

# **Occurrence Details**

Occurrence Number: 105H 102 Occurrence Name: Fer Occurrence Type: Hard-rock Status: Showing Date printed: 6/14/2025 6:08:03 PM

## **General Information**

Secondary Commodities: arsenic, copper, gold, lead, zinc Deposit Type(s): Vein Au-Quartz Location(s): 61°55'1" N - -128°34'11" W NTS Mapsheet(s): 105H15 Location Comments: .5 Kilometres Hand Samples Available: Yes Last Reviewed:

### Capsule

Work History

Staked as Fer cl 1-76 (YB84329) in Jun/96 by Westmin Resources Ltd to cover a gold anomaly detected in a regional stream sediment sampling program conducted in 1994. In 1996 Westmin carried out geological mapping and contour soil sampling and added Fer cl 77-118 (YB85825) in July of that year. Westmin also staked Lin cl 1-24 (YB 85801) 10 km to the northwest in Jul/96 and carried out contour geochemical soil sampling and some geological mapping.

In Sep/96 Phelps Dodge Corporation of Canada Ltd staked Hy cl 1-76 (YB87384) contiguously to the northwest. In 1997 the company carried out prospecting and grid soil sampling. In 1997 Westmin carried out geological mapping and grid soil sampling on the Fer claims and additional soil geochemical sampling on the Lin claims. Rimfire Minerals Corporation briefly optioned the Lin claims in 1998 and carried out geological mapping, prospecting and geochemical rock sampling that year.

In 1998 Paramount Ventures and Finance Inc optioned the Hy claims and carried out prospecting, geological mapping and grid soil sampling before dropping the option. Hudson Bay Exploration and Development Company Ltd staked Horn cl 1-24 (YB91646) approximately 15 km to the northwest in Sep/98.

The Hy claims were optioned by Athlone Minerals Ltd in Mar/2000, which carried out prospecting, grid soil sampling and geological mapping later that year.

#### Capsule Geology

The area is located approximately 185 km north of Watson Lake, within the eastern portion of the Selwyn Basin. Both the Fer and Hy claim blocks are underlain by Upper Proterozoic to Lower Cambrian Hyland Group sedimentary rocks consisting of silici-clastic, phyllitic and limy units. A mid-Cretaceous intrusion assigned to the Selwyn Plutonic Suite intrudes Hyland Group rocks approximately 5 kms to the southwest. Sedimentary rocks on both claim blocks are locally silicified, fractured and mineralized.

The Fer and Hy claim blocks appear to host distal, sediment-hosted gold-lithophile mineralization formed from circulating mineralizing fluids, driven by a distal heat source which replaced receptive host lithologies along structurally controlled conduits. Numerous faults are seen throughout the area, predominantly trending northwest-southeast. Deep overburden commonly obscures sulfide mineralization, although there is widespread gossan development and manganese oxide staining. Where preserved, sulfide mineralization occurs as disseminations, blebs and pods of arsenopyrite, pyrite, minor galena and chalcopyrite in quartz veins, stockworks and breccias exposed in isolated outcrops. Rock and soil sampling has shown that mineralization in the area is primarily arsenic and gold rich with minor metal associations that include copper, zinc, lead and occasionally silver.

The occurrence location marks the site of a 8 m long composite chip sample collected from weakly sericitic and clay altered, strongly silicified quartz grit phyllite containing pods and blebs of pyrite. The sample assayed 1 970 ppb Au. A heavily manganese stained rock containing 5-10% pyrite and collected from the same area assayed 1 080 ppb Au. Contour soil sampling outlined at least 3 gold arsenic anomalies on the Fer claims. The strongest anomaly returned up to 1 870 ppb Au and 2 330 ppm As.

Follow-up grid soil sampling in 1997 better defined the two main soil anomalies The strongest anomaly occurs on the Southern grid where it measures approximately 2 000 by 500 m and returned values up to 1 870 ppb Au and 5 430 ppm As. A second smaller anomaly was outlined on the Northeast grid which measures 500 by 200 m. It returned values up to 665 ppb Au and 942 ppm As and anomalous values of up to 352 ppm Cu, 158 ppm Pb and 294 ppm Zn. Numerous single point Au-As anomalies were also found throughout the claim group. Soil sampling on the Hy claims delineated two areas (West and East zones) with anomalous gold and arsenic in soils. The West zone is a narrow feature that extends for approximately 1.4 km in length with Au concentrations up to 909 ppb in soil and up to 8.74 g/t in rocks. The East zone measures 550 mi length and from 50 to 200 m in width, and returned up to 1 259 ppb Au and 91.6 g/t Au in rock. Follow-up exploration in 1998 returned rock samples from the West zone which assayed up to 144.2 g/t Au from arsenopyrite bearing quartzite and quartz vein material. A cluster of rocks from the East zone returned up to 9.9 g/t Au from arsenopyrite-bearing quartz vein material, quartz breccia and phyllite. Anomalous results from these claim groups appear associated with strongly silicified sediments located on or near fault structures.

