



## Occurrence Details

**Occurrence Number:** 1150 077  
**Occurrence Name:** Nugget East  
**Occurrence Type:** Hard-rock  
**Status:** Prospect  
**Date printed:** 6/14/2025 5:01:31 PM

## General Information

**Secondary Commodities:** gold, silver  
**Aliases:** Buckland  
**Deposit Type(s):** Orogenic Au  
**Location(s):** 63°52'53.5" N - -139°15'24.95" W  
**NTS Mapsheet(s):** 115014  
**Location Comments:** Coordinates provided by Klondike Gold Corp. in 2019.  
**Hand Samples Available:** No  
**Last Reviewed:**

## Capsule

### Work History

Heavily staked in 1898-1905 and explored with shallow shafts and trenches. Several claims in the Eldorado Reef group, immediately southeast, were later surveyed and taken to lease. Re-staked in March, 1960 as Hope, etc cl (78766) by Klondike Lode Gold ML, which conducted limited bulldozer trenching in 1960 and 1961 and drilled one hole (43 m) in 1962.

Re-staked as Rod cl (Y65296) in May, 1972 by R.G. Hilker on behalf of Sullivan and Rogers, who carried out mapping and geochemical sampling later in the year and bulldozer trenching in 1973. The adjoining Joe cl (Y65536) to the southeast was staked in July, 1972 and May, 1975 by J. Lamontagne, who trenched in 1976, and transferred them in May, 1978 to G. Hakonson, who trenched in 1980. The Rod group was re-staked as Ron cl (YA10300) in July, 1977 by G.J. McGinn and transferred in May, 1978 to Klon ELC, which performed mapping in 1979.

Klondike Ken Ventures Inc. tied on the ND cl (YA49724) to the east in May, 1980 and optioned the claims to Dawson Eldorado Gold EL in 1981. Dawson Eldorado explored with geochemical sampling and rock sampling of old workings nearby in 1984 and bulldozer trenching in 1985. In June, 1986 the property was optioned to Arbor Res L, which explored with linecutting, magnetic surveys, VLF-EM surveys and percussion drilling in 1986; an airborne magnetics and EM survey, grid geochemistry, EM and IP surveys, bulldozer trenching, one diamond drill hole and 3 rotary drill holes in 1987; and geochemistry, geophysics and trenching in 1988.

Faith ML optioned 50% of Arbor's interests in June, 1989 and performed geochemical surveys and trenching later that year. In 1990, Arbor performed an IP survey and drilled a rotary hole at the intersection of Gay Gulch and Eldorado Creek, and trenched in the area of the 1987 drilling. In December, 1992, the Joe claims were transferred to Klondike Reef ML.

Kennecott Canada Inc. optioned the property in 1992 and drilled 4 reverse circulation holes (540 m) in 1993. In 1994, Kennecott carried out a reconnaissance assessment of the entire Lone Star property (MINFILE occurrences 1150 073, 131, 146, 147, 148, and 150). The program included digitizing of previous exploration data, geological mapping, rock sampling, trenching and backpack soil augering. Two diamond drill holes (397.6 m) were drilled on the Buckland Shear zone. In January, 1995 Kennecott terminated the option agreement. In January, 1996 Arbor changed its name to Klondike Gold Corp. Newmont Exploration Ltd. performed a study of the mineralogy and amenability to milling of bulk samples during this time to evaluate the property under option.

Klondike Gold Corp. optioned a 50% interest to Klondike Star Mineral Corp. in 2005 who conducted IP geophysics in 2006 and drilled one NQ and 4 HQ holes (845.5 m) on the Buckland showing. Klondike Gold resumed work in 2011 and purchased Klondike Star Mineral Corp. in 2015 to restore a 100% interest.

Klondike Gold performed regional surficial mapping in 2012 and drilled 6 NQ holes (551.9 m) and performed regional orthophoto and ground magnetics surveys in 2015.

