



Occurrence Details

Occurrence Number: 095D 035
Occurrence Name: Jeri North
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 5:58:51 AM

General Information

Secondary Commodities: zinc
Deposit Type(s): Sediment hosted Mississippi Valley-Type Pb-Zn (MVT)
Location(s): 60°24'33.37" N - -127°20'55.27" W
NTS Mapsheet(s): 95D06
Location Comments: Approximate center of mineralized zone.
Hand Samples Available: No
Last Reviewed: Jun 8, 2018

Capsule

WORK HISTORY

Staked as Sam cl 1-86 (YB46141) in Aug/93 by International Barytex Resources Ltd. The claims were staked as part of the larger Mel property (Minfile Occurrence # 095D 005, 027 and 032). The company cut a grid over the claims and carried out reconnaissance scale soil sampling later in the summer.

In 1994 International Barytex carried out detailed soil sampling and an Induced Polarization (IP) ground geophysical survey over the claims. In 1995 the company carried out further soil sampling and IP surveys and collared 8 widely spaced diamond drill holes (847.6 m) over the newly defined Jeri North zone.

In Sep/96 Cominco Ltd optioned the Mel property from International Barytex and Breakwater Resources Ltd (a minority partner in the property) in return for cash and staged exploration expenses. In Jul/96, prior to formalizing the option agreement Cominco staked Silent cl 1-36 (YB85969) and Sam cl 100-113 (YB86005) and cl 135-152 (YB86019) to cover the northern extension of the Jeri North zone. During the 1996 exploration season the company soil sampled north of the Jeri North zone and tested the zone with 6 diamond drill holes (1 189 m)

Cominco explored the Mel property in 1997 but no work was carried out on the Jeri North zone. In Sep/97 the company terminated its option on the property.

On July 14, 2000 International Barytex reported that it had entered into an agreement with Breakwater Resources whereby International Barytex acquired a one hundred (100%) percent undivided interest in the Mel property (including the Jeri North zone), in return for 600 000 shares of International Barytex and payment to Breakwater of a one percent (1%) Net Smelter Return (NSR).

On September 30, 2009, International Barytex Resources changed its name to Kobex Minerals Inc. On June 15, 2011 Breakwater Resources was purchased by Nyxstar, an international integrated mining company. Breakwater's 1% Net Smelter Return (NSR), interest in the Mel property was retained by the company.

In 2012 Kobex Minerals digitized all available drill hole data and used the data obtained, to create a wire-frame model which could be used to produce a resource estimate for the property.

On June 19, 2014 Kobex Minerals sold 100 % interest in the Mel property to Silver Range Resources Ltd. Breakwater Resources retained its 1 % Net Profit Return interest. In Sep/2014, Breakwater Resources sold its 1 % (NSR) interest in the Mel property to Whirlwind Capital Ltd.

On November 12, 2014 Silver Range released 43-101 Compliant Technical Report on the Mel property which included an updated independent resource estimate for the Mel deposit/zone and the results of an independent barite marketing study relating to the entire property. On November 14, 2014 the company staked Mel cl 1-318 (YE60001) on the south end of the property to cover access routes to the Alaska Highway. A single claim MELBC (1032196) was staked on the British Columbia side of the route.

In 2015 Silver Range completed LIDAR, aerial photography, and a heritage resource overview assessment.

On February 1, 2017 Yukon Government passed an Order in Council (O.I.C. 2017/26) prohibiting entry on certain lands (the Kaska asserted territory outside of the Ross River Area) for the purpose of staking Quartz or Placer Mining claims. The Order was made to facilitate continuing consultation with the Liard First Nation and Kaska Dena Council and covers the entire Mel property and surrounding area. The Order in Council provides registered active claims holders in the affected area relief from annual assessment work obligations. The Order in Council was renewed on April 18, 2018 (OIC 2018-71) and has been extended to April 20, 2020 (it may be renewed in the future).

On March 15, 2017 Silver Range sold the Mel property to Benz Mining Corp. in return for a staged series of cash and shares. As part of the sale Benz Mining released an updated technical report on the property.

During the 2017 exploration season Benz Mining focused its effort on exploring the Mel deposit (Minfile Occurrence #095D 005), located approximately 12 km to the southwest. The company hopes to explore the Jeri North zone in the future.

GEOLOGY

The Mel property consists of the Mel Main deposit (Minfile Occurrence #095D 005), and the Mel East, Jeri, (Minfile Occurrences #095D 027 and 032) and Jeri North (this occurrence), mineralized zones. Access to the property is located off the Alaska Highway approximately 77 km east of the Town of Watson Lake in southeast Yukon. A seasonal bush/winter road runs northerly for approximately 47 km through gentle terrain to the property. A 640 m long air strip located on the property, provides additional access to the property.

L. Pigage of the Yukon Geological Survey remapped topographic map sheet 095D/6 at 1:50 000 scale during the summers of 2006 and 07 and published his map in the fall of 2007. In 2011 Pigage published a 1:250 000 scale map of topographic map sheet 095D which included updated stratigraphy. In 2015 Pigage released a geological bulletin (#17) which covered the geology and economic potential of topographic map sheet 095D. In 2016 M. Colpron of the Yukon Geological Survey released an updated geological compilation map of the Yukon which included Pigage's updated stratigraphic units.

