Occurrence Details

Occurrence Number: 115I 064
Occurrence Name: Brown-McDade
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 8/6/2025 8:03:14 AM

General Information

Primary Commodities: gold, silver
Secondary Commodities: antimony, copper, lead, zinc
Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation
Location(s): 62°2'54.02" N - -137°7'26.57" W
NTS Mapsheet(s): 115I03
Location Comments: Location provided by Rockhaven Resources 2019
Hand Samples Available: Yes
Last Reviewed:

Capsule

Work History

Staked as Big Thing claim (4329) and others, in 1943 by A. Brown and G. McDade, who sold the property in 1945 to Yukon Northwest Exploration Ltd. (Leitch Gold Mines Ltd.), which explored with trenching and drilling in 1946. The property was then transferred to Brown-McDade Mines Ltd., which developed the vein with 609 m of crosscutting and drifting in 1947. G.F. Dickson added Dome cl 1-7 (73538) to the west in 1958 and April 1962 and optioned them to Mount Nansen Mines Ltd. in March 1963. Control of the Brown-McDade property was acquired by Peso Silver Mines Ltd. in July 1964 and transferred to a subsidiary, Mount Nansen Mines Ltd, in 1965. Mount Nansen explored with 552 m underground drilling in 1966 and 216 m of underground development in 1967.

In 1968, Peso sold its control of Brown-McDade Mines Ltd. to Charter Oil Company Ltd. (controlled by Canadawide Investments Ltd.). Peso regained control of the Brown-McDade claims in 1978, changed its name to Rex Silver Mines Ltd. in 1979, and sold its interest in 1981 to a private syndicate. The syndicate tied on DD cl 1-66 (YA59596) to the south and east in February 1981 and transferred its interest in 1984 to a new company, BYG Natural Resources Inc.

Chevron Canada Resources Ltd. optioned the property from BYG in June 1985 and explored with soil geochemistry, EM-16 surveys, 3,717 m of excavator trenching, 1,234 m of percussion drilling (17 holes) and 638 m of diamond drilling (6 holes) in 1985; EM-16, horizontal loop and magnetic surveys, plus 3,715 m of excavator trenching and one diamond drill hole (172 m) in 1987. BYG entered into a sub-option agreement with Chevron in 1988 and drilled 75 diamond drill holes totaling 5,077 m. Metallurgical testing was done on oxidized and sulphide-bearing mineralization to determine its amenability to cyanidization. A historical resource estimate was undertaken in 1989 (not NI 43-101 compliant). In 1989, five shallow holes were drilled for soil tests on the proposed tailings dam site.

In November 1993, Gestion S.R.C. Inc. entered a letter of intent to acquire a 50% interest in the property by providing the capital and management to put the property into production, beginning with the Brown-McDade deposit. This deal did not proceed and in April 1994 BYG made an agreement with J. Malcolm Slack and Associates, a company comprised of former Noranda executives.

During the summer of 1994, BYG. drilled 6 holes (748 m) on the Brown-McDade property and 6 holes (241 m) on the neighboring Mount Nansen property (MINFILE occurrence 115I 065). 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. In preparation for mine production, 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 licenses. In April 1996, BYG received their Class A water license which allowed them to begin mining operations. Mining began on the oxidized portion of the Brown-McDade zone and the first gold-silver bar was poured in November 1996. Production rates at the end of 1996 reached 500 tonnes/day.

BYG continued mining the Brown-McDade deposit in 1997. A SAG mill was installed and commissioned in late August to replace the crushing and screening circuit. Production for 1997 totaled 617 kg (19,829 ounces) of Au and 3,068 kg Ag (98,654 ounces). The mine shut down in November 1997 to upgrade the water treatment system. The mine resumed limited production in January 1998 and full production in June 1998. In 1998, BYG recovered 472 kg (15,190 ounces) Au and 1,208 kg (38,849 ounces) Ag. Mining was suspended at the beginning of 1999 due to environmental problems and it became a Type II Minesite.

