## Occurrence Details

**Occurrence Number:** 106D 125
**Occurrence Name:** Bobcat
**Occurrence Type:** Hard-rock
**Status:** Prospect
**Date printed:** 8/5/2025 8:27:23 AM

## General Information

**Secondary Commodities:** copper, gold
**Aliases:** Rau, Rackla
**Deposit Type(s):** Skarn
**Location(s):** 64°10'51.35" N - -134°19'31.59" W
**NTS Mapsheet(s):** 106D01
**Location Comments:** Coordinates supplied by ATAC 2019
**Hand Samples Available:** No
**Last Reviewed:**

### Capsule

**Exploration History**

The earliest reported exploration in the region occurred in 1922, following the discovery of silver mineralization at Keno Hill, prospectors first identified and staked mineralized float occurrences at Carpenter Ridge in the headwaters of the Beaver River, west of the showing. In 1924, reconnaissance work conducted by the Geological Survey of Canada discovered galena-calcite-siderite in float on the southwest end of Carpenter Ridge. A sample of this float returned 8.75 oz. silver and 56.0% lead.

Nearby at Grey Copper Hill, silver-rich tetrahedrite float was discovered in 1923 by an independent prospector. This showing and other nearby prospects were staked later that year. Several investigatory adits were dug into the hillside during follow up exploration but eventually all claim holdings lapsed.

Between 1930 and 1988 Grey Copper Hill was staked several times by independent prospectors and exploration companies, including Cypress Resources Limited, United Keno Hill Mines Limited, Hesca Resources Corporation Ltd., Prism Resources Limited and Bonventures Limited. Sporatic work was reported and eventually all claims ultimately expired.

In 1968, Cominco Limited staked the Beaver claims on thew westweren side of the Rau Property based on results of regional geochemical sampling done the year before. Later that year, L. Elliott staked the nearby Now claims and optioned them to Cominco, which completed mapping and soil sampling in 1968 and 1969 (Johnson, 1969). The claims were later allowed to lapse.

In 1977, Prism Joint Venture (Asamera Oil Corp, Chieftain Development Company Limited, Prism Resources Ltd, Siebens Oil & Gas Limited and E & B Exploration Limited) restaked Cominco's claims as part of a larger block that extended for about 20 km along the north side of the Beaver River. In 1979, Dome Petroleum Ltd replaced Siebens in the joint venture.

Prism conducted most of its activities around the original Beaver claims. Soil sampling and mapping were performed in 1977 (Montgomery and Dewonck, 1978) and additional soil sampling and trenching were done in 1978 (Prism Joint Venture, 1979). In 1979 Prism completed six diamond drill holes totalling 610 m (Dewonck, 1980). This work focused primarily on sedimentary exhalite and Mississippi Valley type lead-zinc mineralization, but resulted in the discovery of a narrow gold-rich vein (the Now Showing).

NDU Resources Ltd. staked claims over the Now Showing in 1987 to cover the lead, zinc and silver soil geochemical anomalies identified by Cominco and Prism. The following year, NDU conducted a geochemical sampling program which focused on the gold vein mineralization at the Now Showing (Cathro, 1989).

In 1977, on what is now known as the Ocelot showing, Prism Resources conducted mapping, soil sampling and electromagnetic surveys. Numerous samples from that program returned high zinc-in-soil values ranging from 2,100 ppm to 12.2%. One sample collected from a large gossan on the Ocelot Showing yielded 3.8 g/t silver, 800 ppm lead and 12.2% zinc (Montgomery and Cavey, 1978), suggesting the metals were leached and remobilized in acidic groundwater before being reprecipitated when the fluids were neutralized. These promising results were not followed up.

In 1979 and 1980, Prism explored the northern part of the Rau Property and conducted prospecting, soil geochemical sampling and one diamond drill hole. This work led to the discovery of scheelite mineralization at the Blue Lite and Flat Top Showings. Well mineralized tremolite skarn specimens from the Flat Top Showing assayed up to 8.4% $WO_3$, but most material graded below 0.04% (Churchill, 1980). No further work was done at either showing.

ATAC Resources Ltd  interest in the area was prompted by an isolated, high gold value (150 ppb) reported by a regional-scale stream sediment geochemical survey, conducted by the Geological Survey of Canada (Hornbrook et al., 1990). This value is in the 99th percentile of gold results from the survey and is supported by a 99th percentile tungsten value (25 ppm). The sample was collected near the Rackla Pluton, east of the Tiger Deposit.

