

AUGUST 26, 2021

ATSUTLA

FINDING GOLD IN CANADA'S LAST FRONTIER trailbreakerresources.com TSX.V: TBK •WATSON LAKE

TERRACE

PROJECT DEASE LAKE OLS Red Chris Schaft Creek Eskay Creek Bruce Jack

Premier

ATSUTLA GOLD

LIN

FORT ST. JOHN

Stikinia Terrane

Quesnel Terrane

🗘 Skarn

gan (

Au Vein (Epithermal/Orogenic)

Massive Sulphide (VMS)

PRINCE GEORGE

WILLIAMS LAKE

VANCOUVER

COMPARISON WITH PROLIFIC BRITISH COLUMBIA GOLD DEPOSITS

GOLD PROJECT

What do gold districts in British Columbia have in common and what makes them different? Do they all have a connection with heat and fluid byproducts of volcanoes? Does the gold form in quartz veins? What other metals are they associated with?

Our Atsutla Gold Project is located north of the prolific Golden Triangle district of British Columbia, an area known for hosting a variety of gold deposit styles, including porphyry, vein-related, skarn and volcanogenic massive sulphides (VMS). Each of these deposit styles can be associated with other metals, such as copper, molybdenum, silver, lead and zinc to name a few. At Atsutla, silver and copper mineralization is associated with gold in guartz veins, linked to either a porphyry or intrusion-related system (IRS). Both porphyry and IRS gold deposit types, are linked to heat and fluid generation, with volcano formation being a common culprit to their existence. Both the Atsutla property, and Golden Triangle District lie on geological divisions called terranes, which consist of old volcanic arc-associated rock successions. Different to the Golden Triangle district, Atsutla is located in the Quesnel geological terrane, whereas the Golden Triangle district is located in the Stikinia terrane. Even though both of these terranes are representative of paleo volcanic arcs, their rock types are of different

ages and mineralogical compositions, making them juxtaposed geographically and geologically. Prolific porphyry-style gold mines in the Quesnel terrane include Mount Milligan, Mount Polley and New Afton, which have all produced greater than 3 million ounces of gold. See the map above, to get a better idea of how geographically extensive these prolific gold deposit hosting terranes are across British Columbia.

Figure 1: British Columbia geological terrane map with prolific gold deposits. Map adapted from: Colpron, M., Nelson, J.L. and Murphy, D.C., 2007. Northern Cordilleran terranes and their interactions through time. GSA Today, vol. 17, no. 4/5, p. 4-10

ABOUT THE AUTHOR

Natasha Morris is a Project Geologist at Trailbreaker Resources. She is a University of Calgary graduate and has worked on a variety of deposits mainly in northern Canada, including kimberlites on Baffin Island, VMS deposits in northern BC, and she studied rift associated volcanism for her MSc thesis on Ellesmere Island. She enjoys doing research in her spare time- which is quite limited being a mother of two young kids! This is her first season with Trailbreaker, where she completed prospecting mainly focused on the Atsutla property. She is looking forward to working on future project generation, to add to the growing Trailbreaker portfolio.



