District Geologist, Prince George

```
ASSESSMENT REPORT 18610 MINING DIVISION: Cariboo
\begin{tabular}{lllllll} 
PROPERTY: & Eureka & & & \\
LOCATION: & LAT & 52 & 19 & 00 & LONG & 120 \\
& UTM & 10 & 5798716 & 662453 & & \\
& & NTS & \(093 A 07 E\) & & & \\
& & & &
\end{tabular}
CAMP: 036 Cariboo - Quesnel Belt
CLAIM(S): EN 5
OPERATOR(S): Sirius Res.
AUTHOR(S): Rowan, L.G.
REPORT YEAR: 1989, }35\mathrm{ Pages
COMMODITIES
SEARCHED FOR: Gold,Copper
KEYWORDS: Triassic - Jurassic,Takla Group,Volcanics,Sediments,Intrusives
WORK
DONE: Drilling,Geochemical
DIAD 172.5 m 2 hole(s)
    Map(s) - 3; Scale(s) - 1:50 000,1:5000,1:250
        SAMP 46 sample(s) ;AU,CU,ZN
    02137,02662,03814,05215,09786,10723,11935,13365,15527
    093A 011
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DRILLING REPORT ON THE 1988 EXPLORATION PROGRAM FOR THE EUREKA CLAIM GROUP

LOG NO: OSO9 $\frac{\text { RD Q } 2}{\text { RCTINN Date received report }}$ bade from amendments 35 p :

FILE WO:

# MACKAY RIVER AREA, CARIBOU MINING DIVISION BRITISH COLUMBIA, CANADA 

LATITUDE: $52^{\circ} 18^{\prime} \mathrm{N}$ LONGITUDE: $120^{\circ} 38^{\prime} \mathrm{W}$

NTS: 93A/7E

## PROPERTY OWNERS: ERIC SCHOLTES

ROBERT CARSON
MEX INC.

OPTIONORS: SIRIUS RESOURCE CORPORATION

MARCH 10, 1989

## SUMMARY

The Ashton Copper-Gold project focuses attention on the Eureka group of mineral claims which comprise 51 claim units covering approximately 23 square kilometers on Eureka Peak Mountain, in the Horsefly River region of the Cariboo Mining Division in Central British Columbia.

Interest in the area began in 1958 with the discovery of porphyry copper mineralization associated with calcic-alkaline granitoid stocks in the vicinity of Eureka Peak. Work on the property has occurred intermittently since then for its copper-porphyry potential by several companies; including Helicon Exploration, Amax, Riocanex, Noranda and in 1981 by Umex Corporation. The rock geochemical survey conducted by Umex Corporation identified several gold anomalies in the Eureka Peak area. More recently, copper mineralization with gold in association has been identified in samples taken from the property.

In the Fall of 1988, Sirius Resource Corporation optioned the Eureka group from its owners and conducted a limited exploration program consisting of data compilation and diamond drilling. The purpose of the drilling was to test a small portion of the alteration halo surrounding the nearby Eureka Peak intrusive. The drilling produced anomalous copper values, but the alteration halo was not reached.

Plutons compositionally related to the type of intrusive found at Eureka Peak have historically hosted significant gold deposits as zoning features accompanying porphyry copper mineralization. At current metal prices, the discovery of a large tonnage coppergold porphyry type deposit would be economically attractive.

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STATEMENT OF QUALIFICATIONS

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3. CLAIM INDEX AND LOCATION MAP (After Page 2)

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4. REGIONAL GEOLOGICAL MAP
5. DRILL HOLE LOCATION MAP
6. CROSS SECTION OF SEP-88-08

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APPENDIX II ASSAY PROCEDURE AND ANALYTICAL RESULTS

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### 1.0 INTRODUCTION

### 1.1 Scope

In November of 1988, 1257 Geological Ltd. was commissioned by Sirius Resource Corporation to conduct an assessment of the geology and to supervise a short diamond drilling program on the Ashton Copper-Gold project. This report is based upon the results of the diamond drilling and from information contained in previous reports that were made available to the author.

