

2. Pickhandle Lake proposed SMA NTS 115 F/16

3.a. Introduction

The proposed Pickhandle Lake SMA has an area of 57.08 square kilometers. The proposed SMA is located on the south side of the Alaska Highway southeast of the Donjeck River crossing. The area is a wetland valley bottom within the Denali Fault Zone.

3.b. Exploration History

There are no records of exploration within the area of the proposed SMA. Claims immediately north of the highway were staked and explored to follow up on gold mineralization in a shear zone (Yukon Minfile 115F 093). A rock sampled yielded an analysis of 3,100 ppb gold. Follow up exploration consisted of detail stream and soil sampling, prospecting and geological mapping. The Pick claims were staked and explored by Noranda Exploration in 1985.

3.c. Regional Geology

The area of the proposed SMA is a low-lying, overburden-covered wetland located within the Denali Fault zone.

Devonian – Cretaceous aged Windy Assemblage metamorphic rocks have been mapped along trend.

Pennsylvanian-Permian aged Skolai Group volcanic rocks outcrop on the ridge to the south of the proposed SMA. Within the Skolai Group is a narrow belt of Late Triassic and older Kluane Ultramafic Suite rocks that hosts the Canalask Nickel-Copper deposit two kilometers west of the north end of the proposed SMA.

3.d. Minfile Occurrences

There are no occurrences listed in the Yukon Minfile within the area of the proposed Pickhandle Lake SMA.

Ultramafic related nickel-copper sulphide mineralization with associated PGE's, base metal skarn and veins are relatively abundant in the Wrangellia Terrane rocks south of the Denali fault.

Occurrences north of the Denali fault are rare although a number of magnetic anomalies associated with the Windy Assemblage ultramafic suite have been staked in the past.

3.e. Regional Silt Sediment Geochemistry

There are three silt sediment sample locations within the proposed SMA, all of which drain rocks from the southern boundary.

The area has been glaciated and is a low-lying wetland. The use of geochemical silt or soil sampling in the area is not considered to be practical.

3.f. Aero-magnetic Survey

The regional aero-magnetic survey results indicate a broad linear trend of relative low magnetic susceptibility associated with the Denali Fault Zone.

3.g. Metallogeny

Windy Assemblage metamorphic or carbonate rocks in contact with Nasina Assemblage metamorphosed sedimentary rocks are extrapolated to underlie the proposed SMA. There are no outcrops within the proposed SMA and the areo-magnetic survey indicates little likelihood of ultramafic rocks within the area.

3.h. Conclusions and Recommendations

The proposed Pickhandle Lake SMA is in a low-lying wetland in a readily accessible area. There are no indications of mineralization within the area.

A brief examination of the area from the Alaska Highway is warranted to further assess the potential for outcrops.