Occurrence Details

Occurrence Number: 106D 113
Occurrence Name: Puma
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 8/5/2025 6:02:50 PM

General Information

Secondary Commodities: gold, silver
Aliases: Rau, Rackla
Deposit Type(s): Manto Au
Location(s): 64°13'18.92" N - -134°28'23.3" W
NTS Mapsheet(s): 106D01
Location Comments: Coordinates supplied by ATAC 2019
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked within R cl 1-1295 (YC68334) in Jul/2008 by ATAC Resources Ltd. The claims are part of the larger Rackla Gold Project and were staked following the discovery of gold mineralization in 2008 at the company's Tiger occurrence (Minfile Occurrence #106D 098) located approximately 5 km to the southeast. Following staking the company carried out a helicopter-borne magnetic and variable-time domain electromagnetic survey over the newly staked area.

In 2009 ATAC Resources carried out grid and contour soil sampling followed by prospecting and rock sampling of anomalous areas including the Puma occurrence. In 2010 ATAC Resources carried out a large exploration program on the Rau portion of its Rackla Gold property. The company completed air-borne ZTEM and aeromagnetic geophysical surveys over the majority of the Rau trend. ATAC also completed a soil sampling over the area.

The 2011 exploration program was mainly focused on identifying additional Carlin type gold mineralization targets within the Nadaleen Trend (located on east side of the Rackla Gold Project). The company carried out limited grid, ridge and contour soil sampling programs and collared two diamond drill holes (341.38 m) on the Puma showing. In 2012 the company carried out reconnaissance prospecting and soil and rock sampling over the area.

As part of 2013 exploration program ATAC Resources carried out detailed geological mapping and rock sampling around the Puma showing. In 2015, ATAC Resources collared 2 holes (395.63 m) near the Puma occurrence. Rock sampling and prospecting was carried out in 2018.

Geology

Regionally, the occurrence lies between the Dawson and Kathleen Lakes thrusts which form part of a band of regional-scale thrust faults that imbricate rocks of Mackenzie Platform and Selwyn Basin. The occurrence area lies on the western margin of ancestral North America and is underlain primarily by carbonate platform rocks of Mackenzie Platform which are in turn overlain by Paleozoic Selwyn Basin clastic rocks. The rock package formed a fault-bounded package which was thrust northeasterly during Jurassic to Cretaceous times by the Dawson and Kathleen Lakes thrust faults onto predominantly Proterozoic rocks. Following faulting, Late Cretaceous (94-90 million years), intermediate to felsic plutons of the Tombstone Suite were emplaced. A second intrusive event around 65 million years saw the emplacement of felsic intrusives assigned to the McQuesten Suite.

The Puma showing discovered in 2009 lies on an east facing slope where oxidized cobbles were discovered scattered over a 250 m by 450 m grassy area. Many of the samples collected consist of dense, rusty, dark purple siderite and goethite containing patches of boxwork limonite. Other samples consisted of limonite or altered carbonate, with occasional narrow quartz veins containing bismuthinite and galena. Bismuthinite crystals up to 3 cm long, were observed in one sample. Six goethite or goethite rich limonite samples collected in 2009 returned values greater than 1.0 g/t gold including a peak value of 18.45 g/t gold. Silver values ranged between 0.2 g/t and 68.8 g/t with four samples exceeding 100 g/t to a maximum of 241 g/t silver.

ATAC Resources tested the Puma showing in 2011 with 2 diamond drill holes. The holes targeted a fault that was believed to be the source of the gold mineralized rock samples. Both holes intersected creamy dolomite altered limestone. A strongly oxidized and healed fault comprising brecciated dolomite and limestone cuts through the stratigraphy. The fault is healed and competent and contains narrow muddy intervals. One drill hole (PM-11-02) returned a 6.10 m intersection which assayed 0.54 g/t gold. Geological mapping carried out in 2013 identified the same limestone, dolostone and volcaniclastic units that occur at the Tiger deposit located 4.3 km to the southeast. Mapping also outlined two distinct fault systems. The first fault generation shows a northerly orientation which in plan view sinisterly displaces the dolostone-volcaniclastic contact. The second
generation, informally referred to as the Puma fault, has a west-northwesterly orientation which dextrally displaces the dolostone-volcaniclastic contact. Prospecting performed at the Puma target in 2013 revealed an area of notable gold enrichment where the dolostone-volcaniclastic contact is cut by the Puma Fault.

