

## **Occurrence Details**

Occurrence Number: 095D 005

Occurrence Name: Mel
Occurrence Type: Hard-rock

**Status:** Deposit

Date printed: 12/16/2025 3:28:20 AM

# **General Information**

Primary Commodities: barite, lead, zinc

Aliases: Jean

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

Location(s): 60°21'0" N - -127°24'0" W

NTS Mapsheet(s): 95D06

Location Comments: Location marks approximate center of deposit.

Hand Samples Available: No Last Reviewed: May 3, 2018

### Capsule

#### WORK HISTORY

Staked as the Mel cl 1-75 (Y17410) in Mar/67 by J. Melnychuk and T. Flint. Newmont Mining Corporation of Canada Ltd optioned the claims briefly in 1967-68 and conducted soil sampling and bulldozer trenching, during which time the prospectors' interest was sold to Winco Mining & Exploration Ltd who completed an airborne geophysical survey in 1969.

Restaked as Jean cl 1-121 (Y72731) in Apr/73 by Melnychuk, who sold the claims in Aug/73 to Empire Metal Corporation Ltd, who subsequently optioned the claims to Granby Mining Company Ltd. Granby performed geological mapping and soil sampling surveys in 1973 and 1974, drilled 8 diamond drill holes (548 m) in 1974, and added more Jean claims in Oct/73 and Wet cl 1-32 (Y83309) in Aug/74, and drilled an additional 10 diamond drill holes (1,404 m) in early 1975. Empire changed its name to Sovereign Metals Corporation in Feb/76.

St Joseph Explorations Ltd entered into a joint venture with Granby and Sovereign in Dec/76 and performed geological mapping, soil and silt sampling, and gravity and Induced Polarization (IP) geophysical surveys in 1977. Between 1978 and 79 St. Joseph drilled 19 diamond drill holes (4.054 m) on the property.

Granby Mining changed its name to Zapata Granby Corporation in Jan/79 and lost its interest in mid-1980 when it merged with Noranda Mines Ltd.

In 1979 St. Joseph staked Sov cl 1-6 (YA28600). In 1981 St Joseph changed its name to Sulpetro Minerals Ltd and carried out IP and gravity surveys.

In 1985, Sulpetro constructed an airstrip and upgraded the access road to the property before transferring its interest to Novamin Resources Inc, who entered into a joint venture agreement with BP Canada Inc.

In Apr/86, Sovereign changed its name to Barytex Resources Corporation.

In 1987, Novamin drilled 7 holes (2,012 m). During the year control of Novamin was slowly acquired by Breakwater Resources Ltd such that by the end of the year Breakwater owned 85% of the company.

In 1989 Barytex Resources collared 4 diamond drill holes (638 m) designed to test the near surface, open pit potential of the Mel deposit and completed a pre-feasibility study. In 1990 Barytex collared 11 additional diamond drill holes (1,552 m) and bulldozer stripped the north end of the orebody, which was mapped with a transit.

In Aug/92 Barytex optioned an 85% interest in the Mel project from Breakwater Resources in return for cash and staged exploration expenses. In Mar/93 Barytex reorganized and emerged as International Barytex Resources Ltd. In 1994 the company carried out a deep drilling program (6 diamond drill holes – 3,123 m) on the Main zone and geological mapping, soil sampling and ground magnetic, very-low-frequency (VLF) and IP geophysical surveys over the Main and Jeri zones (Minfile 095D 032). In 1995 International Barytex carried out additional ground IP surveys and collared 2 diamond drill holes (337.5 m) on the South Main zone.

In Sep/96 Cominco Ltd optioned the Mel property from International Barytex and Breakwater 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 zone. During the 1996 exploration season the company soil sampled an area located directly south of the Main zone and collared a single diamond drill hole (336.5 m) on the South Main zone.

In 1997 Cominco carried out soil sampling over the Main zone, ground resistivity, IP, magnetics and limited gravity geophysical surveys south of the Main zone and collared 2 diamond drill holes (361 m) south of the Main 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 in return for 600,000 shares of International Barytex and payment to Breakwater of a royalty of one (1%) percent of any Net Smelter Return from the property.

