



## Occurrence Details

**Occurrence Number:** 106D 064

**Occurrence Name:** Blende-West (Main)

**Occurrence Type:** Hard-rock

**Status:** Deposit

**Date printed:** 8/6/2025 12:43:54 AM

## General Information

**Primary Commodities:** lead, silver, zinc

**Secondary Commodities:** copper

**Aliases:** Braine

**Deposit Type(s):** Sediment hosted Mississippi Valley-Type Pb-Zn (MVT)

**Location(s):** 64°24'24.96" N - -134°40'3.396" W

**NTS Mapsheet(s):** 106D07

**Location Comments:** Location based on collar of drillhole B88-1 (Moose Mountain Technical Services, 2018)

**Hand Samples Available:** Yes

**Last Reviewed:** May 23, 2019

## Capsule

### Work History

Mineralization was originally noted in this vicinity by the Geological Survey of Canada in 1961 and the area was first staked as Will cl 1-60 in Jul/75 by Cyprus Anvil Mining Corporation, which carried out geological mapping, geochemical silt and soil sampling and prospecting later in the year.

Restaked as Blende cl 1-15 in Mar/81 by Archer, Cathro and Associates (1981) Ltd which carried out geochemical rock sampling in 1981; geochemical rock sampling, prospecting and airphoto interpretation in 1982; and hand trenching and geochemical rock sampling in 1984. The property was subsequently optioned by Canadian Nickel Company Ltd, which staked Blende cl 16-88 to surround the existing claims in 1984 and carried out geological mapping in 1985 before dropping the option.

In 1986 the Blende 1-15 claims were sold to NDU Resources Ltd which staked surrounding Blende claims 16-66 in 1988 and carried out 720.3 m of diamond drillholes in three holes from a single set-up on the Blende 10 claim. In 1989, NDU Resources staked Blende 67-122 claims and carried out geological mapping, grid geochemical soil sampling, road construction and geophysical magnetometer and VLF-EM surveying.

Billiton Metals Canada Inc optioned the property in Oct/89 and the following year carried out geological mapping, baseline water quality testing, road construction, drilled 15 holes (3659.7 m) and staked Blende 123-128 claims and 1fr-28fr.

Billiton's 1991 work included completion of the soil geochemical and geophysical coverage, drill-testing (15 holes southeast, south and west of the occurrence), preliminary metallurgical testing and the staking of Blende cl 129-169 in Jun/91 and Zinc cl 1-48 in Jul/91.

Eagle Plains Resources Ltd restaked the land over the occurrence as Mix cl 1-8 in Mar/2002 and carried out a one day property examination to assess the property's infrastructure. Eagle Plains staked Trix cl 1-46 to surround the Mix claims in Apr/2004; announced that it had executed an option agreement with Shoshone Silver Mining Company whereby Shoshone could earn a 60% interest in the Blende deposit in May/2004; and staked Trix cl 47-56 contiguously to the southeast in Aug/2004. Shoshone released a technical report in Oct/04 which verified the resource calculations originally prepared in 1991 by Billiton Metals Canada Ltd. Shoshone terminated its option in May/2005.

In Aug/2005 Eagle Plains optioned the property to Blind Creek Resources Ltd which carried out an exploration program consisting of re-logging historical diamond drill core, a ground-based gravity survey, and rock sampling. In Mar/2006 Blind Creek constructed a winter road into the property, mapped surface showings in old trenches and carried out diamond drilling just southwest of the occurrence. In 2007 the company carried out further geological mapping. In 2009, Blind Creek Resources finalized the purchasing agreement for the entire Blende property from Eagle Plains Resources and assumed 100% interest in the property. In 2018, a NI 43-101 resource estimate for the Blende deposits was calculated. In 2020, Blind Creek Resources Ltd changed their name to Blende Silver Corp. and in 2021, Blende Silver drilled 3 holes on the Blende-West target (1,082.14 m).

