

SUMMARY OF ECSTALL RIVER PROJECT, BRITISH COLUMBIA

To accompany F.A.M.E. application by Falconbridge Limited

The purpose of this project is to explore the on strike stratigraphy and the surrounding "Mine Series" of the Ecstall River massive pyrite deposit to discover an economic zinc, copper, gold, silver deposit. The project is located in the Skeena Mining Division on the Ecstall River, about 65 km southeast of Prince Rupert. Access is by boat up the Ecstall River, by fixed wing aircraft to Johnson Lake, or by helicopter.

The property consists of 21 Crown Grants plus an additional 160 claim units acquired in 1985. Sixteen of these units are optioned from Chris Graf. The agreement calls for exploration expenditures of \$500,000 by Dec 1, 1989 for an 80% interest. A cash payment of \$15,000 is due on Dec 1, 1986. The remaining claims and Crown Grants are in the name of Kidd Creek Mines Ltd.. Falconbridge Limited owns 100% of Kidd Creek Mines Ltd. and carries out exploration on its behalf.

The Ecstall River or "Red Gulch" deposit was acquired by Northern Pyrites Co., a T.G.S. (Texasgulf Inc.) subsidiary in 1937 as a potential source of sulphur. The deposit is comprised of two or more massive pyrite lenses hosted by high-grade metamorphic rocks of the Central Gneiss Complex. The current interpretation is that the rocks have a significant volcanic component and that the deposit is volcanogenic. The massive sulphides are coarse, granular pyrite with variable amounts of interstitial chalcopyrite, sphalerite, pyrrhotite and galena. Minor but significant gold values are reported. Estimated proven and probable reserves contained in the

north and south lens are 7 million tons grading 2.5% Zn, 0.9% Cu, 0.6 oz/T Ag and 0.015 oz/T Au. A small, higher grade reserve of 300 to 500 thousand tons of 2% Cu and 0.018 oz/T Au occurs in the north lens.

The deposit was extensively explored by Granby from 1917 to 1919, and by T.G.S. in the late 1930's and early 1950's. In the period 1938 to 1940, T.G.S. drove an exploration drift 847 m with seven cross-cuts totalling 221 m, and a 183 m raise. A total of 7,830 metres of diamond drilling was completed in 77 holes at this time.

In 1975, a program of line-cutting and ground EM surveys was completed on the river flats south of the south lens, to test for extensions of the massive sulphides. This survey was unsuccessful but the results were inconclusive due to inadequate depth penetration of the equipment used. In 1985, a helicopter Input survey was carried out by Questor, and numerous conductors were discovered on strike and parallel to the deposit.

The 1986 work program will consist of:

- evaluation of geophysical conductors (line-cutting, ground geophysics, soil geochemistry, geology)
- reinterpretation of the geological setting of the Ecstall Deposit based on current knowledge of volcanogenic deposits.
- diamond drilling of high priority targets.

This year's program was started on May 26th and is scheduled to continue until inclement weather shuts the program down near the end of October.

R. L. Moore
June 3, 1986.

**BIBLIOGRAPHY
ECSTALL PROPERTY
LIST OF REPORTS**

BACON, W.R., 1952: Ecstall River, Excerpt from Minister of Mines, Province of British Columbia Annual Report, p 81-84.

CLAYTON, R. H., January 1962: Summary of Reports on the Ecstall Mine, unpublished Texas Gulf Sulphur Report

DOLMAGE, MASON and STEWART LTD., July 11, 1961: Production Possibilities Ecstall Mine, unpublished T.G.S. Report.

DOUGLAS, H., April 20, 1953: Geology of the Ecstall Mine, unpublished T.G.S. report.

HOLYK, W., 1952: Geology of the Ecstall River Mine Area, unpublished T.G.S. report.

MacDONALD, H.J.C., August 6, 1917: Report on a Pyritic Deposit on the Ecstall River, British Columbia, unpublished Granby Mines Report.

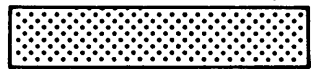
MacDONALD, H.J.C., December 1918: Progress Report on the Ecstall Exploration, unpublished Granby Mines Report.

MacDONALD, H.J.C., March 1920: Final Report on the Ecstall Exploration, unpublished Granby Mines Report.