A 43-101 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 minesite, including the Brown-McDade 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 Brown-McDade deposit is part of the Mount Nansen mine area, which is located in the Dawson Range within the 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 with local metamorphosed carbonate noted in the Brown-McDade open pit. The meta-igneous package is comprised of biotite-hornblende feldspar gneiss and coarse-grained granodiorite orthogneiss with lesser amphibolite. These two metamorphic suites have been intruded by foliated Upper Triassic and weakly foliated Jurassic diorite, granodiorite and syenite plutons (Stroshein, 1998). In the Mount Nansen area, the Triassic to Jurassic plutons in the area are intruded by younger, mid-Cretaceous felsic plutonic rocks of the Coffee Creek Plutonic Suite and capped by the Mount Nansen Volcanic Suite coeval magic to intermediate volcanic and tuff rocks (Stroshein, 1998; Johnstone & Mortensen, 1994). Sub-volcanic feldspar porphyry dykes intrude all rock types in the area (Stroshein, 1998; Sawyer & Dickinson, 1976).

A sub-volcanic porphyry intrusive complex of the Mount Nansen Volcanic Suite occurs in the centre of the Mount Nansen property that forms an east-west zone 3.2 km long by 1.6 km wide. This complex is host to disseminated copper-molybdenum mineralization in porphyritic dykes, plugs and breccia bodies. Widespread propylitic alteration from this complex has altered the majority of rocks in the Mount Nansen area, including the Brown-McDade deposit which contains epidote, calcite, pyrite and magnetite replacement of hornblende (Stroshein, 1998; Sawyer & Dickinson, 1976).

Mining at the Brown-McDade open pit has exposed two separate and distinct deposit types. The first type is gold-silver vein mineralization hosted by a massive feldspar porphyry dyke. These fine-grained quartz-sulfide veins and breccia are enclosed by silicified and/or intensely clay-altered brecciated feldspar porphyry. The feldspar porphyry dyke has intruded along an igneous-metamorphic contact that has been mined over a strike length of 50 m in the southern portion of the pit. The second deposit type that occurs at the north end of the pit consists of a siliceous, sulphide-rich breccia in a pipe-like structure hosted by metamorphosed carbonate and clastic rocks of the Nasina Assemblage (Paleozoic). The pipe is elongate in plan with a high-grade core approximately 15 m wide and 25 m long surrounded by a low-grade envelope consisting of quartz-sulphide stringers in a silicified breccia. The deposits are separated by a northeast-striking fault which truncates and offsets the main vein-dyke mineralization.

Mineralization & Results

The ore at the Brown-McDade deposit is composed of fine-grained quartz and sulphides in narrow veins or as a matrix to a breccia of silicified and pyritized wall rock fragments. Unoxidized ore contains dark grey silica and pyrite, arsenopyrite, sphalerite, galena, sulphostalts, bornite, stibnite and chalcopyrite. Gold is genetically related to the pyrite phase of the mineralization and occurs as 5 to 50 micron-sized inclusions in pyrite grains. Oxidation of sulphide minerals extends to depths of up to 70 m and a large portion of the gold grains have been exposed by oxidation of the sulphides and post-depositional cataclastic fractures in the pyrite. The silver mineralogy is not as well understood but appears to be related to the base metal sulphide mineralization.

The 1985 exploration showed that haloes of lower grade mineralization and argillic alteration surround the high grade veins. The widest trench intersection (Trench 4) assayed 5.76 g/t Au and 63.1 g/t Ag across 22.0 m, while the highest grade (Trench 9) was 72.3 g/t Au and 79.2 g/t Ag across 6.0 m. The best drill intersection was 11.8 g/t Au and 83.0 g/t Ag across a true width of 19.6 m from Hole 85-4.

The 1986 work, which tested the northern and southern extensions of the Brown-McDade Zone, yielded disappointing results. The 1987 and 1988 work increased the density of holes in the main zone and tested it at depth. Proved open pit reserves (oxide) consist of 124,606 tonnes grading 10.42 g/t Au and 98 g/t Ag and probable underground reserves (sulphide) are 193,706 tonnes grading 14.47 g/t Au and 100 g/t Ag.

The six 1994 drill holes provided infill information to provide an updated reserve estimate for the Brown-McDade deposit. The holes typically returned lower grades and widths of mineralization than those obtained in many of the previous drilled adjacent holes. However, by design, many of the 1994 holes were drilled along the margins of the mineralized shoots where significantly lower grades and narrower widths would be encountered.

