



Occurrence Details

Occurrence Number: 116B 006

Occurrence Name: Unexpected

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/16/2025 11:20:16 PM

General Information

Secondary Commodities: fluorite, gold, silver, uranium

Aliases: Surprise Claims

Deposit Type(s): Plutonic Related Au

Location(s): 64°1'0" N - -139°4'20" W

NTS Mapsheet(s): 116B03

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Unexpected cl (1234) in Sep/08 by J. Graham, who put in an open-cut and 3 m adit by 1912. Restaked as Surprise cl (YA9565) in Oct/76 by Ukon JV (Chevron & Kerr Addison) which explored with grid geochemical and radiometric surveys in 1976, 1977 and 1978, bulldozer trenching in 1977 and 1978 and a radon survey and 411 m of drilling (9 holes) in 1978, when the property was enlarged to 200 claims. Further radon and scintillometer surveys were conducted in 1979. Partially restaked as Hun cl (YA79929) in Aug/84 by a joint venture between United Keno Hill ML and Falconbridge. J. Alton tied on Henry cl (YB23419) in Mar/89. The Henry cl were transferred to Kennecott Canada Inc. in May/93 as part of an option agreement.

Capsule Geology

The Surprise claims cover an unmapped 6 km x 3 km porphyry stock of probable Eocene age. It exhibits round quartz eyes in an aphanitic ground mass and contains traces of purple fluorite, topaz and miarolitic zeolites. Disseminations and discontinuous stringers of fluorite are inferred to have been produced by late or post-magmatic streaming of volatiles (Mortensen et al., 1992). Uranium anomalies occur within and near the contact of the stock, with values of up to 400 ppm U from organic soils. The best rock assay was 90 ppm U from leached Klondike Schist. Radon gas anomalies appear to be fault controlled. The open cut on the Unexpected claim exposed a purple-stained quartz porphyry plug that assayed 1.4 g/t Au and 2.1 g/t Ag across 0.9 m. A grab sample collected in 1972 assayed 0.102 g/t Au, 1.4 g/t Ag and 4.12% F. According to the GSC, wood tin was recovered by placer miners from creeks draining the porphyry body and is associated with topaz, fluorite and tourmaline in most placer and eluvial samples collected over the porphyry.

References

GEOLOGICAL SURVEY OF CANADA, Bulletin 173, p. 39, p. 46-48.

GEOLOGICAL SURVEY OF CANADA, Economic Geology Report No. 28, p. 67-70.

MACLEAN, T.A., 1914. Lode Mining in Yukon. Mines Branch Publication 222, p. 124-125.

MINERAL INDUSTRY REPORT, 1978.

MORTENSEN, J.K., and RUSHTON, R., 1992. Preliminary observations on the geology and geochemistry of quartz veins in the Klondike District, West-Central Yukon. In: Yukon Geology Vol. 3, Exploration and Geological Services Division, DIAND, p. 260-270.

YUKON EXPLORATION AND GEOLOGY, p. 238.

Work History

Date	Work Type	Comment
12/31/1979	Geochemistry	
12/31/1979	Geochemistry	
12/31/1978	Geology	
12/31/1978	Geochemistry	
12/31/1978	Geochemistry	
12/31/1978	Trenching	
12/31/1978	Geochemistry	
12/31/1977	Geochemistry	
12/31/1977	Trenching	

