Occurrence Details

Occurrence Number: 115I 143
Occurrence Name: Eliza E
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 7:48:05 AM

General Information

Secondary Commodities: copper, gold, lead, silver, zinc
Aliases: Goulter
Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation
Location(s): 62°5'8.96" N - -137°11'48.75" W
NTS Mapsheet(s): 115I03
Location Comments: Location provided by Rockhaven Resources 2019
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Silver Standard Mines Ltd. staked YU cl (73506) in July 1958 and explored with mapping and EM surveys in 1958-1959.

The area covering Eliza E was re-staked as Sen cl 1-8 (YA23985) in March 1979 by Cominco Ltd., which carried out geological mapping, prospecting and geochemical rock and soil sampling in 1979. Re-staked by G. Dickson as Wedge cl 1-15 (YA82167), by M. Muursepp as Bull cl 1-8 (YA81420) and other miscellaneous claims, in 1984. Chevron Canada Resources Ltd. optioned the BYG property in June 1985 and re-staked the west side of the occurrence as TBR cl 1-8 (YA86690) in May 1985 and EEK cl 1-18 (YA87210) to the east in June 1985. Prochem Ltd. optioned the leased claims and some of the Wedge claims and explored with EM-16 surveys, trenching, bedrock mapping and rock and soil geochemistry in 1986 and magnetic surveys, soil geochemistry and bedrock mapping in 1988.

In 1991, Aurchem completed property wide geological mappings, soil sampling, IP/resistivity surveys and target specific magnetometer surveys. All previous exploration results, including soil sample locations, were compiled on a new compilation map. In July 1993, the Wedge cl 1-4 and 16-17 were transferred to J. Dickson from the estate of G. Dickson. In 1993, Aurchem conducted soil geochemistry on the claims covering the Eliza E occurrence.

In March 1995, the Wedge claims were transferred to Aurchem Exploration Ltd. In early 1996, BYG obtained an option to purchase all of Aurchem's claims located in the Mt Nansen area. As part of this agreement BYG funded an extensive trenching and mapping program from August to October 1996, on the Bull 2, JBF 1-f, Jon-Wedge 3 and LCGS 1 claims. BYG encountered financial difficulties at the end of 1996 and suspended most exploration activities.

In January and February 1997, 10 diamond drill holes (1 559.3 m) were drilled on cls JFB 1,6 & 7, and Bull 2 at Eliza E by the Aurchem Project (Aurchem Exploration Ltd, BYG Natural Resources Ltd, Trumpeter Yukon Gold Ltd, and Conquest Yellowknife Resources Ltd) based on results from the 1996 exploration program.

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. The Wedge, Etzel and Bull claims reverted to Aurchem after the federal government took over maintenance of the adjoining Mount Nansen mine site in July 1999.

Aurchem carried out a limited exploration in 2001 and 2002, attempting to find new targets from compilation of existing exploration data. The company completed excavator trenching, geological mapping and rock geochemical sampling on the northeast flank of Tit Mountain and the Eliza Creek E. In 2003, Aurchem continued trenching, geological mapping and sampling these areas and in 2007 the company dug 4 trenches on Tit Mountain near Eliza E and carried out further rock and soil sampling and mapping.

In 2008, Yukon-Shaanxi Mining Company optioned the claims from Aurchem and performed cursory soil sampling to the west of Eliza E.

In 2009, 101073531 Saskatchewan Corp. flew a regional airborne and magnetic survey that included the Eliza E occurrence. In 2011, Ansell Capital Corp optioned the Discovery Creek property, including the Eliza E occurrence, from Aurchem Exploration. Ansell Capital carried out bedrock mapping as well as rock and soil geochemistry in 2011 and backhoe trenching in 2012.

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

A porphyry copper-molybdenum complex (MINFILE occurrence 115I 066) is found in the northeast section of the property, with argillic and propylitic alteration haloes covering the remainder. The porphyry complex occurs at the intersection between a major northwest structure and an east-west fault. Copper and molybdenum ± gold and silver occur in a porphyry stock and phyllic-altered granodiorite. Surface leaching and oxidation is variable, but can reach considerable depths. A steeply dipping, northwest-striking epithermal vein system which formed peripheral to the porphyry migrated inward during cooling and collapsed, creating a complex system of overlapping mineralization including: porphyry Cu-Mo-Au-Ag; northwest striking mesothermal quartz-pyrite-gold veins; and northwest striking epithermal quartz-Au-Ag-Pb-Zn-Cu veins.

The Eliza E occurrence is a continuation of the Eliza S and Eliza N showings and is located on the northeast flank of Tit Mountain. It consists of four shear zones within a hornblende granodiorite intruded by feldspar porphyry dykes. Veining and stockworks are strongly associated with porphyry stocks, breccia, and argillic/phyllic alteration.

Mineralization & Results

Mineralization at the Eliza E prospect consists of pyrite with lesser galena, sphalerite, chalcopyrite and arsenopyrite in quartz ± carbonate veins. Sampling of a three meter wide quartz stringer/veinlet stockwork within an intensely clay-altered zone and surrounded by a pervasive argillic alteration envelope returned 2.27 g/t gold with 17.6 g/t silver.

Work on the Eliza E in 2002 exposed several north-northeast trending shear zones in trenches predominately underlain by hornblende granodiorite. Silicification of the rocks in this area has produced a distinctive yellowish-green stain accompanying quartz-sulphide veining in the area which is apparently a good visual indicator of high-grade gold values. Sampling of a two meter wide stockwork zone in trench T-1 returned 3.01 g/t gold and 8.6 g/t silver. Trench T-5 revealed a previously unrecognized broad, rusty weathering shear zone, up to 13 m wide, sampling of which returned an average of 1.27 g/t gold and 4.0 g/t silver.