During road construction in 1996, BYG discovered a vein system parallel to the Brown-McDade zone. The vein is located within a geochemical anomaly which strikes northwest. The vein runs sub-parallel to the Brown-McDade vein and assayed 17.6 and 9.5 g/t Au equivalent over 3.05 m in trenches located 60 metres apart.

The 1996 geophysical programs were carried out over two grids; (1) the Nisling Lake and (2) the Buffalo. Both grid areas returned numerous, significant VLF-EM and magnetic anomalies, although most of the anomalies were not coincident. Financial problems at BYG prevented the company from following up any of the anomalies.

At the end of 1995 and prior to the commencement of mining published reserves for the Brown-McDade property stood at:

Open Pit - Oxide: 319 000 tonnes grading 5.30 g/t Au and 50 g/t Ag
Underground - Sulphide Ore: 298 000 tonnes grading 6.80 g/t Au and 57 g/t Ag

In 1996, BYG upgraded the on-site mill to 700 tonnes/day and added a carbon-in-pulp cyanide circuit. Previous operators at Mount Nansen were unsuccessful mainly due to poor recoveries. The addition of the cyanide circuit significantly improved recoveries. At the beginning of 1999, mining was suspended due to environmental problems. Ore reserves at the Brown-McDade property were nearly exhausted at the time of suspension.

A 43-101 technical report by Middleton, 2009, summarizes the Mount Nansen and Tawa properties. Resources are quoted for the Brown-McDade as re-calculated by Denholm et al (2000). The total INDICATED resource is listed as 126,100 tonnes grading 6. 2g/t Au and 51 g/t Ag. This appears to be for the underground portion of the No. 1 and 2 veins, and doesn't seem to include the open pittable portion of the resource mentioned earlier in the report. An additional INFERRED resources for the breccia pipe is calculated at 25,000 tonnes grading 10.7 g/t Au and 15 8g/t Ag. The summary table for the whole Mount Nansen project also includes an INDICATED resource for the Brown-McDade ore dump, calculated at 12,000 tonnes grading 5.0 g/t Au and 42 g/t Ag. This resource estimate was not filed with the securities authority and is not NI 43-101 compliant.

Work History

Date	Work Type	Comment
12/31/1999	Other	Company operated for short time, shut down.
12/31/1998	Other	Company continued mining, temporary shutdown for environmental reasons.
12/31/1997	Other	Company continued mining.
12/31/1996	Other	Deposit entered production.
12/31/1995	Development, Surface	Company constructed mill and mine infrastructure.
12/31/1994	Drilling	Six holes, 748 m.
12/31/1988	Drilling	Seventy-five holes, 5,077 m.
12/31/1988	Lab Work/Physical Studies	
12/31/1986	Ground Geophysics	
12/31/1985	Drilling	Six holes, 638 m.
12/31/1985	Drilling	Number of holes drilled: 17 Amount of work done: 1234 METRES
12/31/1985	Geochemistry	
12/31/1985	Ground Geophysics	
12/31/1985	Trenching	
12/31/1966	Drilling	Underground drilling, 216 m.
	Development	

12/31/1947	Development, Underground	609 m of X-cuts & drifting.
12/31/1946	Drilling	Not specified.
12/31/1943	Other	
12/31/1943	Trenching	
12/13/2009	Airborne Geophysics	Magnetic and EM regional survey.
12/13/1994	Studies	Conducted various pre-feasibility studies.
12/13/1989	Studies	Historical estimate, not NI 43-101 compliant.
12/13/1989	Drilling	Five holes, unknown footage.
12/13/1987	Drilling	One drill hole totaling 172 m.
12/13/1987	Studies	
12/13/1987	Trenching	Backhoe and mechanical trenching totaling 3715 m.
12/13/1987	Geochemistry	
12/13/1967	Development, Underground	Total of 522 m.
11/27/2009	Studies	Middleton, 2009, technical report.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
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		
092505	1959	Dickson Gold Option, Carmacks, Yukon Terr. Billy Claim Group	Diamond - Drilling, Drill Core - Geochemistry, Drill Cuttings - Geochemistry, Mechanical - Trenching	8	122.83

