



Occurrence Details

Occurrence Number: 105D 203

Occurrence Name: Grumpy

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 8/6/2025 1:46:14 AM

General Information

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

Aliases: Hartless Joe

Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au

Location(s): 60°54'17.87" N - -134°43'16.13" W

NTS Mapsheet(s): 105D15

Location Comments: Occurrence marks collar of drill holes HJ08-02 & 03 which are located within showing. Hart's original showing located 300 m to southwest.

Hand Samples Available: No

Last Reviewed: Aug 4, 2017

Capsule

WORK HISTORY

Discovered by Hart and Hunt (1997) of the Yukon Geology Program, during a regional mapping program conducted in the mid 1990's.

Staked as Hart cl 1 (YC26563) in Mar/2004 by R. Hamel to cover the Hart's original discovery. ATAC Resources Ltd prospected, soil and rock sampled the occurrence during a 1 day property visit in Aug/2004. In Sep/2004 the company formally optioned the property from Hamel and staked Hart cl 2-4 (YC30012) north of the occurrence.

In Nov/2004 ATAC Resources surrounded the original 4 Hart claims with Les cl 1-10 (YC37081) and Joe cl 1-10 (YC37091) to the northeast and Hart cl 5-28 (YC37057) to the north, west and south. The company grouped the claims into the Hartless Joe project.

In 2005 ATAC Resources carried out reconnaissance scale prospecting, rock and stream sampling program across the property. The company also carried out contour and grid soil sampling with the majority of samples collected between the Grumpy (this occurrence), and the Hartless Joe (Minfile Occurrence #105D 051) occurrence located approximately 2.2 km to the northeast.

In Jan/2006 ATAC Resources optioned the Hartless Joe project to New Shoshoni Ventures Ltd in return for shares and certain work commitments. New Shoshoni transferred the initial shares to ATAC Resources but never undertook any exploration work and the agreement was terminated in May/2007.

In 2007 ATAC Resources continued prospecting the property and carried out follow-up soil sampling between the Grumpy and Les 2 (part of this occurrence) showings. Later in the exploration season the company flew a helicopter-borne VTEM and magnetic geophysical survey over the entire project area and conducted a reconnaissance scale, ground induced polarization and resistivity survey over the Grumpy showing.

In Mar/2008 ATAC Resources optioned the Hartless Joe project to Ferus Resources Ltd in return for cash, shares and certain work commitments. In the summer of 2008 Ferus Resources collared 3 diamond drill holes (612.2 m) on and around the Grumpy showing. In Jan/2009 Ferus terminated the option and returned the claims to ATAC Resources.

In Jan 2010 Strategic Metals paid \$300 000.00 to ATAC Resources for a 100 % interest in the Hartless Joe project and 5 other properties owned by ATAC Resources. In Nov/2010 Strategic Metals staked Hart cl 29-40 (YD35289) on the east and southeast sides of the property. On Jan/2011 Strategic Metals optioned the Hartless Joe property to Alix Resources Corp in return for cash and shares.

In May/2011 Alix Resources attempted to transfer its interest in the property to Caribou Copper Resources Ltd but the agreement fell through. During the 2011 exploration season Alix geologically mapped and sampled all known areas of mineralization. Alix Resources terminated the agreement in Jul/2012 and return the claims to Strategic Metals.

In 2012 Strategic Metals carried out limited rock sampling on the Joe 4 (Minfile Occurrence #105D 197) and the Les 7 and Ace showings (Minfile Occurrence #105D 051) and contour soil samples over the central and northern parts of the property. A drill pad was constructed near the center of the Grumpy showing but was never utilized. In Sep/2012 Strategic Metals staked Joe cl 11-12 (YC37091) on the west-central side of the property.

In Aug/2015 Strategic Metals collected a line of soil samples along the west-central side of the property, covering the Joe Creek and Joe 4 (Minfile Occurrence #105D 197) showings. The company also collected soil and rock samples along a line trending north-easterly between the Les 2 (this occurrence) and Les 7 (Minfile Occurrence 105D 051) showings. In Oct/2015 the company flew a LIDAR survey over the entire property.

