



Occurrence Details

Occurrence Number: 1150 087
Occurrence Name: Carmacks
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 6:47:58 AM

General Information

Secondary Commodities: arsenic, gold
Deposit Type(s): Vein Au-Quartz
Location(s): 63°55'17" N - -139°7'49" W
NTS Mapsheet(s): 115014
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Bon cl 1-116 (YA80927) between June and September, 1984 by a joint venture between United Keno Hill Mines Ltd. & Falconbridge Ltd., which explored with a fence of seven percussion holes (481.6 m) later in the year. In September, 1987 R. McPhee re-staked a number of Bar claims located to the north as Hope cl 16 (YBO4245).

Re-staked within LC cl 1-57 (YB68582) by Barramundi Gold Ltd. in March, 1996 which carried out a regional geological mapping and silt sampling program later in the year.

Re-staked within Wedge cl 1-229 (YC15905) in May, 1999 by Barramundi Gold Ltd. In July, 1999 the company optioned their entire Klondike regional claim holdings to KSL Exploration (Yukon) Ltd., a private company owned by Klondike Source Ltd. of Australia. KSL Exploration carried out regional soil sampling and prospecting programs in 2000 and 2001. In 2002, the company completed a compilation study of all available geological and geochemical data and undertook a review of all geophysical data including a recently released regional airborne geophysical survey jointly funded by the Geological Survey of Canada and the Yukon Geology Program.

Capsule Geology

The area is underlain by quartz-muscovite-chlorite schist (unit Psq) and minor interlayered chlorite schist (unit Psc), which are overlain to the southwest by rusty weathering muscovite-quartz schist (unit Psqm). All of these units are part of the Permian Klondike Schist Assemblage.

Most of the joint venture's drill holes returned background values except for holes Bon-3 and Bon-4. The bottom 3 metres of Bon-3 returned 75 ppb gold, while hole Bon-4 returned an 18.2 m intersection averaging 62.5 ppb. No follow-up work was carried out by the joint venture.

Barramundi's 1996 program covered their entire claim holdings in the Klondike region. The company's geological mapping program appears to mimic Mortensen's 1996 open file release. The silt sampling program returned strongly anomalous arsenic and barium results from Flannery Pup and anomalous arsenic values from the unnamed pup located to the east. The anomalies appear to be hosted by a distinct rusty weathering quartz muscovite schist (felsic schist) unit. No rock samples appear to have been collected in the vicinity of this occurrence.

KSL Exploration collected two lines of soil samples (lines 45 and 46) northeast of this occurrence in 2000. The samples were analyzed using Mobile Metal Ion (MMI) geochemistry; a method thought to enhance weaker or more dispersed anomalies. Both lines returned weak to strong gold response. Two additional lines (lines 97 and 98) were collected over the occurrence and to the southeast in 2001. These lines also returned several weak to moderate gold anomalies. The company interpreted the results as representing three distinct zones of anomalous bedrock underlain by felsic schist that appear to dip gently northwestwards. An area located approximately 1 km northeast east of the occurrence location was designated "target D". The company plans to test the target with a drill hole in the future.

Work History		
Date	Work Type	Comment
7/1/2019	Remote Sensing	
12/31/2002	Pre-existing Data	Company compiles all known data.
12/31/2001	Geochemistry	KSL carried out regional sampling program employing Mobile Metal Ion geochemistry.
12/31/2000	Geochemistry	KSL carried out regional sampling program employing Mobile Metal Ion geochemistry.
12/31/1996	Geology	Barramundi carried out regional program.
12/31/1996	Geochemistry	Barramundi carried out regional program.
12/31/1984	Drilling	Seven holes, 481.58 m. Drilled on Bonanza Creek.
12/31/1984	Ground Geophysics	Ran survey around drill holes.
12/31/1984	Geochemistry	

Assessment Reports that overlap occurrence					
Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled

096871	2013	Assessment Report (Reconnaissance and Target Definition for Future Machine Access)	Prospecting - Other		
094564	2004	Assessment Report for the Renewal of Wedge, Mice, Bobo, and Fur Claim Groups	Soil - Geochemistry, Bedrock Mapping - Geology		
094316	2002	Assessment Report for the Renewal of Klondike, Bear, Gap, IF, Act, Gilt, Nug, and Wedge Claims	Soil - Geochemistry, Process/Interpret - Pre-existing Data		
094209	2000	Assessment Report for the Renewal of Klondike, Bear and Wedge Claims	Soil - Geochemistry, Bedrock Mapping - Geology		
094119	1999	Assessment Report Klondike and Wedge Claim Blocks	Interpretation - Airphotography, Bedrock Mapping - Geology, Data Compilation - Pre-existing Data, Landsat - Remote Sensing		
093321	1994	1994 Annual Report on the Klondike Gold Project	Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
093075	1992	Geological, Geochemical and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Mechanical - Trenching		
092971	1990	Geological, Geochemical, and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Mechanical - Trenching		
092690	1988	Geological, Geophysical, Geochemical, and Trench Report for Work Performed by Mark Management Ltd. on the REEF Grid	All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Line Cutting - Other, Mechanical - Trenching		
091634	1984	Report on the 1984 Exploration Program in Klondike Gold Fields	Electromagnetic - Airborne Geophysics, Percussion - Drilling, Drill Cuttings - Geochemistry, EM - Ground Geophysics	95	6900.67
091399	1981	Gold Potential Evaluation Report Klondike District on Violet Gold - Quartz Property	Orthophoto - Airphotography, Cursory Property Visit - Other, Data Compilation - Pre-existing Data		
060149	1972	Geological and Geochemical Report Yukon Quartz Mineral Claims	Silt - Geochemistry, Soil - Geochemistry		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC006811	Field map - Carmacks		Property File Collection	Geoscience Map (General)
ARMC006812	Geochemistry map - Targets 1, 1W, 1N, 2, 3, 5 - Gold silver regional - Fig. 3b		Property File Collection	Geochemical Map
ARMC010567	Diamond drill record - 1986-1987 - Carmacks project		Property File Collection	Drill Logs
1996-1(G)	Geological Compilation Maps of the Northern Stewart River Area, Klondike and Sixty mile Districts (115N/15, 16, 115O/13, 14 and Parts of 115O/15, 16)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)
2001-8	Multisensor airborne geophysical survey, Stewart River area, 115O/14		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geophysical)