### Regional & Property Geology

The Buckland occurrence, similar to the Lone Star prospect (MINFILE occurrence 1150 072), is located within the Klondike region which is underlain by the Permian Klondike Schist Assemblage of the Yukon-Tanana terrane (YTT). The Klondike Schist represents a transition from plutonism to arc volcanism and consists of metaplutonic Sulphur Creek orthogneiss in the west that transitions to a package of felsic to mafic (quartz-mica) schist, graphitic schist and quartz augen schist (PKf and PKs) to the east. Evidence of five deformation events (D1 to D5) are present in within the Klondike Schist Assemblage as a result of obduction and regional thrusting and faulting related to uplift, which have produced a visible S2 and S3 foliation fabric in the schist units.

The lithological units of the Klondike region commonly contain both large, foliaform quartz veins associated with D3 folding and thrusting and discordant quartz veins possibly associated with D4 brittle faulting. Mineralization is generally hosted in the discordant quartz veins, however, the exact mineralization age and timing in the Klondike region is currently unknown. A structural mapping program completed by SRK Consulting in 2018 on the Klondike claims in the Lone Star property area identified a newly defined D4 fault system interpreted to be the primary conduit for gold mineralization fluids that suggests a younger mineralization age than previously assumed.

The white to locally oxidized, discordant veins are generally mineralized with sulphides (pyrite, rare galena, chalcopyrite), as well as visible gold, and are rarely more than 2-3 metres thick. Where present, visible gold is commonly noted along the selvages of both fresh and oxidized pyrite grains and can also occur as free grains within the quartz veins. In 2016, Klondike Gold Corp. also noted the presence of finely disseminated gold within large intervals of intermediate to mafic schist (quartz-mica schist) units in the Lone Star claims associated with the Bonanza and Nugget Faults.

### Mineralization & Results

Mineralization at the Buckland occurrence is commonly noted as pyrite associated visible gold contained in crosscutting, discordant quartz veins within extensively fractured intermediate to mafic (quartz-mica) schist units. The schistose units correspond to a large magnetic low in the area interpreted to be a large, D4 fault zone associated with gold mineralization. Ladder-style quartz veins fill tension gashes in the Buckland shear zone and extend 150 m or more into the adjacent wall rocks. Crushed, bleached material within the shear zone is quartz-sericite altered and carbonatization extends 10 m or more into the wall rock. Schist within the carbonatized zone contains micron-sized gold particles and has assayed up to 8.6 g/t Au. The shear zone is associated with a series of magnetic lows which project 7 km northwest into Eldorado Creek. Placer mining operations in the 27 Pup area are reported to have uncovered narrow pyritic quartz stringers with visible gold, with assays ranging from 1714 to 4457 g/t Au.

Historical assays by Klondike Lode Gold ranged up to 96.0 g/t Au over 0.7 m. A grab sample collected by Gleeson (1970) assayed 62.7 g/t Au and 13.7 g/t Ag. The 1987 diamond drill hole at the mouth of Gay Gulch cut quartz augen-bearing quartz-muscovite schist and a mafic dyke or sill. Several major and minor shear zones were intersected and core recovery was poor. A few thin quartz veins with some pyrite cut the schist, but all assays were low.

Sampling in 1985 returned assays of 5.8 g/t to 10.3 g/t Au from zones up to 1.5 m wide exposed in three trenches along a length of 32 m. The percussion drilling returned inconclusive results. The 1987 work reaffirmed that mineralization is best developed in the previously known area further east on Gay Gulch, with the highest assay (7.2 g/t Au over 3 m) coming from the diamond drill hole. The 1989 IP survey outlined a 300 m long anomaly at the junction of Gay Gulch and Eldorado Creek. Narrow quartz veins from this area returned assays up to 42.5 g/t Au.

Arbor's 1990 drill hole intersected 2.8 g/t Au over 3.0 m and the four trenches in the area of the 1987 drilling exposed a gold-bearing vein over a strike length of 900 m. Assays ranged from 36 g/t Au to 46.6 g/t Au over an average width of 0.5 m. Subsequent trenching showed that the vein is associated with a vertical northwest-trending shear zone, referred to as the Buckland shear zone. The zone is 10 to 20 m wide and has been traced for 1.4 km. A sample from trench 90-20, near the southeast end, assayed 1.9 g/t Au across 4.0 m. Trench 90-4, one km further to the northwest, returned an assay of 1.6 g/t Au across 12.5 m. Two drill holes that intersected the shear zone at depth assayed 6.51 g/t Au across 4.5 m and 3.57 g/t Au across 16.8 m.

