

REPORT ON THE GALENA GNAT MINES LTD.

(WHITE CAT MINE.)

LOCATION.

South side of Boulder creek a tributary of Horse Thief creek, 25 miles by wagon road from the town of Athalmer, Windermere mining Division, British Columbia.

Four claims-- White Cat, Ground Floor, separated from Heavenly Twins No.1 and No.2 by some open ground.

Property known as White Cat Mine although the present workings are all on the Heavenly Twins. No.2.

FINANCIAL ETC.

The claims are Crown Granted, Mr H.T. Harding of Stettler Alberta is the President of the company.

Mr Harding says he gave a verbal option on the property to Mr J.A. Knott of Toronto with a cash payment of \$5,000 due on Dec 12th 1925 on a total purchase price of \$166,000. He says he feels bound by this agreement, and he does not appear anxious to deal.

GEOLOGY AND ORE OCCURRENCES.

The rocks of the area consist of Argillites, shales, limestones and quartzites. On the Heavenly Twins No.2 where all the work has been done the sediments have been intruded by a sheet or sill of Diorite, locally known as greenstone. The strike of the formation and contact is from 165 to 175 degrees and the dip here is 70 degrees east. The limestone sheet is 20 or more feet wide. On its eastern or upper side it is in contact with argillites. The lower contact is hidden beneath a rock and snow slide.

The ore occurs in a fault fissure west of the Diorite Sheet. This fissure cuts the formation and has a general trend of 55 degrees and dip of 70 to 80 degrees south east. The wall rock is a calcareous schist.

The ore minerals are Galena, Zinc Blende, Pyrite and Grey Copper in a gangue of quartz, calcite and carbonates.

The vein varies from one inch to 3 feet in width. In places the fissure is shown only by a narrow streak of gouge. Thus the ore is formed in small lenses not over 20 feet high and in the 140 feet tunnel the lense pinched out in the first 40 feet.

The last 100 feet of this tunnel follows the gouge of the fissure. It shows a few inches wide of Galena from about 110 to 130 feet. There is no ore in the face.

The tunnel was driven to cut another ore lense showing on the surface 100 feet above the tunnel and and supposed to rake downwards to the west, This lense on surface shows up to 8 inches of solid Galena on both the hanging and the footwall with carbonates and a 2 foot horse of waste in between. This is at an elevation of 7350 feet. The main tunnel is at 7250 feet.

A 20 foot tunnel vertically below the main tunnel shows the best face of ore. The ore here averages 28 inches wide. It shows 6 inches of solid Galena on the hanging wall the remainder soft brown carbonates with a little Galena to a sharp footwall.

A ~~short~~ open cut 18 feet below this again

shows 17 inches of probably medium grade ore.

Ten inches of snow at the time of the visit prevented a thorough examination of the surface.

A parallel fissure 300 feet north of the main vein is said to show up to 6 inches of Galena, while another 60 feet south of the main vein also shows a few inches.

ORE VALUES ETC.

The gross and net values of the ore already shipped are shown by attached Smelter returns.

The returns so far received for 1924 and 1925 are as follows.

YEAR,	TONS,	%Pb.	%Zn.	Oz, Ag.
1924	30	74.75.	1.4.	32.3.
1925.	7.33.	75.4	---	44.6
1925.	27.	44.85.	2.2	30.0

The above represent hand sorted ore and much higher than the average of the ore shoots.

The lower grade ore is simply thrown out on the rock slide so may be considered practically lost. Of a recent carload to Trail the results are not known and there is about 30 tons awaiting shipment at the railway.

TRANSPORTATION.

A light aerial tram takes ore part way down to the creek bed, thence by single horse sloop one half mile to a fair wagon road 23 miles to Athalmer station. Freight costs \$12.00 to \$15.00 per ton to the railway, plus \$3.00 R.R. freight to Trail

SUMMARY AND CONCLUSIONS.

1. Insufficient development work has been done to make any estimate of the ore reserves.

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2. The property is small, fairly high grade and with no apparent prospect of becoming anything but a small shipper.
3. High freight costs make hand sorting necessary, with consequent waste of lower grade material necessarily mined.
4. On account of smallness of the property and difficulty of access erection of a concentrator would not be justified.
5. The price asked is in my opinion, too high for the property in its present state of development.
- 6 50% of the net Smelter returns is said to have paid all expenses in 1924. Taking 1924 and 1925 as a basis and assuming 3 cars per year at \$2,000.00 per car net it would take a great many years to pay off the purchase price asked.

Oct. 14th, 1925.

Signed V.A. James.

NOTE —: SILVER AND LEAD PRICES HIGHER IN 1925

Copy (Smelter Returns)

Trail Sept. 24, 1925

C.M.S. Co. of Canada, Ltd.

White Cat
Lump

Spot Settlement for Ore.

Quotation of Sept. 6 to 12 (Average) 1925

Arrived Sept. 9 No. Cars 1 No. Sacks 540 Wt. Sacks 625 lb.
Gross Wt. Ore 54,955 lb. Moisture 0.8% Dry Wt. Ore 54,515 lb.

ASSAY

Gold Tr.	Silver	oz/ton	Cu	%	CaO	5.0%
Lead	Zn	2.2%	S	9.0%	SiO ₂	17.7
46.1						Fe 3.2
7.25						
44.85						

QUOTATIONS

N.Y. Silver .72 N.Y. Cu (elec) less per lb.
London Lead \$8.257 Less \$25.00 per 2000 lb. \$7.007 per 100 lb.

CONTENTS

..... oz. Gold at \$20 ⁰⁰ per oz. for	%
817.73 " Silver at .72 " " " 95 %	%
24450 lb. Lead at .07007 per lb. for 90 %	%
Total gross value		2101 21
Less Treatment at \$8.851 per ton		241.26
		1859.95
Less Freight		90.00
		1769.95
Freight on Sacks returned		77
		1769.18

Base	\$8.00
Zn	.44
	8.44
Cu	1.589
	6.851
S	2.00
	\$ 8.851

COPY (Smelter Returns)

Cons^d Mining & Smelting Co. of Canada Ltd.
Trail, B.C. Oct. 23, 1924

White Bat Mine
Lump Ore

Spot Settlement for Ore.

Quotation of Oct. 12-18 (Average) 1924

Arrived Oct. 12th No. Cars - 1 No. Sacks 424 Wt. Sacks 515 lb.
Gross Wt. Ore 60,825 Moisture 0.7% Dry Wt. Ore - 60,399 lb.
Car Nos 49332

ASSAY Gold .01 oz/ton Silver 32.3 oz/ton Cu — % CaO 0.6%
Lead 74.75% Zinc 1.4% S 12.1% SiO₂ 3.9 Fe 1.6

QUOTATIONS

N.Y. Silver .71550 N.Y. Cu (electr.) less per lb.
London Lead \$7.066 Less \$25.00 per 2,000 lb. ... \$5.816 per 100 lb.

CONTENTS

		VALUE	
..... oz.	Gold at \$20 ⁰⁰ per oz. for	70	
975.44	" Silver at .71550 per oz. for	95	663.03
45,148	lb. Lead at .05816 per lb. "	90	2363.22
	Total Gross Value		3026.25
	Less Treatment at \$11.077 per ton		334.52
	Less Freight		2691.73
			92.01
			2599.72
	Freight on Sacks		3.96
			\$ 2595.76

B.R. (Case Rate) 8.00
Zn .35
8.35
Cr. .273
8.077
S 3.000
11.077

C.M.S.C. of Can. Ltd.
Per R.C.