



Occurrence Details

Occurrence Number: 115I 038
Occurrence Name: Klazan
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 2:51:18 AM

General Information

Secondary Commodities: copper, gold, molybdenum, silver
Aliases: Nitro
Deposit Type(s): Porphyry Cu-Mo-Au
Location(s): 62°22'50" N - -137°29'33" W
NTS Mapsheet(s): 115I06
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Discovered in 1965 during reconnaissance geochemical program and staked as Klazan cl (Y8375) in July 1966 by Coranex L (Frobex L, Inco, Dome EL, Denison ML, and McIntyre Porcupine ML), which explored with a geochemical survey and mapping in 1966 and bulldozer trenching in 1968. Optioned in 1970 by a joint venture between Atlas EL and Caltor Synd (Rayrock ML; Can Industrial G OL; Ashland O Can L), which conducted grid soil sampling, a ground magnetic survey, bulldozer trenching and 966.5 m of drilling in 5 holes later in the year before dropping the option. Klotassin JV (Newconex Can EL, Marietta Res Int L, and Molybdenum Corp of America) tied on 200 Roc & Jen cl (Y91802) in December 1974 and Skunk cl (YA4049) in December 1975 to the northwest and southeast and performed mapping, geochemical surveys and a magnetic survey in 1975 and 1976.

Re-staked as Nitro cl 1-24 (YA60232) in June 1981 by Nat Joint Venture (Armco Mineral Exploration Ltd. and Chevron Canada Ltd.), which performed mapping and geochemical sampling in 1981 and 1982. In June 1985, the Freegold Venture staked Nitro cl 25-50 (YA87375) to the west and north and carried out geochemical soil sampling of the newly staked claims later in the year. Chevron optioned the property in 1987 to Big Creek JV (Big Creek Res L & Rexford Mls), which conducted bulldozer trenching in 1988.

Regional & Property Geology

The occurrence is partly underlain by Yukon-Tanana Terrane (YTT). The rocks of the YTT in this region consist of Early Mississippian metamorphic rocks separated into meta-sedimentary and meta-igneous suites. The meta-sedimentary suite consists of micaceous quartz-feldspar gneiss, schist and quartzite. The meta-igneous package is comprised of biotite-hornblende feldspar gneiss and coarse-grained granodiorite orthogneiss with lesser amphibolite.

The YTT basement rocks are cut by numerous plutonic and volcanic events from the Mesozoic (Allan & Friend, 2018; AR 091804), including:

1. Early Jurassic monzonite to syenite plutonic suites;
2. Mid-Cretaceous Mount Nansen Suite andesite and rhyolite tuff-breccia;
3. Mid-Cretaceous Whitehorse granodiorite;
4. Late Cretaceous Carmacks rhyodacites;
5. Late Cretaceous Casino calc-alkaline suites; and,
6. Quartz feldspar and feldspar hornblende porphyry dykes and plugs.

The Klazan occurrence is located on the south side of the Big Creek Fault and associated with a brecciated, leached, quartz-veined rhyolite surrounding a stock of altered orthoclase porphyry (AR 091438; Allan & Friend, 2018).

Mineralization & Results

The Klazan claims were staked to cover geochemical anomalies associated with a strong gossan. Mineralization at the Klazan occurrence was noted as disseminated pyrite and occasional molybdenite, galena and sphalerite in surface trenches in the leached and gossaned rhyolite (AR 091438).

The best grade intersections reported from the 1970 drilling are 44.2 m of 0.17% Cu and 3.0 m of 0.16% Cu and 0.68% MoS₂ (AR 091329).

The Klotassin JV property completely covers the parts of the valley which lie below the level of effective conventional prospecting. Mapping of rock chips collected during soil sampling outlined areas of thick alluvial overburden and delineated several small porphyry stocks and related dyke swarms. The 1981 by Nat JV sampling located a 700 by 200 m gold soil geochemical anomaly coincident with the gossan, and rock chips from the gossan returned up to 212 ppb Au. A silver soil anomaly up to 10.7 ppm Ag partly coincides with the gold anomaly (AR 091438).