On September 30, 2009, International Barytex Resources changed its name to Kobex Minerals Inc. On June 15, 2011 Breakwater Resources was purchased by Nyrstar, an international integrated mining company. Breakwater's 1% Net Smelter Return 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% Net Profit Return 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 Main 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 (OIC 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 carried out metallurgical testing, soil sampling, trenching and geological mapping, follow by 9 holes (2,114 m) of diamond drilling targeting the Mel Main zone.

### GEOLOGY

The Mel property consists of the Mel Main deposit (this occurrence) and the Jeri, Jeri North and Mel East mineralized zones (Minfile Occurrences 095D 032, 035 and 027). Access to the property is located off the Alaska Highway approximately 77 km east of the Town of Watson Lake in southeastern Yukon. A seasonal bush/winter road runs northerly for approximately 47 km through gentle terrain to the property. A 640 m long air strip is 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 YGS 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 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  $\pm$  lead  $\pm$  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 Mel deposit is described as a disc-shaped and stratigraphically controlled body which rests disconformably on unaltered fine-grained limestone. The mineralization is located on the steeply dipping western limb of a major syncline and is slightly deformed by a secondary fold. Mineralization consists of coarse-grained sphalerite, galena and barite disseminated throughout a mixture of mudstone, silica and carbonate. Minor amounts of fine-grained, sparsely disseminated pyrite occur locally, but overall, pyrite accounts for less than 2% of the sulphides.

Pigage (2015) reports the deposit is probably Devonian-Mississippian in age on the basis of lead-isotope data (Godwin and Sinclair, 1982, Godwin et al., 1988) and best classified as an epigenetic Irish-type replacement of Mississippi Valley-type (MVT) deposit. Trenching and diamond drilling have delineated the mineralized zone over a strike length of about 700 m and from a surface depth of 500 m down dip. The true thickness of the zone varies from less than 1 m at each end to a maximum of 17.9 m in the central portion. The zone remains open to extension at depth.

In Oct/95 H.L. King, a geologist employed by International Barytex Resources published a Historic Resource Estimate (non NI 43-101 compliant) for the Mel deposit. The resource estimate was based on 48 diamond drill holes and totaled 6.78 million tonnes grading 7.10% zinc, 2.03% lead and 54.69% barite (Assessment Report 093353). The resource estimate was repeated in Canadian Mines Handbook 2001-02, p. 216. About 725,000 tonnes were believed to be open pittable to a depth of 60 m.

Early soil sampling programs outlined a large zinc soil anomaly with values greater than 300 ppm zinc (background 140 ppm), and a smaller lead anomaly with values greater than 50 ppm lead (background 40 ppm). The highest anomalous values, ranged up to 6,000 ppm zinc and 2,500 ppm lead. Five trenches completed by Newmont Mining in 1968 exposed mineralization in the Mel Main zone which returned assays averaging 5.3% combined lead-zinc over widths of 2.3 to 9 m. Follow-up geophysical programs and numerous diamond drill programs over the years outlined the Mel Main deposit and led to the discovery of the Jeri, Jeri North and Mel East mineralized zones.

On November 12, 2014 Silver Range Resources released a National Instrument 43-101 compliant independent resources estimate for the Mel Main zone. The estimate was prepared by Gary Giroux, P. Eng., M.A.Sc., a principal of Giroux Consultants Ltd who is the designated qualified person and independent of Silver Range Resources Ltd. Based on a 5.0% zinc-equivalent (ZnEQ%) cut-off grade the Mel Main zone hosts an inferred resource of 5.38 million tonnes grading 6.45% zinc, 1.85% lead and 44.79% barite (BaSO4). The zinc equivalence (ZnEQ%) was calculated using metal prices of US\$ 0.89/lb zinc and US\$0.96/lb lead and assuming 90.3% zinc recovery and 97.7% lead recovery. The resource was calculated using data from 64 diamond drill holes collared on the Mel Main zone. The resource figure was repeated in Benz Mining March 2017 technical report.

Metallurgical testing conducted on drill core from the Mel Main zone by Lakefield Research in 1976 indicated that after grinding to 100 mesh, the mineralization responded well to floatation and yielded concentrates ranging from 60.9 to 64.7% zinc, 78.0 to 79.6% lead and 90.3 to 94.4% barite. Recoveries ranged from 90.3 to 96.2% for zinc, 97.7 to 98.0% for lead and 88.0 to 90.0% for barite.

