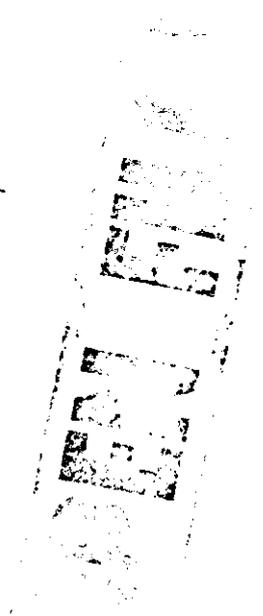


ANNUAL REPORT TO 30 APRIL 1987

EXPLORATION LICENCE 34/85



87-2647

MICROFILMEDANNUAL REPORT TO 30th APRIL 1987Exploration Licence 34/85

939001

MINES

File Ref. E.L. 34/85

15 APR 1987

Doc. Ref. 827

Action Officer Initials

Literature Survey:

Even though the area has been held before, the extreme lack of access has meant that there has been very little field work and subsequently, little published information. The 1:250,000 geological map shows the whole area as undifferentiated Precambrian sedimentary rocks. There are no 1:50,000 Geological maps available.

Aerial photography in colour and black and white is available and has been used to determine the initial areas of interest.

Geo Peko commissioned a study by Professor S.W. Carey of the major geological units in the region and whilst the report deals with country to the west of the area in question it should provide some clues to the rock types to be found.

It was decided that due to the almost complete lack of information that the exploration programme would have to start from a very basic level and determine target areas from aerial photograph interpretation and field sampling.

Aerial Photography:

The whole of the area is almost devoid of any outcrop, even the mountains are scrub covered. From the photographs it is apparent that the vegetation cover varies from very sparse low scrub, through thick scrub, to low dense rainforest and in some places well developed rainforest.

The vegetation type is almost certainly dependant on the underlying rock type and the density dependant on the time from the last time it was burnt.

As a first assumption the scrub covers precambrian quartzites, schists and silicified tertiary gravels whilst rainforest covers carbonates, clays, phyllites, shales and basalts. As the prime exploration target is silica flour associated with dolomite, the thickly vegetated areas are the most likely areas.

There is no foot or road access so helicopter transport was chosen as the most expedient, at least initially.

Initial Exploration:

In early 1986 helicopter transport was used to collect surface samples where landing was possible within the exploration licence area. It was found that it was only possible to land in areas of light scrub cover and that access to other areas would require track cutting from landing pads.

OPEN FILE

Hand samples were taken where possible and all were quartzite or orthoquartzite. A typical analysis was :

Al ₂ O ₃	Fe ₂ O ₃	TiO ₂	SiO ₂
0.26%	0.46%	0.06%	99.2%

i.e. adequate for metallurgical silicon metal or ferro silicon production but not electronic grade silicon metal or ultra pure silica applications. Difficulties in mining and transport would preclude its use for a long time.

Even in the areas of light scrub cover there was little outcrop and this became worse as the vegetation density and height increased. The only rock outcrop in the dense rainforest areas appeared to be in the major rivers themselves and the next exercise must be to either gain access to the rivers at various points or follow their length for as far as possible. Outcrop in the river beds is visible from the air.

A pyrite vein in quartzite was located just outside the western boundary. This analysed as follows :

Cu	Zu	Fe	Ni	Co	Au	Ag	Sn
%	ppm	%	ppm	ppm	ppm	ppm	%
4.7	14	17.0	42	67	0.27	5.7	<0.01

Whilst this result is not encouraging due to the small size of the outcrop it does indicate that magnetic anomalies in the area should be checked for mineralisation.

Main Exploration Programme:

Helicopter transport was to be used for access to the area of dense rainforest along the main rivers - Donaldson, Little Donaldson and Toner so that rock samples could be collected and analysed and basic mapping carried out. Unfortunately, the weather precluded helicopter transport during the summer of 1986/87 and alternative access will have to be devised in case the same situation arises next summer.

