



Occurrence Details

Occurrence Number: 116B 094

Occurrence Name: Antimony Mountain

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 6/14/2025 4:58:26 PM

General Information

Secondary Commodities: arsenic, bismuth, copper, gold, silver

Aliases: Aj, O'Brien

Deposit Type(s): Vein Cu+/-Ag Quartz

Location(s): 64°17'18" N - -138°10'19" W

NTS Mapsheet(s): 116B08

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as 144 AJ cl (87572) in Jul/66 by Conwest Exploration Company Ltd and Central Patricia Gold Mines Ltd, which carried out geochemical sampling, geophysical surveying, geological mapping and drilled 4 holes (200.9 m) in 1967. Optioned in Jul/75 by Acheron Mines Ltd, which added AJ, JA, etc cl (YA2100) and carried out geological mapping, geochemical sampling, hand trenching and drilled 3 holes (166.1 m) in 1975 and changed its name to Pan Acheron Resources Ltd in 1976.

Following an EM survey in 1980 by Riocanex Inc, the property was expanded in Sep/82 and optioned by Cody Hawk Resources Inc, which carried out geological mapping, EM surveying and geochemical rock sampling in 1983 and 1984; geophysical surveying in 1984; partially restaked the showing as Con cl (YA87874) in Mar/86; and trenched in 1988.

In Mar/89 Total Energold Corp optioned the Con and JA claims and added them to their existing claim block, comprised of Tooth, Hud and Buz claims. During the 1989 field season, the company carried out a large exploration program on their consolidated claim block consisting of geological mapping, geochemical sampling, airborne and surface magnetometer and EM surveying, trenching and drilled 6 holes (756 m). Total Energold dropped the option in Jan/91 and the claims reverted to Cody Hawk Resources.

S. Ridgway tied on 114 Dar cl (YB39844) to the south in Jan/91 but they were allowed to lapse in Feb/92.

In Jan/94 the majority of Con and JA claims lapsed but 6 Con claims overlying the occurrence remained in good standing. In Oct/94 Kennecott Canada Inc staked the AM cl 1-120 (YB52734) around three sides of the remaining Con claims.

In Jan/95 B. Kreft restaked the occurrence as Tim's cl 1-4 (YB53058) when the remaining Con claims expired.

In 1995 Kennecott carried out detailed geological mapping and rock, soil and stream sediment sampling on the AM claims. In Dec/95 the company staked PM cl 121-194 (YB67734) on the northeast and northwest side of the AM and Tim's claims. In 1996 Kennecott carried out a limited exploration program over selected portions of their claim block. The company also optioned the Tim's claims from Kreft.

In 1997 Propector International Resources Inc staked For Sure cl 1-20 and 25-38 (YC04884) 3 km to the southeast, contiguous with the AM claims and carried out one day of geochemical stream sediment sampling, prospecting and geological mapping in 1998.

In 1998 Kennecott carried out a detailed exploration program consisting of property wide regional stream sediment fine-fraction sampling, prospecting, soil and rock sampling of ridges and valley slopes. The program concentrated on areas that were underexplored by previous operators. In Aug/98 the company staked OM cl 1-63 (YC07710) to the north to cover anomalous drainages.

Prospecting, soil sampling, mapping, and trenching early in 2004 provided drill targets for the Strategic Metals/War Eagle JV. Drilling later in 2004 targeted the flanks of Mt. Walker, a copper and gold geochemical anomaly associated with surface mineralization. Four holes (832 m) were drilled nearly perpendicular to an east-trending extensional fracture set to test for bulk-tonnage, intrusive-hosted gold mineralization.

In 2009, Golden Predator drilled 12 diamond drillholes on the AJ target.

Capsule Geology

The occurrence is primarily underlain by the mid-Cretaceous (93 to 91 Ma) Antimony Mountain Stock of the Tombstone Plutonic Suite. The stock intrudes a southeast dipping sequence of variably deformed and metamorphosed coarse to fine grained clastic rocks belonging to the Late Proterozoic to Early Cambrian Hyland Group and the Ordovician to Early Devonian Road River Group.