### 1.2 Location and Access

The Ashton Copper Gold Project is situated at approximately $120^{\circ} 38^{\prime} \mathrm{W}$ and $52^{\circ} 18^{\prime} \mathrm{N}$ about 375 km northeast of Vancouver. Access is by highway 97 from the 150 Mile House junction easterly for 55 km to the town of Horsefly, then northeasterly along an all-weather gravel road for 55 km to about Post 153. From there, a branch road crosses the Horsefly River and enters into the MacKay River valley. The base camp at Hawkley Creek is reached after 7 km and the drill site is approximately 4 km beyond camp. Topography is quite steep on the property with Eureka Peak at 2388 metres ( 7959 feet) being the highest point.

### 1.3 Claims

The property consists of 25 claims totalling 51 units covering an area of 11.8 square kilometers. The claims are grouped, for assessment purposes, in the Eureka Group.



0

| Claim Name | Units | Record Number | Expiry <br> Date | Owner |
| :---: | :---: | :---: | :---: | :---: |
| EM 1 | 16 | 3367 | APRIL 2, 1989 | UMEX INC. |
| EM. 2 | 10 | 3368 | APRIL 2, 1989 | UMEX INC. |
| EM 4 | 3 | 3370 | APRIL 2, 1989 | UMEX INC. |
| EN 1 | 1 | 30398 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 2 | 1 | 30399 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 3 | 1 | 30400 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 4 | 1 | 30401 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 5 | 1 | 30402 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 6 | 1 | 30403 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 14 | 1 | 30477 | AUGUST 5, 1989 | ERIC SCHOLTES |
| EN 28 | 1 | 30646 | SEPTEMBER 28, 1989 | ERIC SCHOLTES |
| EN 29 | 1 | 30647 | SEPTEMBER 28, 1989 | ERIC SCHOLTES |
| EN 104 | 1 | 30618 | AUGUST 30, 1989 | ERIC SCHOLTES |
| EN 105 | 1 | 30619 | AUGUST 30, 1989 | ERIC SCHOLTES |
| EN 106 | 1 | 30620 | AUGUST 30, 1989 | ERIC SCHOLTES |
| EN 107 | 1 | 30621 | AUGUST 30, 1989 | ERIC SCHOLTES |
| EN 109 | 1 | 30623 | AUGUST 30, 1989 | ERIC SCHOLTES |
| NS 1 |  | 3373 | APRIL 2, 1989 | UMEX INC. |
| NS 2 | 1 | 3374 | APRIL 2, 1989 | UMEX INC. |
| CS 55 | 1 | 48017 | OCTOBER 24, 1989 | ROBERT J. CARSON |
| CS 56 | 1 | 48018 | OCTOBER 24, 1989 | ROBERT J. CARSON |
| SF 1 | 1 | 1688 | MAY 30, 1989 | ROBERT J. CARSON |
| SF 2 | 1 | 1689 | MAY 30, 1989 | ROBERT J. CARSON |
| SF 3 | 1 | 1690 | MAY 30, 1989 | ROBERT J. CARSON |
| SF 4 | $\frac{1}{51}$ | 1691 | MAY 30, 1989 | ROBERT J. CARSON |



| 1257 GEOLOGICAL LTD. |  |  |  |
| :---: | :---: | :---: | :---: |
| SIRIUS RESOURCE CORPORATION |  |  |  |
| ASHTON COPPER-GOLD PROJECT |  |  |  |
| CLAIM MAP |  |  |  |
| OEOLOAIST | LR | scale | 30,000 |
| DRAWN 日Y | EBC | date | MARCH 19 |
| CHECKED Br | MM |  | URE 3 |

### 1.4 Property History

The claims that comprise the Ashton Copper-Gold project were first staked by prospector Eric Scholtes of Williams Lake in 1958. Since then there has been extensive reconnaissance exploration work for a porphyry copper style deposit primarily in cirques 1,2, and 7. Following is a list of the exploration work that has been carried out on the property:

1958 The copper showings were discovered on Eureka Peak property by prospector E. Scholtes of Williams Lake.

1965-66 Helicon performed following work on the property: $X$-ray drilling in Cirque 1 and 7 , construction of the 72 foot long adit in Cirque 2, drilling of 630 foot horizontal hole from the adit, compilation of contours at 100 foot intervals onto the topographic maps, reconnaissance aeromagnetic, geochemical and geological surveys, ground EM and IP surveys in Cirque 2.