On the Lin claims, mieralization and alteration is not extensive and rock and soil sampling results to date have been quite weak. Quartz-rich units of Hyland Group sedimentary rocks containing traces of pyrite are interbedded with phyllite and limestone units. Quartz veining, including stockwork zones, is common in the quartz-rich units and locally is quite abundant. Silicification has been noted, but is not extensive. Spotty arsenic values occur in the north part of the property (to 636 ppm), but no similarily elevated gold values were detected. Preliminary geological mapping on the Horn claims by Hudson Bay indicates that the regionally extensive Hyland Group units encountered further to the southeast also underly this area. Soil sampling in 1998 identified at least two anomalous areas in the central part of the property; a 200 by 200 m anomaly with values ranging from 141-330 ppb Au and up to 300 ppm As; and an open 600 by 200 m anomaly with values ranging from 20 to > 600 ppb Au and > 300 ppm As.

#### References

ATHLONE MINERALS LTD, News Release, 13 Mar/2000 and 10 Nov/2000.

ATHLONE MINERALS LTD, Nov/2000. Assessment Report #094146 by S. Harris.

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LTD, Mar/2000. Assessment Report #094116 by M. Buchanan.

PARAMOUNT VENTURES AND FINANCE INC, 15 Sep/98, News Release.

PARAMOUNT VENTURES AND FINANCE INC, Dec/98. Assessment Report #093913 by P.E. Fox.

PHELPS DODGE CORPORATION OF CANADA LTD, Jan/98. Assessment Report #093740 by P.E. Fox and R.S. Cameron.

RIMFIRE MINERALS CORPORATION, Apr/99. Assessment Report #093982 by M.I. Jones.

WESTMIN RESOURCES LTD, Apr/97. Assessment Report #093628 by M.I. Jones.

WESTMIN RESOURCES LTD, Jan/98. Assessment Report #093795 by D.F. Gale and D.A. Terry.

WESTMIN RESOURCES LTD, Jan/98. Assessment Report #093796 by D.A. Terry.

YUKON EXPLORATION AND GEOLOGY 1998, p. 13; 2000, p. 21.

### Work History

Date	Work Type	Comment			
12/31/2000	Geology				
12/31/2000	Geochemistry				
12/31/2000	Other				
12/31/1998	Geology				
12/31/1998	Geochemistry				
12/31/1998	Other				
12/31/1997	Geology	Geological mapping on Fer claims.			
12/31/1997	Geochemistry	Grid soil sampling carried out on Hy and Fer claims.			
12/31/1997	Other	Prospecting on Hy claims.			
12/31/1996	Geology				
12/31/1996	Geochemistry				
12/31/1994	Geochemistry	Westmin Resources conducted regional stream sediment survey did not stake claims.			

# Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>097106</u>	2017	2017 Soil and Rock Chip Sampling Program	Rock - Geochemistry, Soil - Geochemistry		
<u>096383</u>	2012	June to November 2012 Exploration Report, Reef Property	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Data Compilation - Pre-existing Data		
<u>095865</u>	2011	July 2011 to May 2012 Exploration Report, Reef Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Data Compilation - Pre- existing Data, Digitizing Data - Pre-existing Data, Process/Interpret - Pre-existing Data		
<u>095437</u>	2011	Assessment Report Describing Airborne Geophysical Surveys at the Reef Property	Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, VTEM - Airborne Geophysics		
<u>095589</u>	2011	2011 Assessment Report on the Hy-Jay Claims	Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
<u>093795</u>	1997	1997 Assessment Report Describing Geological and Geochemical Surveys on the FER 1-118 Mineral Claims, Hyland River Area, Yukon Territory	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
<u>093628</u>	1996	1996 Assessment Report Fer 1-76 Mineral Claims and Soil Sampling Surveys	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology		