Occurrence Details

Occurrence Number: 115I 138
Occurrence Name: Huestis
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 12/16/2025 7:47:05 AM

General Information

Primary Commodities: copper, gold, silver
Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation
Location(s): 62°2'48.42" N - -137°8'57.86" W
NTS Mapsheet(s): 115I03
Location Comments: Location provided by Rockhaven Resources 2019
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 Huestis Syndicate (Frobisher Exploration Company Ltd, Anglo Huronian, International Mining Corporation of Canada, Trans-American Mining Corporation, Nipissing Mining Company, Lake Expanse Gold Mines Ltd. and Transcontinental Resources Ltd.) found and explored the Huestis vein. 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 Cananda Exploration Ltd. and, later, Central Patricia Gold Mines Ltd.). In 1963, Mount Nansen Mines Ltd. was formed by the syndicate. Bulldozing elsewhere on the property further exposed the Huestis vein. The Penny & Gold cl (81870) were tied on to the west in September 1962 by Racicot Syndicate (Teck Exploration Ltd., Silver Standard Mining Ltd. and Magnum Consolidated) and bulldozed in 1964 by Central Nansen Mines Ltd under option.

Peso Silver Mines Ltd acquired control of Mount Nansen Mines Ltd in 1964 and through to 1966 explored the Webber and Huestis veins by 2,107 m of underground development and 2,226 m of diamond drilling and added the Laura Betty cl (93469) in October-November 1965. A production decision was made in 1967 and Mount Nansen Mines Ltd. ownership was modified due to acquisition of Peso Silver Mines Ltd. (which was controlled at this time by Charter Oil Company Ltd. & Moneta Porcupine Mines Ltd.) by Canadawide Investments Ltd., controlled by H. Willi, representing Swiss financing. In 1968, the Huestis vein was developed with 976 m of drifting on a new lower (4100) level and a 163 tonne mill was operated from September 1968 to April 1969. Production was lower than forecast grades with 85,133 g Au, 2,625,116 g Ag and 49,207 kg Pb from 16,360 tonnes milled due to poor gold recovery without a cyanide circuit.

The mine was reopened in 1975 and in 1976 the 4100 level was extended 141 m. In 1976, 290 m of raises were driven, 7,451 tonnes were mined and 5,844 tonnes grading about 10.3 g/t Au, 240.1 g/t Ag 1.0% Pb and 1.0% Zn were milled in a five month period. Peso changed its name to Rex Silver Mines Ltd. in 1979 and transferred the property to Schweizerische Gesellschaft in 1980 and to Nansen Mining Corporation in 1981. 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, dominantly focusing on the Webber and Brown-McDade (MINFILE occurrences 115I 065 and 064), however soils and EM ground geophysics were performed at Huestis. In 1986, Chevron performed further trenching. In 1987, Chevron dug fourteen trenches and drilled one diamond drill hole at the Huestis vein. BYG entered into a sub-option agreement with Chevron in 1988 and explored Huestis with 2 HQ holes (86 m) and 1,242 m of excavator trenching. The Huestis 4300' level underground workings were also rehabilitated, the mill equipment and buildings were examined and redesigned for cyanide vat leaching, and possible tailings pond sites were studied. In 1989, a feasibility study was conducted over the claims.

During the summer of 1994, BYG drilled 1 hole (53 m) on the Huestis North zone. In addition, the company carried out a topographic survey, geotechnical drilling (46 m) and a tailing storage study. The company also rehabilitated one of the water wells on Victoria Creek.

In 1995, BYG continued exploration and development work on their Mount Nansen Project. Three diamond drill holes (890 m) were drilled on the Huestis zone. In preparation for mine production at Brown-McDade (MINFILE occurrence 115I 064), BYG carried out road construction, tailings dam stripping and construction and rehabilitation of mill and mine buildings. BYG also applied for various mining permits and licences. 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 February 1999, BYG announced plans to temporarily shut down the Mount Nansen Mine. In March 1999, the company was placed in receivership and on April 22, 1999 shares of the company were suspended from trading and subsequently delisted. At this time, the Mount Nansen mine, including the Huestis zone, became a Type II Minesite.

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

In 2019, the Yukon Supreme Court approved the sale of the Mount Nansen mine site, including the Huestis occurrence, to a 50/50 joint venture of Alexco Environmental and JDS Group called the Mount Nansen Remediation Limited Partnership (MNLRP). The project will include engineering, permitting, care and maintenance and remediation (jdsmining.ca).

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 Mississipian 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 Huestis vein is in a strong shear zone, striking northwest and dipping steeply west, that cuts highly altered Mississippian schist and gneiss intruded by dykes and stocks of Mid-Cretaceous porphyry. The veins form lenses within the shears and consist of quartz, pyrite and arsenopyrite and minor amounts of galena, chalcopyrite, sphalerite and various silver minerals.

