

# **Occurrence Details**

Occurrence Number: 106D 107 Occurrence Name: Blende-East Occurrence Type: Hard-rock Status: Deposit Date printed: 8/6/2025 4:38:05 AM

# **General Information**

Secondary Commodities: lead, silver, zinc Aliases: Mix 14; Zone 11 Deposit Type(s): Sediment hosted Mississippi Valley-Type Pb-Zn (MVT) Location(s): 64°23'40.57" N - -134°37'54.17" W NTS Mapsheet(s): 106D07 Location Comments: Location is based on drill collar 91-68 (AR093005) Hand Samples Available: Yes Last Reviewed:

### Capsule

### Work History

Mineralization was originally noted in this vicinity by the Geological Survey of Canada in 1961. Canadian Nickel Company Ltd staked Blende cl 16-88 (YA77655) in Oct/84 over the occurrence and carried out prospecting in 1985 before dropping the option. NDU Resources Ltd staked Blende cl 16-56 (YB02529) covering the occurrence in Jul/88. In Jul/89 the company carried out geological mapping, grid geochemical soil sampling, and geophysical magnetometer and VLF-EM surveying. The magnetic survey was abandoned shortly after starting completion due to low magnetic contrast. Billiton Metals Canada Inc optioned the property in Oct/89 and performed work west of the occurrence. Billiton's 1991 work included drill-testing the East Zone (34 holes).

Eagle Plains Resources Ltd restaked Mix cl 1-16 (YC09986) over the occurrence in Mar/2002 and carried out a one day property examination to assess the property's infrastructure. Eagle Plains executed an option agreement with Shoshone Silver Mining Company whereby Shoshone could earn a 60% interest in the property, including the East occurrence in May/2004. Shoshone terminated its option in May/2005. In Aug/2005 Eagle Plains optioned the property, including this occurrence, to Blind Creek Resources Ltd, which carried out an exploration program consisting of re-logging historical diamond drill core and other activities west of the occurrence. In Mar/2006 Blind Creek constructed a winter road into the property. The company carried out prospecting surrounding the occurrence and an Airphoto survey of the property. Most of the 2006 diamond drilling (20 holes) were completed at the East Zone.

In 2007 the company carried out limited sampling and mapping. In 2009, Blind Creek Resources finalized the purchasing agreement for the Blende from Eagle Plains Resources and assumed 100% interest in the entire property.

A new resource on the Blende deposit (MINFILE 106D 064) 2.35 km to the northwest of the occurrence was released in 2018 and metallurgy was carried out on drillcore from across the property, including the Blende-East occurrence.

In 2019, a heritage resource overview and impact assessment was carried out across the property.

#### **Regional & Property Geology**

The Blende East Zone occurrence is located on the south edge of the Mackenzie Platform, immediately north of the regional scale Kathleen Lakes Fault Zone. It is hosted in Lower Proterozoic Gillespie Lake Group dolomite, a 1200 m 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.

Pre-mineralization tectonism folded the stratigraphy into a broad southeast-plunging anticline which developed a strong axial plane fabric that controlled later shearing and brecciation, and subsequently, mineralization, within the Gillespie Lake dolostones (Moroskat, 2009). Moroskat also concludes that the age of mineralization is between 1490 and 1300 Ma.

#### **Mineralization & Results**

The host rock for mineralization at the East Zone is stromatolitic dolostone of the Gillespie Lake Group. Originally called zone 11, the surface expression of the East Zone consists of hydrozincite-stained sphalerite and galena-bearing rock fragments mixed with ferricrete boulders on a gentle vegetated slope. Trenching was likely carried out in 1990. Although permafrost prevented trenching from reaching bedrock, mineralized boulders up to 2 m wide were exposed in trenches. These trench samples returned up to 36.1% Pb, 11.6% Zn and 438.8 g/t Ag. At the east edge of the zone, chip sampling across two 1.5 m wide mineralized shear zones assayed up to 0.06% Pb, 7.9% Zn and 6.9 g/t Ag (AR 092942).

In 1991, the first drill program at the East Zone was completed (34 holes). Diamond drillhole DDH B91-68 was mineralized from surface down to 84 m. Within this intersection was an intercept of 23.8 m of 4.54% Pb and 4.16% Zn (AR 093005). The 2006 drill program tested the East Zone with 22 diamond drillholes. One of the better intersections was 3.90% Zn and 2.38% Pb over 65.54 m, including 3.10 m of 8.06% Zn and 6.38% Pb in DDH BE06088. (AR 094955).

A National Instrument 43-101 compliant resource on the Blende East deposit was released in 2018. The East Pit indicated resource was calculated at 1.068 Mt @ 2.45% Zn, 1.32% Pb and 13.2 g/t Ag; with an inferred resource of 3.441 Mt @ 2.42% Zn, 0.85% Pb and 9.3 g/t Ag, both at a 2.0 zinc-equivalent cut-off grade.

### Work History

Date	Work Type	Comment
12/13/2006	Airphotography	
12/13/2006	Geochemistry	
12/13/2006	Drilling	most of the 20 holes were completed at East Zone
12/13/2006	Other	2006 - road work, not surveying
12/13/2005	Drilling	no drilling, just re-logging historical diamond drill core

12/13/2002	Other	
12/13/1991	Drilling	34 holes
12/13/1989	Geochemistry	
12/13/1989	Ground Geophysics	
12/13/1989	Ground Geophysics	
12/13/1989	Geology	
12/13/1985	Geochemistry	

# Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>097178</u>	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		
<u>097217</u>	2018	Assessment Report Describing Heritage Resource Overview & Impact Assessments of the Blende Property	Heritage/Archeological - Studies		
<u>095641</u>	2007	Diamond Drilling, Geological and Geochemical Report for the Blende Property	Diamond - Drilling, Drill Core - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	15	3410.90
<u>094955</u>	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
<u>094971</u>	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		
<u>094407</u>	2003	Assessment Report for the Blende Property, Mix 1-16 Claims	Property Evaluation - Other		
093005	1991	Assessment Report, Blende 123-169, Fr 1-28 and Zinc 1-48 Claims	Diamond - Drilling, Drill Core - Geochemistry	62	11525.10
<u>092942</u>	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
<u>092795</u>	1989	Blende Property 1989 Final Report	Diamond - Drilling, Drill Core - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics	3	720.32
062294	1987	Geologic Report on the Blende Mineral Property	Soil - Geochemistry, Bedrock Mapping - Geology		
<u>090076</u>	1975	Geological and Geochemical Report on the Will Claims	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		