

# GOLDEN EYE MINERALS LTD.

#### RED BIRD PROJECT EXPLORATION SUMMARY

(March 7, 1987)

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# INTRODUCTION

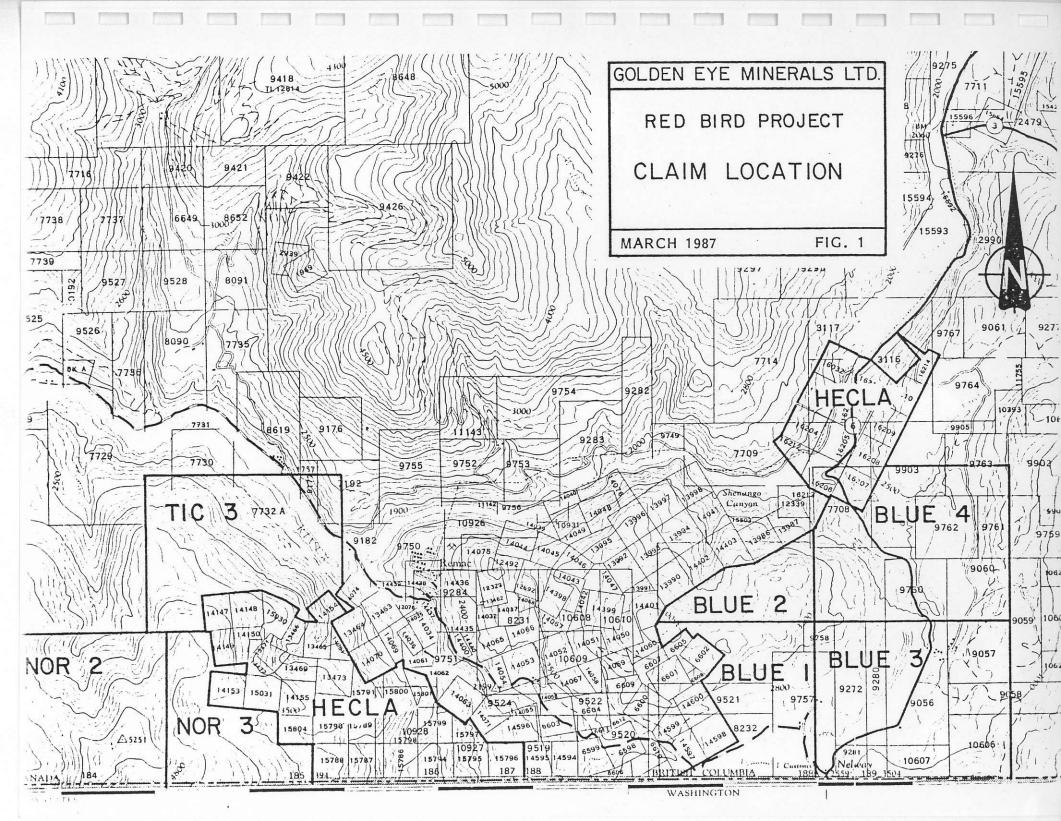
A significant stratiform zinc-lead-cadmium-germanium discovery has been made by Golden Eye Minerals Ltd. at their Red Bird Project, located 35 km southeast of Trail, B.C. The project is adjacent to the abandoned Reeves MacDonald Mine, from which approxiantely 7 million tons of ore containing 540 million pounds of zinc, 140 million pounds of lead, and 1.5 million ounces of silver were produced in the period 1949 to 1975. Geological data indicate that ore zones mined at the Reeves MacDonald Mine project onto ground now held by Golden Eye. The area is serviced by an excellent infrastructure of roads and hydro-power, and is situated in one of B.C.'s oldest mining camps.

# PROPERTY DEFINITION

The property (Figure 1) comprises several groups of claims acquired by staking and/or renewable lease agreements. Status and underlying agreements for each component of the property are described by Price (1987).

## **REGIONAL GEOLOGY**

The Red Bird project is located near the south end of the "Kootenay Arc", a curving belt of limy sedimentary rocks of Cambrian Age. The Kootenay Arc is characterized by significant zinc-lead-silver deposits extending from near the International Boundary to north of Revelstoke, B.C.



# GEOLOGY OF THE RED BIRD PROPERTY

The stratigraphic column in the Red Bird area includes the lower Cambrian Quartzite Range Formation and the Reno and Laib Formations, in ascending order. To the south and west, the Ordovician Active Argillite is thrust over the Cambrian rocks. Dolomitized portions of one band of the Reeves Member (Laib Formation) are the main hosts for zinc-lead mineralization. Important deposits in the area, mined from the Reeves Member, include the Emerald and Jersey mines (Placer Development Ltd.), the H.B. Mine (Cominco), the Reeves MacDonald Mine, and the Red Bird Deposit.

#### EXPLORATION SUMMARY

Recent exploration of the prospect is best described with reference to a longitudinal section through the Reeves Member (Figure 2). Exploration is by diamond drilling, and the following information summarizes the results of drilling to date:

1) Under an arrangement with Teck Explorations of Vancouver, Golden Eye completed three diamond drill holes (total footage 7021') through the Reeves unit in the period November 1985 to March 1986.

