Geologic map of the Surveyors Ridge area, Clearwater and Shoshone Counties, Idaho

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Introduction

The Prichard Belt is a Mesoproterozoic collisional orogen located in the Idaho Rocky Mountains, which extends from the Idaho-Montana border south to the Clearwater Range. The belt comprises a variety of metasedimentary and metavolcanic rocks that were deformed and metamorphosed under high-grade conditions. The belt is bounded to the north by the Collins Creek Fault and to the south by the Sawtooth Saddle and Mallard Peak basement gneiss complex.

The Surveyors Ridge area, located in the Bathtub stratigraphic relationships within the Clearwater complex need to be reassessed. Doughty et al. (2007) postulated that the east-bounding normal fault of the Clearwater complex was the Collins Creek fault, Mountain shear zone, both located to the west of the map area. In the eastern part of the Clearwater complex, however, the exhumation history and structural evolution remain cryptic. Doughty et al. (2007) postulated that the east-bounding normal fault of the Clearwater complex was the Collins Creek fault, Mountain shear zone, both located to the west of the map area.

The ages of these bodies are uncertain, but are most likely between Cretaceous and Cenozoic. The contact between this unit and the overlying Prichard schist in the vicinity of Surveyors Ridge Lookout is mapped as a normal fault (Lookout Fault), based on the presence of downdip mica that pre-dates the Belt Supergroup (Figure 2, 3, 4; Ross and Villenueve, 2003). The contact between this unit and the overlying Prichard schist in the vicinity of Surveyors Ridge Lookout is mapped as a normal fault (Lookout Fault), based on the presence of downdip mica that pre-dates the Belt Supergroup (Figure 2, 3, 4; Ross and Villenueve, 2003).

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