



Occurrence Details

Occurrence Number: 105D 197
Occurrence Name: Joe Creek
Occurrence Type: Hard-rock
Status: Showing
Date printed: 4/28/2025 4:35:30 PM

General Information

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

Aliases: Hartless Joe

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

Location(s): 60°55'14.93" N - -134°43'8.13" W

NTS Mapsheet(s): 105D15

Location Comments: Location data marks approximate center point of showing.

Hand Samples Available: No

Last Reviewed: Aug 8, 2017

Capsule

WORK HISTORY

Discovered by Hart and Hunt (1997) of the Canada/Yukon Geoscience office, forerunner to the Yukon Geological Survey, during a regional mapping program conducted in the mid 1990's. The occurrence was previously staked in Jul/82 on the western end of Joe cl 1-28 (YA61396) by R. Simpson. No assessment work appears to have been filed.

R Hamel staked Hart cl 1 (YC26563) approximately 2 km to the south in Mar/2004. 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 original Hart claim.

Staked within Joe cl 1-10 (YC37091) in Nov/2004 by ATAC Resources which staked Les cl 1-10 (YC37081) to the southeast and Hart cl 5-28 (YC37057) to south at the same time. 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 occurrence (Minfile Occurrence # 105D 203), located 2 km to the south and the Hartless Joe occurrence (Minfile Occurrence #105D 051) located approximately 1.6 km to the east.

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 (Minfile Occurrence 105D 203) 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 test 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 southeast side 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 (this occurrence) and the Les 7 and Ace showings (Minfile Occurrence #105D 051) and contour soil sampling 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) due south of this occurrence.

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 (this occurrence) showings. The company also collected soil and rock samples along a line trending north-easterly between the Les 2 (Minfile Occurrence #105D 203) 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) east of this occurrence and Hart cl 41-46 (YD00305) on the southeast 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 – Minfile Occurrence #105D 051) 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 northeast and Hart cl 99-163 (YF49119) to the southeast.

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 "A" 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 1994(b) and an updated versions in 1997 and 2003. S. Piercey (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; Joe Creek and Joe 4 (this occurrence), King (Les 7), Ace, Queen and Jack (Minfile Occurrence #105D 051) and Grumpy and Les 2 (Minfile Occurrence #105D 203).

Hart's original discovery lies within Settlement "A" Lands controlled by the Ta'an Kwach'an Council. The discovery is described as a banded and massive white quartz vein containing sparsely disseminated pyrite and arsenopyrite hosted within by Middle Triassic Joe Mountain Formation pillowed basaltic flows and massive microdiorite that strike northwest and dip moderately west. The vein measures 0.5 to 1.0 m in width, is of unknown length and is located in a splay of the northwest trending Joe Creek Fault which cuts across the map sheet. Of two grab samples collected by Hart, one yielded 1 150 ppb gold, 1.2 ppm silver, and 405 ppm arsenic, while the second sample returned 90 ppb gold (1997 – Bulletin 8)

In 2005 geologists employed by ATAC Resources discovered banded and massive quartz talus containing sparsely disseminated pyrite and arsenopyrite approximately 500 m northeast of Hart's original discovery, and within the company's claim boundary. A grab sample returned 46.5 g/t silver, 0.08 g/t gold, 38 ppm arsenic, 1 ppm antimony, 0.02 % copper, 0.220 % lead and 0.03 % zinc. This area was renamed the Joe Creek showing (occurrence location). A single reconnaissance soil sample collect in 2005 approximately 300 m to the north-northeast returned 2 230 ppm gold, the highest value found to date on the property.

Prospecting carried out in 2005 identified the Joe 4 showing (UTM 515635 E, 6755030 N) approximately 1.2 km to the northeast. The showing covers mineralized quartz vein and quartz-healed breccia talus lying in a northwest-trending gully. A grab sample consisting of quartz-cemented breccia containing pyrite, chalcopyrite, pyrrhotite and an unknown blue mineral (covellite?) in quartz matrix and andesite clasts returned 16.4 g/t silver and 1.81 % copper. A second more weakly mineralized sample of breccia returned 22.4 g/t silver. A sample of cream-white weakly oxidized quartz vein containing abundant limonitic pitting and azurite and residual chalcopyrite assayed 1.91 % copper. Soil sampling returned moderate to strong copper values and weak gold and silver values.

Although both showings appeared to have been re-visited over the following years no new mineralization appears to have been discovered.

The Hartless Joe property is currently listed as available for option on the Strategic Metals website.

Work History

Date	Work Type	Comment
12/31/1997	Geochemistry	Results of samples collected by Hart released in Bulletin 8.
12/13/2016	Drilling	Five holes (292.6 m) on King showing, 1 hole on Queen showing.
12/13/2016	Geochemistry	Soil sampling northwest of Joe 4 showing.
12/13/2016	Trenching	Hand trenching on King showing,(to the southeast).
12/13/2015	Geochemistry	Soil sampling between Joe Creek and Joe 4 showings.
12/13/2011	Geochemistry	All showings prospected and sampled.
12/13/2008	Drilling	Three holes (612.2 m) collared on and near Grumpy showing.
12/13/2007	Airborne Geophysics	Also magnetic survey over entire property.
12/13/2005	Geochemistry	Sampled known showings.
12/13/2005	Geochemistry	Carried out contour and grid sampling.
12/13/2005	Geology	Mapped and prospected all known showings.

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		
094998	2007	Assessment Report Describing Geochemical Sampling,Propsecting 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	Yukon Geological Survey	Annual Report Paper
YEG2015-OV2	Yukon Hard Rock Mining, Development and Exploration Overview 2015	p. 42	Yukon Geological Survey	Annual Report Paper
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
YEG2016-OV4	Yukon Hardrock Mining, Development and Exploration Overview 2016	p. 52	Yukon Geological Survey	Annual Report Paper
YEG1993-pg47	Geology of the Joe Mountain Map Area (105D/15), Southern Yukon Territory	p. 47-66.	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. 213-226.	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)
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)
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
97-040	Placer Exploration and Prospecting Report on the Joe Mountain Area		Yukon Government: Energy, Mines and Resources	YMEP Report