Drill holes 86-2 and 86-3 encountered weak zinc mineralization in the Prospect Dolomite. No mineralization was encountered in the Reeves Limestone, but a strong strike-slip fault is postulated to have displaced the Red Bird zone to the east.

Drill hole 86-5 encountered a thick section of Reeves Limestone near the base of which an oxidized zone of mineralization from 2264 to 2312.8' (54.8') assayed up to 7.2% lead and 8.95% zinc. The five assay samples of oxidized mud with dolomite and sulphide fragments averaged about 10% combined lead-zinc, but these values cannot be considered representative, considering the poor core recovery. The material encountered was believed to be the oxidized Red Bird zone, and the hole was considered to be a technical success.

2) Using flow-through funding provided by Knights Mineral Partnership Ltd. combined with a B.C. Provincial Government grant provided under the

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"FAME" program, Golden Eye resumed diamond drilling on November 15, 1986. Two drill holes were completed by February 12, 1987.

Drill hole 86-6, designed to test the Red Bird mineralization down-plunge of the oxidized intercept encountered in hole 86-5, passed below the plunge of the mineralization by a distance estimated to be 400-600'. The hole encountered the expected stratigraphic sequence, including the Prospect Dolomite (1186 to 1684') and the Reeves Limestone and Dolomite (from 2687 to 3204'). Scattered mineralization was present in the Prospect Dolomite, and a narrow section of up to 20% pyrite with minor sphalerite and galena was encountered from 3187 to 3191.7'. This narrow section is believed to represent the Red Bird mineralization east of the ore-shoot.

Drill hole 87-1 was collared January 15, 1987, and completed February 4, 1987. This hole, located approximately 1600' east of hole 86-6, was selected to intercept the "Annex" mineralized zone approximately 500' down-plunge of known mineralization in the most westerly heading of the Beeves MacDonald Mine. The section cored was comparable in stratigraphy with hole 86-6. The hole encountered significant stratiform mineralization in the Prospect Dolomite in the interval 1733 to 2176.6', consisting of 54.7' of 2.05% zinc (interval 1733.3-1789.0') and ten shorter intersections ranging from 1.0' to 6.7' and totalling 32.5' in the interval 1827.5 to 2176.6'. The best intersection consisted of 5.0' grading 11.21% zinc in the interval 1852.5-1857.5'. The persistence of the mineralization in this unit suggests proximity to potentially economic zones which require further testing.

The Reeves Member in hole 87-1 extended from 2857' to the end of hole at 3250' (393'). It consists of a short upper section (21') of limestone with the balance consisting of massive to blocky dolomite with a "Tweedy" texture, host to an important mineralized zone. In the interval 3080.9' to 3134.7', 53.8' of mineralization was encountered which assayed as follows:

Intercept	Pb %	Zn %	Ag, oz/t	Cd %	Ge, ppm
3080.9-3134.7' (53.8')	0.87	7.97	1.64	0.085	22.7
including:					
3099-3125' (26')	1.64	10.0	2.21	0.1	29.25

Drill hole 87-2 is presently being drilled.

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## EXPLORATION POTENTIAL

Information from recent diamond drilling and from previous exploration data indicates the projection of at least four potentially productive mineralized zones on Golden Eye's property. With reference to Figure 2, assuming a 2000' plunge dimension (rake), the tonnage potential and Gross Metal Value (GMV)\* of each of the four zones is shown in the following table:

	Red Bird	Annex	Annex West	K-Zone
Grade Lead	6.5	1.0	3.5	1.5
" Zinc	18.5	8.0	3.5	4.5
" Cadmium	0.10?	0.09	0.02	0.02
" Silver	2.0?	2.5	1.0	0.30
" Germanium	50	22	?	?
Width	20	45	20	20
Tons/Vert. Ft	1,200	2,700?	700	900
Total Tons	2.4 M	2.7 M	1.4 M	1.8 M
GMV \$/Ton	\$235	\$109	\$67	\$68
Gross Value	\$560 M	\$294 M	\$94 M	\$122 M

# MINERALIZED ZONE - HECLA/NOR CLAIMS

Total Gross Metal Values All Zones: \$1,070,000,000. in 8.3 Million Tons.

\*Lead - \$0.345/lb; zinc - \$0.505/lb; cadmium - \$1.25/lb; silver - \$7.35/oz; germanium - \$1060 U.S./kg.

# MINING CONDITIONS

Because of their steep dips, good widths, and favourable gound conditions, the orebodies at the Reeves MacDonald Mine allowed the application of low-cost sub-level benching and blast-hole mining methods. As an example, direct operating costs including mining, milling and development in June of 1973 were \$10.62 per ton on a throughput of approximately 18,000 tons. Present mining costs have not been calculated, but modern bulk mining methods are applicable.

# FURTHER EXPLORATION

The Red Bird property provides an exceptional opportunity to develop economically mineable reserves in an area where logistics are favourable and mining conditions are excellent. It is recommended that at least six more drill holes be completed to test plunge extensions of all four mineralized zones (Figure 2). The successful completion of these holes will provide data to be used in calculation of reserves with a view to economic production from an underground mine.

#### REFERENCE

Price, B. 1987. Geological Summary, Red Bird Exploration Project - Salmo, B.C. Prepared for Golden Eye Minerals Ltd. by Rapitan Resources Inc.

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