The Antimony Mountain Stock consists of a well jointed syenite, quartz monzonite and diorite ranging from equigranular to porphyritic with local trachytic texture. Contacts between the various compositional and textural phases appear to be gradational. The main stock encompasses an area of about 20 square kilometres with lesser related stocks and dykes concentrated to the northwest. Aplite, diorite and lamprophyre dykes locally cut the intrusive and sedimentary rocks.

Along the contact of the Antimony Mountain Stock, surrounding meta-sediments are altered to hornfels facies with finely disseminated pyrrhotite over widths up to 1000 m. These resistant sulphide rich rocks form prominent rusty weathering ridges. Previously documented 'skarns' examined (by Kennecott) to date are best described as calc-silicate hornfels with little true skarn mineralogy. The intrusion shows some indications of metasomatic alteration along its margins with secondary potassium feldspar overprinting plagioclase crystals and locally developed secondary fine-grained biotite. Hydrothermal alteration is localized along faults and shears within the sedimentary rocks, generally concentrated around the intrusions. Rare hydrothermal alteration has been observed associated with shears in the intrusion.

Conwest described the original occurrence as arsenopyrite occurring with minor pyrite, pyrrhotite and chalcopyrite in three parallel quartz veins located at the North, South (renamed AJ Vein by Energold) and Ridge showings. The veins strike 045°, dip 50-90° SE and cut the syenite stock near its contact with Proterozoic or Lower Cambrian metasedimentary rocks. The South showing is the strike extension of the North showing while the Ridge showing is a separate area located at the top of a ridge 400 m to the southeast.

Chip samples from the North showing vein returned up to 120.0 g/t Au and 41.1 g/t Ag across 1.3 m. Chip samples across two parallel branches of the South showing vein, separated by 3.3 m of waste, returned 41.1 g/t Au across 2.5 m and 44.6 g/t Au across 0.6 m. No chip sampling was reported from the Ridge Zone but specimens returned assays up to 44.1 g/t Au. The best Conwest intersection was 28.5 g/t across 2.8 m on the South showing vein but recoveries were poor.

Acheron's drill program returned 20.6 g/t Au across 3.1 m from the South showing vein while the hole on the North showing vein returned only low values with poor core recovery from an 18 m wide shear zone. The third hole was lost in overburden. Cody Hawk determined that the best gold values are associated with quartz-tourmaline-sulphide veins in the hornfels aureole beside the Antimony Mountain Stock.

Total Energold's 1989 exploration program marked the first time that the entire Antimony Mountain area was controlled and explored by one company. The company remapped the location of all known veins, showings and other significant geological occurrences in the area. The North and Show showings were renamed the AJ vein. Hand trenching on the vein cut mineralized lenses up to 5 m wide. Holes 89-007 to 89-010 tested a strong east-trending geophysical anomaly passing through the north end of the vein where a trench sample assayed 20 g/t Au over 3 m. Hole 89-007, located 25 m east of the vein, intersected the vein at depth. Assays averaged 22.8 g/t Au over a true thickness of 1.53 m. Holes 89-011 and 89-012 tested a parallel geophysical anomaly which passes through the south end of the vein. The two intersections graded 7.9 g/t Au and 7.5 g/t Au over a true thickness of 1.8 m.

Prospecting by Total Energold located the Toby vein 1400 m northwest of the AJ vein. The vein is exposed in two trenches 15 m apart and consists of arsenopyrite-pyrite-quartz-tourmaline-calcite cutting the Antimony Mountain Stock. Sampling returned low gold values.

Kennecott staked their claims to evaluated the bulk tonnage gold potential of the Antimony Mountain Stock. In 1995 the company discovered a series of sheeted quartz-arsenopyrite veins cutting monzonite near the reported location of the Toby vein. Chip samples ran up to 280 ppb Au and contained anomalous As and Cu values. Soil and stream sediment sampling over the whole claim block returned numerous multi-element anomalies.

In 1996 detailed geological mapping at Toby Creek outlined several significant fault zones and gossans in sedimentary rocks exposed in the creek bed. All returned values of < 0.005 g/t Au. Two float samples of arsenopyrite-chalcopyrite-tourmaline-quartz veining in the vicinity of one of the fault zones returned 19.00 g/t and 7.24 g/t Au. Both samples contained highly anomalous As and Bi and elevated Ag, Co, Cu, Mo, Pb and Sb. The sampled material was not found in outcrop but appeared to be locally derived. Similar vein material located in float further down slope returned 2.14 g/t and 0.935 g/t Au.

