

# **Occurrence Details**

Occurrence Number: 105G 021 Occurrence Name: Zielinski Occurrence Type: Hard-rock Status: Showing Date printed: 4/29/2025 5:47:27 PM

## **General Information**

Secondary Commodities: arsenic, beryllium, copper, fluorite, lead, silver, zinc Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au Location(s): 61°27'4" N - -131°8'6" W NTS Mapsheet(s): 105G06 Location Comments: .5 Kilometres Hand Samples Available: No Last Reviewed:

### Capsule

#### Work History

Staked by Northlake Mines Ltd (Augustus Exploration Ltd, Silver Standard Mines Ltd, Transcontinental Resources Ltd, Copper Ridge Mines Ltd and North Pacific Mines Ltd) in Jan/66 as part of the Gee claims (1-530, Y90172) over showings initially found in 1954 by K.G. Sanders and R. Zielinski for Pelly River Exploration Ltd (Pioneer Gold Mines Ltd, American Standard Mines Ltd, New York - Alaska Gold Dredging Corporation, and Northwest Ventures Ltd). During 1966, Northlake conducted an airborne mag and EM survey, prospecting and mapping over all three areas, plus a grid soil survey, Ronka and Turam surveys over Area 10.

Restaked as part of a large block of Boot claims (40-252, YA33838) in Jul/78 by Chevron Canada Ltd, which explored with mapping, geochem sampling and hand trenching in 1978 and additional geochem sampling in 1979.

In 1994, the area surrounding occurrences A and B was withdrawn from staking due to land claims negotiations.

Occurrence C was restaked within Light cl 1-41 (YB92385) in Aug/99 by Expatriate Resources Ltd. The company carried out prospecting and sampling programs later in the month. In 2002 the company carried out one day of soil sampling and prospecting and added Light cl 51-60 (YC22637) and Light cl 65-68 (YC22647) to the northeast in Nov/2002.

In Jan/2003 True North Gems Inc staked WW cl 1-6 (YC23184) northwest of Occurrence A, along the northwest boundary of the land withdrawal. The company carried out a small prospecting and soil sampling program later in the year.

In Mar/2003 Expatriate optioned the Light claims and the neighboring NS claims (Minfile Occurrence #105G 020) to Entourage Mining Ltd in return for certain work commitments and monetary payments. In Sep/2003 Entourage carried out soil sampling, prospecting and geological mapping southeast of occurrence C. Entourage dropped the option in Nov/2005 and returned both claim groups to Expatriate.

#### Capsule Geology

The area was recently re-mapped by Murphy et al., (2001) of the Yukon Geological Survey. The occurrence is underlain by voluminous layered metamorphic rocks that range in age from Upper Devonian and Older, to Lower Mississippian. These rocks belong to the Yukon-Tanana Terrane and have been assigned to Murphy's Grass Lakes Succession. The oldest rock unit in the area is unit Dqm, comprised of micaeous marble, calcareous schist and lesser carbonaceous phyllite and followed by unit Dq, comprised of tan- to brown-weathering biotite-muscovite-feldspar psammitic schist and quartz-biotite-muscovite metapelitic schist.

These units are overlain by the unit DF, Fire Lake metavolcanic rocks, comprised of massive to subtly layered, plagioclase-chlorite phyllite or schist, lesser carbonaceous phyllite, muscovite-quartz phyllite, grey quartzite and marble. The unit also hosts rare brown-weathering carbonate-clast pebble to cobble conglomerate. The succession is topped by unit DMcg, quartzofeldspathic-pebble metaconglomerate. In the Finlayson Lake area, the metaconglomerate unit was deposited on all underlying units of the Grass Lakes succession, implying an angular nonconformity following a phase of deformation.

The Grass Lake succession is intruded by voluminous granitic meta-plutonic rocks of the "Grass Lakes Plutonic Suite". In the occurrence area, unit Mgag underlies all three occurrences and consists of variably foliated, medium- to coarse-grained, equigranular granite to quartz monzonite. A small, granitic stock believed to be Cretaceous in age intrudes the succession 3 km to the southeast.

An airborne geophysical survey carried out by Northlake Mines identified numerous EM conductors. An exploration program to follow up the conductors identified 3 mineralized occurrences. The northernmost occurrence (occurrence A, Northlake area 7) was described by Sanders as a lens of massive galena, sphalerite and chalcopyrite 1 524 m long and 1.8 m thick. Northlake described it as a swarm of small quartz veins cutting dolomite and containing minor arsenopyrite and traces of pyrrhotite, chalcopyrite, bornite, galena and sphalerite. The showing is surrounded by a large gossan caused by weathering of pyrite and pyrrhotite in a granitoid gneiss. Assays were low.