1967 Chapman, Wood and Griswold dropped their option after having spent a reported $\$ 155,000.00$.

1968 H. Trario spent $\$ 20,000$ on EM survey in Cirque 2 and diamond drilling ( 3 holes were drilled).

1968 Property was restaked by Scholtes and Carson.

1981 UMEX Inc. optioned the property. A. Chevalier undertook detailed lithogeochemical sampling program and he concluded that the property had potential for 1) $\mathrm{Cu}-\mathrm{Au}$ mineralization and 2) $\mathrm{Zn}, \mathrm{Ag}, \mathrm{Pb}$ and Mo mineralization.

1983 Dome Exploration optioned the Eureka Peak property from UMEX Inc. Geochemical sampling of silt, soil and rock-chip was undertaken in order to confirm the gold anomalies indicated by UMEX's sampling program in 1981. Only trace amounts of gold were located with the exception of one very narrow shear zone within the auguite porphyry breccia ( 600 metres southeast of Eureka Peak) where samples ran 1.3 to $1.7 \mathrm{~g} /$ ton Au .

1984 Dome Exploration carried out another lithogeochemical sampling program which was concentrated on Cirque 2 and 3 in order to confirm gold anomalies indicated from previous sampling.

1986
Umex Inc. completed a 1:5000 geological mapping of Cirque $2,3,5$ and 7. Further lithogeochemical sampling took place, with 98 samples being collected.

### 1.51988 Exploration Program

The purpose of the 1988 Exploration program was to compile available information on the property and to establish the volcanic/intrusive contact through diamond drilling. Two drill holes were sited from existing roads to cut the contact as it
was projected by UMEX in 1986. Diamond drilling began on November 22, 1988 and was completed on November 28, 1988.
The first hole failed to reach bedrock after penetrating 25.3 metres of overburden, and the second hole reached a depth of 147.2 metres at an inclination of $-50^{\circ}$, but failed to cut the contact. The drill core was transported to the base camp at Hawkley Creek for logging, sampling and subsequent storage. Lorne G. Rowan supervised the commencement of the diamond drilling and core sampling, and Mark A. Morrison continued and finished the logging and drill core sampling. A total of 46 samples were selected, split by a manual blade splitter and shipped to CDN Resource Laboratories in Burnaby for assaying. The remaining portion of the drill core has been stored in enclosed racks at the Hawkley Creek base camp, where it is available for future inspection. Anomalous values of copper were encountered along with alteration which was thought to be indicative of the periphery of the zonal alteration caused by the intrusive.

### 2.0 GEOLOGY

The Ashton Copper-Gold Project claim group is located on and around Eureka Peak and its ridgeline. Eureka ridge is formed on the Eureka Peak syncline; which lies on the eastern flank of the Quesnel Trough, near its boundary with the Omineca Belt. The rock units exposed on the property have been thought to be part of the Triassic-Jurassic Takla Group rocks of the Quesnel Trough. However they are non-typical and may constitute a unique sequence of a granitoid stock that has intruded into its own co-magmatic pile of sedimentary volcanics. The intrusive is thought to be Cretaceous in age and is an epizonal complex. Composition is primarily granodioritic, but
ranges from felsic quartz monozonite through to peridotite and amphibolite. Underneath the assemblage of volcano-sedimentary and intrusive rocks is a series of ultramafic, sill-like intrusions. These have been metamorphosed and are thought to be older than the volcanics. Blocks and fragments of these intrusive ultramafics are found in the augite-porphyry breccia of the overlying mafic volcanics. A major fault exists above the ultra mafics and it is along this fault that the later granodioritic stock probably intruded.

The Diamond drill hole SEP-88-08 was drilled in a sequence of mafic volcanics. It intersected a series of both brecciated and non-brecciated flows, minor fine grained dykes and tuff beds. Weak, pervasive, propylitic alteration was present throughout all units. Calcite occurs as stringers, veinlets and blebs in the flow rocks and in the brecciated sections it supports up to 2 cm clasts and comprises between $10 \%$ and $20 \%$ of the rock. Both pyrite and pyrrhotite occur as disseminations and blebs. The pyrrhotite is anhedral and the pyrite as anhedral to euhedral, up to 2 mm (cubic crystals). All rock types have sections of coarse, milky white quartz-calcite veins and veinlets. Sections of veining are often accompanied by stronger chloritic alteration of mafics and light green, sub 1 mm stringers of probable epidote.

### 3.0 DISCUSSION OF RESULTS

The 1988 exploration program on the Ashton Copper Gold project was successful in accomplishing its objectives. The compilation of reports from previous work programs on the property has provided a foundation of information for Sirius Resource Corporation to interpret and utilize towards further
exploration.

Several drill targets have already been identified above the adit constructed by Helicon in 1966 and along the flank of the ridge which forms the north slope of Eureka Bowl. These drill targets will be accessible during the summer months only.

A ground EM survey conducted in 1966 outlined the boundaries of a large electromagnetic conductor surrounding the Eureka Peak intrusive. The conductor has been interpreted to represent the pyrrhotite halo which extends from the intrusive contact into the surrounding volcanic rocks. Reconnaissance mapping supports this interpretation.

The limited drill program completed in November, 1988 by 1257 Geological Ltd. on behalf of Sirius Resource Corporation, was intended to confirm the location of the inferred contact between the intrusive and the volcanic rocks at depth. The second drill hole intersected a series of weakly propylitic altered mafic volcanic rocks and tuffs. The presence of small veinlets and disseminations of pyrite and pyrrhotite as well as minor amounts of disseminated chalcopyrite in the drill core are thought to be peripheral products of the zonal alteration caused by the intrusive. Mapping has shown that copper mineralization extends up to 70 metres into the altered mafic volcanics, with the pyritic halo extending another 30 metres beyond that. The diamond drill hole did not reach the area of strongest alteration, although anomalous copper values up to 295 ppm were intersected. All indications are that the potential exists for an economic copper porphyry deposit closer to the intrusive.

### 4.0 CONCLUSIONS

The property which comprises the Ashton Copper-Gold project has potential for hosting an economic copper porphyry deposit with associated gold mineralization. Previous work on the property has identified a halo of disseminated copper mineralization which extends approximately 70 metres into the surrounding volcanic rocks from the intrusive. The drilling completed in November 1988 on behalf of Sirius Resource Corporation intersected zoning features of this alteration halo, returning anomalous values of copper.

Plutons compositionally related to the Eureka Peak intrusive have historically hosted economic gold deposits in British Columbia. Results to date warrant continued exploration of this intrusive complex.

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5.0 ITEMIZED COST STATEMENT
B.G. Richards, P. Eng.3 days @ $\$ 400.00$ per dayM. Morrison, Geologist7 days @ $\$ 230.00$ per day $1,610.00$
D. Barrett, Core Splitter
2 days @ $\$ 100.00$ per day ..... 200.00
Diamond Drilling172.5 metres @ $101.10 /$ metre $17,440.29$
Road Maintenance, Snow RemovalGrader$1,500.00$
Camp CostsRental of trailer complex andassociated equipment
Catering
2,080.00
1,764.00
Maintenance
1,200.00

$$
5,044.00
$$

Transportation
Trucks and ATV's ..... 883.38
Assay CostsCDN Resource Laboratories46 samples @ $\$ 12.40$570.40
Report Writing
Geologist, draftsman, typing,reproductions3,240.00
TOTAL COSTS ..... $\$ 31,688.07$

## REFERENCES

1. Chevalier, A. (1982) Eureka Project, Report on the 1981 Exploration Program
2. DUBA, D. (1986) Geological and Geochemical Report for the 1986 Eureka Peak Project. Report for UMEX Inc.
3. HURD, G.M. (1966) Summary Report, Eureka Project.
4. MUSTARD, D.K. (1969) Property Examination, Eureka Mountain Prospect Report for AMAX
5. ODDY, R.W. and CAMERON, R.S. (1984) Geological and Geochemical Report for 1983, Eureka Peak Project 237. Report for Dome Exploration (Canada) Ltd.