In 1998 a float sample collected 150 m north of the northern portion of the AJ vein returned 4.3 g/t Au. A soil sample collected down slope of the southern portion of the vein returned 170 ppb Au. A line of soil samples collected along the ridge separating Cody Creek from Toby Creek returned several 200+ ppb Au spot anomalies. Prospecting in the Toby Creek area uncovered a 40 cm wide drusy quartz vein with pods of massive arsenopyrite in quartzite outcrop located at the head of the creek. A sample of the vein returned 69.0 g/t Au.

On the For Sure claims, disseminated or interstitial polymetallic sulfide mineralization is associated with narrow quartz-calcite breccia veins within shear and hornfelsed zones adjacent to the southeastern edge of the Antimony Mountain stock. Mineralization consists of up to 10% sphalerite and up to 5% galena occurring as pods, blebs up to 10 mm and disseminations, as well as pyrite and pyrrhotite to 3% as small blebs up to 5 mm. Grab sampling returned anomalous values up to 15.6 ppm Ag, 13 855 ppm Pb and 65 124 ppm Zn with only traces of Au. Strategic and War Eagle diamond drilled four holes in the property in 2004 to test strong gold and copper soil geochemical anomalies on the slopes of Mt. Walker. All holes were drilled nearly perpendicular to an east-west-trending extensional fracture set. The drill program was designed to test for bulk tonnage, intrusion-hosted gold mineralization. Three of the four holes cut 20- to 40-metre intervals enriched in gold (200 to 300 ppb). Total sulphide content averaged about 2% in gold-enriched intervals. Arsenopyrite and chalcopyrite are the most common sulphide minerals, occurring in fractures, quartz veinlets or narrow alteration envelopes surrounding the mineralization. Gold content generally increased with elevation, suggesting that the most favourable target lies higher on the slopes of Mt. Walker, closer to the core of the geochemical anomaly.

Diamond drilling in 2009 by Golden Predator comprised 12 holes drilled in a fan pattern from two locations. Drillhole AJ09-017 intersected 0.49 m @ 5.55 g/t Au, 4.88 m @ 12.45 g/t Au and 0.31 m @ 9.24 g/t Au. The drilling intersected veining with variable amounts of quartz, tourmaline, arsenopyrite, pyrite, pyrrhotite and chalcopyrite. Gold mineralization appears to have a geochemical association with arsenic, bismuth, tellurium and silver. Sporadic enrichments of copper, lead, zinc, arsenic and silver are found outside the veins within the hornfels zone.

References

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ACHERON MINES LTD, Dec 1976. Assessment Report #091360 G.W. Grant.

CODY HAWK RESOURCES INC., Jun 1983. Assessment Report #092041 by H.J. Hodge.

CODY HAWK RESOURCES INC., Nov 1984. Assessment Report #091576 G.W. Grant.

GEORGE CROSS NEWSLETTER, 8 Aug/1975; 7 Nov/1975.

GOLDEN PREDATOR ROYALTY & DEVELOPMENT CORP., News Release, 5 Nov 2009.

KENNECOTT CANADA INC, Jan 1996. Assessment Report #093368 by T. Heah.

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KENNECOTT CANADA INC, Dec 1996. Assessment Report #093525 by S. Coombes.

KENNECOTT CANADA INC, Dec 1999. Assessment Report #093916 by F. Andersen and R. Hulstein.

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PROSPECTOR INTERNATIONAL RESOURCES INC, Nov 1998. Assessment Report #093900 by B.D. Game and V. P. VanDamme.

STRATEGIC METALS LTD AND WAR EAGLE MINING COMPANY INC, News Release, 17 Feb/2004; 20 Apr/2004; 20 Oct/2004;

TOTAL ENERGOLD CORPORATION, Dec/1989. Assessment Report #092787 by K. Pelletier and T. Tucker.

TOTAL ENERGOLD CORPORATION, Nov/1989. Assessment Report #092792 by R. Basnett.

YUKON EXPLORATION 1989, p. 140-141.

YUKON EXPLORATION AND GEOLOGY 1981, p. 279; 1983, p. 278; 1984, p. 235-236; 1995, p. 16; 1996, p. 30; 1998, p. 29.

