



Occurrence Details

Occurrence Number: 105D 006

Occurrence Name: Montana

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 7/20/2025 4:47:03 PM

General Information

Secondary Commodities: gold, silver

Aliases: Joe Petty

Deposit Type(s): Vein Au-Quartz

Location(s): 60°3'1" N - 134°39'59" W

NTS Mapsheet(s): 105D02

Location Comments: .5 Kilometres

Hand Samples Available: Yes

Last Reviewed:

Capsule

Work History

Staked as Montana (3416) in July, 1899 and Mountain Hero (3660) in July, 1900 by W.R. Young & J.M. Pooley and acquired by I. Petty in 1900. The property was transferred in 1904 to Conrad Consolidated Mining Ltd, which completed 762 m of tunnels and shafts in 2 adits and a 6.4 km long aerial tramway between 1905 and 1907. It was later optioned by Lackinaw & Tagish Mining Ltd and transferred to Yukon District Gold Mining Company Ltd in 1908, surveyed and taken to lease about 1915.

The property was held by L.C. Leggat in 1960 when it was optioned by New Imperial Mines Ltd. It was reoptioned in Jun/65 by Tagish Lake Silver Mines Ltd and transferred in 1967 to Arctic Gold & Silver Mining Ltd, which drove a new 244 m adit near the old workings, and subsequently to Rex Silver Mines in 1978.

In late 1979, L. Milot offered United Keno Hill Mines Ltd an option on the property on behalf of his cousin Mrs L. Leggat who had inherited them from her husband's estate. United Keno Hill investigated the property between 1979 and 1981 with mapping and sampling, including a 91 x 30 m soil grid over the Joe Petty area. A preliminary exploration proposal was drawn up but the option agreement was withdrawn after the Venus mine shut down in 1981. United Keno Hill resampled the Joe Petty vein in 1984, and finally optioned the six crown grants (Lots 31-35) covering the Montana and Joe Petty veins from L. Milot in Jan/88. In spring, 1988, 18 percussion holes (2 229.6 m) were drilled on the west and east extensions of the Joe Petty vein and this was followed by 3 diamond drill holes (363.6 m) in 1989, plus soil sampling over the Little Johnny claim.

The adjoining Pooley cl (77823) and Tana cl (Y757) were staked in Jun/62 and Mar/66 by Cons Marbenor Mines Ltd, which carried out mapping in 1967. The Mac cl 1-40 (98656) were tied on in Feb/66 by Montana Mines Ltd, which conducted a grid soil survey in 1968.

The southwest side was staked as Gold cl (Y78168) in Mar/74 by B. Fulcher and restaked as GHI cl (YA24093) in Jun/79 by United Keno Hill Mines Ltd, which performed mapping and geochem sampling.

The north side was restaked as NYAC cl 1-4 (YA82997) and cl 5-87 (YA85201) in Sep/84 by Shakkwak Exploration Company Ltd, which explored with mapping and geochem sampling in 1985 and staked Rat cl 1-16 (YA86457) in Mar/85 and Rat cl 17-24 (YA92863) to the north in Jul/85. The claims were transferred to Anooraq Resources Corporation in 1986, which performed trenching and soil sampling in 1988. The NYAC cl were transferred to Feather Gold Resources Ltd in Mar/92. Feather Gold Resources conducted a program of trenching and blasting on the NYAC and Rat claims in July/93 and drilled 10 diamond drill holes (830) on the Rat claims in Dec/93.

In Jun/99 R. Berdahl staked Uranus cl 1-3 (YC15301) and MM cl 1-4 (YC15304) southeast of the Joe Petty vein. During the summer of 1999 and the spring of 2000, Berdahl prospected and sampled the claims.

Capsule Geology

Two veins are present, the Montana, striking north, and the Joe Petty, which is 100 m south of the Montana workings and strikes east. Both cut mid-Cretaceous Mount Nansen Group rhyolite tuffs and flows and consist of mineralized, sheared quartz lenses. The Montana vein was traced for 150 m on surface and has an average width of 1.2 m and dips 35°. Grab samples from surface assayed 18.2 g/t Au, 3233 g/t Ag, and 2.06 g/t Au, 582.8 g/t Ag. Mineralization consists of galena, pyrite, arsenopyrite, pyrrargyrite, and tetrahedrite. The 1967 adit on the Montana vein encountered only weak mineralization.

The Joe Petty vein was traced for 300 m by a 2.06 m shaft, 44 m adit and several pits. It was described by Arctic Gold and Silver Mines Ltd as a mineralized shear zone 1.8 to 2.4 m wide, containing arsenopyrite and tetrahedrite. Arctic's channel samples assayed 0.34 g/t Au and 1299.4 g/t Ag across 1.8 m; and trace Au and 6.9 g/t Ag across 91 cm.

The 1988 percussion drilling investigated possible west and east extensions to the vein. Two percussion drill holes 150 m to the east intersected the vein at a depth of 61 m on azimuths of 185 and 200°. Both drill intersections consisted of 1.5 m of quartz with freibergite and malachite. JPDH-13 intersected 1.5 m grading 45.3 g/t Au and 3977.0 g/t Ag; JPDH-15 intersected 1.5 m grading 3.2 g/t Au and 224.9 g/t Ag. Two of the 1989 diamond drill holes tested beneath the JPDH-13 percussion drill hole, while the third tested a large gold-silver-lead-zinc soil anomaly 160 m to the east on the Little Johnny claim. Hole 89-JP-2 intersected 1.06 m of limonite-altered andesite which assayed 7.6 g/t Au and 566 g/t Ag. Hole 89-JP-3 intersected a 15 cm quartz vein within a 30 cm interval which averaged 1.3 g/t Au and 296 g/t Ag. The drill results leave the Joe Petty vein open on the east side, but suggest that it pinches out at depth and to the west.