Kennecott used a backpack soil auger to carry out property wide reconnaissance soil sampling. A soil sampling line running from the Lone Star ridge down across the Buckland zone identified a 400 m interval with anomalous Au values up to 355 ppb. Chip samples from a 350 m long trench on the anomaly returned consecutive assays of 2.35 g/t Au over 12.0 m and 26.5 g/t Au over 2.0 m. The mineralized interval coincides with a concentration of quartz veins which cut metamorphic foliation. Visible Au on pyrite was noted within the high grade Au sample.

Two diamond drill holes (397.6 m) were drilled in 1994 to verify intersections of 4.5 g/t Au over 6.7 m and 3.5 g/t Au over 15.2 m reported from 1987 diamond and reverse circulation holes drilled on the Buckland Shear Zone. Hole 94LS-07 tested the mineralized zone at a vertical depth of 60 m and produced a 4.7 m intersection grading 4.6 g/t Au and 4 597 ppm As. Hole 94LS-06 tested the mineralized zone 100 m down dip from hole 94LS-07, and returned peak values for Au and As of 65 ppb and 858 ppm respectively. The discontinuity in mineralization down dip, combined with its variability along strike was judged by Kennecott to severely limit the potential for a bulk tonnage target.

Three trenches near the Buckland Shear were cleaned out and/or extended and resampled. The best results were from Trench 90GGTR-06 which returned 3.71 g/t Au, 3.01 g/t Au, 1.25 g/t Au and 1.17 g/t Au from non-consecutive 2 m chip samples of quartz feldspar augen schist. All were associated with crosscutting quartz veins containing up to 2% pyrite. Visible Au was observed as a 1 mm crystal on the surface of a weathered pyrite cube within a quartz vein from this trench. The other 2 trenches did not return significant Au values.

Klondike Star Mineral Corp. and Klondike Gold Corp drilled five holes as a fence oriented NNE within a geophysical anomaly along line L1100E on the 2006 IP survey grid. Three of the five holes intersected anomalous Au values, including drill holes 07BU-3, 07BU-4 and 07BU-5 which returned 2.06 g/t Au over 21.0 m, including 22.6 g/t Au over 1.0 m; 1.65 g/t Au over 16.0 m, including 10.57 g/t Au over 1.5 m and 6.59 g/t Au over 1.0 m; and 0.37 g/t Au over 5.0 m, including 2.66 g/t Au over 1.0 m and 3/17 g/t Au over 1.0 m, respectively.

A total of five holes were drilled in 2015 by Klondike Gold Corp. to test individual vein targets and significant Au intercepts were noted in three of the five holes. Holes EC15-15, EC15-16 and EC15-17 returned anomalous Au values of 3.7 g/t Au over 1.8 m 11.9 g/t Au over 0.2 m and 5.9 g/t Au over 0.45 m, respectively. Drilling results combined with previous IP geophysical anomalies suggest that quartz vein arrays at Buckland have limited strike length continuity.

### Work History

Date	Work Type	Comment
7/1/2019	Drilling	19 holes, 1,556.92 m
7/1/2019	Geochemistry	
7/1/2019	Geochemistry	
7/1/2019	Remote Sensing	
12/31/1993	Drilling	Four holes, 540 m.
12/31/1990	Drilling	One hole part of larger regional program.Number of holes drilled: 1
12/31/1989	Geochemistry	Also soil sampling.
12/31/1989	Trenching	
12/31/1988	Trenching	
12/31/1987	Geochemistry	
12/31/1987	Trenching	
12/31/1987	Airborne Geophysics	Also magnetic survey.
12/31/1986	Geology	
12/31/1986	Ground Geophysics	Also VLF_EM survey.
12/31/1985	Trenching	
12/31/1984	Geochemistry	
12/31/1984	Geochemistry	
12/31/1979	Geology	
12/31/1973	Trenching	
12/31/1972	Geochemistry	Also soil sampling.
12/31/1972	Geology	
12/31/1962	Drilling	One hole, 43 m.
12/31/1961	Trenching	
12/31/1960	Trenching	
12/31/1905	Development, Underground	Numerous small shafts dug from 1898 to 1905.
12/31/1905	Trenching	Work carried out between 1898 and 1905.
12/13/2015	Airphotography	
12/13/2015	Drilling	Six NQ drill holes totaling 551.9 m.
12/13/2015	Ground Geophysics	

