

# **Occurrence Details**

Occurrence Number: 105F 029 Occurrence Name: Groundhog Occurrence Type: Hard-rock Status: Deposit Date printed: 6/15/2025 11:48:45 AM

# **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. Versluce for British Yukon Exploration Ltd, which performed hand trenching, mapping and drilled 3 packsack holes (36.0 m) in 1957. Restaked by Versluce 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 Versluce 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 unamed group. In 1968 the company drilled 17 holes on the No. 1 showing-vein (1058.9 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, Versluce 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 occrrence 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 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 bulks ample reportedly averaged about 46% Pb and 1,104.0 g/t Ag.

St. Cyr identified propective 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

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
<u>093042</u>	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
<u>092539</u>	1988	Diamond drilling on the Ketza Project	Diamond - Drilling, Rock - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching	45	2286
<u>092097</u>	1987	1987 Exploration Report on the HV Property, Groundhog Creeek, Yukon	Rock - Geochemistry, Backhoe - Trenching		
<u>061526</u>	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
<u>061527</u>	1967	Summary Report; Canol Property	Bedrock Mapping - Geology		
<u>061525</u>	1966	Report on the Ben, Caribou and Snowhite Groups of Mineral Claims	Research/Summarize - Pre-existing Data		

### **Related References**

Number Title

<u>ARMC001</u> <u>806</u>	Area A maps - Ketza project	Property File Collection	Geoscience Map (Geological - Bedrock)
<u>ARMC001</u> <u>807</u>	Area B maps - Ketza project	Property File Collection	Geoscience Map (Geological - Bedrock)
<u>ARMC001</u> <u>808</u>	Area C maps- Ketza project	Property File Collection	Geoscience Map (Geological - Bedrock)
<u>ARMC004</u> <u>447</u>	Map collection - Ketza project - Area A	Property File Collection	Geoscience Map (Geological - Bedrock)
<u>ARMC004</u> <u>448</u>	Map collection - Ketza project - Area B	Property File Collection	Geoscience Map (Geological - Bedrock)
<u>ARMC004</u> <u>449</u>	Map collection - Ketza project - Area C	Property File Collection	Geoscience Map (Geological - Bedrock)
<u>ARMC004</u> <u>957</u>	Map showing location of Tet, Rio and Cone claims - Ketza River area	Property File Collection	Geoscience Map (General)
<u>ARMC004</u> <u>958</u>	Report on progress of exploration - Cone group	Property File Collection	Report
<u>ARMC004</u> <u>959</u>	Assay certificate - Cone group	Property File Collection	Assay s
<u>ARMC004</u> <u>960</u>	Report on programme of Pelly Minerals syndicate	Property File Collection	Report
<u>ARMC004</u> <u>961</u>	Notes and sketch map on the Pelly Minerals project	Property File Collection	Miscellaneous Company Documents
<u>ARMC004</u> <u>962</u>	Correspondence Re: Pelly Mineral syndicate properties	Property File Collection	Miscellaneous Company Documents
<u>ARMC014</u> <u>263</u>	Plan of Tet and Rio claims - Seagull Lakes	Property File Collection	Geoscience Map (General)
<u>ARMC014</u> <u>410</u>	Property examination - Field notes, air photo overlay A12238-71 and assay certificate for W of Canal Mines	Property File Collection	Report
<u>ARMC014</u> <u>311</u>	Prospectus of Canol Mines Limited - July 1967	Property File Collection	Report
<u>ARMC014</u> <u>407</u>	Versluce prospecting syndicate proposal - January 1962	Property File Collection	Report
<u>ARMC014</u> <u>271</u>	Map showing location of Tet, Rio and Cone claims - Ketza River area	Property File Collection	Geoscience Map (General)
<u>ARMC014</u> <u>276</u>	Nature of mineral occurrences noted on Quiet Lake sheet - Silver-lead ratios in showings and float at White Lake	Property File Collection	Miscellaneous Company Documents
<u>ARMC014</u> <u>312</u>	Information sheet - Canol Mines Limited	Property File Collection	News Release
<u>ARMC014</u> <u>406</u>	Progress report - August 5, 1962 - Pelly Minerals Syndicate	Property File Collection	Report
<u>ARMC014</u> <u>411</u>	Progress report No. 1, 1969 - Seagull Lake property, Yukon	Property File Collection	Report
<u>ARMC014</u> <u>292</u>	Final report on silver-lead showing "A", Tet No. 9 M.C Seagull Lakes, Y.T With attached map	Property File Collection	Report
<u>ARMC014</u> <u>414</u>	Claims sheet 105F/10 with field markings	Property File Collection	Geoscience Map (General)
<u>ARMC014</u> <u>408</u>	Correspondence re: Pelly Minerals	Property File Collection	Miscellaneous Company Documents
<u>ARMC019</u> <u>522</u>	Yukon Minerals Corporation company brochure with maps, reports and news releases	Property File Collection	Miscellaneous Company Documents
<u>ARMC019</u> <u>524</u>	Doocat project report - Watson Lake mining district, Yukon - NTS 105F	Property File Collection	Report
<u>ARMC014</u> <u>274</u>	Assay certificates - Pelly River syndicate	Property File Collection	A ssay s
<u>ARMC014</u> <u>409</u>	Claim map of Tet group	Property File Collection	Geoscience Map (General)
<u>1986Geol</u> Vol1_06	Epigenetic mineral deposits of the Ketza-Seagull district, Yukon	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper

# **Resource/Reserve**

Year	Zone	Туре	Commodity	Grade	Tonnage	A mount	Reported A mount	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

1988	GROUNDHOG - TOTAL RESERVES (OPEN PIT & UNDERGROUND)	Historical Estimate	lead	3.18 %	200,950		No	No	Unknown
Compa	ny called this figure Probable and drill indicated reserves. Do not meet National Ins	strument 43-101 standa	ards.; Assessmei	nt Report #0	)93042, 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.									