



Occurrence Details

Occurrence Number: 106D 005
Occurrence Name: Flat Top
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 8/5/2025 8:27:14 AM

General Information

Secondary Commodities: gold, lead, silver, tungsten, zinc
Aliases: Flat Ridge, Rau Trend, Rackla Gold Belt
Deposit Type(s): Manto Polymetallic Ag-Pb-Zn
Location(s): 64°12'19.43" N - -134°21'57.75" W
NTS Mapsheet(s): 106D01
Location Comments: Coordinates supplied by ATAC 2019
Hand Samples Available: Yes
Last Reviewed: May 4, 2016

Capsule

Work History

Staked within Blue Lite cl 1-128 (YA40742) in August, 1979 by the Prism Joint Venture 1979 (Asamera Oil Corporation Ltd., Chieftain Development Company Ltd., Prism Resources Ltd., Dome Petroleum Ltd. and E & B Explorations Ltd.) during a regional exploration program. The claim block covered the Blue Lite occurrence (MINFILE occurrence 106D 084) located approximately 5 km to the northeast.

The joint venture carried out a regional silt sampling and prospecting program over the entire claim block during the 1979 season. Results from this program led to the discovery of a mineralized skarn in an area the joint venture group informally named Flat Ridge (now Flat Top). The area surrounding the occurrence was trenched, grid soil sampled and regionally mapped later in the summer. In 1980, the group carried out detailed mapping around the occurrence.

Re-staked within Rau cl 1-64 (YC50268) in July, 2006 by ATAC Resources Ltd. In 2007 and 2008 the company flew helicopter-borne magnetic and VTEM surveys over the claim block as part of a larger program carried out over the entire Rau exploration property. ATAC Resources added Rau cl 65-96 (YC57529) in October 2007, R cl 1-1295 (YC68334) in July 2008 and S cl 1-1250 in 2009.

In April 2008, ATAC Resources optioned Rau cl 1-32 (YC50268) and cl 87-94 (YC57551) (referred to as the Wau option) to Yankee Hat Minerals Ltd. in return for shares in Yankee Hat and certain work commitments. The option agreement allowed Yankee Hat to explore the area for tungsten mineralization in the vicinity of the occurrence. Between June and July 2008 Yankee Hat Minerals prospected and collared 3 diamond drill holes (437.38 m) on the claims with only one of these drill holes testing the Flat Top occurrence. In February 2009 the company dropped its option without any interests being earned.

ATAC Resources carried out prospecting at the Flat Top occurrence in 2009.

Regional & Property Geology

ATAC Resources carried out the 2008 exploration program on behalf of Yankee Hat Minerals. At that time, the Rau claims surrounding this occurrence had seen very little modern detailed mapping. Based on geological mapping and correlation studies carried out in later programs the occurrence is located along the contact between Mackenzie Platform dominantly shallow water carbonate and clastic sediments and regionally metamorphosed basinal sediments deposited in the Selwyn Basin. Both packages were deposited on the western margin of North America. The contact is believed to be marked by a thrust fault that thrusts older Mackenzie Platform Bouvette Formation (Cambrian to Devonian) rocks onto younger Selwyn Basin Earn Group (Devonian to Mississippian) rocks. In the south end of the claim block a high angle normal fault(?) places Selwyn Basin rocks against Mackenzie Platform rocks.

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.

In the southwest corner of the claim group thin volcanic horizons assigned to the Marmot Formation (Cambrian to Silurian) are interbedded with the Bouvette Formation rocks. The horizons range from a few metres to about 20 m thick and are locally magnetic. Although volumetrically insignificant it appears these horizons have played an important role in localizing mineralization in the underlying carbonates by acting as an impermeable cap. The Rackla Pluton, a granitic intrusion assigned a (U-Pb zircon) age of 62.9 ± 0.5 Ma intrudes Bouvette Formation rocks in the east central portion of the claim block. Numerous dyke and sills associated with the pluton intrude the Bouvette Formation in the northwest portion of the claim block.

