



Occurrence Details

Occurrence Number: 105F 029

Occurrence Name: Groundhog

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 12/16/2025 4:58:50 PM

General Information

Primary Commodities: gold, lead, silver, zinc

Secondary Commodities: copper

Aliases: Groundhog Vein Zone

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

Location(s): 61°39'0" N - -132°49'42" W

NTS Mapsheet(s): 105F10

Location Comments: Location digitized from map in AR093042

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Tet cl (72815) in Oct/56 by H. Verslucé for British Yukon Exploration Ltd, which performed hand trenching, mapping and drilled 3 packsack holes (36.0 m) in 1957. Restaked by Verslucé in Jul/62 as Rio cl (79561); in Jul/64 as IA cl (88707) and later as Ben cl 1-24 (YA13583) and AG cl 9-16 (Y19979) in Aug/66 by Verslucé and A. Arsenault, who formed a new company, Canol Mines Ltd to develop the showing. Canol explored with bulldozer trenching and drilling on No. 1 showing-vein (occurrence C) in 1967 (225.9 m in 5 holes) and optioned Caribou cl 1-3 (89296) from an unnamed group. In 1968 the company drilled 17 holes on the No. 1 showing-vein (1 058.9 m). In 1969 the company drilled 8 holes (473.0 m) on the No. 2 showing-vein (occurrence B), and an undetermined number of holes (2,286 m) in the area located south of No. 1 showing-vein. The company carried out bulldozing in 1974. Based on drilling completed up to and including 1969, unofficial reserves for the No. 1 showing-vein were estimated at 2,558 tonnes grading 695 g/t Ag and 42.5% Pb.

The property was optioned briefly by Aurum & Argentum Ltd in 1977 and was fringe staked by N. Hennel, etc. as Porcupine, John & Ang cl (YA33683) in Jul/78. Canol carried out road construction and bulldozer trenching in 1978, added more claims and optioned the property to Silver Arrow Syndicate, which conducted extensive trenching and open cutting and shipped 780 tonnes of hand-sorted galena ore in 1979 and 230 tonnes in 1980. Hennel performed trenching in 1981.

After Silver Arrow Syndicate dropped its option, Verslucé performed more trenching in 1986 and added HV cl 1-348 (YA90984) to the west in May/86, and optioned the property to Yukon Minerals Corporation, which carried out an aggressive surface exploration program in 1987 and allowed Perrex Resources Ltd to earn a 30% interest by funding the exploration program in 1988. The 1988 program consisted of 2 286 m of diamond drilling in 45 holes, a regional mapping and prospecting program, road construction, an orthophoto survey of the claim block, a baseline environmental study and a 300 x 3.0 x 2.5 m exploration drift and the construction of nine underground drill stations.

St Cyr Mineral Exploration Ltd staked Greg cl 1-62 (YB00427), Max cl 1-2 (YA70392), Max 2 cl 1-3 (YB00489) and Spam cl 1 (YB00492) to the east in Jul/87 and carried out prospecting and geochemical sampling that year; trenched on the Greg cl 1, 2 and 4 between July and Nov/91; and prospected briefly in 1998.

A portion of the occurrence area was withdrawn from staking due to land claims in 1994.

Capsule Geology

Galena occurs with pyrite in quartz-siderite veins, massive sulphide veins, and fault breccias and replacement bodies in middle Silurian to middle Devonian dolomite immediately below the contact with black shale of the Upper Devonian to Lower Mississippian Earn Group. The replacement mineralization is believed to be associated with a buried Cretaceous intrusion in the core of the Ketza-Seagull Arch (Abbott, 1986).

By the end of the 1980's, Yukon Minerals had documented at least 53 separate galena showings and 22 quartz-freibergite showings within their claim holdings and had estimated the total reserves on the property at 200,950 tonnes (probable and drill-indicated) grading 91.89 g/t Ag, 3.18% Pb and 4.01% Zn in seven separate deposits (Fowler, Dec/88).

The largest single reserve is the No. 3 zone, which contains an estimated 134,180 tonnes (probable and drill-indicated) grading 67.89 g/t Ag, 2.32% Pb, 4.27% Zn and 0.18 g/t Au.