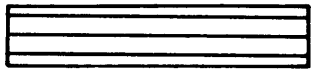
Ecstall massive sulphide deposit

Ecstall River

**FALCONBRIDGE LIMITED
ECSTALL RIVER PROJECT**



"favourable schists"

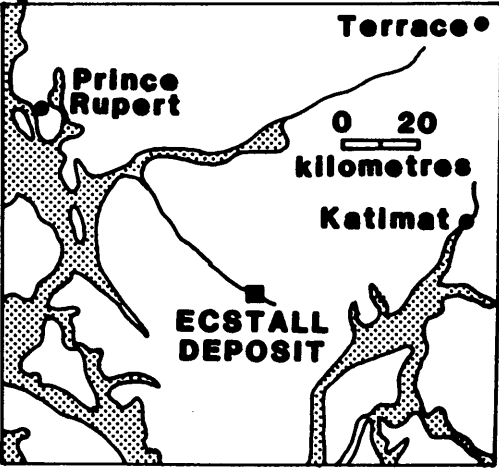
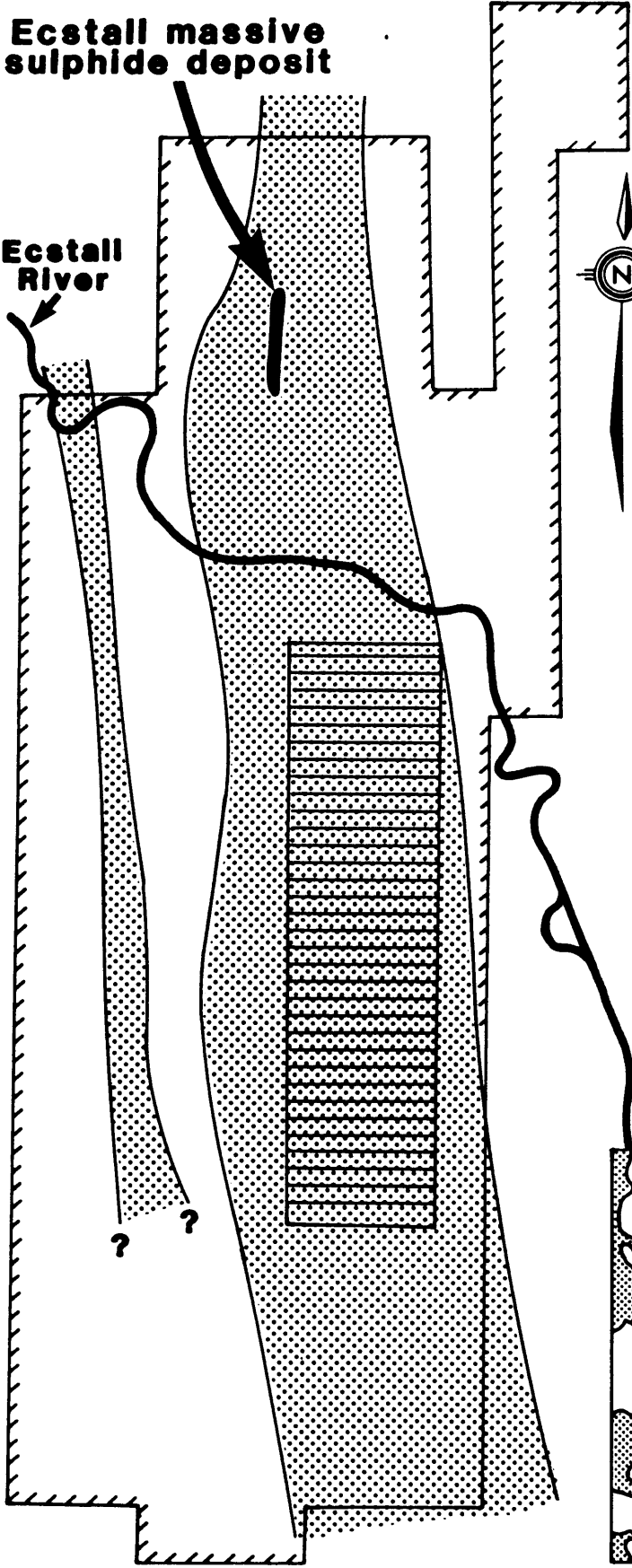


**Mariposite Option
(approx. location)**



**claim boundary
(approx. location)**

kilometres





Province of
British Columbia
Ministry of
Energy, Mines and
Petroleum Resources

FORM 1

APPLICATION FOR FUNDING

OFFICE USE ONLY
E153

INSTRUCTIONS:

- Please type or print
- Please identify program being applied for
- Please submit completed forms to:
Manager, EXPLORATION BRITISH COLUMBIA, Mineral Resources Division,
Ministry of Energy, Mines and Petroleum Resources, Parliament Buildings, Victoria, B.C.

