding of the volcanic rocks in a relative design to the synclinal valleys. Many geologists have highlighted that the quaternary normal faults are the description for the faulting that resulted. This led to the formation of class B structures that characterize the Saddle Mountains. It is in these mountains that the described rock was found (‘Washington Geologic Newsletter’ 56)

According to further research, there is evidence suggesting that uplifting of the Cascade Mountains that occurred in the Columbian river, which is denoted as the ancestral Columbia river exhibited a coincidence that saw the formation of a canyon through cutting. In the years that followed, fluid deposition and intracanyon flows accounted for the existence of basalt in the river channel. Such basalt is the basic material that formed the volcanic rocks similar to the type presented in the image.

The latest event in the Columbia River basalt was the deposition of the saddle mountain basalt. Saddle Mountains have been described as containing high silica content, and of noticeably thin nature compared to other basalts of the Columbian river (70). The nature of appearance is the result if extensive compression as well as that of the ensuing extensional events that followed as the deposited basalt cooled.

Work Cited

Washington Geologic Newsletter. Olympia: Dept. of Natural Resources,
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