## Author's Statement of Qualifications

I, Lorne G. Rowan, do hereby certify:

1. That I am a self-employed geologist with an office at 32595 Dalhstrom Avenue, Abbotsford, B.C.
2. That I graduated from the University of British Columbia in 1985 with a degree of Bachelor of Science in Geology.
3. That I have practiced my profession since graduation in British Columbia and the Yukon Territory.
4. That I am a member in good standing of the Geological Association of Canada.
5. That I personally conducted or supervised the work program described in this report dated February 28, 1989.
6. That I own shares in Sirius Resource Corporation.
7. That written permission from the author is required to publish this report in any Prospectus or Statement of Material Facts.

Dated at Vancouver, British Columbia this day of March, 1989.


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APPENDIX I - DRML LOGS: SEP-88-07,08

DIAMOND DRILL LOG HOLE NO. SEP-88-07


ABBREVIATIONS FOR DRIEL EOGS

## AMOUNT: A=amount in percentage; tetrace; m=minor; 10=percentage,eg.10\%.

COLOURS: bk=black; bl=blue; br=brown: grn=green; gry=grey

MODE OF OCCURRANCE: Bそblebs; Drx=brecこid(ted); CBA=core to becicing angle; Clv=cleavage-plane; diss, =disseminat(ions,eci) F=ioliation; G=gouge; $I=i$ megular veins; MSvmassive; Q=quilteci, disseminated patcines; $V=v e i n s ;$ W=icox work. MINERALS: Ars=arsenopysite; Au=visible gola; bio=biotite; cal.=calcite; chi=chlorite; cpy=chalocopyrite; F-spar=felcspars! Fe-carb=iron carbonate; gn=galema; Mag=uagnetite; POFpyr=hotite; py=pyrite; ;lag=plagioclase; gtz=quartz; ser=sericite; spl=spinaierite

DIAMOND DRILL LOG HOLE NO. SEP-88-08

latitude:
oeparture OEPARTURE:
MORIZ TRACE :
vear. trace: $\frac{93 \mathrm{~m}}{115 \mathrm{~m}}$ COMPLETED ON: A.M. NOV. 28 . 1988
pace: 1 or 10

| FROM (fent) in I | 70 (feat) (m). | $\begin{aligned} & \text { ROCX } \\ & \text { fYpg } \end{aligned}$ |  | 619HOLOGY | suiphross |  |  |  |  | gangue - alieration |  |  |  |  |  |  | samples N\%. . | WTERY. <br> (fat) <br> (m) | assay <br> ppb | ASSAY | $\left\|\begin{array}{c} \text { MVRAGE } \\ \text { assar } \\ 02 / T o n / i v \end{array}\right\|$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | - |  |  |  | - | 1 |  | I |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 1 | AIH | 41 m | 4 | H | 411 | $4{ }_{4}$ | AIN | 41 N | AIM | 11 | $\pm$ |  |  |  |  |  |
| 0 | 0, 01 m |  |  | Casing to Bed rock |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0.91 | 3.96 | Amo |  | -amphibolite w/minor calcic stgs |  |  |  |  |  |  |  |  |  |  |  |  | 2.14 | 3.75 | <3 |  |  |
|  |  |  |  | -minor epidote and hornblende laths |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | to small crystals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -more epi and hbl $x^{\prime} 1 \mathrm{~s}$ up to 2 mm at |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
|  |  |  |  | $2.44 \mathrm{~m} \mathrm{w} / \mathrm{m}$. dissem. py |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -m calcite in fractures w/0y a $20^{\circ}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | +مr/A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -3.6 more epi and hbl in anhedral |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $\mathrm{x}^{\prime}$ ]s |  |  |  |  |  |  |  |  |  |  |  |  |  | $=$ |  |  |  |
| 3.96 | 5.10 | Amp |  | -epi stgs in a more mafic alt'd amp., |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | flowage direction $30^{\circ}$ to C/A |  |  |  |  |  |  |  |  |  |  |  |  | 3.961 | 5.05 | 3 |  |  |
|  |  |  |  | -hbl average $\simeq 10 \%$ overall w/calcite |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | blebs \& stgs and chlorite w/mafic f.g. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | matrix |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## ABEREVIATIONS FOR DRIIT LOGS

AMOUNT: $A=$ mount in pescentage; t=tacs; maninor; 10mgercantage, eg. 10\%.