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC900075	Informational bulletin and statutory information		Property File Collection	Miscellaneous Company Documents
ARMC900068	Report on study of plans of Brown McDade Mine		Property File Collection	Miscellaneous Company Documents
ARMC006634	Notes and sketch map - Mt. Nansen drill holes		Property File Collection	Miscellaneous Company Documents
ARMC006635	Correspondence Re: Mount Nansen exploration syndicate		Property File Collection	Miscellaneous Company Documents
ARMC006636	Correspondence Re: The Brown-McDade property		Property File Collection	Miscellaneous Company

6636				Documents
ARMC006637	Portion of March 1982 feasibility report - Mt. Nansen mine		Property File Collection	Report
ARMC006638	Property geology map - Mount Nansen property		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006639	Plan map - Geochemical soil survey anomalies - Values in ppm silver and arsenic - Mt. Nansen mine area		Property File Collection	Geochemical Map
ARMC006640	General plan map - property geology - Mount Nansen		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006641	Geology map - Mount Nansen area		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006642	Main workings and general geology map - Mount Nansen properties		Property File Collection	Geoscience Map (General)
ARMC006643	Geology and assays map - Mt. Nansen		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006645	Topographic map showing Mt. Nansen roads		Property File Collection	Geoscience Map (General)
ARMC006602	Proposal report - Mt. Nansen camp		Property File Collection	Report
ARMC006603	New regional - Nansen		Property File Collection	Miscellaneous Company Documents
ARMC006619	Mine map - Ore shoots - 4100 adit level - Brown-McDade vein zones		Property File Collection	Geoscience Map (General)
ARMC006621	Geology level plan map - 604-4-7 - Brown-McDade		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006622	Geology level plan map - 604-4-8 - Brown-McDade		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006623	Surface plan map - Brown McDade vein		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC006624	Notes - Geology and mineralogy of Brown-McDade zone		Property File Collection	Miscellaneous Company Documents
ARMC006627	Annual report 1968 - Mount Nansen mines		Property File Collection	Report
ARMC006629	Photo - Mt. Nansen area		Property File Collection	Photos
ARMC006630	Correspondence Re: Mount Nansen mines data		Property File Collection	Miscellaneous Company Documents
ARMC006631	Correspondence Re: Target for mine development, 1965		Property File Collection	Miscellaneous Company Documents
ARMC006632	Correspondence Re: Visit to the Brown-McDade and Mt. Nansen mines		Property File Collection	Miscellaneous Company Documents
ARMC006633	Summary report to date of 1964 season's work - Mount Nansen mines		Property File Collection	Report
ARMC004468	Ronka EM-16 survey map - Map No. W-130-16 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004469	Ground magnetometer survey - Map No. W-130-15 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004470	Induced polarization survey - Contours of percent frequency effect - Map no. W-130-5 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004471	Induced polarization survey - Contours of percent frequency effect - Map no. W-130-6 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004472	Survey grid map - M-546-T-22 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004473	Survey grid map - M-546-T19 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004474	Survey grid and topography map - M-546-T18 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC00	Survey grid map - M-546-T20 - Mt. Nansen project		Property File Collection	Geophysical Map