12/13/2012	Geochemistry	Property wide rock sampling and prospecting.
12/13/2012	Geology	Property wide surficial terrain mapping based on 1996 1:25000 aerial photographs.
12/13/2007	Drilling	One NQ and 4 HQ holes drilled as a N-NE fence along line L1100E from 2006 IP survey. Total of 845.5m drilled.
12/13/2006	Ground Geophysics	
12/13/1996	Trenching	
12/13/1994	Geochemistry	Power driven soil augers.
12/13/1987	Ground Geophysics	Also IP survey.

### Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<a href="#">097066</a>	2015	Report on Diamond Drilling, Prospecting, and Ground Magnetism on the Lone Star Property, Dawson Mining District, Yukon Territory, Canada	Diamond - Drilling, Rock - Geochemistry, Magnetism - Ground Geophysics	19	1369.30
<a href="#">096398</a>	2012	Diamond Drilling, Trenching, Soil Sampling, Rock Sampling, and Prospecting at the Lone Star Property	All Weather Road - Development, Surface, All Weather Road - Development, Surface, Diamond - Drilling, Diamond - Drilling, Drill Core - Geochemistry, Drill Core - Geochemistry, Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Prospecting - Other, Prospecting - Other, Backhoe - Trenching, Backhoe - Trenching	8	2762.20
<a href="#">094919</a>	2007	Diamond Drilling, Rotary Drilling, Geological Mapping, Rock and Soil Geochemistry, IP Geophysics, Trenching and Bulk Sampling on the Lone Star Property	Diamond - Drilling, Percussion - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Resource Estimate - Studies, Hand - Trenching	11	1314.10
<a href="#">094638</a>	2006	Diamond Drilling, Geological Mapping, Rock and Soil Geochemistry, IP Geophysics, Trenching and Bulk Sampling on the Lone Star	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Resource Estimate - Studies, Mechanical - Trenching	23	2892
<a href="#">094579</a>	2005	Diamond Drilling, Geological Mapping, Rock and Soil Geochemistry, Trenching and Bulk Sampling on the Lone Star Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Prospecting - Other, Backhoe - Trenching, Mechanical - Trenching	32	5429.40
<a href="#">094689</a>	2004	Geological Mapping, Rock and Soil Geochemistry, Trenching and Bulk sampling on the Lone Star Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Bulk Sample - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Data Compilation - Pre-existing Data, Mechanical - Trenching		
<a href="#">093321</a>	1994	1994 Annual Report on the Klondike Gold Project	Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetism - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
<a href="#">093320</a>	1994	1994 Annual Report on the Lone Star Project	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology	2	397.60
<a href="#">093214</a>	1993	1993 Assessment Report for Drilling on the Lone Star Property, Klondike District	Diamond - Drilling	10	691.30
<a href="#">093075</a>	1992	Geological, Geochemical and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Mechanical - Trenching		
<a href="#">092162</a>	1991	Geological, Geochemical, and Trenching Report on the Lone Star Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
<a href="#">092969</a>	1990	Geological and Geochemical Report on the Lone Star Property	Reverse Circulation - Drilling, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other, Data Compilation - Pre-existing Data, Mechanical - Trenching	45	2796
<a href="#">092860</a>	1989	Geological, Geochemical and Trenching Report on the Dawson Property	Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Mechanical - Trenching		
<a href="#">092691</a>	1988	Geological, Geochemical, Geophysical and Trenching Report on the Dawson Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Bulk Sample - Lab Work/Physical Studies, Column Leach Test - Lab Work/Physical Studies, Heavy Mineral Concentrate - Lab Work/Physical Studies, Metallurgical Tests - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Mechanical - Trenching		
<a href="#">092690</a>	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, Magnetism - Ground Geophysics, Line Cutting - Other, Mechanical - Trenching		
<a href="#">091760</a>	1987	Report on Combined Helicopter Borne Electromagnetic, Magnetic, and VLF-EM Survey Bonanza-Eldorado Creek Area	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics		