COLOURS: bk=black; bl=blue; br=iorown: grn=green; grf=grey



 spl=spinalerite



| $\begin{aligned} & \text { EROM } \\ & \text { llaell } \\ & \text { lal } \end{aligned}$ | $\begin{gathered} 70 \\ \|\operatorname{lent\|}\| \\ \|\mathrm{m}\| \end{gathered}$ | $\begin{aligned} & \text { ROCX } \\ & \text { TYPE } \end{aligned}$ | a$\stackrel{1}{6}$00$\vdots$ | LITMOLOGY | SULPHIOES |  |  |  |  | GAMGUE - ALTERATION |  |  |  |  |  |  |  | samples <br> $\mathrm{N}^{8 .}$ | inteay. (teal) (a) | ASSAT <br> ppb | Assat | $\begin{aligned} & \text { WERAGE } \\ & \text { LSSAY } \\ & \text { a/tea/II. } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | H 4 / H |  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 4 | H | A/H |  |  | A1H | 414 | A1s | 41 H | $1{ }_{14}$ | 4 |  |  |  |  |  |
| 29.9 | 32.9 | Amp |  | -increasing epi swirls and hbl, fract. |  |  |  |  |  |  |  |  |  |  |  |  |  | . |  |  |  |  |
|  |  |  |  | $\simeq 43^{\circ}$ to $\mathrm{C} / \mathrm{A} \mathrm{w} / \mathrm{chl}$ - calc infilling |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -sma $11 \mathrm{hbl} \times 1 \mathrm{~s}$ (euhedral) up to $3 \times 1 \mathrm{~cm}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | and cut by calc vn $\rightarrow$ softer $\therefore$ altered |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | \& chloritic (replacement) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 32.9 | 39.2 | Amp |  | -increase in bl/gry remnant mag and calc. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -also py diss. cubes (up to 1 cm ) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -calc/chl. in fractures $\simeq 10^{\circ}$ to $\mathrm{C} / \mathrm{A}$, |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | fractures $\simeq 50^{\circ}$ to $\mathrm{C} / \mathrm{A}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -grades to more mafic (dkr grn-blk $\rightarrow$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | chlorite) and epi 36.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -epi, plag.? (pale pink/brn.) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -dissem. py in small clusters or in mag. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | x1s |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -calc. stgs \& $V \mathrm{n} \simeq 80^{\circ}$ to $88^{\circ} \mathrm{C} / \mathrm{A}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39.2 | 39.6 | Tuff |  | -alt'd tuff w/epi swirls and amph w/m. py |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | cubes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39.6 | 42.2 |  |  | -Amph., $40 \rightarrow 40.6$ lesser ch1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -40.6. increasing chl and mafic swirls |  |  |  |  |  |  |  |  |  |  |  |  | 58139 | 42.06 | 42.5 | <3 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42.2 | 42.35 |  |  | -calci/qtz vn w/epi and m. dissem. py |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $\simeq 50^{\circ}$ to C/A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -grade to amph then more calcic swirls |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | w/epi |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| . |  |  |  | . |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| FROM \|lesil |al |  | $\begin{aligned} & \text { ROCX } \\ & \text { IYPE } \end{aligned}$ | 晨 | LITMOLOGY | SUGPHIOES |  |  |  |  | GAMGUE - ALTERATION |  |  |  |  |  |  | SMapls | $\begin{gathered} \text { Mr ERY } \\ \text { (leen) } \\ \text { (an) } \end{gathered}$ | Assat <br> ppb | ASSAY | $\begin{gathered} \text { WERAGE } \\ \angle S S A Y \\ \text { Oe/ten/tis. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | n | 41 m | A/H | A1H | 4 | 18 | $4 / \mathrm{M}$ | A $/ \mathrm{H}$ | AlH | AIM | AIM | 4 |  |  |  |  |  |
| 61.87 | 62.3 | Tuff |  | -alt. m. tuff w/epi. overprint |  |  |  |  |  |  |  |  |  |  |  |  | . |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | I |  |  |  |  |  |  |  |  |  |