In Jul/2015 Strategic Metals staked Joe cl 13-30 (YE43243) and Hart cl 41-46 (YD00305) on the east side of the property. In Oct/2015 the company staked fractional Les cl 11-12 in the center of the property.

In the summer of 2016 Strategic Metals carried out contour soil sampling over the northern portion of the property covered by Joe claims 13-30, staked the previous fall. The company also hand trenched the King showing (formerly called the Les 7 showing) and prospected and rock sampled other mineralized showings. As part of a Land Use Permit, a heritage study was also carried out. In Sep/2016 Strategic Metals collared 5 diamond drill holes (292.6 m) on the King showing and one hole (74.7 m) on the Queen (Minfile Occurrence #105D 051) showing.

In Jul/2016 Strategic Metals staked Joe cl 31-94 (YF49391) to the north and in Aug/2016 staked Hart cl 47-98 (YF47807) to the south. In Oct/2016 Strategic Metals added Joe cl 95-170 (YF49875) to the north and Hart cl 99-163 (YF49119) to the south.

GEOLOGY

The occurrence is area is located around Joe Mountain, approximately 29 km northeast of the city of Whitehorse in southeastern Yukon. Access is normally by helicopter although foot access could be obtained from the Alaskan Highway located approximately 25 km to the west. The Hartless Joe property abuts Land Claims Settlement lands to the west, owned by the Ta'an Kwach'an Council.

The area was mapped in detailed in the early 1990's by Hart et al. employed by the Canada/Yukon Geoscience office which was later incorporated into the Yukon Geology Program, fore runner of the Yukon Geological Survey. Hart and Hunt published a 1:50 000 geological map in 1994b and an updated versions in 1997 and 2003. S. Piercy (2005), under contract with the Yukon Geological Survey released a research paper on the geological and geochemical studies of Joe Mountain which employed Hart's nomenclature. In 2015 and 16, E. Bordet of the Yukon Geological Survey remapped parts of topographic map sheets 105E 02, 03 and 06 to the north, employing updated nomenclature. In 2016 M. Colpron et al., of the Yukon Geological Survey released a geological compilation of the Yukon.

The Hartless Joe property is located within Stikinia, the largest of the exotic terranes that have been accreted to the western margin of Ancestral North America. The Stikinia is comprised of a package of volcanics and sedimentary rocks that are cut by numerous large-scale and complex faults. All of the known mineralized showings located on the Hartless Joe property are hosted in Middle Triassic

Joe Mountain Formation volcanic rocks which underlie the majority of the property. Bordet revised Harts original map units by dividing them into specific rock types, such that all similar rock types like the various basalts form their own unit. In addition Bordet separated mudstones, volcanics and calcareous units into separate units. Bordet did not map any massive gabbro (Hart's unit MTJM4) in her area and the Yukon Geological Survey's 2016 geological compilation still lists this as a separate unit (MTrdJ). The gabbro intrudes other Joe Mountain volcanic rocks in the northern part of the property and likely represents a hypabyssal portion of the magma chamber that spawned the Joe Mountain volcanic suite.

In the southwest side of the property the Joe Mountain Formation rocks are overlain by Upper Triassic Aksala Formation sediments, comprised of Casca Member sedimentary rocks and the Hancock Member which forms a distinctive limey sub-unit of limestone, marble and skarn rocks. The youngest formational units are turbiditic mudstones and sandstones assigned to lower to Middle Jurassic Richthofen Formation of the Laberge Group, which overlie Aksala Formation rocks in the southwest side of the property.

A Lower Cretaceous pluton tentatively assigned to the M'Clintock Lake pluton of the Teslin Plutonic Suite intrudes Joe Mountain Formation rocks on the east side of the property. Several mid-Cretaceous rhyolite and dacite flows assigned to the Bing Creek volcanics of the Mount Nansen Group overlie Joe Mountain volcanics in the southeast portion of the property.

The Hartless Joe Property hosts gold and silver bearing epithermal style mineralization that is hosted within Joe Mountain Formation volcanics. Mineralization occurs within veins, silica- and carbonate-breccias and as stratigraphically-controlled horizons. To date mineralization has been identified in 8 separate showings; Grumpy and Les 2 (this occurrence), King (Les 7), Ace, Queen and Jack (Minfile Occurrence #105D 051) and Joe Creek and Joe 4 (Minfile Occurrence # 105D 197).

