

41P12SE0527 2.11448 BENNEWEIS

GEOLOGICAL REPORT
ON
BLUE FALCON MINES LTD.
AND
ROBERT LELIEVER
PROPERTY HOLDINGS
IN
CENTRAL BENNEWEIS TOWNSHIP

by: Michael Alexander, B.Sc. and Neil Novak, B.Sc. F.G.A.C July 20, 1988

RECEIVED

JUL 29 1988

MINING LANDS SECTION

INTRODUCTION

A program consisting of linecutting and geological mapping was carried out over this property during the month of May, 1988. A baseline was established at 061° starting from the old 560 road just below the properties southern boundary, with stations every 20 meters. The offset lines are on 120 meter spacing with stations every 25 meters. Two tie lines were cut at 1000 mN and 2000 mN. A second baseline was established along the power line at 090°. Lines running north from this baseline are at 100 meter spacing with 25 meter stations, except for the three eastern most claims where lines are run along the claim lines with lines additional established between these lines appropriate intervals. Geological mapping was conducted on both grids. In addition all east - west claim lines and boundary claim lines were mapped for the claims north of the power line.

LOCATION AND ACCESS

The property is located in central Benneweis Township (see figure 1), approximately 15km. due south of the town of Gogama, Ontario.

Access to the property is easily attained by the old 560 road, a slightly grown-in gravel road which cuts around the northeast intersection of highway 144 and the 560 road. Personnel involved in the linecutting and geological survey travelled to the work site daily by motor vehicle.

PROPERTY DESCRIPTION

This property consist of 64 contiguous claims in Benneweis Township forming an irregular shaped block comprising some 2560 acres (see figure 1), the claim listing is as follows:

Benneweis Township P849865 to P849924 inclusive and P1035979 to P1035982 inclusive

These claims are held jointly by Blue Falcon Mines Ltd. and Robert Leliever both of address, 20 Advance Blvd., Brampton, Ontario L6T 4R7.

These claims are currently in good standing with the Provincial Mining Recorder.

HISTORY OF EXPLORATION

The earliest exploration activity took place during the period of 1922 to 1935, in Champagne and Churchill Townships, beginning with a gold discovery in 1922 near the railway bridge at Makwa. Several gold discoveries were made by extensive trenching activity but exploration was largely confined to the area east of the C.N.R. line. This work is described in an O.D.M report from 1934 entitled "Makwa-Churchill Area." Since these early discoveries and other discoveries in Chester Township, there have been only sporadic periods of exploration activity in the area.

In 1971 Texas Gulf Sulphur recorded work on what are now claims Pl035979, 80,81 and Pl035982. Three diamond drill holes were drilled near the common corner of these four claims for a total of 1005 feet. Logs of these holes are on file at the Ministry of National Resources office in Timmins, Ontario.

In 1980 Canadian Gold and Metals Ltd. performed a geophysical survey along with a small amount of stripping and blasting on what are now claims Pl035979, Pl035980.

The only other recorded work on the property was done by Edward J. Blanchard in the fall of 1982. At this time extensive power stripping was done over what are now claims P849880 and P849875. Two unmineralized quartz veins were exposed and blasted at that time.

The writers along with the geologist L. Bursey B.Sc. examined the property during the period late May 1988. During this time a geological survey was conducted.

PROPERTY GEOLOGY

The entire property has been geologically mapped at a scale of 1" to 50m and is presented as figure 2 (East sheet), figure 3 (West sheet) and figure 4 (North sheet). The map area lies south of the Swayze Syncline in an intrusive complex of granitic rocks and dioritic to gabbroic rocks.

The property is dominated by granitic rocks to the west and north with granitic rocks appearing again on the easternmost edge of the property. These rocks are dominantly medium grained homogeneous hornblende bearing granodiorites (la) with minor sections in the west grading to medium grained biotitic granite (lb) subordinate to these are two occurrences, one of granitic aplite (lc) and one of aphanitic blue quartz porphyry. The granitic aplite is a massive fine grained concordant dike with a granular texture. This dike cuts east-west between L600E, 6+85N and L480E, 7+30N. The aphanitic blue quartz porphyry also forms a small concordant dike just east of NL100E, 10+20N trending northnorthwest. Siragusa (1981) suggests that this unit is an aphanitic trondhjemitic sheet which may have rounded quartz grains up to a few millimeters.