| 62.3 | 80.3 | Amp |  | -m. amph. w/dissem. py |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -63.42-63.63 coarse grain (.5-1 mm) |  |  |  |  |  |  |  |  |  |  |  | 58145 | 63.05 | 63.90 | <3 |  |  |
|  |  |  |  | mainly epi \& mafics w/m. py cubes |  |  |  |  |  |  |  |  |  |  |  | 58146 | 67.1 | 68.0 | $<3$ |  |  |
|  |  |  |  | -grade to amph. gradually w/py x 1 s (2) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | up to 1.5 cm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| , |  |  |  | -variable chloritic epi. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -67.24 m. mag w/relict mag. w/py dissem. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | \& cubic |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $-67.6 \rightarrow$ amph. m. Brx |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $-72.0 \rightarrow$ start m. mag. grade to up to |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | ( $70 \% 2 \mathrm{~mm}$ mag x 7 s ) more mag. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -variable small xls w/ lg. clusters in |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | f.g. amph. matrix |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | calcic stgs, m.epi, m. py |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -at $\simeq 79.4$ mag. disappears |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -80.0 epi swirls w/m. calc stgs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80.3 | 81.0 |  |  | -f.g. tuffaceous matrix epidote matrix |  |  |  |  |  |  |  |  |  |  |  | 58147 | 80.2 | 81.3 | $<3$ |  |  |
|  |  |  |  | $(\approx 80 \%) \rightarrow 80.5$ py cubes \& diss. (up to |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | . 5 mm diss cubes) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | -grade to f.g. Lt grey/b1. amph/tuff |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 81.0 | 85.0 |  |  | Amph w/diss. py |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |






0 APPENDIX II: ASSAY PROCEDURE AND ANALYTICAL RESULTS

```
Lorne Rowan
1257 Geological Ltd.
1150 - 609 West Hastings
Box 26
Vancouver. B.C.
VGB 4W4
December 14. 1988
```

Dear Lorne:
The following are the procedures we followed for analysis
of your samples from the Frasergold project:


Geccher A口. Cu - 0.5 g of sample was digested in aqua regia on a hot water bath for 2 hours. The solution was bulked to 10 ml with distilled water and then presented to the AA for silver and copper determinations.

6329 BERESFORD STREET, BURNABY, B.C. V5E 183 / PH: 435-8376 / FAX: 435-9746
GEOCHEMICAL REPORT

1257 Geological Ltd. 1150 - 609 West Hastings Box 26
Vancouver. B.C., V6B 4W4

Number: 88621
Date: December 5. 1988
Proj.: Aahton Gold Area ENS

Attn: Lorne Rowan
cc. Sirius Resource Corporation

|  | $\begin{array}{r} A u \\ p p b \end{array}$ | $\begin{array}{r} \mathrm{Cu} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Zn} \\ \text { ppm } \end{array}$ |
| :---: | :---: | :---: | :---: |
| 58126 | $\leqslant 3$ | 26 | 30 |
| 58127 | 3 | 78 | 40 |
| 58128 | < 3 | 52 | 44 |
| 58129 | $<3$ | 22 | 19 |
| 58130 | $<3$ | 5 | 26 |
| 58131 | $<3$ | 44 | 52 |
| 58132 | < 3 | 24 | 17 |
| 58133 | $<3$ | 40 | 24 |
| 58134 | $<3$ | 108 | 44 |
| 58135 | $<3$ | 40 | 9 |
| 58136 | $<3$ | 15 | 18 |
| 58137 | $<3$ | 38 | 24 |
| 58138 | < 3 | 19 | 15 |
| 58139 | $<3$ | 168 | 10 |
| 140 | $<3$ | 122 | 20 |
| 48141 | $<3$ | 28 | 26 |
| 58142 | $<3$ | 174 | 26 |
| 58143 | $<3$ | 24 | 32 |
| 58144 | $<3$ | 134 | 34 |
| 58145 | $<3$ | 28 | 28 |
| 58146 | $<3$ | 26 | 14 |
| 58147 | $<3$ | 18 | 18 |
| 58148 | 7 | 118 | 54 |
| 58149 | 53 | 98 | 76 |
| 58150 | 13 | 240 | 72 |
| 58151 | $<3$ | 52 | 34 |
| 58152 | $<3$ | 28 | 22 |
| 58153 | $<3$ | 285 | 28 |
| 58154 | $<3$ | 164 | 20 |
| 58155 | $<3$ | 205 | 44 |
| 58156 | 43 | 280 | 56 |
| 58157 | $<3$ | 64 | 26 |
| 58158 | 13 | 74 | 17 |
| 58159 | 3 | 182 | 36 |
| 58160 | $<3$ | 76 | 20 |
| 58161 | 7 | 104 | 24 |
| 58162 | $<3$ | 44 | 13 |
| 58163 | $<3$ | 64 | 24 |
| 58164 | 3 | 295 | 28 |
| 165 | $<3$ | 68 | 19 |

6329 BERESFORD STREET, BURNABY, B.C. V5E 1B3 / PH: 435-8376 / FAX: 435-9746
GEOCHEMICAL REPORT

10: 1257 Geological Ltd.