<a href="#">092132</a>	1987	Geological, Geochemical, Geophysical, Diamond and Rotary Drilling Report on the Lone Star Property	Magnetic - Airborne Geophysics, Diamond - Drilling, Rotary - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Mechanical - Trenching	50	5753.40
<a href="#">091750</a>	1986	A Report on Magnetic, Electromagnetic and Induced Polarization Surveys	EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics		
<a href="#">091754</a>	1986	A Report on Magnetic and Induced Polarization Surveying	IP - Ground Geophysics, Magnetics - Ground Geophysics		
<a href="#">091756</a>	1986	Geological, Geochemical and Diamond and Rotary Drilling Report on the Lone Star Property	Diamond - Drilling, Reverse Circulation - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics, Mechanical - Trenching	52	5425.14
<a href="#">091683</a>	1984	Report of 1984 Exploration on the Lone Star Property of Dawson Eldorado Mines Ltd.	Rehabilitation - Development, Underground, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Line Cutting - Other, Surveying - Other		
<a href="#">091535</a>	1983	Summary Report 1983 Mapping and Interpretation Lone Star Gold Property	Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Process/Interpret - Pre-existing Data		
<a href="#">091399</a>	1981	Gold Potential Evaluation Report Klondike District on Violet Gold - Quartz Property	Orthophoto - Airphotography, Cursory Property Visit - Other, Data Compilation - Pre-existing Data		
<a href="#">091064</a>	1981	Summary Report of 1981 Exploration on the Lone Star Ridge Property	Orthophoto - Airphotography, All Weather Road - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Heavy Mineral Concentrate - Lab Work/Physical Studies, Line Cutting - Other, Prospecting - Other, Surveying - Other, Data Compilation - Pre-existing Data, Hand - Trenching, Mechanical - Trenching		
<a href="#">060149</a>	1972	Geological and Geochemical Report Yukon Quartz Mineral Claims	Silt - Geochemistry, Soil - Geochemistry		

## Related References

Number	Title	Page(s)	Reference Type	Document Type
<a href="#">ARMC004676</a>	Report from Klondike prospective venture		Property File Collection	Report
<a href="#">ARMC012894</a>	Report on Klondike Lode gold mines property - Dawson mining district, Yukon		Property File Collection	Report
<a href="#">ARMC012899</a>	Notes on Lone Star - Klondike Lode		Property File Collection	Miscellaneous Company Documents
<a href="#">ARMC012893</a>	Surface exploration for the Klondike motherlode		Property File Collection	Report
<a href="#">ARMC012897</a>	News article - Klondike Lode		Property File Collection	News Release
<a href="#">ARMC012892</a>	Newspaper report - Search for the Klondike mother lode		Property File Collection	News Release
<a href="#">ARMC012896</a>	Note and photos of Klondike Lode gold mines		Property File Collection	Photos
<a href="#">ARMC012900</a>	Notes and expenses - Klondike Lode gold property		Property File Collection	Miscellaneous Company Documents
<a href="#">ARMC012898</a>	Correspondence Re: Klondike Lode gold property		Property File Collection	Miscellaneous Company Documents
<a href="#">ARMC012895</a>	Field notes on Klondike Lode gold mines		Property File Collection	Miscellaneous Company Documents
<a href="#">1996-1(G)</a>	Geological Compilation Maps of the Northern Stewart River Area, Klondike and Sixtymile 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)

## Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
<a href="#">87-D11</a>	Lone Star	1987	HQ-NQ	16	2