In 2003, Aurchem dug four trenches at Eliza E. Examination of the area indicated the area was first trenched in 1988, but the trenches were never sampled. Aurchem cleaned out and extended the four trenches and mapped and sampled them. Low-grade gold mineralization occurs with clay altered quartz-feldspar porphyry that locally includes white to light grade quartz stringers and veinlets. A 5.2 m zone in trench two returned 1.34 g/t gold and 9.4 g/t silver. These results were typical for the area. The company dug 4 wing trenches off of trench number 5. These trenches exposed multiple east-northeast trending shear zones which are clay rich and rusty weathering and locally include light grey quartz veining. The shear zones routinely assayed greater than 0.2 g/t gold with veined intervals grading up to 11.55 g/t gold.

In 2011, Ansell Corporation excavated and mapped three trenches at Eliza E. Historical trench ECE-TR94-5d was re-mapped as unmineralized quartz monzonite transitioning into a potassic altered granite with disseminated pyrite. The highest sample from the trench returned 0.49 g/t Au and 2.4 g/t Ag over 0.8 m.

Work History

Date	Work Type	Comment
12/13/2012	Trenching	
12/13/2011	Trenching	
12/13/2011	Geochemistry	
12/13/2011	Geology	
12/13/2011	Geochemistry	
12/13/2009	Airborne Geophysics	And EM.
12/13/2008	Geochemistry	
12/13/2007	Trenching	
12/13/2007	Geochemistry	
12/13/2007	Geology	
12/13/2003	Geology	
12/13/2003	Geochemistry	
12/13/2003	Trenching	
12/13/2003	Other	
12/13/2002	Geochemistry	
12/13/2002	Trenching	
12/13/2002	Geology	
12/13/1997	Drilling	Ten holes totaling 1559 m.
12/13/1996	Geochemistry	
12/13/1996	Geology	
12/13/1996	Trenching	
12/13/1993	Geochemistry	
12/13/1991	Geology	
12/13/1991	Geochemistry	
12/13/1991	Ground Geophysics	And magnetics.
12/13/1988	Geology	
12/13/1988	Geochemistry	
12/13/1988	Ground Geophysics	
12/13/1986	Geochemistry	
12/13/1986	Geology	
12/13/1986	Geochemistry	
12/13/1986	Ground Geophysics	

12/13/1986	Trenching	
12/13/1979	Geology	
12/13/1979	Geochemistry	
12/13/1979	Other	
12/13/1959	Ground Geophysics	
12/13/1958	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096109	2012	Assessment Report on the 2012 Trenching, and Diamond Drill Program	Diamond - Drilling, Backhoe - Trenching	6	1883.46
095861	2011	Assessment Report on the 2011 Trenching and Diamond Drilling Program	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching	22	3607.93
095471	2011	Summary Report on the 2011 Reconnaissance Mapping and Soil Geochemistry Program	Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
095089	2009	Report on a Geophysical Survey on the Mount Nansen Property and the Tawa Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
095088	2008	Discovery Creek Project Exploration Report for 2008 Geochemical	Soil - Geochemistry, Cursory Property Visit - Other		
094989	2007	Exploration Report for 2007 Trenching and Sampling on the Vic 30, Bull 4, J.Bill 16 Claims	Rock - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
094450	2003	Exploration Report for 2003 Geological, Geochemical and Trenching on the Bull, Jbf, Etzel, J-Bill and Jcs Mineral Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Cursory Property Visit - Other, Prospecting - Other, Mechanical - Trenching		
094238	2001	Geological, Geochemical and Trenching on the Vic, Wedge 12 and Bull 4	Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other, Mechanical - Trenching		
093138	1993	Report on a Soil Geochemical Survey Carried out on the Discovery Creek Property on Claims of: Wedge, Jbf, Jon-Wedge, Lcgs	Soil - Geochemistry, Line Cutting - Other		
093059	1992	Report on the Reverse Circulation Drilling With Assays Carried out on the Discovery Creek Property on Claims of: Wedge, Bull , Ras, Ras	Reverse Circulation - Drilling	32	3384.80
092987	1991	Report Magnetic and IP Surveys Discovery Creek Project	Soil - Geochemistry, Regional Bedrock Mapping - Geology, IP - Ground Geophysics, Magnetics - Ground Geophysics, Mechanical - Trenching		
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		
092588	1988	1988 Diamond Drill and Exploration Program - Discovery Creek Project	Diamond - Drilling, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Mechanical - Trenching	15	1219.20
091845	1986	Geological, Geophysical, Geochemical and General Exploration Including Trenching was Carried out on Wedge, Ras, Lgsc, and Msl Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Line Cutting - Other, Hand - Trenching		
092153	1986	Geological, Geophysical, Geochemical and General Exploration Including Trenching was Carried out on Wedge, Ras, Lgcs, and Msl Claims	Interpretation - Airphotography, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Metallurgical Tests - Lab Work/Physical Studies, Petrographic - Lab Work/Physical Studies, Line Cutting - Other, Mechanical - Trenching		
090616	1979	Geochemical Report on the Sen Claims 1-8	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Line Cutting - Other, Prospecting - Other		
062230	1966	Preliminary Feasibility Report Development and Mining Operations at the Mount Nansen Properties	Pre-feasibility - Studies		
060738	1959	Report on the Reconnaissance Electromagnetic Survey in the Nansen Creek Area, Yukon Territory - Silver Standard Group, Brown McDade Group	EM - Ground Geophysics		
019091	1958	Geology of Nansen Creek Area Claims Silver Standard Mines Ltd.	Bedrock Mapping - Geology		

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_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
1999-1(D)	Yukon Digital Geology		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)