A historical barite marketing study completed in 1989 by MineStart Management Inc concluded barite from the entire property demonstrated positive potential as a saleable by-product. Sale of barite products were deemed to be particularly attractive for the property as they would not only provide an additional revenue stream but also reduce capital costs due to less need for tailings disposal capability. An updated study completed by World Industrial Minerals in 2014 found that barite from the property could likely be sold into the drilling products market in western Canada and Alaska. Based on current demand it was estimated that sales of 50,000 tonnes per year at US\$100/tonne would be reasonable into the Western Canadian market. The study also recommended that further work be undertaken to verify that impurity levels meet required specifications.

Silver Range carried out aerial photography and Light Intensity Distance and Range (LIDAR) surveys to update existing topographic data over the deposit area and potential access routes.

All nine diamond drill holes collared in 2017 by Benz Mining targeted the Mel Main zone/deposit. All nine holes intersected mineralized intervals comprising sphalerite, galena and barite as predicted by the exploration model. Highlights include hole 053 which returned 11.5% zinc and 0.33% lead over 3.53 m true width. Other highlights include hole 056 which returned 27.78% zinc with 0.65% lead over 2.38 m true-width and hole 058 which returned 10.93% zinc over 4.94 m and 16.65% zinc over 0.78 m true-widths.

In 2018 Benz Mining plans further diamond drilling on the Mel Main zone/deposit in order to increase the resource base of the zone to the north and south. The company also hopes to upgrade the Mel Main zone/deposit resource to the Measured and Indicated categories from its current Inferred Resource. Further exploration is also planned on other mineralized zones located on the property.

# **Work History**

Date	Work Type	Comment
12/31/1997	Drilling	Two holes, 361 m.

12/31/1997 G	Ground Geophysics	Also IP, magnetics and limited gravity.
12/31/1996 D	Drilling	One hole, 336.5 m.
12/31/1995 D	Drilling	Two holes, 337.5 m.
12/31/1995 G	Ground Geophysics	
12/31/1994 D	Drilling	Six holes, 3,122 m.
12/31/1994 G	Geochemistry	
12/31/1994 G	Ground Geophysics	Also VLF and magnetics.
12/31/1994 G	Geology	
12/31/1990 D	Drilling	Eleven holes, 1 552 m.
12/31/1990 G	Geology	
12/31/1990 T	Trenching	Stripped north end of Mel Main zone.
12/31/1989 D	Drilling	Four holes, 726 m.
12/31/1987 D	Drilling	Seven holes, 2,012 m.
12/31/1983 D	Development, Surface	
12/31/1979 D	Drilling	Nineteen holes, 4,054 m spread over 1978-79.
12/31/1977 G	Ground Geophysics	Also ran IP.
12/31/1977 G	Geology	
12/31/1977 G	Geochemistry	Also silt sampling.
12/31/1975 D	Drilling	Ten holes, 1,404 m.
12/31/1974 D	Drilling	Eight holes, 548 m.
12/31/1974 G	Geochemistry	
12/31/1974 G	Geology	
12/31/1973 G	Geology	
12/31/1973 G	Geochemistry	
12/31/1967 G	Geochemistry	Grid based.
12/31/1967 T	Trenching	Five trenches dug on Main zone.
12/13/2017 S	Studies	Updated technical report including resource estimate
12/13/2017 D	Drilling	Seventeen holes, 2,114 m.
12/13/2015 A	Airphotography	
12/13/2015 R	Remote Sensing	
12/13/2015 S	Studies	
12/13/2014 S	Studies	For Mel Main zone/deposit.
12/13/2014 S	Studies	Barite marketing study.
12/13/2012 P	Pre-existing Data	Digitized all drill data and used it to create wire-frame model.
12/13/1996 G	Geochemistry	South of Mel Main zone.
12/13/1989 S	Studies	Also marketing study.
12/13/1969 A	Airborne Geophysics	Type not reported.

