



Occurrence Details

Occurrence Number: 106D 119

Occurrence Name: Bengal

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 8/5/2025 9:03:19 AM

General Information

Secondary Commodities: gold

Aliases: Rau, Rackla

Deposit Type(s): Manto Au

Location(s): 64°10'2.53" N - -134°25'40.8" 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 July 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 3.2 km to the north of the Bengal occurrence. Following staking, the company performed a helicopter-borne magnetic and variable-time domain electromagnetic survey over the newly staked area, including Bengal occurrence.

In 2012, ATAC Resources carried out a soil sampling grid over the Bengal occurrence and performed hand trenching proximal to elevated soil anomalies. Prospecting and geochemical analysis of samples from the trench were also performed at this time. ATAC extended and sampled the Bengal trench, prospected and soil sampled in the area in 2013.

In 2015, ATAC Resources carried out an extension of the soil sampling grid to the southeast of that returned the highly anomalous gold-in-soil values known as the Airstrip occurrence (MINFILE occurrence 106D 126). Prospecting was also performed in 2015. In 2016, RAB drilling was performed at the Bengal occurrence.

Regional & Property Geology

The occurrence lies with the Rau Trend 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 shallow water carbonate and clastic sediment rocks of the Mid-Proterozoic to Paleozoic Mackenzie Platform and the Neo-Proterozoic to Paleozoic, regionally metamorphosed Selwyn Basin clastic rocks. These rocks formed a fault-bounded sediment package which was thrust northeasterly during Jurassic to Cretaceous times by the Dawson and Kathleen Lakes thrust faults onto predominantly Proterozoic rocks. Following thrust faulting, Late Cretaceous (94-90 million years) intermediate to felsic plutons of the Tombstone Suite were emplaced (Mortensen et al., 2000). A second compressional orogenic event around 65 million years saw the emplacement of felsic intrusives assigned to the McQuesten Suite.

Other than the immediate area surrounding the Tiger deposit (MINFILE occurrence 106D 098), the occurrence area has not been geologically mapped in detail. ATAC Resources (AR 096936) has mapped 3 main units in the area comprising the Rau Trend:

1. Cambrian to Ordovician massive, grey dolostone,
2. Ordovician and/or Silurian bedded, grey and buff silty limestone and massive white limestone, and
3. Silurian to Devonian thick, bedded dolostone and limestone.

The company has assigned all three units to the Cambrian to Devonian Bouvette Formation. Colpron's 2013 geological map generally supports this interpretation; however it uses slightly different age dates and doesn't include the oldest rocks (Cambrian to Ordovician dolostones) within the Bouvette formation.

Thin volcanoclastic horizons assigned to the Ordovician Marmot Formation are interbedded with the Ordovician and/or Silurian limestones and a narrow sliver of Mid-Proterozoic Fifteen Mile Group dolostone underlies the Bouvette Formation rocks to the southwest. Devonian and Mississippian Earn Group comprised of black shale and chert bounds the Bouvette Formation to the south east and north in the southern half of the Rau Trend property.

Mineralization at the Rau Trend varies and consists mainly of: sediment-hosted replacement-style Au; structurally hosted Ag-Pb-Zn; skarns; Au-bearing quartz veins; and transported gossans/unknown deposit style (AR 096936).

The Bengal occurrence is hosted in moderately dipping basinal argillites interbedded with fossiliferous carbonate debrite layers and lies within in area mapped as Earn Group shales (Blusson, 1974).

Mineralization & Results

The Bengal occurrence was discovered in 2012 within an intermittent gold-in-soil anomaly. Prospecting and trenching of the occurrence revealed "highly friable argillites interbedded with fossiliferous carbonate debrite layers" (AR 096069). Carbonate horizons were preferentially oxidized with evidence of hydrothermal alteration forming coarse-grained dolomite crystals similar to those hosting the nearby Tiger deposit (MINFILE occurrence 106D 098). Gold mineralization is associated with pyrite and elevated arsenic and bismuth values.

Soil sampling in 2012 by ATAC Resources returned gold-in-soil values up to 2.36 g/t Au. Hand trenching in the area of this sample exposed rocks with lithology and alteration similar to the Tiger deposit (MINFILE occurrence 106D 098) and returned samples with anomalous gold values up to 3.19 g/t Au. Samples of oxidized, dolomite altered material returned values between 0.3 g/t Au and 0/8 g/t Au (AR 096597).

Follow-up trenching, soil sampling and prospecting was performed in 2013 by ATAC Resources. The 2012 trench was extended 7 m to the northwest and chip samples of highly altered argillite returned gold values between 0.25 g/t Au and 4.59 g/t Au (AR 096728). Prospecting in the Bengal area during 2013 also returned an anomalous shale sample with 0.95 g/t Au. Targeted soil samples to the northeast returned up to 1.42 g/t Au.

In 2015, a prospecting and soil sampling was performed. Soil sampling led to the discovery of a large gold-in-soil anomaly that is now referred to as the Airstrip occurrence (MINFILE occurrence 106D 126).

Work History

Date	Work Type	Comment
12/13/2016	Drilling	
12/13/2015	Geochemistry	
12/13/2015	Other	
12/13/2013	Geochemistry	Chip sampling of trench.
12/13/2013	Geochemistry	
12/13/2013	Trenching	
12/13/2013	Other	
12/13/2012	Geochemistry	
12/13/2012	Geochemistry	
12/13/2012	Trenching	
12/13/2012	Other	
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		

Related References

Number	Title	Page(s)	Reference Type	Document Type
2013-13	Geological map of the Rackla belt, east-central Yukon (NTS 106C/1-4, 106D/1)		Yukon Geological Survey	Open File (Geological - Bedrock)
YEG2013_OV	Yukon Exploration and Geology Overview 2013		Yukon Geological Survey	Annual Report