There is a four wheel drive track from the Savage River pipeline road towards the South East corner of the licence area. This will be recleared then walking tracks cut from the end of it to the areas of interest, so that the exploration programme can continue in the summer of 1987/88.

*The alt
147000
As
helicopter
transport*

- 3 -

Expenditure:

Helicopter hire	\$1,600
Airfares	\$ 400
Vehicle hire	\$ 100
Salaries	\$1,500
Sample analysis	\$ 500
Accommodation	\$ 200
Photographs etc.	\$ 100

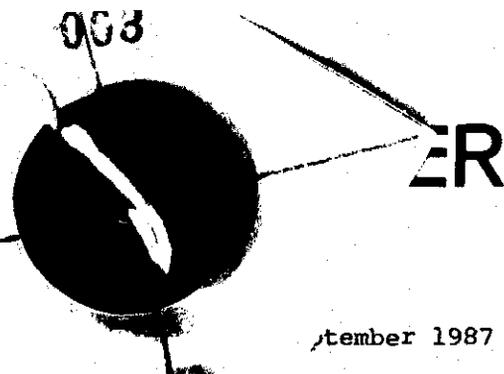
\$4,400

B. R. Hansen

BRH 7.4.87

20/11

REGISTERED OFFICE: THE MONIER BUILDING
 6-8 THOMAS ST., CHATSWOOD, N.S.W. AUSTRALIA
 P.O. BOX 295, CHATSWOOD, N.S.W. 2067
 TELEPHONE: (02) 411 9611 FAX No. (02) 411 1245
 TELEX: AA26673. CABLES & TELEGRAMS: "MONIER" SYDNEY



September 1987

Director of Mines
 Department of Mines
 P.O. Box 56
 ROSNY PARK TAS 7018

*Photocopy included
 in 87-2647*

MINES	
File Ref.	EL34/85
16 SEP 1987	
Doc. Ref.	1008
Action Officer	PW
Initials	AK
Resubmit to	Date

For the attention of Mr. P.K. Wrigley

Dear Sir,

EL34/85 Annual Report

Quartzite and orthoquartzite samples were taken from :

(a) the south east corner of the lease

343350 m E 5405000 m N

CQ 43350500 ✓

(b) hilltops - Mt. Vero 337,000 m E, 5407,600 m N

- Mt. Bolton 338,730 m E, 5411,540 m N

- Pyramid Hill 342,420 m E, 5414,350 m N

*CQ 3700 0760 ✓
 CQ 3373 1154 ✓
 CQ 4242 14350 ✓*

(c) exposed ridges 341,400 m E, 5407,000 m N

342,000 m E, 5407,800 m N

*CQ 4440 0700 ✓
 4200 0780 ✓*

Mt Holloway and Mt Edith which are to the west of the exploration licence were also sampled.

All of the samples were similar in appearance being light grey in colour and the original sand grains still visible as freshly broken surfaces. There had, however, been considerable resiliification. The rock was similar in appearance to the Jacob orthoquartzite of the Sisters Hills area in N.W. Tasmania but was generally more competent with no evidence of disaggregation to a friable sandstone.

One sample was analysed to determine the possible application for the rock:

Al ₂ O ₃	0.26%
Fe ₂ O ₃	0.46%
TiO ₂	0.06%

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(41)
(42)

- 2 -

The rock would be suitable for metallurgical silicon metal and ferro silicon but not electronic grade silicon metal. If there were areas where the material had disaggregated it would have leached and achieved a much higher purity. However, distance from a port would preclude its exploitation unless an exceptional purity e.g. 0.0005% Fe₂O₃ could be achieved.

The pyrite vein was in the head waters of Eighty Creek West North West of Mount Bolton. Its approximate locations was :

334,000 m E, 5413,500 m N

CQ340135

Yours faithfully,

B.R. Harrison

B.R. HARRISON
Development Manager
Construction Materials Division

2/16