Occurrence Details

Occurrence Number: 115I 093
Occurrence Name: Eliza S
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 6/14/2025 4:54:12 PM

General Information

Secondary Commodities: copper, gold, lead, molybdenum, silver, zinc
Aliases: Goulter
Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation
Location(s): 62°4'46.46" N - -137°10'47.53" W
NTS Mapsheet(s): 115I03
Location Comments: Location provided by Rockhaven Resources 2019
Hand Samples Available: Yes
Last Reviewed:

Capsule

Work History

Staked as Silver Queen cl (12632) in July 1917 by C.P. Mack, who explored with 18.3 m of drifting in 1918-1923. The nearby Newbauer cl (12982) was staked in March 1920 by M. Newbauer, who drove a 3 m long drift later in the year. Mack re-staked the showing in October 1929 as Mack, etc. cl (15476), while Orloff King added the adjoining Ptarmigan cl (15729) in October 1932 and Gold Standard cl (15789) in July 1934 and filed 17 m of tunneling on the Gold Standard in 1941.

The Mack claims expired in October 1937 and were re-staked as Mack cl (39134) in May 1939 by C.P. Mack who added six adjoining claims between June 1940 and August 1946. This group was optioned briefly in March 1947 by G.A. Reynolds and C.L. Coleman, was taken to lease in November 1956 and was optioned in May 1972 by Area Exploration Company (Cyprus). Silver Standard Mines Ltd staked YU cl (73506) 1.6 km northeast in July 1958 and explored with mapping and EM surveys in 1958-1959 and later with geochemical sampling and hand trenching.

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. Prochem Ltd. optioned the leased claims and some of the Wedge claims and explored with soil geochemistry, EM-16 surveys and bulldozer trenching in 1985, grid geochemistry and bulldozer trenching in 1986, and 12 holes (822 m) in 1987, and 11 holes (1,219.2 m) in 1988. Bedrock mapping, mechanical trenching, soil geochemistry, and ground magnetics were also performed in 1988. The 1987 and 1988 work was funded by a subsidiary of Prochem's; Aurchem Resources Ltd, which performed additional trenching and soil sampling in 1989.

In 1990, Aurchem built roads, excavated 12 trenches on the Eliza Creek zone and conducted magnetometer and IP surveys. Two hundred soil samples were collected from the Eliza Creek zone and 7 drums of vein material were collected for metallurgical testing.

In 1991, Aurchem expanded the soil grid and completed property wide geological mappings, IP/Resistivity and VLF-EM surveys and target specific magnetometer surveys. All previous exploration results, including soil sample locations, were compiled on a new compilation map. The new survey grid, three trenches were completed and 300 soil samples were collected.

Aurchem added JBF cl 1-7 ((fractional) YB362590) and Jon-Wedge cl 1-6 (YB35895) in August 1992 and explored with 3,384.8 m of reverse circulation drilling in 32 holes in July and August, 1992. 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 IP/resistivity and magnetic surveys, geological mapping and soil geochemistry on the Ras, Wedge, Jon-Wedge, JLZ, and JBF claims.

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 96, 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 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.

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

Regional & Property

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 claims, 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 S showing consists of two main epithermal veins over a 914 strike length along the edge of a volcanic-granodiorite contact.

Mineralization & Results

Mineralization at the Eliza S prospect consists of pyrite with lesser galena, sphalerite, chalcopyrite and arsenopyrite in quartz ± carbonate veins.

Drilling in 1987 and 1988 by Aurchem returned anomalous gold and silver values ranging from 0.3 to 17.1 g/t Au and 10.3 to 2742.8 g/t Ag. Trenching results from 1989 returned assays up to 0.058

oz/ton Au over 11 feet including 2 feet of 0.04 oz/ton Au, 1.56 oz/ton Ag, 2.12% Pb, and 0.19% Zn. Other trenching samples returned 3 m of 1.0 g/t Au and 7.9 m of 3.4 g/t Au. Soil sampling returned assays of >50 ppm Au, 1-2 ppm Ag, and >120 ppm Pb.

In 2011, Ansell Capital performed soil sampling with the best sample returning 1377.5 ppb Au, 23.6 ppm Ag, 4783.7 ppm Pb and 859 ppm Zn.

Work History

Date	Work Type	Comment
3/1/2023	Geochemistry	
3/1/2023	Geochemistry	
3/1/2023	Ground Geophysics	
12/31/1997	Geology	
12/31/1996	Geology	
12/31/1996	Trenching	
12/31/1994	Drilling	Twenty-seven holes, 3,855 m. Includes drilling on Eliza Creek extension.
12/31/1993	Ground Geophysics	Also IP, and resistivity surveys.
12/31/1992	Geology	
12/31/1992	Drilling	
12/31/1992	Ground Geophysics	Also resistivity, and VLF-EM surveys.
12/31/1991	Ground Geophysics	I.P., VLF-EM and magnetometer surveys.
12/31/1990	Ground Geophysics	Also magnetic survey.
12/31/1989	Geochemistry	
12/31/1989	Trenching	
12/31/1988	Drilling	Eleven holes, 1,219 m.
12/31/1987	Drilling	Twelve holes, 822 m.
12/31/1986	Geochemistry	
12/31/1986	Trenching	
12/31/1985	Geochemistry	
12/31/1985	Ground Geophysics	EM-16 survey.
12/31/1985	Trenching	
12/31/1962	Geochemistry	
12/31/1962	Trenching	
12/31/1959	Ground Geophysics	
12/31/1959	Trenching	
12/31/1958	Geology	
12/31/1941	Development, Underground	17 m of drifting by M. Neubauer.
12/31/1923	Development, Underground	Completed 18.28 m of drifting between 1918 and 1923.
12/13/2011	Geochemistry	
12/13/2011	Geology	
12/13/2011	Geochemistry	
12/13/2009	Airborne Geophysics	
12/13/2009	Airborne Geophysics	
12/13/2003	Geochemistry	
12/13/1991	Geology	
12/13/1991	Geochemistry	
12/13/1991	Trenching	
12/13/1990	Geochemistry	

12/13/1990	Trenching	
12/13/1988	Geology	
12/13/1988	Geochemistry	
12/13/1988	Ground Geophysics	
12/13/1988	Trenching	
12/13/1986	Geology	
12/13/1986	Ground Geophysics	
12/13/1985	Geology	
12/13/1985	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
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		
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
091958	1987	1987 Diamond Drill Program Carried out on Wedge, Ras, Lgcs, and Msl Claims	Diamond - Drilling	16	821.74
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		
091658	1985	Geological, Geophysical, and Geochemical Exploration Work Carried out on Wedge 5-10,15	Interpretation - Airphotography, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Prospecting - Other, Mechanical - Trenching		
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		
092059	1958	Report on Geology of Nansen Creek Area Claims	Detailed Bedrock Mapping - Geology		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC006793	Correspondence Re: Discovery Creek project, Mount Nansen		Property File Collection	Miscellaneous Company Documents
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)