Occurrence A was originally called the #3 showing by Canol Mines Ltd. Yukon Minerals Ltd later renamed the occurrence the Groundhog Showing from which this occurrence takes its name. The showing is described as a 6 by 20 m zone of galena bearing quartz and siderite veins in sheared dolomite. The white quartz veins average .5m in width and have sericite rich slickensides along the vein boundaries that strike approximately 150° and dip steeply east. The vein zone lies beside a probable fault contact between shale and dolomite. Mineralization consists of patchy coarse cubic galena lenses and veins (up to .35 m wide) in a quartz gangue. Silver assays range up to 1,180 g/t from grab samples and 236 g/t and 13% Pb over 4.5 m, in chip samples.

Occurrence B was originally called the #2 showing by Canol Mines Ltd. Yukon Minerals Ltd later renamed the occurrence the No. 3 vein zone. Occurrence D marks the location of a second vein zone which Yukon Minerals named the No.2 vein zone.

The No. 2 and No. 3 vein zones consist of sphalerite, galena, quartz and siderite replacing dolomite fault breccia. The two zones are 300 m apart and dip toward each other, and are believed to have formed along the bounding faults of a north-trending graben which follows the crest of a broad anticlinorium. The surface showing of the No. 2 zone averaged 294.8 g/t Ag and 14.7% Pb across 5.3 m over a length of 61.0 m. Oxide material from all zones in this area contains elevated gold values (300-2,220 ppb Au). In 1989, Yukon Minerals reported that a chip sample from trench 90-B on the northeast extension of the No. 2 zone (HV 98 and HV 268 claims) assayed 4.0% Zn, 2.1% Pb, and 41.6 g/t Ag over 3.25 m. Silver values at the No. 3 vein zone average 2,225 g/t with 75% Pb.

Significant zinc values up to 14.1% were obtained in fractured wall rocks, but zinc rich samples generally contain low silver values.

Occurrence C was originally called the #1 showing by Canol Mines Ltd. Yukon Minerals Ltd later renamed the occurrence the Silver Arrow vein. The Silver Arrow vein consists of a quartz and iron carbonate stockwork mineralized with galena and freibergite. The zone strikes 135° and dips 20° southwest. Drilling in 1969 indicated a reserve of 2,558 tonnes grading 695.0 g/t Ag and 42.5% Pb across a width of about 75 cm to a depth of about 15.2 m. The 1979 bulk sample assayed 456.0 g/t Ag, 41.6% Pb and 4.8% Zn while the 1980 bulk sample reportedly averaged about 46% Pb and 1,104.0 g/t Ag.

St. Cyr identified projective stratigraphy on their claims and collected massive and disseminated galena float samples on the Greg cl 1 and 3 that returned high Pb (79.5%) and Ag (2,227.4 g/t) values, but Au values were low (<0.4 g/t). Trenching in 1991 apparently failed to locate a source for this float and limited sampling elsewhere on the property in 1998 did not return any anomalous results.

| Work History | | |
|--------------|--------------------------|--|
| Date | Work Type | Comment |
| 12/31/1998 | Other | |
| 12/31/1991 | Trenching | Carried out on Greg claims 1, 2 and 4. |
| 12/31/1988 | Drilling | Forty-five holes, 2286 m |
| 12/31/1988 | Geology | |
| 12/31/1988 | Trenching | |
| 12/31/1988 | Development, Underground | Three hundred by 3.0 by 2.5 m exploration drift. |
| 12/31/1988 | Other | |
| 12/31/1988 | Development, Surface | |
| 12/31/1987 | Geochemistry | |
| 12/31/1987 | Geology | |
| 12/31/1987 | Ground Geophysics | VLF-EM survey . |
| 12/31/1987 | Trenching | |
| 12/31/1986 | Trenching | |
| 12/31/1980 | Trenching | |
| 12/31/1979 | Trenching | |
| 12/31/1979 | Trenching | |
| 12/31/1978 | Trenching | |
| 12/31/1978 | Development, Surface | |
| 12/31/1974 | Trenching | |
| 12/31/1969 | Drilling | Eight holes, 473.05 m. |
| 12/31/1968 | Drilling | Seventeen holes, 1,058.88 m. |
| 12/31/1967 | Drilling | Five holes, 225.86 m. |
| 12/31/1967 | Trenching | |
| 12/31/1957 | Drilling | Three holes, 35.97 m. |
| 12/31/1957 | Geology | |
| 12/31/1957 | Trenching | |
| 12/13/1998 | Geochemistry | Collected while prospecting. |