YUKON MINING AND EXPLORATION OVERVIEW 1989, p. 5, 8, 10.

Work History

Date	Work Type	Comment
12/31/2009	Drilling	Twelve holes, 881 m.
12/31/2004	Drilling	Four holes, 832 m.
12/31/2004	Geochemistry	
12/31/2004	Trenching	
12/31/1998	Geochemistry	
12/31/1998	Other	
12/31/1996	Geochemistry	Also soil sampling.
12/31/1996	Geology	

12/31/1995	Geochemistry	Also soil and silt sampling.
12/31/1995	Geology	
12/31/1989	Drilling	Six holes, 756 m.
12/31/1989	Geology	
12/31/1989	Geochemistry	
12/31/1989	Geochemistry	
12/31/1989	Trenching	
12/31/1989	Other	
12/31/1988	Trenching	
12/31/1983	Geochemistry	
12/31/1983	Geology	
12/31/1983	Ground Geophysics	Also EM survey.
12/31/1983	Trenching	
12/31/1980	Ground Geophysics	
12/31/1975	Drilling	Three holes, 166 m.
12/31/1975	Geology	
12/31/1975	Geochemistry	
12/31/1975	Other	
12/31/1975	Trenching	
12/31/1967	Drilling	Four holes, 208 m.
12/31/1967	Geology	
12/31/1967	Geochemistry	
12/31/1967	Trenching	
12/13/2004	Other	
12/13/1998	Geology	
12/13/1984	Ground Geophysics	Also VLF-EM and VLEM surveys

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095296	2009	Assessment Report, 2009 Diamond Drilling Program Antimony Mountain	Diamond - Drilling, Drill Core - Geochemistry	12	1142
095092	2008	Assessment Report Describing VTEM and Magnetic Survey at the Antimony Mountain Property	Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics, Soil - Geochemistry		
094867	2007	Helicopter Magnetic and Radiometric Survey on the CHEYENNE Project	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics		
094729	2005	Geochemical, Geophysical, Trenching Report on the ANT Claims	Rock - Geochemistry, Soil - Geochemistry, Magnetics - Ground Geophysics, Line Cutting - Other, Hand - Trenching		
094516	2004	Assessment Report Describing Geological Mapping, Geochemical Sampling, Prospecting and Diamond Drilling at the Antimony Mountain Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other	4	831.80
093916	1998	1998 Assessment Report on the Antimony Mountain Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Prospecting - Other		
093525	1996	1996 Assessment Report on the PM and TIM'S Claims	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
092787	1989	Geological and Geochemical Report on the BUZ 1-14, HUD 1-14, and TOOTH 1-180 Claims	Historical Drill Core - Geochemistry, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Line Cutting - Other, Prospecting - Other, Surveying - Other		
092792	1989	[Diamond Drill Logs for 1989 Drilling on Antimony Mountain]	Diamond - Drilling, Drill Core - Geochemistry	6	616
091576	1983	Geophysical Report on part of the AJ-JA Claim Group	EM - Ground Geophysics, Magnetics - Ground Geophysics		
092041	1983	Report on AJ-JA Property	Diamond - Drilling, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Regional Surficial Mapping - Geology, Prospecting - Other, Hydraulic - Trenching	5	1828.80

091360	1976	[Diamond Drill Logs on the AJ Claims]	Diamond - Drilling, Drill Core - Geochemistry	8	401.36
090123	1975	Report on the A. J. Claim Group	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Hand - Trenching	3	223.11
060246	1970	Report on the Walker Claims	Interpretation - Airphotography, Rock - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Data Compilation - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC005702	Report - AJ-JA property		Property File Collection	Report
ARMC005018	Report - AJ-JA property of Cody Hawk Resources		Property File Collection	Report
ARMC012701	Property submission report and correspondence re: Antimony Mountain - Phil Collins prospect		Property File Collection	Report
ARMC020070	Annual report 1989 - Total Energold Corporation		Property File Collection	Report
ARMC016777	Geology and geochemical map - 116B/8		Property File Collection	Geoscience Map (Geological - Bedrock)

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
AJ11-26	Antimony Mountain	2011	NQ	0	2
AJ11-27	Antimony Mountain	2011	NQ	0	3
AJ11-29	Antimony Mountain	2011	NQ	0	2