The remainder of the property is dominated by a north northeast to northeast trending intrusive body intermediate to mafic migmatitic rocks. This intrusive is composed of fine to medium grained dioritic rocks (3a and 3b) and medium to very coarse grained gabbroic rocks. This unit is very heterogeneous in texture and composition varying rapidly over a few feet in grain size and mafic mineralogy. Locally the unit is texturaly homogeneous fine to medium grained diorite which closely resembles the mafic dikes in the area. Siragusa (1981) suggests that these rocks were formerly fine grained supracrystal rocks that have been subjected to widespread recrystallization and /or assimilation. Several, probably xenolithic, bodies of granodiorites, up to 50 square meters in surface area, exist within the intrusive body and occur more commonly near the contacts with the granitic rocks, several outcrops in the southeastern most claims on the north sheet (figure 4) are a fine to medium grained quartz diorite identical to the diorites found else-where in the intrusive except that it contains up to 5% visible pale blue quartz.

Large xenolithic bodies of metavolcanics are present throughtout the map area but are more commonly found in the granitic rocks. These metavolcanic xenoliths are dominated by fine to medium grained flows (la), displaying varied degrees of chloritization and recrystallization. They very from weakly foliated in an east-west direction to massive in nature and may be up to 50 meters wide and up to 100 meters long. The felsic to intermidiate metavolcanics are probably pyroclastic in origin and display varied types of alteration from silicification to saussaritization. These rocks commonly display moderate to strong vertical eastwest foliation.

Contd....

Fine to medium grained diabase dikes up to 30 meters wide are numerous throughout the property. These generally trend north - northeast and cut all previously mentioned rocks. In several locations on the west side of the property a porphyritic diabase with pale green rounded phenocrysts of feldspar up to 1 centimeter, was observed, and in places rapidly graded into homogeneous grain sized diabase.

Mineralization on the property was confined to or associated with the intermediate to mafic migmatitic rocks and occured in two forms. The first type was found sporatically in the mafic rich sections of the medium to coarse grained dioritic to gabbroic rocks. Mineralized sections typically contained 5-10% (rarely up to 10%) disseminated and/or blebby pyrite and trace -1% blebby to finely disseminated chalcopyrite. A few old trenches and blasts were observed at these mineralized locations. The second type of mineralization was observed along the stripped area between claims Pl035979 and Pl035980. In this area the mineralization is hosted in both the granodiorite and the mafic xenoliths derived from the adjacent intermediate to mafic intrusion. Mineralization is finely disseminated pyrite and chalcopyrite up to 2% and is locally concentrated in narrow shears and narrow quartz veins up to 5% pyrite and 2% chalcopyrite, other major quartz veins on the property were observed to be barren of sulphide minrealization.

No evidence of significant structural disruptions were observed on the property. However, a few minor shear zones were observed.

CONCLUSION

The map area is one of complex migmatitic and intrusive geology and consequently appears to have limited room for the development of major sulphide concentrations, however smaller concentrations of sulphides that host gold and/or platinoids may occur in this environment. Observed mineralization in the area suggests two target types for further investigation.

Firstly, sulphide zones in the grandiorite near the contact with the intermediate to mafic migmatitic rocks. This contact area should be prospected further with attention paid to locating shear zones and/or quartz vein. Any located mineralization should be sampled and assayed for gold and subsequently trenched if positive results are received.

The second target type are the sporatic sulphide concentrations in the intermediate to mafic migmatitic rocks. The whole area covered by this intrusive should be prospected to locate further sulphide concentration. Samples should be taken and assayed for gold and addition platinoids (platinum) since it is suspected the unit may be suitable host for such mineralization. Any find should have a suitable follow up program initiated.

In addition to surface prospecting basal till sampling shall be done over the target areas to solve the problem of poor surface exposure of property in the area.

This report is respectfully submitted this 20th day of July 1988.

Neil World B.Sc.

ELLOW

REFERENCE

Siragusa, G. M.
1981:Precambrian Geology of Pensyl. Lake area
Sudbury District, Ontario Geological survey
Map P2534, Geological series - Preliminary Map.

CERTIFICATE

- I, Neil D. Novak, do hereby certify:
- that I am an exploration geologist residing at 65 Cindy Avenue, Cambridge, Ontario.
- (2) that I am a graduate of the University of Waterloo, Waterloo, Ontario. and hold a Bachelor of Science degree as an Earth Scientist dated 1977;
- that I am a fellow in good standing of the Geological Association of Canada;
- (4)that I hve been engaged in the practice of this profession since graduation;
- (5) that I have no interest, direct or indirect, nor do I expect to receive any such interest in the properties or securities of Blue Falcon Mines Limited;

that I have visited the properties mentioned in this report and have worked in the stream several occasions since 1982.