Accelerated Mine Development Program

Mineral Exploration Incentive Program

ECSTALL RIVER PROJECT

Y8V-1X4
06.05 MGE-F # 11
AC...
FILE NO:

1. Date of Application		
May 26, 1986		
2. Applicant's Identification and Location		
Name FALCONBRIDGE LIMITED		
Address — Street Number and Name, Apt. No. 701 - 1281 West Georgia Street		Telephone No. (604) 688-5476
City, Town, Village Vancouver	Province B.C.	Postal Code V 6 E 3 J 7
3. Head Office Location		
Address — Street Number and Name P.O. Box 40, Commerce Court West		Telephone No. (416) 863-7000
City, Town, Village Toronto	Province Ontario	Postal Code M 5 L 1 B 4
4. Mailing Address (if different from above)		
Address — Street Number and Name		Telephone No.
City, Town, Village	Province	Postal Code
5. Source of Funding 100% funding through a flow through by Falconbridge Limited Attach copies of Agreements and Proof of Funding Attach Names and Addresses of principals and corporate data (where applicable). Attach list if space is insufficient.		
6. Previous Expenditures by Applicant on this property \$		
	Pre 1984	\$ 1,010,000
	1984-85	\$ 0
	1985-86	\$ 25,000
	TOTAL	\$ 1,035,000
7. Total 1986-87 Exploration Budget \$ 20,000,000		
Percentage of Total Budget to be spent in B.C. 6.25%		
8. Principal Business Activity		
MINING		<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private
9. Directors and Officers Attach a list showing position title and name see attached annual report		

10. Signature of Applicant or Signing Officer <i>Richard L. Moore</i>	Name (print) Richard L. Moore	Position Title or Occupation Regional Exploration Manager
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PROPOSED BUDGET
(Check which program being applied for)

Mineral Exploration Incentive Program

Accelerated Mine Exploration Program

**Total
Eligible Expenses**

1. Geological Surveys, Map & Report Preparation & Related Costs	\$	81,000
2. Geophysical Surveys (line-kilometres)		
Ground		
Magnetic.....80..lineal-kilometres.....	\$	10,000
Electromagnetic 80 lineal-kilometres.....	\$	40,000
Induced Polarization	\$	
Radiometric	\$	
Seismic.....	\$	
Other	\$	
Airborne	\$	
	\$	50,000
	\$	50,000
3. Geochemical Surveys (no. of samples analysed for _____)		
Soil..2000..samples-Cu,Pb,Zn,Ag,Au.....	\$	40,000
Silt.....(and pathfinder elements).....	\$	
Rock..200..samples-whole rock major oxides	\$	8,000
Other .. Cu,Pb,Zn,Ag,Au.....	\$	
	\$	48,000
	\$	48,000
4. Drilling		
Surface _____ 1500 _____ m @ \$ _____ 150/metre =	\$	150,000
Underground _____ m @ \$ _____ =	\$	
	\$	150,000
	\$	150,000
5. Related Technical Surveys		
Sampling/Assaying	\$	16,000
Petrographic.....	\$	1,000
Mineralogic	\$	1,000
Metallurgic.....	\$	
	\$	18,000
	\$	18,000
6. Preparatory/Physical		
Line/Grid (kilometres)(80± km).....	\$	38,000
Trenching (metres).....(50 metres length).....	\$	2,000
	\$	40,000
	\$	40,000
7. Tunneling, Drifting, Other Lateral Excavation, Shaft Sinking, (25% of total expenses are eligible)		
_____ m @ \$ _____ = \$ _____ x 25% =	\$	
_____ m @ \$ _____ = \$ _____ x 25% =	\$	
	\$	
	\$	N.A.
8. Other Exploration Costs (attach detailed schedules)		
.....	\$	
.....	\$	
.....	\$	
	\$	
	\$	N.A.
Total Eligible Expenses	\$	387,000
Office Use Only: Total Grant Approved	\$	