Mineralization & Results

The Flat Top showing lies along a north trending ridge (originally named Flat Ridge by the Prism joint venture), that outcrops along the contact between Bouvette Formation and Earn Group strata. Prism Resource discovered scheelite and tungsten mineralization on the ridge in 1979. Soil sampling carried out in 2008 outlined coincident, moderately to strongly anomalous gold, copper and tungsten values in an area measuring approximately 600 m long and up to 300 m wide. Prospecting carried out in 2009 traced skarn mineralization around the nose of the ridge for approximately 400 m. Geological mapping carried out by ATAC Resources noted four types of skarn mineralization occurring across a stratigraphic thickness of about 40 m. The four types of skarn (AR 096936) noted are:

1. Felted to radiating masses of acicular tremolite/actinolite or wollastonite/actinolite in a localized band up to several metres wide above the limestone/shale contact,
2. Masses of tremolite \pm calcite in cm sized veinlets within unaltered carbonate,
3. Fe-rich skarn with aggregates of radiating, acicular tremolite/actinolite masses replacing carbonate,
4. Most Fe-rich skarn with masses of light green actinolite, local tourmaline, biotite, grey quartz and massive limonite upward from the contact.

Prism Resources (1980) reported rock samples assaying up to 8.38% tungsten oxide (WO₃), although typical samples from the area returned average grades of less than 0.04%

tungsten oxide. Two skarn samples collected in 2008 from talus lying overtop the mineralized zone, close to the collar of the drill hole returned 166 ppb gold, 176 ppm tungsten and 289 ppb gold and 92 ppm tungsten. ATAC Resources tested the mineralized zone with a single drill hole in 2008 but the hole was collared too far downhill and only intersected shale belonging to the Earn Group (AR 096936).

ATAC Resource collared a second hole to test a linear magnetic high that trends through an area of mineralized actinolite-diopside +/- garnet skarn float located in the southwest end of the claim block. The hole intersected 182.54 m of limestone that is cut by several narrow pegmatite and granitic dykes and sills. The best result came from actinolite skarn bands which returned peak values of 781 ppm and 445 ppm tungsten over 1.08 m and 1.0 m respectively.

The last drill hole collared by ATAC Resources tested a magnetic anomaly in an area where a skarn band is exposed near a creek on the west-central side of the claim block. Rock samples collected during a prospecting program carried out in 2006 returned values up to 4 010 ppm tungsten. The hole intersected limestone interbedded with chlorite skarn bands, which are less than 0.5 m thick except for one that is 8.13 m thick. Core samples of skarn typically returned 36.5 to 610 ppm tungsten, with a peak value of 1,220 ppm W over 9 cm.

Work History

Date	Work Type	Comment
12/31/1980	Drilling	Number of holes drilled: 1 Amount of work done: 151 METRES
12/31/1980	Geochemistry	
12/31/1979	Drilling	Number of holes drilled: 1 Amount of work done: 140 METRES
12/31/1979	Geology	
12/31/1979	Geochemistry	
12/31/1979	Trenching	
12/13/2009	Other	
12/13/2008	Airborne Geophysics	
12/13/2008	Geochemistry	
12/13/2008	Drilling	Three holes (437.38 m). Only one hole tested occurrence area but it was collared too far downhill and only intersected shale belonging to Devonian to Mississippian Earn Group.
12/13/2008	Airborne Geophysics	
12/13/2008	Other	Carried out over Wau option.
12/13/2007	Airborne Geophysics	Geophysical program flown over entire Rau property. Magnetics also collected.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
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
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
		Geological Mapping, Prospecting, Soil Geochemistry, and Diamond	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		

095684	2009	Geological Mapping, Prospecting, Soil Geochemistry and Diamond Drilling at the Rau Property	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
095622	2008	Prospecting and Diamond Drilling at the Wau Property	Diamond - Drilling, Drill Core - Geochemistry	3	437.38
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
095130	2007	Geological Mapping, Prospecting, Soil Geochemistry, and Geophysical Surveys at the Rau Property	Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
093987	1998	Digital Topography, Landsat, and Colour Air Photo Survey over the Clark Claims]	Orthophoto - Airphotography, Rock - Geochemistry, Landsat - Remote Sensing		
090684	1980	Blue Lite Assessment Report	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology	1	139

Related References

Number	Title	Page(s)	Reference Type	Document Type
1990-1	Geology of the Mt. Westman Map Area (106D/1)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
2003-9(D)	Yukon Digital Geology (version 2)		Yukon Geological Survey	Open File (Geological - Bedrock)
2003Heon	Yukon Regional Geochemical Database - Stream sediment analyses		Yukon Geological Survey	Database
1990-3	Geology of 106D/8 & 7 (East Half) Map Areas		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
YEG2008_OV	Yukon Exploration and Geology Overview 2008	34, 37.	Yukon Geological Survey	Annual Report
YEG1979_80	Yukon Geology and Exploration 1979-80		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
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