### Capsule Geology

The Blende West Main Zone occurrence is a zinc-lead-silver Mississippi Valley type deposit located on the south edge of the Mackenzie Platform, just north of the regional scale Kathleen Lakes Fault Zone. It is hosted in the upper part of the Lower Proterozoic Gillespie Lake Group dolomite, a thick sequence of interbedded clastic and carbonate sedimentary rocks that transitions upward from deep water mudstones to shallow water stromatolitic dolomite. Extension after deposition led to the deposition of Late Proterozoic sedimentary rocks in small local basins. Paleozoic limestone and dolomite unconformably overlie these strata. Mesoproterozoic Hart River gabbro and diorite sills cross-cut stratigraphy.

The deposit is tabular and steeply dipping, cutting bedding at moderate to high angles. Mineralization occurs intermittently along a shear zone about 6 km long and up to 200 m wide in a series of parallel breccia zones. The breccia zones occur in the core of a broad southeast-plunging anticline and are parallel to the axial planar cleavage which strikes northwest and dips steeply to the southwest. The age of mineralization is estimated to be between 1490 and 1300 Ma (Moroskat).

The mineralization consists mostly of yellow sphalerite, which is difficult to distinguish from the host dolomite. Other sulphide minerals include galena, pyrite and minor chalcopyrite and tetrahedrite. Some syngenetic or early diagenetic mineralization has been found associated with oolites and dewatering structures.

On surface, the deposit is outlined by soil anomalies up to 10,000 ppm zinc. Billiton's 1991 drilling established that the west zone mineralization is predictable and extends more than 400 m continuously down dip. Billiton suggested the deposit could be mined by open pit since the deposit is located on a ridge crest and the ore is non-acid generating.

The 2006 drill program tested the Main zone to the southeast with three drillholes. Diamond drillhole BE06108 intersected 16.50 m of 2.82% Zn and 4.83% Pb and a deeper intersection of 65.10 m of 1.53% Zn and 1.85% Pb. Diamond drilling in 2008 was carried out to provide material for metallurgical test work.

A National Instrument 43-101 mineral resource on the Blende deposits was released in March 2017. The West Pit was calculated at 2.585 Mt @ 1.78% Zn, 2.21% Pb, 45.0 g/t Ag at a zinc-equivalent cutoff grade of 2.0% (indicated); and, 29.538 Mt @ 1.96% Zn, 2.00% Pb and 34.7 g/t Ag at a 2.0% zinc-equivalent cut-off grade (inferred).

## Work History

Date	Work Type	Comment

7/1/2021	Drilling	3 holes, 1082.14 m
7/1/2021	Geochemistry	
12/31/2008	Drilling	Seven holes, 1,047 m.
12/31/2007	Geology	
12/31/2006	Drilling	Twenty-three holes, 4,233 m.
12/31/2005	Ground Geophysics	
12/31/2005	Geochemistry	
12/31/2005	Geochemistry	Re-analyzed historic drill core.
12/31/2004	Studies	Technical report released.
12/31/1991	Drilling	15 holes - southeast, south and west of the occurrence.
12/31/1990	Geochemistry	Base line surveys.
12/31/1989	Geology	
12/31/1989	Geochemistry	
12/31/1989	Ground Geophysics	Also VLF-EM surveys.
12/31/1989	Development, Surface	
12/31/1988	Drilling	Three holes, 718 m.
12/31/1985	Geochemistry	
12/31/1985	Other	
12/31/1984	Geochemistry	Sampled known showings.
12/31/1984	Geology	
12/31/1984	Trenching	
12/31/1981	Pre-existing Data	Compiled all previous geochemical data.
12/31/1975	Geology	
12/31/1975	Geochemistry	Also silt sampling.
12/13/2018	Studies	
12/13/2018	Studies	
12/13/2006	Development, Surface	
12/13/2006	Geology	mapped old trenches
12/13/2002	Other	One day visit.
12/13/1990	Drilling	Fifteen holes, 3,659.7 m.
12/13/1989	Ground Geophysics	
12/13/1982	Airphotography	Interpretation of linear structures.
12/13/1982	Geochemistry	Also chip sampling of known showings.
12/13/1982	Other	
12/13/1981	Geochemistry	Re-sampled some of the existing showings.

### Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<a href="#">097178</a>	2018	Assessment Report on Cores from Diamond Drill Holes reported from the Blende Property East Zone and West Zone	Metallurgical Tests - Lab Work/Physical Studies, Resource Estimate - Studies		
<a href="#">097217</a>	2018	Assessment Report Describing Heritage Resource Overview & Impact Assessments of the Blende Property	Heritage/Archeological - Studies		
<a href="#">095670</a>	2008	Diamond Drilling for the Blende Property	Diamond - Drilling, Drill Core - Geochemistry	7	1047.30
<a href="#">095641</a>	2007	Diamond Drilling, Geological and Geochemical Report for the Blende Property	Diamond - Drilling, Drill Core - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	15	3410.90
<a href="#">094955</a>	2006	Diamond Drilling, Geological and Geochemical Report for the Blende Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology	23	5550.40
<a href="#">094971</a>	2005	Geological Report for the Target Evaluation 05-043, Blende Deposit Area - Far East Zone	Gravity - Airborne Geophysics, Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Prospecting - Other,		

			Research/Summarize - Pre-existing Data		
<a href="#">094407</a>	2003	Assessment Report for the Blende Property, Mix 1-16 Claims	Property Evaluation - Other		
<a href="#">093005</a>	1991	Assessment Report, Blende 123-169, Fr 1-28 and Zinc 1-48 Claims	Diamond - Drilling, Drill Core - Geochemistry	62	11525.10
<a href="#">092942</a>	1990	Assessment Report, Blende 1-128 and Fr. 1-28 Claims]	Diamond - Drilling, Drill Core - Geochemistry, Bedrock Mapping - Geology, Environmental Assessment/Impact - Studies	15	3659.70
<a href="#">092795</a>	1989	Blende Property 1989 Final Report	Diamond - Drilling, Drill Core - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics	3	720.32
<a href="#">092684</a>	1988	Geological Report on the Blende Mineral Property, Blende 1-66 Quartz Claims	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Prospecting - Other, Hand - Trenching	3	718
<a href="#">092683</a>	1988	[Diamond Drilling Logs on the Blende Property]	Diamond - Drilling, Drill Core - Geochemistry	3	720.30
<a href="#">062294</a>	1987	Geologic Report on the Blende Mineral Property	Soil - Geochemistry, Bedrock Mapping - Geology		
<a href="#">091665</a>	1985	Geological Report, Blende 16-88 Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
<a href="#">091586</a>	1984	Geologic Report Blende 1-15 Claims	Rock - Geochemistry, Hand - Trenching		
<a href="#">091475</a>	1982	Geologic Report Blende 1-15 Claims	Rock - Geochemistry, Prospecting - Other		
<a href="#">090998</a>	1981	Geological and Geochemical Report	Rock - Geochemistry, Data Compilation - Pre-existing Data		
<a href="#">090076</a>	1975	Geological and Geochemical Report on the Will Claims	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		

