



Occurrence Details

Occurrence Number: 115I 137

Occurrence Name: Flex

Occurrence Type: Hard-rock

Status: Deposit

Date printed: 8/6/2025 8:02:19 AM

General Information

Primary Commodities: copper, gold, silver

Secondary Commodities: lead, zinc

Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation

Location(s): 62°3'4.8" N - -137°9'22.84" W

NTS Mapsheet(s): 115I03

Location Comments: Location taken in the field by P. Sack, 2020.

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

First staked as fringe claims around the Brown-McDade property in 1943-1944. In 1946-1948, the Nansen area was explored by Conwest Exploration Company Ltd. During this period, claims were held nearby by Yukon Range Exploration Ltd (Conwest, Frobisher, & Nova-co Exploration Ltd), Nansen Yukon Mines Ltd. and Colery Yukon Mines Ltd.

Re-staked in June 1958 as Dome cl (73537) and in July 1959 as Joanne cl (74285), which were optioned in 1962 by Mount Nansen Explorers Syndicate (Conwest, Faraday Uranium Mines Ltd, Kerr Addison Gold Mines Ltd, Newmont Mining Corporation of Canada Ltd, Noranda Exploration Company Ltd, J. Rankin, Rio Tinto Canada Exploration Ltd and, later, Central Patricia Gold Mines Ltd.). In 1963, Mount Nansen Mines Ltd. was formed by the syndicate.

Peso Silver Mines Ltd. acquired control of Mount Nansen Mines Ltd. in 1964. Nansen conducted a feasibility study in 1983 and sold the property in 1984 to BYG Natural Resources Inc.

Chevron Canada Resources Ltd. optioned the property from BYG in June 1985 and explored with soils and EM ground geophysics in 1985; trenching and diamond drilling in 1986; and trenching and diamond drilling of 12 HQ holes in 1987. BYG entered into a sub-option agreement with Chevron in 1988 and explored with 1 holes totaling 45.1 m. A feasibility study was undertaken in 1989 by BYG.

In 1994, BYG drilled five diamond drill holes (188.7 m), performed auger drilling, and undertook geotechnical studies at the Flex occurrence. In 1995, BYG continued exploration and development work on their Mount Nansen Project and drilled eighteen diamond drill holes totaling 600 m. In April 1996, BYG received their Class A water licence which allowed them to begin mining operations. Mining began on the oxidized portion of the Brown-McDade zone (MINFILE occurrence 115I 064). In 1998, BYG performed overburden stripping at the Flex zone.

In February 1999, BYG announced plans to temporarily shut down the Mount Nansen Mine. In March 1999, BYG was placed in receivership and the Nansen mine became a Type II Minesite. In 2004, the court appointed receiver PricewaterhouseCoopers to manage the mines' assets. In 2007, the receiver sold 199 periphery claims to #101073531 Saskatchewan Corp., which included the Flex zone.

In 2009, 101073531 Saskatchewan Corp. flew a regional airborne and magnetic survey that included the Flex occurrence. A 43-101 technical report by Middleton, 2009, summarizes the Mount Nansen and Tawa properties.

Guinness Exploration Inc. optioned the claims in 2010 and explored the Flex occurrence with fourteen diamond drill holes totaling 1,452 m. In 2011, Ansell Capital Corp. optioned the claims from Guinness Exploration and completed eighteen diamond drill holes (3,000 m) and bedrock mapping. Ansell completed additional diamond drilling of six holes (1,883.46 m) in 2012. In 2013, Ansell Capital Corp. performed IP ground geophysics over the occurrence.

Regional & Property Geology

The occurrence is located in the Dawson Range within 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 (Stroshein, 1998). The meta-sedimentary suite consists of micaceous quartz-feldspar gneiss, schist and quartzite of the Nasina Assemblage. The meta-igneous package is comprised of biotite-hornblende feldspar gneiss and coarse-grained granodiorite orthogneiss with lesser amphibolite.

Four rock types dominate the geology surrounding the occurrence and are comprised of:

1. Paleozoic metamorphic Yukon-Tanana gneiss, quartzite, and amphibolite to the south;
2. Triassic to Jurassic metamorphosed alkali-feldspar-rich plutonic suites;
3. Mid-Cretaceous Mount Nansen Suite andesite, felsic lapilli tuffs, basaltic to latite volcanic rocks; and quartz feldspar porphyry, dacite, latite, and quartz monzonite porphyritic hypabyssal rocks; and
4. Mid-Cretaceous Whitehorse granodiorite.

Mineralization & Results

The Flex zone was discovered by Chevron in 1985 and lies between the Webber and Huestis occurrences (MINFILE occurrences 115I 065 and 138). The occurrence consists of narrow, anastomosing quartz veins infilling fractures in Paleozoic basement gneiss and felsic schist that have been weathered at surface resulting in a bleached appearance. The subparallel veins are locally brecciated, range from 5 to 50 cm thick and dip steeply to the west. Alteration is primarily patchy silicification with pervasive argillic alteration around sulphide-rich veins in the hanging wall and footwall. Sulphide mineralization within these altered veins consists of pyrite, arsenopyrite, silver sulphosalts, galena and sphalerite (Anderson & Stroshein, 1997).