Hamel's single Hart cl (cl 1 - YC26563) covered C. Hart's original sample site. Hart described the sample as a grab sample collected at the headwaters of Cap Creek and consisting of quartz stringers in a north-trending, siliceous felsic dyke. The sample returned an assay of 10.6 g/t gold. Subsequent exploration by ATAC Resources and Strategic Metals has outlined a 670 m by 400 m area of mineralized quartz-carbonate float, extending north of the original discovery, along the surface trace of a fault and to the east, along the fold axis of an east trending anticline. Float samples collected within the designated area have returned assays of up to 251 g/t gold, 4 540 g/t silver and enriched arsenic values (see assessment report #094692 for these assay results). Soil sampling in and around the Grumpy showing returned strongly anomalous gold and arsenic values and moderately anomalous silver, copper and lead values.

Mineralization at the Grumpy showing occurs in 2 geological settings; rusty weathering quartz-carbonate veins and to a lesser extent, quartz-carbonate healed volcanic breccia and silicified sedimentary rock. Veins typically exhibit a syntaxial or comb texture and sulphide minerals comprised of pyrite, galena, minor chalcopyrite and an unidentified grey-black sulphide (likely tellurides), occur as millimeter-scale bands and blebs. Samples of quartz-carbonate healed breccias are characterized by the presence of disseminated chalcopyrite, trace galena and an unidentified grey black sulphide (tellurides (?)). Chlorite- and sericite-altered silicified sedimentary rock containing disseminated pyrite may be vein wallrock or stratigraphically-controlled mineralization.

The Grump showing was tested with three diamond drill holes (612.2 m) in 2008. Hole HJ08-01 tested a VTEM anomaly identified in the 2007 airborne geophysical survey. The anomaly was located approximately 300 m southwest of the Grumpy showing. The hole intersected mostly dark grey fetid limestone that was cut by numerous narrow dykes and sills which were locally pyritic. Samples of pyritic limestone and feldspar porphyry returned low values for gold, silver and pathfinder elements.

Drill holes HJ08-02 and 02 (occurrence location) were drilled in opposite directions from the same pad located within the showing to provide a section line across the showing. Both holes intersected a number of felsic dykes near the collars of each hole and numerous 1 to 10 cm wide quartz-carbonate veins throughout the hole. Both the dyke and veins contained varying amounts of disseminated pyrite. Drill hole 02 intersected sedimentary rocks in the lower part of the hole while drill hole 03 intersected volcanic rocks in the bottom half. Both holes returned low gold and silver values and lacked key pathfinder minerals such as arsenopyrite and galena observed in surface outcrops.

The Les 2 showing (UTM 516030 E, 6752695 N) is located approximately 1 km northeast of the Grumpy showing along a northwest-trending fault. It was discovered in 2005 and consists of mineralized talus lying within a recessive topographic linear. Two float samples consisting of light orange weathering, milky white quartz vein and siliceous green wallrock containing abundant galena and pyrite returned 117 and 76.1 g/t silver. Another float sample comprised of mineralized jasperoid containing white to yellow quartz stockwork veinlets, minor magnetite and orange limonitic pitting returned 0.99 g/t gold. Soil sampling returned one sample strongly anomalous in silver and several samples moderately anomalous in copper. No significant exploration work has been carried out over the showing since the 2005 exploration season.

Work History

Date	Work Type	Comment
7/1/2020	Airphotography	Drone survey
7/1/2020	Geochemistry	
7/1/2020	Drilling	3 holes, 306.33 m
7/1/2020	Other	
7/1/2019	Drilling	3 holes,
12/13/2016	Geochemistry	Sampled other showings.
12/13/2016	Other	Continued prospecting property.
12/13/2015	Geochemistry	Rock sampled various showings.
12/13/2015	Geochemistry	Follow-up soil sampling over parts of property.
12/13/2015	Trenching	On King showing.
12/13/2015	Studies	Carried out over central part of property.
12/13/2012	Geochemistry	Limited sampling.
12/13/2012	Geochemistry	Contour sampling over central and northern parts of property.
12/13/2012	Development, Surface	Drill pad constructed on Grumpy showing, never used.
12/13/2011	Geochemistry	Sampled all known showings.
12/13/2008	Drilling	Three holes (612.2 m) on and around occurrence.
12/13/2007	Airborne Geophysics	Also magnetic survey, property wide.
12/13/2007	Geochemistry	Follow-up sampling.
12/13/2007	Ground Geophysics	Also resistivity survey, 3 lines to test method.
12/13/2007	Geology	Mapped known showings.
12/13/2005	Geochemistry	Also silt sampling, reconnaissance scale,