> oration Geologist F.G.A.C.

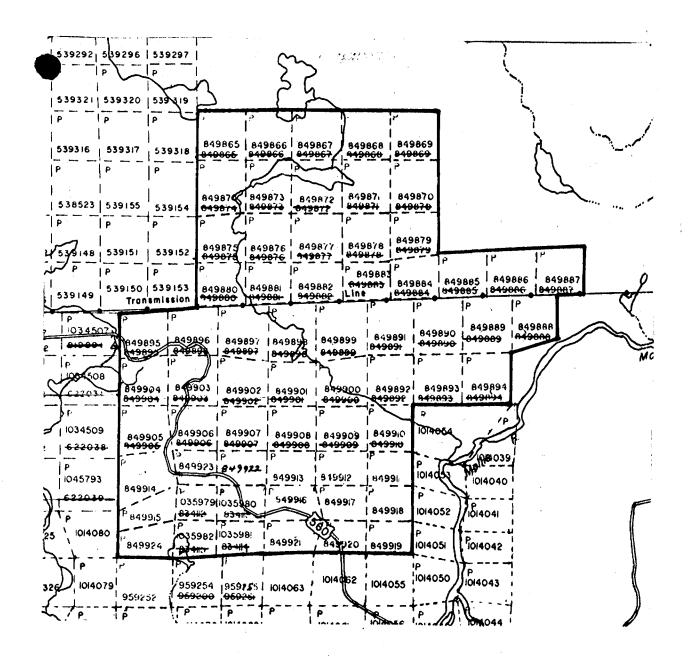
July 20, 1988

NNEIL DANOYAK

CERTIFICATE

- I, MICHAEL ALEXANDER, hereby certyfy
- (1) that I am an exploration and mining geologist residing at, 120 Baronwood Crt. in Brampton, Ontario;
- (2) that I am a graduate of Queen's University 1984,
- (3) that I have been engeged in the practice of my profession for four years.
 - (4) that I have no interest, direct or indirect, nor do
 I expect to receive any such interest in the porperties
 or securities of Blue Falcon Mines Ltd or Robert Leliever.

Michael T. Alexander B.Sc. Geologist July 20, 1988

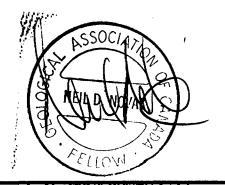


2.11448

SCALE: 1 INCH = 40 CHAINS

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Figure 1
Property Location Map
Benneweis Township



DWT



W8806-141 Ministry of Northern Development and Mines

Namopana Postal Address of Person Certifying

Report of Work

(Geophysical, Geological, Geochemical and Expenditures



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Mining

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Ministry of

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Northern Development

Report of Work 1/0000 22 8

(Geophysical, Geological

Geochemical and Expenditures)

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Instructions: — Please type or print.

— If number of mining claims traversed exceeds speed on this form, attach a list.

Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns.

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GEOLOGICAL	MAPPING		BENNEWEIS	TWP.
Claim Holder(s)				or's Licence No.
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Address				
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BLUE FALCON		Day Mo	88 01 06 88.	78.24 Km
Name and Address of Auth	or (of Geo-Technical report)			
	DER (AS ABOVE)			
Credits Requested per E	sch Claim in Columns at right	Mining Claims Traversed	d (List in numerical sequ	ience)

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Total number of mining claims covered by this report of work.

64

For Office Use Only
Total Days Cr. Date Recorded
Recorded
Date Approved as Recorded Bra

Branch Director What

July 21, 1986 Certification Veriffing Report of Work

in columns at right.

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying

Gordon Leliever 20 Advance Blvd. Brampton Ontario

voorded Helser of Agent (Signature)

Cartifled by (Signature)

; 8-11-88

4:23PM ;

7052648723-)

4169216926;# 2

PAGE ZOFZ.

Also included in this report of work

Benneweis Twp

P. 849911 * 849912 849913 849914 * 849915-* 849916 Ж 849917 ** 849918 * 849919 849920 🛠 849921 * 849922* 849923 * 849924-* 1035979 1035980 1035981

1035982

* Maximum allowable credit akready obtained under Section 77 (11) of the Mining act.