## Related References

Number	Title	Page(s)	Reference Type	Document Type
<a href="#">ARMC005012</a>	Report on Blende property		Property File Collection	Report
<a href="#">ARMC004985</a>	Notes on Nick, Marg and Blende claims of NDU Resources		Property File Collection	Miscellaneous Company Documents
<a href="#">ARMC004987</a>	Mineral claims map - NDU Resources		Property File Collection	Geoscience Map (General)
<a href="#">ARMC004996</a>	Joint venture proposal - Blende project		Property File Collection	Report
<a href="#">ARMC007336</a>	Geological and geochemical compilation map - Blende property		Property File Collection	Geoscience Map (Geological - Bedrock)
<a href="#">YEG1990-pq19</a>	Blende property, central Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper
<a href="#">ARMC007820</a>	Map - Reef project - Figure 19		Property File Collection	Geochemical Map
<a href="#">ARMC020120</a>	Location map - July 1988 - Yukon properties - NDU Resources Ltd.		Property File Collection	Geoscience Map (General)
<a href="#">ARMC020121</a>	Economic analysis - Blende property		Property File Collection	Report
<a href="#">ARMC020124</a>	News release - Assay results of drilling on Marg property and location map of Mayo M.D. properties		Property File Collection	News Release
<a href="#">ARMC020128</a>	Geological report on the Blende mineral property - Blende 1-66 quartz claims for NDU Resources Ltd. - Mayo Mining District		Property File Collection	Report
<a href="#">ARMC020133</a>	Prospectus: NDU Resources Ltd. with report on the Blende property		Property File Collection	Report
<a href="#">YEG1981</a>	Yukon Exploration and Geology 1981	Pages 195-196.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
<a href="#">YEG1983</a>	Yukon Exploration and Geology 1983	Pages 233-234.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
<a href="#">YEG1985_86</a>	Yukon Exploration 1985-86	Page 296.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
<a href="#">YEG1991</a>	Yukon Exploration 1991	Pages 6, 8, 12.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
<a href="#">YEG2005</a>	Yukon Exploration and Geology 2005	Pages 22 & 39.	Yukon Geological Survey	Annual Report
<a href="#">YEG2006</a>	Yukon Exploration and Geology 2006	Pages 25, 43, 46.	Yukon Geological Survey	Annual Report
<a href="#">YEG2007</a>	Yukon Exploration and Geology 2007	Pages 21-22, 37, 41.	Yukon Geological Survey	Annual Report
<a href="#">YEG1988_OV</a>	Yukon Mining and Exploration Overview 1988	Page 31.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
<a href="#">YEG1989</a>	Yukon Exploration 1989	Page 7.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report

Resource/Reserve									
Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
2004	TOTAL OPEN PIT RESERVES (OPEN PIT)	Inferred	lead	2.8 %	19,600,000		No	Unknown	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
2004	TOTAL OPEN PIT RESERVES (OPEN PIT)	Inferred	silver	56 g/t	19,600,000		No	Unknown	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
2004	TOTAL OPEN PIT RESERVES (OPEN PIT)	Inferred	zinc	3.04 %	19,600,000		No	Unknown	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	WEST ZONE (UNDERGROUND)	Historical Estimate	lead	6.67 %	4,136,705		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	WEST ZONE (OPEN PIT)	Historical Estimate	lead	3.23 %	15,300,000		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	EAST ZONE (OPEN PIT)	Historical Estimate	lead	1.31 %	4,300,000		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	WEST ZONE (UNDERGROUND)	Historical Estimate	silver	106.5 g/t	4,136,705		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	WEST ZONE (OPEN PIT)	Historical Estimate	silver	67.5 g/t	15,300,000		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	EAST ZONE (OPEN PIT)	Historical Estimate	silver	15.1 g/t	4,300,000		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	WEST ZONE (UNDERGROUND)	Historical Estimate	zinc	4.62 %	4,136,705		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	WEST ZONE (OPEN PIT)	Historical Estimate	zinc	3.04 %	15,300,000		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									
1991	EAST ZONE (OPEN PIT)	Historical Estimate	zinc	3.05 %	4,300,000		No	No	Unknown
Resource calculations originally prepared by Billiton Metals Canada Inc were examined in detailed by B.J. Price and were found to conform with the definition of Inferred Mineral Resource according to CIM Resource and Reserve standards.; Technical Report - Blende Zinc-Lead-Silver Deposit by B.J. Price Geological Consultants Inc.									

Drill core at YGS core library					
Number	Property	Year Drilled	Core Size	Photos	Data
<a href="#">DDH-B88-1</a>	Blende	1988	NQ	4	1
<a href="#">DDH-B88-2</a>	Blende	1988	NQ-BQ	10	1