12/31/1977	Other	
12/31/1976	Geochemistry	
12/31/1976	Other	
12/31/1912	Other	Amount of work done: 3 METRES Open cut and adit.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096415	2012	Geological and Geochemical Report, Prospecting on the Tin Property	Rock - Geochemistry, Rock - Geochemistry, Prospecting - Other, Prospecting - Other		
094483	2004	Report on the Tin Claims	IP - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Data Compilation - Pre-existing Data		
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		
092591	1987	Geological, Geochemical, Geophysical and Underground Exporation of the Ben Levy, Hun II, Hunker Extension, and Hattie Grids - Lower Hunker Creek	Rehabilitation - Development, Underground, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics		
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
091546	1983	Regional Geochemical and Geophysical Report on the Syndicate, Dawson, William, 83, 98, Wild, and Wild Card Claims	Magnetic - Airborne Geophysics, Bedrock Mapping - Geology, EM - Ground Geophysics, Heavy Mineral Concentrate - Lab Work/Physical Studies, Data Compilation - Pre-existing Data		
090556	1979	Radiometric Geochemical and Radon Soil Gas Survey on the SURPRISE 1-225 Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other		
090448	1978	Assessment Report Surprise Claims	Auger - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Soil - Geochemistry, Mechanical - Trenching	9	415.40
090188	1976	Report on Geochemistry, Geology and Radiometric Survey on the SURPRISE 1-16 Claims	Gamma-Ray Spectrometry - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Gamma-ray Spectrometry - Ground Geophysics, Prospecting - Other		
090274	1976	Assessment Report on SURPRISE 1-95 Claims	Rock - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Hand - Trenching, Mechanical - Trenching		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC006830	Profile map section - Surprise Pit 1 - Ukon joint venture		Property File Collection	Geoscience Map (General)
ARMC006831	Fig. U-UN11 - Detail radiometrics map - Anomaly D - Surprise 1-219 claims - Ukon joint venture		Property File Collection	Geophysical Map
ARMC006832	Fig. U-UN12 - Detail radiometrics map - Anomaly E - Surprise 1-219 claims - Ukon joint venture		Property File Collection	Geophysical Map
ARMC006833	Fig. U-UN13 - Detail radiometrics amp - Anomaly H - Surprise 1-219 claims - Ukon joint venture		Property File Collection	Geophysical Map
ARMC006834	Drill hole log - Surprise claims - Ukon joint venture		Property File Collection	Drill Logs
ARMC006892	Fig. U-UN2 - Geochemistry and radiometrics map - Unexpected grid - Surpize 1-16 claims - Ukon joint venture		Property File Collection	Geochemical Map
ARMC006751	Report on the Unexpected property - Surprise 1-95 claims		Property File Collection	Report

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
DDH-S-10	Unexpected	1978	BQ	0	0
DDH-S-11	Unexpected	1978	BQ	0	0
DDH-S-12	Unexpected	1978	BQ	0	0
DDH-S-13	Unexpected	1978	BQ	0	0
DDH-S-14	Unexpected	1978	BQ	0	0
DDH-S-15	Unexpected	1978	BQ	0	0
DDH-S-16	Unexpected	1978	BQ	0	0
DDH-S-17	Unexpected	1978	BQ	0	0
DDH-S-18	Unexpected	1978	BQ	0	0

DDH-S-19	Unexpected	1978	BQ	0	0
DDH-S-21	Unexpected	1978	BQ	0	0
DDH-S-22	Unexpected	1978	BQ	0	0
DDH-S-23	Unexpected	1978	BQ	0	0
DDH-S-26	Unexpected	1978	BQ	0	0
DDH-S-27	Unexpected	1978	BQ	0	0
DDH-S-29	Unexpected	1978	BQ	0	0
DDH-S-30	Unexpected	1978	BQ	0	0
DDH-S-39	Unexpected	1978	BQ	0	0
DDH-S-40	Unexpected	1978	BQ	0	0
DDH-S-41	Unexpected	1978	BQ	0	0
DDH-S-42	Unexpected	1978	BQ	0	0
DDH-S-43	Unexpected	1978	BQ	0	0
DDH-S-45	Unexpected	1978	BQ	0	0
DDH-S-47	Unexpected	1978	BQ	0	0
DDH-S-49	Unexpected	1978	BQ	0	0
DDH-S-52	Unexpected	1978	BQ	0	0
DDH-S-53	Unexpected	1978	BQ	0	0
DDH-S-54	Unexpected	1978	BQ	0	0
DDH-S-7	Unexpected	1978	BQ	0	0
DDH-S-8	Unexpected	1978	BQ	0	0
DDH-S-9	Unexpected	1978	BQ	0	0
UJV-78-S-1	Unexpected	1978	NQ	0	2
UJV-78-S-2	Unexpected	1978	NQ	0	2
UJV-78-S-3	Unexpected	1978	NQ	0	2
UJV-78-S-4	Unexpected	1978	NQ	0	2
UJV-78-S-5	Unexpected	1978	NQ	0	2
UJV-78-S-6	Unexpected	1978	NQ	0	2
UJV-78-S-7	Unexpected	1978	NQ	0	2
UJV-78-S-8	Unexpected	1978	NQ	0	2
UJV-78-S-9	Unexpected	1978	NQ	0	2