12/13/2005	Geochemistry	Contour and grid sampling.
12/13/2004	Geochemistry	Reconnaissance rock and soil sampling.
12/13/2004	Other	Prospected around occurrence.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096787	2015	Prospecting, Geochemical Sampling and Lidar Surveying at the Hartless Joe Property	Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other, LIDAR - Remote Sensing		
096424	2012	Soil and Rock Geochemical Sampling and Drill Pad Construction at the Hartless Joe Property	Rock - Geochemistry, Soil - Geochemistry, Line Cutting - Other		
095462	2011	Technical Assessment Report for the Hartless Joe Property	Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
095188	2008	Assessment Report Describing Diamond Drilling at the Hartless Joe Property	Diamond - Drilling, Drill Core - Geochemistry	3	612.20
094998	2007	Assessment Report Describing Geochemical Sampling, Prospecting and Geophysical Surveys	Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, Prospecting - Other		
094692	2005	Assessment Report Describing Prospecting and Soil Geochemistry on the Hartless Joe Property	Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG2015-04	Preliminary results on the Middle Triassic-Middle Jurassic stratigraphy and structure of the Teslin Mountain area, southern Yukon	p. 43-61.	Yukon Geological Survey	Annual Report Paper
2016-38	Bedrock geology map of the Teslin Mountain and East Lake Laberge areas, parts of NTS 105E/2, 3 and 6		Yukon Geological Survey	Open File (Geological - Bedrock)
YEG2016-1	Updates on the Middle Triassic-Middle Jurassic stratigraphy and structure of the Teslin Mountain and east Lake Laberge areas, south-central Yukon	p. 1-24.	Yukon Geological Survey	Annual Report Paper
YEG1993-pg47	Geology of the Joe Mountain Map Area (105D/15), Southern Yukon Territory	p. 47	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG2004-16	Reconnaissance geological and geochemical studies of the Joe Mountain Formation, Joe Mountain region (NTS 105D/15), Yukon	p. 213	Yukon Geological Survey	Annual Report Paper
1994-4(G)	Geological Map of Joe Mountain Map Area, Southern Yukon Territory (NTS 105D/15)		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	p. 12, 30, 36.	Yukon Geological Survey	Annual Report
8	A Transect Across Northern Stikinia: Geology of the Northern Whitehorse Map Area, Southern Yukon Territory (105D/13-16)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Bulletin
GM2003-4	Geology of Joe Mountain map area (105D/15), southern Yukon (1:50 000 scale)		Yukon Geological Survey	Geoscience Map (Geological - Bedrock)
GM1997-6	Geology of Joe Mountain map area, southern Yukon Territory, 1:50,000-scale map (105D/15)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Geoscience Map (Geological - Bedrock)
YEG2015-OV2	Yukon Hard Rock Mining, Development and Exploration Overview 2015	p. 42.	Yukon Geological Survey	Annual Report Paper
YEG2016-OV4	Yukon Hardrock Mining, Development and Exploration Overview 2016	p. 52, 55, 59.	Yukon Geological Survey	Annual Report Paper

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
HJ-19-001	Hartless Joe	2019	NTW	0	0
HJ-19-002	Hartless Joe	2019	NTW	0	0
HJ-19-003	Hartless Joe	2019	NTW	0	0
HJ-19-004	Hartless Joe	2019	NTW	0	0
HJ-19-005	Hartless Joe	2019	NTW	0	0
HJ-08-01	Hartless Joe	2008	BTW	28	2
HJ-08-02	Hartless Joe	2008	BTW	24	2
HJ-08-03	Hartless Joe	2008	BTW	20	2