The southernmost occurrence (occurrence B, Northlake Area 6) is a quartz vein 1.5 m wide containing pyrite, galena and tetrahedrite. Disseminated galena, sphalerite and fluorite occur in the sheared hanging wall over a width of 6.1m. No samples were assayed by Pelly River and Northlake reported that all assays were low.

Northlake also found float containing arsenopyrite and chalcopyrite in the valley west of Area 6 (occurrence C, westernmost showing) and designated it Area 10. Mapping indicated the source was probably from the crest of the mountain located to the east.

Chevron reported tungsten mineralization in several different host rocks or settings. The most common occurrence is skarns which have formed at the margins of augen gneiss bodies as well as the contacts of porphyritic-quartz monzonite stocks. The North Cirque, East Gully and Saddle showings are located in the general area of Northlake's showings. The North Cirque reported the highest assay, with a selected talus sample returning 2.23% tungsten oxide (W03). The majority of Chevron's work and their best results were recorded to the south near the Boot occurrence, (Minfile Occurrence #105G 019).

Expatriate explored the area for potential emerald bearing stratigraphy similar to that found at Regal Ridge (Minfile Occurrence #105G 147) located approximately 35 km to the southeast. The company concentrated on two areas, A and B. Area A is located 3 km to the west at Minfile Occurrence #105G 020, while Area B is centered over occurrence C. Soil sampling at Area B returned strongly anomalous arsenic values (highest = 3 680 ppm) over most of the sampled area. Most samples also produced elevated beryllium (highest = 5 ppm) and tungsten values (highest = 60 ppm). Stream sediment samples collected in Area B were all elevated for arsenic, beryllium and tungsten. During prospecting activities the company did not find any ultramafic rocks on the claims. Ultramafic rocks are generally required to provide a source for chromium, which in turn provides emeralds with their green color. Expatriate discovered a 0.5 m wide quartz-tourmaline-beryl vein in a hand pit dug east of occurrence C. Five soil samples collected up slope of the vein in 2002 returned anomalous

arsenic and tungsten values and beryllium values of between 4 and 10.5 ppm. A tan muscovite-calcareous phyllite is the host rock of the vein and since Expatriate interpreted the host rock to be a sediment and not a ultramafic they felt that there was not enough chromium in the sediment to produce green color beryl.

True North Gems staked the WW claims for the potential of emerald mineralization. The company soil sampled along the west slope of the main ridge which bisects the claims in a northsouth direction. The samples returned weakly to strongly anomalous beryllium values but only weakly anomalous chromium values. The low chromium values and the lack of ultramafic host rocks suggests that the presence of emerald mineralization is unlikely.

Prospecting by Entourage Mining located pale to white beryl in float on the southeastern side of the Light claims (southeast of occurrence C). The beryl occurs in float boulders of coarse white vein quartz. Contour soil sampling in the area outlined several subtle beryllium soil anomalies (13 ppm or greater) roughly co-incident with elevated copper, nickel and chromium values. The soil anomalies appears to be associated with pellitic rocks associated with unit Dq, Upper Devonian and older rocks.

#### References

CHEVRON CANADA LTD, Feb/79. Assessment Report #090439 by U. Schmidt and R.J. Cathro.

CHEVRON CANADA LTD, Mar/80. Assessment Report #090558 by U. Schmidt and A.R. Archer.

CHEVRON CANADA LTD, Jan/81. Assessment Report #090728 by U. Schmidt and R.J. Cathro.

ENTOURAGE MINING LTD AND EXPATRIATE RESOURCES LTD, Jan/2004. Assessment Report #094451 by C.G. Verley.

ENTOURAGE MINING LTD, Audited Annual Financial Statements - English. May 1, 2006 p. 13. Available on SEDAR.

EXPATRIATE RESOURCES LTD, May/2000. Assessment Report #0944111 by W.A. Wengzynowski.

EXPATRIATE RESOURCES LTD, Mar/2002. Web Site: www. Expatriateresources.com/

EXPATRIATE RESOURCES LTD, Aug/2003. Assessment Report #094419 by R. Duncan.

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MINERAL INDUSTRY REPORT 1978, p. 65.