Number         Year         Title         Worktypes         Drilled         Drilled         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           093741         1997         1997 Assessment Report on the MEL Property Linecutting, Geophysics, and Soil Geochemistry         Soil - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other									
096813       2014       Barite Marketing Study, Resource Estimation and Scoping Study at the Mel Property       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         093741       1997       1997 Assessment Report on the MEL Property Linecutting, Geophysics, and Soil Geochemistry       Soil - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other	-	Year	Title	Worktypes		Meters Drilled			
Digitizing Data - Pre-existing Data, Resource Estimate - Studies  Barite Deposit and Jeri North Deposit  Digitizing Data - Pre-existing Data, Resource Estimate - Studies  Soil - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other	096813	2014	Barite Marketing Study, Resource Estimation and Scoping Study at	Heritage/Archeological - Studies, Pre-feasibility - Studies, Resource					
997 Assessment Report on the MEL Property Linecutting, Geophysics, and Soil Geochemistry  Geophysics, and Soil Geochemistry  Geology, IP - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other	<u>095857</u>	2012	i i	Digitizing Data - Pre-existing Data, Resource Estimate - Studies					
092846         1990         Diamond Drilling on Jean 1-3 Claims         Diamond - Drilling         4         637.9	<u>093741</u>	1997		Geology, IP - Ground Geophysics, IP - Ground Geophysics, Line					
	092846	1990	Diamond Drilling on Jean 1-3 Claims	Diamond - Drilling	4	637.94			

092833	1990	Report on Diamond Drilling Mel Property, Yukon	Diamond - Drilling	4	662.94
093113	1989	Prefeasibility Study for a Lead, Zinc & Barite Mine on MEL Property Yukon	Pre-feasibility - Studies		
093086	1987	Report on Diamond Drilling Mel Property, Yukon	Diamond - Drilling	7	2011.99
091944	1987	[Novamin Resources Incorporated, Coal River Area, Yukon]	Diamond - Drilling	7	2011.99
<u>091679</u>	1985	Report on Airstrip and Road Construction Mel Property, Yukon	Air Strip - Development, Surface, All Weather Road - Development, Surface		
091077	1982	Geological and Geochemical Report Joni, Keli, Edy, Hose, Jeri, Sin, Ott, Tomi, Yang, Ralfo, Mungo, Chungo and Boz Claims	Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
091092	1979	Diamond Drilling on Mel Prospect	Diamond - Drilling	6	1526.35
090793	1979	[Mel project : 1979 diamond drilling]	Diamond - Drilling	6	1459.90
061961	1979	Mel Barite-Lead-Zinc Deposit, Yukon Territory	Research/Summarize - Pre-existing Data		
091091	1978	Diamond Drilling on the Mel Prospect	Diamond - Drilling	7	1050.34
090234	1977	Geological and Geochemical Report on the Mel Jean and Wet Claims, Yukon	Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics, IP - Ground Geophysics, Line Cutting - Other		
091089	1974	[Diamond drill core log, Empire Metals Corp. Ltd.]	Diamond - Drilling	5	322.48
091090	1974	[Drill Logs - Mel property]	Diamond - Drilling	8	239
060129	1973	Geological & Geochemical Report on the Mel and Jean Claims	Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Backhoe - Trenching		
060679	1969	[Geophysical Report on an Airborne Magnetometer Survey of the ""Mel"" Claim Group]	Magnetic - Airborne Geophysics		

Relat	ed References		Related References								
Number	Title	Page(s)	Reference Type	Document Type							
2011-1	Bedrock geology of Coal River map area (NTS 95D), Yukon		Yukon Geological Survey	Open File (Geological - Bedrock)							
MIR1974	Mineral Industry Report 1974	p. 152-153.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report							
MIR1975	Mineral Industry Report 1975	p. 156-158.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
MIR1977	Mineral Industry Report 1977	p. 75.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report							
MIR1978	Mineral Industry Report 1978	p. 50.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report							
<u>YEG2007</u> <u>18</u>	Preliminary bedrock geology for NTS 95D/6 (Otter Creek area), southeast Yukon.	p. 237-255.	Yukon Geological Survey	Annual Report Paper							
<u>YEG1983</u>	Yukon Exploration and Geology 1983	p. 23.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1994</u>	Yukon Exploration and Geology 1994	p. 7.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1995</u>	Yukon Exploration and Geology 1995	p. 13, 16.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1996</u>	Yukon Exploration and Geology 1996	p. 24, 31.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1997</u>	Yukon Exploration and Geology 1997	p. 36, 38.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1998</u>	Yukon Exploration and Geology 1998	p. 28.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1985_</u> <u>86</u>	Yukon Exploration 1985-86	p. 93-94.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1987</u>	Yukon Exploration 1987	p. 63-64.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1989</u>	Yukon Exploration 1989	p. 4-5.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>YEG1990</u>	Yukon Exploration 1990	p. 7-8.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report							
<u>1976-16</u>	Stratabound Barite and Lead-Zinc Deposits in Eastern Selwyn Basin, Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)							
YEG1990- pg50	Mel property, southeastern Yukon		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report Paper							
MIR1973	Mineral Industry Report 1973	p. 82.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report							
YEG2017_	Yukon Hard Rock Mining, Development and Exploration	p. 54-55,	Vilkon Geological Survey	Annual Ponort Danor							