| Assessment Reports that overlap occurrence | | | | | |
|--|------|--|---|---------------|----------------|
| Report Number | Year | Title | Worktypes | Holes Drilled | Meters Drilled |
| 093042 | 1988 | Ketza Project 1988 Regional Program | Diamond - Drilling, Diamond - Drilling, Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, EM - Ground Geophysics, Prospecting - Other, Surveying - Other, Photogrammetry - Remote Sensing, Resource Estimate - Studies, Backhoe - Trenching, Backhoe - Trenching, Mechanical - Trenching | 90 | 4572 |
| 092539 | 1988 | Diamond drilling on the Ketza Project | Diamond - Drilling, Rock - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching | 45 | 2286 |
| 092097 | 1987 | 1987 Exploration Report on the HV Property, Groundhog Creeek, Yukon | Rock - Geochemistry, Backhoe - Trenching | | |
| 061526 | 1967 | Report on 1967 Exploration Program of Canol Mines Ltd. and Recommendations for the 1968 Expl Program | Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Backhoe - Trenching | 5 | 225.86 |
| 061527 | 1967 | Summary Report; Canol Property | Bedrock Mapping - Geology | | |
| 061525 | 1966 | Report on the Ben, Caribou and Snowwhite Groups of Mineral Claims | Research/Summarize - Pre-existing Data | | |

| Related References | | | | |
|--------------------|-------|---------|----------------|---------------|
| Number | Title | Page(s) | Reference Type | Document Type |
| | | | | |

| Resource/Reserve | | | | | | | | | |
|--|---|---------------------|-----------|---------|---------|--------|-----------------|------------------|---------|
| Year | Zone | Type | Commodity | Grade | Tonnage | Amount | Reported Amount | 43-101 Compliant | Cut-off |
| 1988 | GROUNDHOG - No.3 VEIN RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | gold | .18 g/t | 134,180 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards. Represents largest single reserve.; Assessment Report #093042, p. 49 | | | | | | | | | |
| 1988 | GROUNDHOG - No.3 VEIN RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | lead | 2.32 % | 134,180 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards. Represents largest single reserve.; Assessment Report #093042, p. 49 | | | | | | | | | |

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|---|---|---------------------|--------|-----------|---------|--|----|----|---------|
| 1988 | GROUNDHOG - TOTAL RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | lead | 3.18 % | 200,950 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards.; Assessment Report #093042, p. 49 | | | | | | | | | |
| 1988 | GROUNDHOG - No.3 VEIN RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | silver | 67.89 g/t | 134,180 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards. Represents largest single reserve.; Assessment Report #093042, p. 49 | | | | | | | | | |
| 1988 | GROUNDHOG - TOTAL RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | silver | 91.89 g/t | 200,950 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards.; Assessment Report #093042, p. 49 | | | | | | | | | |
| 1988 | GROUNDHOG - No.3 VEIN RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | zinc | 4.27 % | 134,180 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards. Represents largest single reserve.; Assessment Report #093042, p. 49 | | | | | | | | | |
| 1988 | GROUNDHOG - TOTAL RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | zinc | 4.01 % | 200,950 | | No | No | Unknown |
| Company called this figure Probable and drill indicated reserves. Do not meet National Instrument 43-101 standards.; Assessment Report #093042, p. 49 | | | | | | | | | |
| 1969 | GROUNDHOG - No.1 VEIN RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | lead | 42.5 % | 2,558 | | No | No | Unknown |
| Canol mines called this figure drill indicated. Part of vein was later highgraded.; Original source appears to be private Engineer's report published in Nov/68. Figure also quoted in Abbot, 1986, p. 64 and assessment report 093042. | | | | | | | | | |
| 1969 | GROUNDHOG - No.1 VEIN RESERVES (OPEN PIT & UNDERGROUND) | Historical Estimate | silver | 695 g/t | 2,558 | | No | No | Unknown |
| Canol mines called this figure drill indicated. Part of vein was later highgraded.; Original source appears to be private Engineer's report published in Nov/68. Figure also quoted in Abbot, 1986, p. 64 and assessment report 093042. | | | | | | | | | |