B. Bailey



837 (85/12)



Ministry of Northern Development and Mines

Geophysical-Geological-Geochemical Technical Data Statement

File	
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TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Survey Company BLUE FALL Author of Report NELL NOJA	EIS TWP. CON MINEY UTD. IEUER LON MINES UTD. IC., MIKE ALEXANDER ANCE BLUD BRAMADIN. OF	MINING CLAIMS TRAVERSED List numerically P - 849865, 849866, 849867, 84888. (prefix) (number) 849869, 849870, 849871, 849872,
Total Miles of Line Cut 78. SPECIAL PROVISIONS CREDITS REQUESTED	•	849881, 849882, 849883, 849884, 849885, 849886, 849887, 849888,
ENTER 40 days (includes line cutting) for first survey. ENTER 20 days for each additional survey using same grid.	Electromagnetic Magnetometer Radiometric Other Geological Geochemical	849889, 849890, 849891, 849892, 849893, 849894, 849895, 8498942, 849897,849898,849899,849900, 849901, 849902, 849903, 849904, 849905, 849906, 849907, 849908,
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	ications 2.4227	1035979, 1035.980, 1035.981, 1935.982
Previous Surveys File No. Type Date	Claim Holder RECEIV	ED .
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	MINING LANDS S	
		TOTAL CLAIMS 69

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS - If more than one survey, specify data for each type of survey

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N	Number of Stations	Number	of Readings	
	tation interval			
P	rofile scale			
C	Contour interval			
. Tr	Instrument			
MAGNETIC	Accuracy - Scale constant			
	Diurnal correction method			
MA	Base Station check-in interval (hours)			
	Base Station location and value			
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AG	Coil separation			
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INDUCED POLARIZATION

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Energy windows (levels)	
Height of instrument	Background Count
Size of detector	
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AIRBORNE SURVEYS	
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Accuracy	cify for each type of survey)
Aircraft used	
Sensor altitude	
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Miles flown over total area	

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken					
Total Number of Samples	ANALIS MORE METHODS				
Type of Sample(Nature of Material)	Values expressed in: per cent				
Average Sample Weight.	p, p, m, 🔛				
Method of Collection	p. p. z. ==				
Maction of Confection.	Cu, Pb, Zn, Ni, Co, Ag, Mo, As, (circle)			
Soil Horizon Sampled	Others				
Horizon Development		ts)			
Sample Depth	Extraction Method	_			
Terrain					
Drainage Development	·				
Estimated Range of Overburden Thickness		ts			
	Extraction Method				
	Reagents Used				
SAMPLE PREPARATION	Commercial Laboratory (tes				
(Includes drying, screening, crushing, ashing)	Name of Laboratory				
Mesh size of fraction used for analysis	Extraction Method				
	Analytical Method				
	Reagents Used				
<u></u>					
General	General				
General					

August 31, 1988

Your File:

W8806-141

W8806-228

Our File :

2.11448

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 287

Dear Sir:

RE: Notice of Intent dated August 15, 1988.

Geological Survey submitted on Mining Claims

P 849865 et al in the Township of Benneweis

ONTARIO GEOLOGICAL RURVEY
ASSESSMENT FILES
OFFICE
SEP 8 1988

RECEIVED

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

W.R. Cowan, Manager Mining Lands Section Mines & Minerals Division

Whitney Block, Room 6610 Queen's Park Toronto, Ontario M7A 1W3 Telephone: (416) 965-4888

AB:sc

CC: Blue Falcon Mines Ltd & Mr. Robert Leliever 20 Advance Blvd Brampton, Ontario L6T 4R7

oc: Mr. G.H. Ferguson Mining & Lands Commissioner Toronto, Ontario cc: Resident Geologist Timmins, Ontario



Technical Assessment Work Credits

2.11448

te August 15, 1988

Mining Recorder's Report of Work No. W8806-141

W8806-228

Recorded Holder Blue Falcon Mines Limited and Robert Leliever	
Township XXXXXa Benneweis	
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	
Magnetometer days	P 849865 to 70 inclusive 849874 to 924 inclusive
Radiometric days	1035979-80-81
Induced polarization days	
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 40 days	
Geochemicaldays	
Man days 🗌 Airborne 🗍	
Special provision X Ground X	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
Special credits under section 77 (16) for the following mining claims	
	00 1
<u>30 days</u>	20 days
P 849871-72-73	P 1035982
No credits have been allowed for the following mining claims	
	insufficient technical data filed

The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