1150 - 609 West Hastings
Box 26
Vancouver. B.C. V6B 464

Number: 88621
Date: December 5. 1988
Proj.: Ashton Gold Area ENS

Attn: Lorne Rowan
ce. Sirius Resource Corporation

|  | Au | cu | Zn |
| :--- | ---: | ---: | ---: |
|  | $p p b$ | $p p m$ | $p p m$ |
| 58166 | 3 | 74 | 20 |
| 58167 | 7 | 90 | 17 |
| 58168 | 10 | 76 | 30 |
| 58170 | 3 | 64 | 13 |
| 58171 | 10 | 86 | 20 |
|  | 7 | 44 | 28 |

$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\square$
$\square$ GEOCHEMICAL ANALYSIS CERTIFICATE





| 58139 | 2 | 139 | 2 | 10 | . 1 | 25 | 1 | !98 | . 68 | ? | 5 | HD | 1 | 31 | 1 | 2 | 1 | 6 | 5.06 | . 007 | 1 | 111 | . 19 | 30 | . 03 | 2 | . 19 | . 01 | . 19 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 58142 | 1 | 161 | 2 | 20 | . 1 | 30 | 31 | 332 | 3.67 | 1 | 5 | k | 1 | 20 | I | 2 | , | 27 | 2.21 | . 05 ? | 2 | 104 | 2.61 | 22 | . 01 | 3 | 1.65 | . 01 | .06 | 1 |
| 58111 | 2 | 14 | 2 | 10 | . 1 | 29 | 11 | 106 | 2.68 | 2 | 5 | H0 | 1 | 4 | 1 | 2 | 2 | 11 | 3.13 | . 128 | 1 | 180 | 2.15 | 3 | . 01 | 2 | 2.05 | . 01 | . 08 | 1 |
| $9815]$ | 3 | 221 | 2 | 62 | .! | 11 | 26 | 526 | 3.6 | 1 | 5 | No | 1 | 35 | 1 | 2 | 2 | 76 | 1.17 | . 285 | 2 | 79 | 2.11 | 4 | . 12 | 2 | 2.20 | . 03 | 1.51 | 1 |
| 5015: | 1 | 212 | 1 | 21 | . 1 | 1 | 15 | 221 | 1.33 | 1 | 5 | HD | 1 | 66 | 1 | 1 | 2 | 19 | . 93 | . 111 | 1 | 13 | 1.39 | 13 | . 10 | 2 | 1.11 | . 21 | . 76 | 1 |
| 30151 | 3 | 146 | : | 11 | . 1 | i0 | 11 | 121 | 1.27 | 1 | 5 | yo | 1 | 59 | 1 | 2 | 1 | 21 | 1.39 | . 096 | 2 | 111 | 1.11 | 299 | . 08 | 2 | . 90 | . 03 | . 31 | 1 |
| S8159 | 1 | 194 | 2 | 35 | . 1 | 18 | 28 | 202 | 2.19 | 2 | 5 | HD | 1 | 135 | , | , | 2 | 50 | 1.60 | . 166 | 2 | 101 | 1.95 | 11 | . 11 | 2 | 1.68 | . 02 | . 19 | 1 |
| 58150 | ; | 276 | 2 | 41 | . 1 | 9 | 29 | 363 | 3.31 | 1 | 5 | * | 1 | 136 | 1 | 2 | 2 | 6 | 1.51 | . 217 | 2 | 63 | 2.38 | 8 | . 15 | 3 | 2.08 | . 01 | 1.29 | 1 |