MURPHY, D.C. and PIERCEY, S.J., 1999. Geological map of parts of Finlayson Lake (105G/7, 8 and parts of 1, 2, and 9) and Frances Lake (parts of 105H/5 and 12) map areas, southeastern Yukon (1:100 000-scale). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1999-4.

MURPHY, D.C. AND PIERCEY, S.J., 2000. Syn-mineralization faults and their re-activation, Finlayson Lake massive sulphide district, Yukon-Tanana Terrane, southeastern Yukon. In: Yukon Exploration and Geology 1999, D.S. Emond and L.H. Weston (eds.), Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 55-66.

MURPHY, D.C. ET AL., 2001. Preliminary bedrock geological map of northern Finlayson Lake area (NTS 105G), Yukon Territory. Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Open File 2001-33, 1:00 000 scale.

MURPHY, D.C. ET AL., 2002. Finlayson Lake Targeted Geoscience Initiative (southwestern Yukon), Part 1: Bedrock geology. In: Yukon Exploration and Geology 2001, D.S. Emond, L.H Weston and L.L. Lewis (eds.), Exploration and Geological Services Division, Yukon region, Indian and Northern Affairs Canada, p. 189-207.

NORTHLAKE MINES LTD, 1966. Assessment Report \*#060252 by N.R. Paterson.

NORTHLAKE MINES LTD, 1967. Assessment Report #019114 by A.J. MacDonald.

NORTHLAKE MINES LTD, 1967 Assessment Report #019115 by P.H. Sevensma.

NORTHLAKE MINES LTD, Apr/68. Assessment Report #060585 by R.G. Gifford.

TRUE NORTH GEMS INC, Sep/2004. Assessment Report #094460 by B. Wengzynowski.

#### Work History

Date	Work Type	Comment			
12/31/2003	Geology	By Entourage Mining.			
12/31/2003	Geochemistry	By Entourage Mining. Also on WW claims by True North Gems.			
12/31/2003	Other	By Entourage Mining. Also on WW claims by True North Gems.			
12/31/2002	Geochemistry	One day program.			
12/31/2002	Other	One day program.			
12/31/1999	Drilling	Ten holes, 1,414 m.			
12/31/1999	Geochemistry	Program was preliminary in nature.			
12/31/1999	Geochemistry	Program was preliminary in nature.			
12/31/1978	Geology				
12/31/1978	Geochemistry				
12/31/1978	Trenching				
12/31/1966	Drilling	Four holes, 499 m.			
12/31/1966	Geology				
12/31/1966	Geochemistry	Also silt sampling.			
12/31/1966	Airborne Geophysics	Also EM survey.			
12/31/1954	Other	Discovered original showings.			
12/13/1978	Lab Work/Physical Studies	Samples were lamped in field.			
12/13/1978	Ground Geophysics				

Ground Geophysics

# Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>094460</u>	2003	Assessment Report Describing Prospecting and Soil Sampling at the WW Property	Soil - Geochemistry, Prospecting - Other		
<u>)90728</u>	1980	Report on Geological Mapping and Diamond Drilling on the Boot 1- 284 & Marmot 1-24 Claims	Diamond - Drilling, Soil - Geochemistry, Detailed Bedrock Mapping - Geology	10	1232
<u>)90558</u>	1979	Report on Geological Mapping, Geochemical Surveys and Diamond Drilling Boot 1-284 & Marmot 1-24 Claim Group Conducted July 29 - October 13, 1979	Diamond - Drilling, Soil - Geochemistry, Detailed Bedrock Mapping - Geology	10	1414
<u>)90439</u>	1978	Report on Geological Mapping, Geochemical and Radiometric Surveys, BOOT 1-284 and MARMOT 1-24 Claim Group	Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Line Cutting - Other, Hand - Trenching		
060250	1966	Geological, Geochemical, Geophysical & Physical Work Report on the Hoo, EL, Gee Leo, P.S., P.G., C.W. and Z Claim Groups	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Backhoe - Trenching	4	486.46
<u>)19114</u>	1966	Report on the Hoo, EL, Gee Leo, P.S., P.G., C.W. and Z Group of Mineral Claim Groups Belectromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Backhoe - Trenching		4	486.46
019115	1966	Northlake Mines Limited, Gee Group of Claims: Report on Airborne Geophysical Surveys	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		

## **Related References**

Number	mber Title		Reference Type	Document Type
ARMC016586	Geochemical map - 105G/6 - Upper Hoole River		Property File Collection	Geochemical Map
ARMC016576	Geology map - 105G/6 - Upper Hoole River		Property File Collection	Geoscience Map (Geological - Bedrock)