Follow up prospecting hand pitting and trenching in 2014 returning values of up to 4.21 g/t Au, seemingly sourcing from the Puma fault. In 2015, two diamond drill holes were drilled to test both the Puma fault and faults that offset the Puma fault. Both holes encountered significant intervals of oxide development, but were largely unmineralized. The highest grade interval from the program returned a value of 1.45 g/t gold over 3.05 m. In 2017, the existing soil sample grid was expanded. Weakly to moderately anomalous gold-in-soil was identified within this expansion, including values of 124 and 115 ppb gold. In 2018 a grid of hand pits was dug in an area east of the main showing with a strong gold-insoil response and limited follow up work. No significant results were returned (AR 097311).

Work History

Date	Work Type	Comment
12/13/2018	Geochemistry	
12/13/2015	Drilling	2 holes, 395.63m
12/13/2014	Geochemistry	
12/13/2013	Geochemistry	
12/13/2011	Drilling	2 holes, 341.38m

12/13/2010	Geochemistry	
12/13/2009	Geochemistry	
12/13/2009	Geochemistry	
12/13/2008	Airborne Geophysics	
12/13/2008	Airborne Geophysics	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096936	2015	Assessment Report Describing Geochemical Sampling, Prospecting and Diamond Drilling at the Rau Trend - Rackla Gold Property	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry	20	1814.23
096939	2015	Technical Report and Preliminary Economic Assessment for the Tiger Deposit, Rackla Gold Project	VTEM - Airborne Geophysics, ZTEM - Airborne Geophysics, Mill/Concentrator Construction - Development, Surface, Tailings Pond - Development, Surface, Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Gravity Survey - Ground Geophysics, IP - Ground Geophysics, Resistivity - Ground Geophysics, Metallurgical Tests - Lab Work/Physical Studies, Data Compilation - Pre-existing Data, Data Compilation - Pre-existing Data, Environmental Assessment/Impact - Studies, Preliminary Economic Assessment - Studies, Resource Estimate - Studies	150	26846.60
096732	2014	Assessment Report Describing Metallurgical Test Pits, Metallurgical Auger Drilling, Geotechnical Auger Drilling, Geotechnical Study, Environmental Baseline Studies, Heritage Evaluation, and Water Quality and Climate Monitoring Surveys	Auger - Drilling, Water - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Environmental Assessment/Impact - Studies, Geotechnical - Studies, Heritage/Archeological - Studies	9	96.77
096728	2013	Assessment Report Describing Geochemical Sampling, Hand Trenching, Prospecting and Geological Mapping at the Rau Trend	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Hand - Trenching		
096607	2012	Assessment Report Describing Metallurgical Testing, Wildlife Monitoring, Heritage Evaluation, and Water Quality and Climate Monitoring Surveys	Water - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Environmental Assessment/Impact - Studies, Heritage/Archeological - Studies		
096597	2012	Assessment Report Describing Geochemical Sampling, Auger Sampling, Geological Mapping, Diamond Drilling, and Geophysical Surveys	Air Strip - Development, Surface, Auger - Drilling, Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics, Prospecting - Other, Hand - Trenching	172	37340.37
095938	2011	Assessment Report Describing Geochemical Sampling, Geological Mapping and Remote Sensing Surveys at the Rackla Gold Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, LIDAR - Remote Sensing, Heritage/Archeological - Studies		
095721	2010	Assessment Report Describing Geophysics, Soil Geochemistry and Diamond Drilling at the Rau Property	Electromagnetic - Airborne Geophysics, Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Diamond - Drilling, Drill Core - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Downhole Survey - Ground Geophysics, Gravity Survey - Ground Geophysics, IP - Ground Geophysics	170	36900.84
095684	2009	Geological Mapping, Prospecting, Soil Geochemistry and Diamond Drilling at the Rau Property	Interpretation - Airphotography, Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Regional Surficial Mapping - Geology, IP - Ground Geophysics, Metallurgical Tests - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Data Compilation - Pre-existing Data, Process/Interpret - Pre-existing Data, Biophysical Mapping - Studies, Environmental Assessment/Impact - Studies, Geotechnical - Studies, Heritage/Archeological - Studies	58	9578.30
095131	2008	Geological Mapping, Prospecting, Soil Geochemistry, Diamond Drilling, and Geophysical Surveys at the Rau Property	Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics, Diamond - Drilling, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	18	3423.21
093987	1998	Digital Topography, Landsat, and Colour Air Photo Survey over the Clark Claims]	Orthophoto - Airphotography, Rock - Geochemistry, Landsat - Remote Sensing		