In 2006, ATAC Resources Ltd staked 64 Rau claims to follow up a high gold value (150 ppb) reported by a regional-scale stream sediment geochemical survey, conducted by the Geological Survey of Canada (Hornbrook et al., 1990). During the staking, a number of rock and soil samples were collected, many of which returned anomalous values for tungsten and a few were notably enriched in gold, lead, zinc, silver and copper. Cursory prospecting relocated scheelite-bearing tremolite skarn (Flat Top Showing) and discovered tungsten in diopside-actinolite skarn and highly fractionated intrusive rocks, about 1,500 m to the south.

In 2007 ATAC completed geological mapping, prospecting, grid soil sampling and helicopter-borne variable time-domain electromagnetic (VTEM) surveys on the Rau property (Eaton and Panton, 2008). This work partially delineated a large hydrothermal system centered on the largely buried Rackla Pluton. Following that program, ATAC staked an additional 32 claims.

ATAC and Yankee Hat Minerals Limited signed an option agreement in spring 2008 concerning 40 claims that covered the Rackla Pluton and the tungsten-bearing skarns. During the summer of 2008 Yankee Hat conducted prospecting and a total of 437.38 m of diamond drilling in three holes (Dumala, 2008). Several narrow skarn bands with weak to moderate tungsten mineralization were identified within the carbonate host rocks. The option agreement was terminated in late 2008 following poor results and the claims were returned to ATAC.

Also in the summer of 2008, ATAC conducted geological mapping, prospecting, soil and stream sediment geochemical sampling, 3,423.21 m of diamond drilling in 18 holes and property-wide helicopter-borne magnetic variable time-domain electromagnetic (VTEM) surveys on the claims not covered by the Yankee Hat option agreement. Drilling identified three stacked, gold-bearing horizons in what is now known as the Tiger Deposit (Dumala, 2009). In response to positive results, ATAC added 1,340 claims.

In 2009 ATAC continued to delineate the Tiger Deposit with an additional 58 diamond drill holes totalling 9,578.30 m (Dumala and Lane, 2010). Drilling identified a significant oxide component to the northwest, within the Tiger Deposit. Prospecting in 2009 also identified several new showings containing mineralization similar to that found at the Tiger Deposit. These include the Cub, Lion, Jaguar, Panther, Cougar, Puma, Cheetah and Lynx Showings.

Between 2010 and 2012, ATAC Resources carried out a soil sampling grid and limited prospecting over the occurrence. In 2018, ATAC Resources performed detailed mapping, prospecting and hand trenching. Further prospecting and diamond drilling (3 holes, 722.2 m), RAB drilling (6 holes, 239.58 m) were performed in 2019, as well as ground-based IP and magnetic geophysical surveys.

**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 volcaniclastic 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/unkown deposit style (AR 096936).

**Mineralization & Results**

The Bobcat occurrence was originally discovered as a gold-in-soil anomaly by ATAC Resources in 2010. Follow-up prospecting between 2010 and 2012 identified the anomaly as intrusion-related skarn and vein mineralization with grades up to 13.7 g/t Au, 1090 g/t Ag, 1920 ppm Cu, 11.9% Pb, and 10.9% Sn.

Prospecting and diamond drilling by ATAC Resources in 2018 and 2019 identified mineralization as "comb textured, quartz-tremolite-malachite sulphide veins that exhibit multi-phase retrograde skarn alteration". Mineralization includes chalcopyrite, pyrrhotite, pyrite and bismthinite. Mineralized veins are narrow, ranging from mm-size to half a meter, and have silicified, bleached alteration envelopes extending several meters into the host carbonate rocks. Drilling results in 2019 returned significant results with intervals of up to 17.75 g/t Au over 0.51 m and 173 g/t Au and >1% Cu over 0.05 m. Prospecting also returned anomalous values with the best grab samples ranging from 6.05 g/t Au and 1.9% Cu to 50.8 g/t Au and 3% Cu (atacresources.com, news release: 9 Sep/2019).

## Work History

| Date | Work Type | Comment |
|---|---|---|
| 6/1/2019 | Geochemistry | |
| 6/1/2019 | Drilling | 3 holes, 722.2 m |
| 6/1/2019 | Geochemistry | |
| 6/1/2019 | Geochemistry | |
| 6/1/2019 | Drilling | 6 holes, 239.58 m |
| 12/13/2019 | Ground Geophysics | |
| 12/13/2019 | Ground Geophysics | |
| 12/13/2019 | Other | |
| 12/13/2018 | Geology | |
| 12/13/2018 | Trenching | |
| 12/13/2018 | Other | |
| 12/13/2012 | Other | |
| 12/13/2011 | Other | |
| 12/13/2010 | Geochemistry | |
| 12/13/2010 | 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 |
|---|---|---|---|---|---|
| 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 |

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|---|---|---|---|---|---|
| 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 |