Chevron's 1985 and 1986 work outlined other veins parallel to the Webber (MINFILE occurrence 115I 065) and Heustis. Work from 1985 to 1987 was performed primarily on these other veins, including the Flex and Orloff-King (MINFILE occurrences 115I 137 and 134). Trenching in 1987 returned high grade samples of up to 5.3 g/t Au and 29.25 g/t Ag over 0.076 m. Diamond drilling in 1987 returned up to 0.084 g/t Au and 1.36 g/t Ag over 2.1 m.

Reserves calculated at Huestis in 1989 were 85,727 tonnes of 14.0 g/t Au and 283 g/t Ag proved and probably underground (not NI 43-101 compliant).

The 1994 hole on the Heustis North zone intersected two quartz veins which correlate with those previously intersected in 1986 and 1987 and returned 7.8 g/t Au and 118.7 g/t Ag over 1.52 m and 1.8 g/t Au and 34.3 g/t Ag over 1.53 m.

In 1995, two diamond drill holes (340 m) on the Heustis NW vein system intersected mineralized veins beyond the limits of previous underground drifting. DDH 95-149 intersected the #12 vein about 10 m beyond the limit of underground development. The hole intersected 0.74 m of massive galena-pyrite-sphalerite-chalcopyrite-stibnite-arsenopyrite in quartz-carbonate gangue that assayed 50.47 g/t Au and 1221.0 g/t Ag. DDH 95-150 intersected the #11 vein about 50 m beyond the limits of previous underground development. The hole intersected 0.60 m of partially oxidized and black massive sulphides that assayed 15.67 g/t Au and 3475.0 g/t Ag.

One diamond drill hole (DDH 95-151 - 550 m) on the Heustis deposit was drilled 330 m deeper than the lowermost developed level on the deposit. The hole encountered several mineralized veins in more than 130 m of intense carbonate-sericite alteration. The best interval, 450 m below surface, consisted of quartz vein stockwork containing fine grained, disseminated pyrite-arsenopyrite-galena-sphalerite-chalcopyrite-stibnite grading 4.07 g/t Au and 73.8 g/t Ag over 5.24 m. These results are highly significant because present reserves on the property in all categories do not include mineralization below 150 m.

A 43-101 technical report by Middleton, 2009, summarizes the Mount Nansen and Tawa properties.

Work History

Date	Work Type	Comment
12/13/2009	Airborne Geophysics	And EM.
12/13/2009	Studies	Middleton, 2009, technical report.
12/13/1995	Drilling	Three holes totaling 890 m.
12/13/1994	Drilling	One hole totaling 53 m.
12/13/1989	Studies	
12/13/1988	Drilling	Two holes totaling 86 m.
12/13/1988	Development, Underground	
12/13/1987	Drilling	One drill hole.
12/13/1987	Trenching	Fourteen trenches.
12/13/1986	Trenching	
12/13/1985	Geochemistry	
12/13/1985	Ground Geophysics	
12/13/1983	Studies	
12/13/1976	Development, Underground	
12/13/1976	Other	Mining ceases after 5 months.
12/13/1975	Other	Mill re-opens.
12/13/1969	Other	Production ceases in April 1969.
12/13/1968	Development, Underground	Approximately 976 m of underground development.
12/13/1967	Other	Production decision was made.
12/13/1966	Drilling	Unknown number of holes, 2,226 m. Most of which appears to have been collared from underground.
12/13/1966	Development, Underground	Approximately 2,107 m of drifting.
12/13/1965	Development, Underground	
12/13/1963	Trenching	
12/13/1946	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
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		
093231	1994	Suinmaiy 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
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_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
1987-2(G)	Geology of Mt. Nansen (115I/3) and Stoddart Creek (115I/6), Dawson Range, Central Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
2009	Huestis (Underground)	Historical Estimate	silver	288 g/t	84,000		No	No	3.5 g/t Au equiv
Originally reported as indicated 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	Huestis (Underground)	Historical Estimate	silver	309 g/t	38,100		No	No	3.5 g/t Au equiv
Originally reported as indicated 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	Huestis (Underground)	Historical Estimate	gold	14 g/t	84,000		No	No	3.5 g/t Au equiv
Originally reported as indicated 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	Huestis (Underground)	Historical Estimate	gold	14.3 g/t	38,100		No	No	3.5 g/t Au equiv
Originally reported as indicated 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.									
1989	Huestis (Underground)	Historical Estimate	silver	283 g/t	85,727		No	No	Unknown
Original calculations were reported in earlier private company reports and were not rechecked by Eaton and Archer.; Assessment Report #092701 by W.D. Eaton and A.R. Archer.									
1989	Huestis (Underground)	Historical Estimate	gold	14 g/t	85,727		No	No	Unknown
Original calculations were reported in earlier private company reports and were not rechecked by Eaton and Archer.; Assessment Report #092701 by W.D. Eaton and A.R. Archer.									