<u>OV4</u>	Overview 2017	59, 62.	rukori deologicai survey	Allilual veholt Lahel	
<u>17</u>	Regional bedrock geology for Coal River map area (NTS 95D), southeast Yukon		Yukon Geological Survey	Bulletin	
<u>2007-4</u>	Preliminary Geology Map of NTS 95D/6 (1:50 000 scale)		Yukon Geological Survey	Open File (Geological - Bedrock)	

Resource/Reserve										
Year	Zone	Туре	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off	
2017	MEL - MAIN ZONE (Open Pit & Underground)	Inferred	lead	1.86 %	5,280,000		Yes	Yes	5.0 % (ZnEQ%)	
Taken from Technical Report on the Mel Zinc-Lead-Barite Property, by H. Leo King and G.H. Giroux Effective Date March 20, 2017. G.H. Giroux calculated reserves. Updated report based on Nov. 2014 calculation by Giroux (no change in figures). Available on SEDAR under Benz Mining. Based on 5.0 % Zinc-Equivalent (ZnEQ%) cut-off grade.										
2017	MEL - MAIN ZONE (Open Pit & Underground)	Inferred	zinc	6.51 %	5,280,000		Yes	Yes	5.0 % (ZnEQ%)	
Taken from Technical Report on the Mel Zinc-Lead-Barite Property, by H. Leo King and G.H. Giroux Effective Date March 20, 2017. G.H. Giroux calculated reserves. Updated report based on Nov. 2014 calculation by Giroux (no change in figures). Available on SEDAR under Benz Mining. Based on 5.0 % Zinc-Equivalent (ZnEQ%) cut-off grade.										
2017	MEL - MAIN ZONE (Open Pit & Underground)	Inferred	barite	45.05 %	5,280,000		Yes	Yes	5.0 % (ZnEQ%)	
	from Technical Report on the Mel Zinc-Lead-Barite Property, by H. ion by Giroux (no change in figures). Available on SEDAR under B	9		,			reserves. Up	dated report l	pased on Nov. 2014	
1994	MEL - MAIN ZONE (OPEN PIT & UNDERGROUND)	Historical Estimate	barite	54.7 %	6,780,000		No	No	Unknown	
Reserve	es based on 49 drill holes. Not National Instrument 43-101 compliant	; Northern Miner 26 Sep	/94. Also see As	sessment Rep	ort #093353.					
1994	MEL - MAIN ZONE (OPEN PIT & UNDERGROUND)	Historical Estimate	lead	2.03 %	6,780,000		No	No	Unknown	
Reserve	es based on 49 drill holes. Not National Instrument 43-101 compliant	; Northern Miner 26 Sep	/94. Also see As	sessment Rep	ort #093353.					
1994	MEL - MAIN ZONE (OPEN PIT & UNDERGROUND)	Historical Estimate	zinc	7.1 %	6,780,000		No	No	Unknown	
Reserve	Reserves based on 49 drill holes. Not National Instrument 43-101 compliant.; Northern Miner 26 Sep/94. Also see Assessment Report #093353.									

Drill core at YGS core library									
Number	Property	Year Drilled	Core Size	Photos	Data				
<u>DDH-87-5</u>	Mel	1987	BQ	0	1				
Mel-75-11	Mel	1975	AQ	12	0				
Mel-75-14	Mel	1975	AQ	12	0				
Mel-75-16	Mel	1975	AQ	4	1				
<u>Mel-74-1</u>	Mel	1974	AQ	6	1				
Mel-74-2	Mel	1974	AQ	6	1				
<u>Mel-74-5</u>	Mel	1974	AQ	4	1				
<u>Mel-74-6</u>	Mel	1974	AQ	6	1				
<u>Mel-74-8</u>	Mel	1974	AQ	8	0				