Stroshein & Anderson (1997) identified three vein compositions at the Flex zone that consist of:

1. Dark grey, sulphide-rich, opaque, vitreous quartz associated with high-grade Au
2. Massive, grey chalcedonic quartz with angular clasts of brecciated wallrock, and
3. Barren, pale grey, opaque and vitreous quartz veins containing open spaces.

In 1986, exploration of the Flex vein system returned assays up to 4.0 g/t Au and 136.1 g/t Ag over 19.0 m from trenching and 4.4 g/t Au and 244.4 g/t Ag over 7.6 m from drilling. The veins are cut off by a major cross fault at their north end. Possible offsets were located indicate about 1.4 km of right-lateral offset.

Drilling in 1987 showed the mineralization in the Flex Zone is highly erratic, but returned assays up to 21.0 g/t Au and 280.0 g/t Ag over 1.8 m. Historical possible open pit and underground reserves for the Flex zone were calculated in 1989 as 114,851 tonnes of 7.5 g/t Au and 200 g/t Ag (not NI 43-101 compliant).

In 1994, five infill holes on the Flex Zone returned very encouraging results, with some of the better results being: 11.7 g/t Au 767.2 g/t Ag over 1.92 m in hole 94-137 and 14.4 g/t Au 1152.6 g/t Ag over 3.04 m in hole 94-141. Drilling at the Flex by BYG in 1995 returned assays results of up to 15.57 g/t Au and 502.2 g/t Ag over 2.44 m in hole 95-157; 11.96 g/t Au and 142.7 g/t Ag over 1.31 m in

hole 95-161; and 6.48 g/t Au and 300.5 g/t Ag over 1.64 m in hole 95-166.

Overburden stripping and geological mapping of the Flex zone in 1998 by BYG revealed that the mineralized veins trend north-northwest, dip steeply to the west and have been offset by cross cutting northeast trending faults with left lateral movement of up to 26 m. The mineralization is typically epithermal with extensive wall rock alteration, including argillic and phyllic zones.

Diamond drilling performed by Guinness Exploration in 2010 at Flex confirmed previous gold mineralization with significant intercepts of 1.66 g/t Au and 67.91 g/t Ag over 31.25 m, including 12.14 g/t Au and 778.03 g/t Ag over 1.7 m in hole DDH-10-240; 1.77 g/t Au and 115.96 g/t Ag over 24.25 m, including 22.8 g/t Au and 2946 g/t Ag over 0.2 m in DDH-10-241; and 3/52 g/t Au and 119 g/t Ag over 5 m, including 24.4 g/t Au and 1058 g/t Ag over 0.5 m in DDH-10-249.

Diamond drilling performed by Ansell Capital in 2011 and 2012 extended known geology and mineralization to further depths with some of the significant assay results including: 9.12 g/t Au and 193.36 g/t Ag over 15.53 m, including 72.97 g/t Au and 3122 g/t Ag over 0.6 m in DDH-11-271; 7.55 g/t Au and 296.49 g/t Ag over 9.15 m, including 58.59 g/t Au and 1884 g/t Ag over 1.05 m in DDH-11-272; and 60.7 g/t Au and 1069 g/t Ag over 1.26 m in DDH-12-276.

Work History

Date	Work Type	Comment
7/1/2020	Drilling	11 holes, 2,347.1 m
7/1/2020	Geochemistry	
12/13/2013	Ground Geophysics	
12/13/2012	Drilling	Six holes totaling 1883.46 m.
12/13/2011	Drilling	Eighteen holes totaling 3000 m.
12/13/2011	Geology	
12/13/2010	Drilling	Fourteen holes totaling 1452 m.
12/13/2009	Airborne Geophysics	And EM.
12/13/1998	Other	Overburden stripping.
12/13/1995	Drilling	Eighteen holes totaling 600 m.
12/13/1994	Drilling	Five holes totaling 188.7 m.
12/13/1994	Drilling	
12/13/1994	Studies	
12/13/1989	Studies	
12/13/1988	Drilling	One HQ hole totaling 45.1 m.
12/13/1987	Drilling	Twelve HQ holes.
12/13/1987	Studies	
12/13/1987	Trenching	
12/13/1986	Drilling	
12/13/1986	Trenching	
12/13/1985	Geochemistry	
12/13/1985	Ground Geophysics	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095861	2011	Assessment Report on the 2011 Trenching and Diamond Drilling Program	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching	22	3607.93
095315	2010	Assessment Report on the 2010 Trenching and Diamond Drilling Program Charlotte Property	Reclamation - Development, Surface, Diamond - Drilling, Soil - Geochemistry, Surveying - Other, Mechanical - Trenching	14	1452
095089	2009	Report on a Geophysical Survey on the Mount Nansen Property and the Tawa Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
093877	1997	Overburden Stripping Program of the Flex Deposit on the Dome 1 and Dome 6 Mineral Claims	Soil - Geochemistry, Detailed Surficial Mapping - Geology, Stripping - Placer Processing, Mechanical - Trenching		
093365	1995	B.Y.G. Natural Resources Inc. Mt. Nansen Gold Project	All Weather Road - Development, Surface, Stripping - Development, Surface, Diamond - Drilling, Prospecting - Other	21	1490
093231	1994	Suinmai Report 1994 Exploration Program -Mt. Nansen Gold Project	All Weather Road - Development, Surface, Auger - Drilling, Diamond - Drilling, Drill Core - Geochemistry, Geotechnical - Studies, Mechanical - Trenching	15	1036
092701	1989	Report on the Geology and Mineral Inventory of the Mt. Nansen and Tawa Properties With Assessment of the Economic Potential for Open Pit Mining of Oxidized Mineralization in the Brown-McDade Zone	Data Compilation - Pre-existing Data, Resource Estimate - Studies		