4475	Survey grid map - M-546-T20 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004476	Survey grid map - M-546-T21 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004477	Plan view - Brown-McDade main zone - M-546-C-91 - Mt. Nansen project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004478	Claims map showing Betty, Stone, Dome, Bit, Laura, Joanne, Dolly, Jeff, BM and South claims - M-546-CL-14 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004479	Claims location map - M-546-CL-15 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004480	Geology map - M-546-G-23 - Mt. Nansen project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004481	Area geology map - M-546-G-24 - Mt. Nansen project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004482	Generalized alteration plan map - M-546-G-25 - Mt. Nansen project		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC004483	Schematic geological section X-Y - M-546-G-26 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004484	Schematic geological section alone line 224N - M-546-G-27 - Mt. Nansen Lithologic log, assay log, structural log, fault Log, geotechnical log project		Property File Collection	Geoscience Map (General)
ARMC004486	Map - Drilling, 1971 and proposed drilling, 1972 - M-546-D-11 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004487	Map - Drillhole and water locations 1973 - M-546-D-12 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004488	Plan view map - M-546-C-90 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004489	Plan map showing trenches - M-546-C92 - Mt. Nansen project		Property File Collection	Geoscience Map (General)
ARMC004450	Induced polarization survey map - Contours of apparent resistivity - Map no. W-130-4 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004451	Induced polarization survey map - Contours of apparent resistivity - Map no. W-130-3 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004452	Induced polarization survey map - Contours of apparent resistivity - Map no. W-130-2 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004453	Induced polarization survey map - Contours of apparent resistivity - Map no. W-130-1 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004454	Induced polarization survey map - Contours of apparent metal factor - Map no. W-130-12 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004455	Induced polarization survey map - Contours of apparent metal factor - Map no. W-130-11 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004456	Induced polarization survey map - Contours of apparent metal factor - Map no. W-130-10 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004457	Induced polarization survey map - Contours of apparent metal factor - Map no. W-130-9 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004458	Induced polarization survey map - Contours of apparent metal factor - Map no. W-130-14 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004459	Induced polarization survey map - Contours of percent frequency effect - Map no. W-130-8 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004460	Induced polarization survey map - Contours of percent frequency effect - Map no. W-130-7 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004461	Induced polarization survey map - Contours of percent frequency effect - Map no. W-130-13 - Mt. Nansen project		Property File Collection	Geophysical Map
ARMC004463	Electromagnetic survey map - Mt. Nansen project - Plate 2		Property File Collection	Geophysical Map
ARMC004464	Magnetic profile - Mt. Nansen project - Sheet 3		Property File Collection	Geophysical Map
ARMC004465	Magnetic profile - Mt. Nansen project - Sheet 2		Property File Collection	Geophysical Map
ARMC004466	Magnetic profile - Mt. Nansen project - Sheet 1		Property File Collection	Geophysical Map
ARMC004467	Electromagnetic survey map - Mt. Nansen project - Plate 1		Property File Collection	Geophysical Map
ARMC004462	Electromagnetic survey map - Mt. Nansen project - Plate 3		Property File Collection	Geophysical Map
ARMC00	Geology map - M-546-G-28 - Rusk Creek - Mt. Nansen project		Property File Collection	Geoscience Map (Geological -

4485	Geology map - MF-340-G-28 - Rusk Creek - Mt. Nansen project		Property File Collection	(Geological - Bedrock)
ARMC010592	Sketch map showing lineations, Vic trench, J Bill trenches - Mt. Nansen area		Property File Collection	Geoscience Map (General)
ARMC010597	Mylar overlays of Dickenson report/map - Ag and Pb - Nansen N.		Property File Collection	Geochemical Map
ARMC010598	Mylar overlays of the Mt. Nansen area showing embayment lineations, mine, placer creek, and hot spot		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC010599	Mylar overlay of the Mt. Nansen area showing lineations, fault lines and structural features		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC010600	Mylar overlay of the Mt. Nansen area showing claim outlines, outcrop locations and geochemical sample locations		Property File Collection	Geochemical Map
ARMC010601	Mylar overlays of lineations and fault blocks in Freegold and Mt. Nansen areas		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC900070	Interim Report #2, Brown-McDade Mines Ltd., Carmacks, YT		Property File Collection	Miscellaneous Company Documents
ARMC900069	Interim Report #1 for Mount Nansen Mines Ltd.		Property File Collection	Miscellaneous Company Documents
ARMC900072	Impressions of Mount Nansen gold-silver district, Yukon		Property File Collection	Miscellaneous Company Documents
ARMC900065	Summary Report Mount Nansen Mines Ltd., Carmacks Area		Property File Collection	Miscellaneous Company Documents
ARMC012905	Report on proposed development program - Huestis & Webber mines 1969		Property File Collection	Report
ARMC012911	Ore reserves - Dec. 1, 1968 - Mt. Nansen Mines Ltd.		Property File Collection	Report
ARMC012907	Proposed budget (October 1, 1968 - July 31, 1969) - Mt. Nansen operation		Property File Collection	Report
ARMC012910	Mineralogical investigation of a sample of silver-gold ore from Mount Nansen Mines Limited, Yukon Territory - Mines branch investigative report IR 68-52		Property File Collection	Report
ARMC016612	Geochemical map with notations - 115I/3 - Victoria Mountain		Property File Collection	Geochemical Map
ARMC011181	Map section - Diamond drilling - 1971 - Mt. Nansen		Property File Collection	Geoscience Map (General)
ARMC011180	Map section - Percussion holes - 1971 - Mt. Nansen		Property File Collection	Geoscience Map (General)
ARMC012904	Review-report on the Mt. Nansen Mine, Yukon Territory, Canada		Property File Collection	Report
ARMC016613	Geology map - 115I/3 - Victoria Mountain		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC016238	Lithologic logs - Webber and Brown-McDade - Nansen project		Property File Collection	Drill Logs
ARMC012906	Economic performance of the Mt. Nansen operation		Property File Collection	Report
ARMC012909	Feasibility report - Mt. Nansen mine & mill, Carmacks, Yukon Territory		Property File Collection	Report
ARMC011179	Claim location plan map - Mt. Nansen project		Property File Collection	Geoscience Map (General)
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