Feather Gold Ltd's 1993 trenching program uncovered a new zone (Ridge Zone) of mineralized veins grading 11.2 g/t to 43.9 g/t Au and 157.4 g/t to 546.1 g/t Ag, over widths of up to 0.8 metres. Subsequent diamond drilling encountered sulphides in 5 out of 10 drill holes. Hole number 6 encountered low grade gold and silver values over 21.2 metres of altered silicified granitic rock, including a 4.4 metre zone which assayed 3.2 g/t Au and 38.4 g/t Ag, including 1.13 metres grading 9.2 g/t Au and 103.9 g/t Ag.

The objective of Berdahl's prospecting program was to extend the known length of the Uranus vein to the west and to try and discover any new mineralized showings on the two claim blocks. Limited soil sampling suggests that the vein may not be offset by Pooley Creek thus extending it across the creek towards the western adit. Prospecting on the MM claims failed to detect any new mineralization and the MM claims were allowed to lapse in 2002.

References

ANOORAQ RESOURCES CORPORATION LTD, Apr/85. Assessment Report #091624 by G. Macdonald.

ARCTIC GOLD AND SILVER MINES LTD, Nov/66. Prospectus Report #018924 by D.D. Campbell.

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BOREAL CONSULTING SERVICES, Mar/89. Assessment Report #092707 by G Hendrickson.

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GEOLOGICAL SURVEY OF CANADA, 1905. Summary Report Part A, p. 30; 1906, Part A, p. 25; 1916, p. 38-39.

GEORGE CROSS NEWSLETTER, 8 Jun/93; 9 Sept/93; 1 Oct/93; 29 Oct/93.

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HART, C.J.R. AND RANDLOFF, J.K., 1990. Geology of Whitehorse, Alligator Lake, Fenwick Creek, Carcross and part of Robinson map areas (105D/11, 6, 3, 2, & 7). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs, Open File 1990.4, 113 p.

INTERNATIONAL MINE SERVICES LTD, Jun/68. Assessment Report *#018630 by D. Waugh.

LYTLE, L.K. Sep/62. Assessment Report #018631 by L.K. Lytle.

MCCORY HOLDINGS YUKON LIMITED, May/86. Assessment Report #091839 by R. Robertson.

MONTANA MINES LTD, Dec/68. Assessment Report #019591 by P.H. Sevensma.

SHAKWAK EXPLORATION COMPANY LTD, May/86. Assessment Report #091840 by R. Robertson.

UNITED KENO HILL MINES LTD, 1989. Diamond Drill Report (internal company report) by K. Kettles, D.J. Ouellette and A.J. McFaul.

UNIVEX MINING CORPORATION, Dec/88. Assessment Report #092614 by B.E. Mackean.

YUKON MINING AND EXPLORATION OVERVIEW 1989, p. 9-10.

YUKON EXPLORATION 1985-86, p. 201-203.

Work History

Date	Work Type	Comment
12/31/2000	Other	
12/31/1999	Geochemistry	
12/31/1999	Trenching	
12/31/1989	Drilling	Number of holes drilled: 3 Amount of work done: 363.6 METRES
12/31/1989	Geochemistry	
12/31/1988	Drilling	Number of holes drilled: 18 Amount of work done: 2229.6 METRES
12/31/1967	Other	Amount of work done: 244 METRES Drove adit.
12/31/1907	Development, Surface	Tramway constructed over 3 years, completed in 1907.
12/31/1907	Other	Over three years developed drifts, shafts and 2 adits.
12/31/1906	Other	
12/31/1905	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
092614	1988	Report on the Montana Mountain Property, Whitehorse Mining District	Rock - Geochemistry, Soil - Geochemistry, Heavy Mineral Concentrate - Lab Work/Physical Studies, Mechanical - Trenching		
091840	1985	Prospecting and Geochemical Sampling NYAC 1-87 Mineral Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other		
062278	1980	1980 Report on the Surface, Venus Mines Area	Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
018630	1967	Geological Report on the Pooly Claim Group	Bedrock Mapping - Geology, Line Cutting - Other, Prospecting - Other		
018935	1967	Summary Report, Exploration Work on Carcross, Y.T. Property	Diamond - Drilling, Drill Core - Geochemistry	138	4904.84
019788	1967	Summary Report, Exploration Work on Carcross, Y.T Property	Drifting/Raising - Development, Underground, Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Mechanical - Trenching	127	5806.44
018628	1967	Summary Report, Exploration Work on Carcross, Y.T Property	Drifting/Raising - Development, Underground, Diamond - Drilling, Soil - Geochemistry	127	5806.44
018631	1962	Geophysical Survey (Magnetometer) Claims Pooly 1-6	Magnetics - Ground Geophysics, Line Cutting - Other		

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
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89-JP-1	Montana	1989	HQ	2	0
89-JP-2	Montana	1989	HQ	2	0
89-JP-3	Montana	1989	NQ	8	0