092122	1987	Nansen Project Final Report,Report on Bulldozer and Excavator Trenching Rusk Group,Environmental Update For the Mount Nansen Project	Diamond - Drilling, Water - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Environmental Assessment/Impact - Studies, Backhoe - Trenching, Mechanical - Trenching	17	1048.50
091825	1985	Report on Geological, Geochemical, Geophysical, Trench and Drill Results on the Mt. Nansen Property	Interpretation - Airphotography, Environmental Clean-up - Development, Surface, Diamond - Drilling, Rotary - Drilling, Muck - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology, EM - Ground Geophysics, Metallurgical Tests - Lab Work/Physical Studies, Line Cutting - Other, Environmental Assessment/Impact - Studies, Geotechnical - Studies, Resource Estimate - Studies, Mechanical - Trenching	30	2232.90
092553	1968	Geology, Economy, Boring - Brown-McDade,Huestis,Webber Zones, Mount Nansen Property	Resource Estimate - Studies		
062230	1966	Preliminary Feasibility Report Development and Mining Operations at the Mount Nansen Properties	Pre-feasibility - Studies		
062258	1965	[Summary of the Peso Silver Mines Ltd. Properties]	Data Compilation - Pre-existing Data, Research/Summarize - Pre-existing Data, Resource Estimate - Studies		

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG1997 Andersen	Geology of the Flex gold-silver vein system, Mount Nansen area, Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG1998 20	A summary report on the geology of the Brown-McDade gold-silver deposit, Mount Nansen mine area, Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
YEG1997 14	Geology and mineral deposits of the Mount Nansen camp, Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
13-060	Summary Report of the 2013 Geophysical Work and Mineralogical Study on the Charlotte Property		Yukon Government: Energy, Mines and Resources	YMEP Report

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
2009	Flex (Open Pit & Underground)	Historical Estimate	silver	158 g/t	40,900		No	No	3.5 g/t gold equiv.
Originally reported as inferred geological resources, not 43-101 compliant. Original figures came from Denholm, Dumka and Farquharson, 2000, p. 36. Middleton report (2009) never filed with securities authority. Cut-off grade chosen to conform with previous reports but likely much higher due to increase in all mining and recovery costs.									
2009	Flex (Open Pit & Underground)	Historical Estimate	gold	4.9 g/t	40,900		No	No	3.5 g/t gold
Originally reported as inferred geological resources, not 43-101 compliant. Original figures came from Denholm, Dumka and Farquharson, 2000, p. 36. Middleton report (2009) never filed with securities authority. Cut-off grade chosen to conform with previous reports but likely much higher due to increase in all mining and recovery costs.									
1995	Flex (Open Pit & Underground)	Historical Estimate	silver	234 g/t	69,977		No	No	Unknown
Revised calculation based on 1994/95 drilling programs.; Assessment Report #093365 by D.R. Melling.									
1995	Flex (Open Pit & Underground)	Historical Estimate	silver	333 g/t	38,615		No	No	Unknown
Revised calculation based on 1994/95 drilling programs.; Assessment Report #093365 by D.R. Melling.									
1995	Flex (Open Pit & Underground)	Historical Estimate	gold	5.8 g/t	38,615		No	No	Unknown
Revised calculation based on 1994/95 drilling programs.; Assessment Report #093365 by D.R. Melling.									
1995	Flex (Open Pit & Underground)	Historical Estimate	gold	6 g/t	69,977		No	No	Unknown
Revised calculation based on 1994/95 drilling programs.; Assessment Report #093365 by D.R. Melling.									
1989	Flex (Open Pit & Underground)	Historical Estimate	gold	7.5 g/t	114,851		No	No	Unknown
Mineral inventory calculated for a 360 m by 100 m area near the centre of the zone.; Assessment Report #092701 by W.D. Eaton and A.R. Archer.									
1989	Flex (Open Pit & Underground)	Historical Estimate	silver	200 g/t	114,851		No	No	Unknown
Mineral inventory calculated for a 360 by 100 m area near the centre of the zone.; Assessment Report #092701 by W.D. Eaton and A.R. Archer.									

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
DDH 95-158	Mount Nansen	1995	HQ	0	1
DDH 95-161	Mount Nansen	1995	HQ	0	1