Work History

Date	Work Type	Comment
12/31/1988	Trenching	
12/31/1985	Geology	
12/31/1985	Geochemistry	Also rock sampling.
12/31/1982	Geology	

12/31/1982	Other	
12/31/1981	Geochemistry	
12/31/1976	Ground Geophysics	
12/31/1975	Geology	
12/31/1975	Geochemistry	Also some rock sampling.
12/31/1975	Ground Geophysics	
12/31/1970	Drilling	Five holes, 966.52 m.
12/31/1970	Geochemistry	
12/31/1970	Ground Geophysics	
12/31/1970	Trenching	
12/31/1968	Trenching	
12/31/1966	Geology	
12/31/1966	Geochemistry	Also rock and additional silt sampling.
12/31/1966	Other	
12/31/1965	Geochemistry	Regional silt sampling program.
12/13/2006	Airborne Geophysics	Regional property survey.
12/13/2006	Airborne Geophysics	Regional property survey.
12/13/1982	Geochemistry	
12/13/1981	Geology	
12/13/1976	Geochemistry	
12/13/1976	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094745	2006	2006 Geophysical Assessment Report on the Freegold Mountain Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
093152	1993	Linecutting Report Patriot Resources Ltd. Cash Property - Nitro Property	Line Cutting - Other		
091804	1985	Geological and Geochemical Report on the NUCLEUS Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Property Evaluation - Other, Prospecting - Other, Mechanical - Trenching		
091819	1985	Geological and Geochemical Reports on the NITRO Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
090974	1981	Nat Joint Venture Geological, Geochemical Report Nitro 1-24 Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Data Compilation - Pre-existing Data		
060199	1970	Geological, Geochemical, Geophysical and Diamond Drilling Report on the Klazan Group	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetism - Ground Geophysics, Mechanical - Trenching	5	966.52
091329	1970	Geological, Geochemical, Geophysical and Diamond Drilling Report on The Klazan Group	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetism - Ground Geophysics, Mechanical - Trenching	5	966.52
019096	1967	Klazan Group - Geochemical Report	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
019095	1966	Klazan Group - Geochemical Report	Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Hand - Trenching		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC012920	Report - Klazan project		Property File Collection	Report
ARMC012924	Report on Klazan group, Yukon Territory		Property File Collection	Report
ARMC012935	GSC annual report - Klazan group - Claims 1 to 48, 55 to 136		Property File Collection	Report
ARMC01291Z	Geological map - Klazan group - Coranex project - Figure 5		Property File Collection	Geochemical Map

ARMC012916	Mo geochemistry - Total molybdenum in soils - Klazan group - Coranex Project - Figure 8		Property File Collection	Geochemical Map
ARMC012922	Interim progress report to May 10, 1970 - Victor project - Klazan group		Property File Collection	Report
ARMC012926	Rock and soil geochemistry - Arsenic-zinc - Klazan group		Property File Collection	Geochemical Map
ARMC012932	Rock and soil geochemistry - Copper-molybdenum - Klazan group		Property File Collection	Geochemical Map
ARMC012928	Rock and soil geochemistry - Copper-molybdenum - S.E. side Burgis Creek Valley - Klazan group		Property File Collection	Geochemical Map
ARMC012931	Rock and soil geochemistry - Sample no. - Klazan group		Property File Collection	Geochemical Map
ARMC012927	Rock and soil geochemistry - Sample numbers - S.E. side Burgis Creek Valley - Klazan group		Property File Collection	Geochemical Map
ARMC012929	Rock and soil geochemistry - Silver-lead - Klazan group		Property File Collection	Geochemical Map
ARMC012919	Klazan project - Annual report		Property File Collection	Report
ARMC012930	Rock and soil geochemistry - Silver-lead - S.E. side Burgis Creek Valley - Klazan group		Property File Collection	Geochemical Map
ARMC012915	Rock and soil geochemistry - Zinc - S.E. side Burgis Creek Valley - Klazan group		Property File Collection	Geochemical Map
ARMC012925	Rock geochemistry - Total molybdenum in rock - Klazan group - Coranex project - Figure 7		Property File Collection	Geochemical Map
ARMC012923	Progress report for the month of April - Victor project - Klazan group		Property File Collection	Report
ARMC012914	Diamond drilling report on the Klazan group - Big Creek area, Yukon Territory - May 1 to June 10, 1970		Property File Collection	Report
ARMC012918	Alteration map - Klazan group - Coranex project - Figure 6		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC012934	Geology and geochemistry - Klazan group		Property File Collection	Geochemical Map
ARMC012933	Geology and geochemistry - Klazan group - Figure 3		Property File Collection	Geochemical Map
ARMC012939	Field sheet - Yukon River area with geology - Klazan, Johnny and Cash claims		Property File Collection	Geoscience Map (Geological - Bedrock)
2018-2	Bedrock geological map of the Mount Freegold district, Dawson Range		Yukon Geological Survey	Open File (Geological - Bedrock)
YEG2017_4	New contributions to the bedrock geology of the Mount Freegold district, Dawson Range, Yukon (NTS 115I/2, 6 and 7)		Yukon Geological Survey	Annual Report Paper