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
2009	Brown-McDade No. 1&2 U/G (Underground)	Historical Estimate	gold	6.2 g/t	126,100		No	No	3.5g/t gold
Originally reported as indicated geological resources, not 43-101 compliant. Original figures came from Denholm, Dumka and Farquharson, 2000, p. 20. 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	Brown-McDade No. 1&2 U/G (Underground)	Historical Estimate	silver	51 g/t	126,100		No	No	3.5g/t gold equv.
Originally reported as indicated geological resources, not 43-101 compliant. Original figures came from Denholm, Dumka and Farquharson, 2000, p. 20. 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	Brown-McDade No. 1&2 U/G (Underground?)	Historical Estimate	gold	10.7 g/t	25,000		No	No	3.5g/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.									
2009	Breccia Pipe (Underground?)	Historical Estimate	silver	158 g/t	25,000		No	No	3.5g/t gold equiv.
Originally reported as inferred geological resources, not 43-101 compliant. Original figures came from Denholm, Dumka and Farquharson, 2000, p. 20. 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	Brown-McDade ore dump (Ore dump)	Historical Estimate	gold	5 g/t	12,000		No	No	3.5 g/t gold
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	Brown-McDade ore dump (Ore dump)	Historical Estimate	silver	42 g/t	12,000		No	No	3.5 g/t gold eqiv.
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	Breccia Pipe (Open Pit & Underground)	Historical Estimate	gold	10.7 g/t	25,000		No	No	3.5g/t gold
Originally reported as inferred geological resources, not 43-101 compliant. Original figures came from Denholm, Dumka and Farquharson, 2000, p. 20. 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	BROWN-MCDADE (OPEN PIT)	Historical Estimate	gold	10.42 g/t	124,606		No	No	Unknown
Calculation assumes 1.52 m minimum mining width and cutoff grades of 3.4 g/t Au for open pit material that is contained in two pits. Originall classified as a proven reserve.; Assessment Report #092701 by W.D Eaton and A. Archer. This is a historical calculation as is not National Instrument 43-101 compliant.									
1989	BROWN-MCDADE (UNDERGROUND)	Historical Estimate	gold	14.47 g/t	193,706		No	No	Unknown
Calculation assumes 1.52 m minimum mining width and cutoff grades of 6.8 g/t Au for underground material. Originally classified as a probable reserve.; Assessment Report #092701 by W.D Eaton and A. Archer. This is a historical calculation as is not National Instrument 43-101 compliant.									
1989	BROWN-MCDADE (OPEN PIT)	Historical Estimate	silver	98 g/t	124,606		No	No	Unknown
Calculation assumes 1.52 m minimum mining width and cutoff grades of 3.4 g/t Au for open pit material that is contained in two pits. Originall classified as a proven reserve.; Assessment Report #092701 by W.D Eaton and A. Archer. This is a historical calculation as is not National Instrument 43-101 compliant.									
1989	BROWN-MCDADE (UNDERGROUND)	Historical Estimate	silver	100 g/t	193,706		No	No	Unknown
Calculation assumes 1.52 m minimum mining width and cutoff grades of 6.8 g/t Au for underground material. Originally classified as a probable reserve.; Assessment Report #092701 by W.D Eaton and A. Archer. This is a historical calculation as is not National Instrument 43-101 compliant.									

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
DDH 95-149	Mount Nansen	1995		0	2
DDH 85-12A	Mount Nansen	1985	HQ	0	3
DDH 85-2A	Mount Nansen	1985	HQ	0	3