Based on Pigage's bulletin and Benz Mining technical report all 4 occurrences are classified as stratabound zinc +/- lead +/- barite mineralized zones. The Mel, Jeri North and Mel East occurrences are hosted in massive fine-grained limestone of the Cambrian - Ordovician Otter Creek Formation at the contact with the overlying argillaceous limestone of the Cambrian -

Ordovician Rabbittkettle Formation. Benz Mining reports that the Jeri zone is hosted mainly within hydrothermally altered rocks that are thought to be equivalent to the Otter Creek fine-grained limestone.

The Sam claims were staked to cover the northerly strike extension of the Jeri zone. Geological mapping traced the favorable contact hosting the Jeri zone mineralization for a strike length of over 9 kms and led to the discovery of the Jeri North zone. Soil sampling outlined two zinc anomalies over the Jeri North zone. IP ground geophysical surveys outlined strong chargeability highs over both zinc anomalies. Diamond drilling carried out in 1995 intersected a sequence of intermediate volcanic flows and volcanoclastic sediments that are overlain by the limestone unit common throughout much of the larger property. A massive chert unit up to 5 m thick was intersected below the volcanic-volcanoclastic sequence. In places the chert rests directly on the basal fine grained limestone unit but on other sections it is separated from the fine-grained limestone by a dolomitic horizon.

The Jeri-North zone lies on the east limb of the Mel syncline. The sphalerite is generally coarse-grained, reddish-brown in color and is commonly disseminated within an extensive chert horizon but also occurs in lesser amounts within an overlying ash layer and underlying dolomitized limestone. The sphalerite is accompanied by minor pyrite and chalcopyrite mineralization. The hanging wall to mineralization is a 30 metre-thick massive and autobrecciated basalt. Silty limestones of the Rabbittkettle formation conformably overlie the Otter Creek formation.

Diamond drilling in 1995 returned 9.9 % zinc over 5 m in Hole J-95-4 and 15.6 % zinc over 5.1 m in Hole J-95-5. Diamond drilling carried out in 1996 attempted to expand the zone intersected in 1995. Hole 96-10 which was collared 205 m to the south intersected two intervals containing significant sphalerite, however holes that tested further down dip and on strike failed to encounter significant zinc mineralization. Thus, limiting the potential size of the known mineralized zone to about 400 m in strike and 100 m down dip.

The discovery of zinc mineralization at the Jeri North zone indicates there is potential for discovery of additional deposits of stratigraphically controlled zinc mineralization elsewhere along the east limb of the syncline.

Work History

Date	Work Type	Comment
12/31/1996	Drilling	Six holes (1,189 m).
12/31/1995	Drilling	Eight holes (847.6 m) widely spaced to test zone.
12/31/1995	Geochemistry	Further sampling.
12/31/1995	Ground Geophysics	Increased surveyed area.
12/31/1994	Geochemistry	Detailed grid sampling.
12/31/1994	Ground Geophysics	
12/13/2017	Studies	Updated Resource Estimate for Mel deposit. Also summary of exploration carried out to date and updated barite marketing study.
12/13/2015	Airphotography	Carried out over entire property.
12/13/2015	Studies	Also barite marketing study.
12/13/2014	Studies	Published resource calculation for Mel deposit and summary of results for Jeri North.
12/13/2012	Pre-existing Data	Digitized all drill data to create wire frames.
12/13/1996	Geochemistry	Resampled over zone to verify earlier results.
12/13/1993	Geochemistry	Reconnaissance scale sampling.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096813	2014	Aerial Photography , Lidar Topographic Surveys, Heritage Study , Barite Marketing Study, Resource Estimation and Scoping Study at the Mel Property	Orthophoto - Airphotography, LIDAR - Remote Sensing, Heritage/Archeological - Studies, Pre-feasibility - Studies, Resource Estimate - Studies		
095857	2012	Report on Preparation of Drill-Hole Data Base for the Mel Lead-Zinc-Barite Deposit and Jeri North Deposit	Digitizing Data - Pre-existing Data, Resource Estimate - Studies		
093667	1996	1996 Assessment Report on the Mel Property	Diamond - Drilling, Diamond - Drilling, Soil - Geochemistry, Soil - Geochemistry	14	3050.50
093353	1995	Report on Diamond Drilling Mel Property, Yukon	Diamond - Drilling, IP - Ground Geophysics	10	1165

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG1995	Yukon Exploration and Geology 1995	13	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
2011-1	Bedrock geology of Coal River map area (NTS 95D), Yukon		Yukon Geological Survey	Open File (Geological - Bedrock)
2007-4	Preliminary Geology Map of NTS 95D/6 (1:50 000 scale)		Yukon Geological Survey	Open File (Geological - Bedrock)
YEG2007_18	Preliminary bedrock geology for NTS 95D/6 (Otter Creek area), southeast Yukon.		Yukon Geological Survey	Annual Report Paper
YEG2017_OV4	Yukon Hard Rock Mining, Development and Exploration Overview 2017	p. 54-55, 59, 62.	Yukon Geological Survey	Annual Report Paper

