REPORT ON HARTS RANGE, NORTHERN TERRITORY FOR NOVEMBER, 1970.

This report covers Authority to Prospect 2268, 2434, 2450, 2580, 2703 and 2705, for the month of November, 1970.

Geological mapping has been carried out during the month, particularly in the Virginia Prospect area near Mount Riddock. At the end of the month cupriferous rock had been traced over a length of at least three (3) miles. One exploratory inclined tunnel into the Virginia Prospect had been completed at 20 feet and a second one had reached 9 feet by the end of the month.

The base map for the Virginia area is being compiled from enlarged aerial photographs. The geologist who has been mapping in the Harts Range is returning to Sydney and assessment and plotting of the geological information will proceed in December. During November Mr. Peter Woyzbun and myself spent several days inspecting the Harts Range Prospect.

Receipt of the draft maps of the aeromagnetic survey has commenced, but interpretation is being delayed by the geophysical contractor's failure to complete the contouring. At the end of the month only one of the nine sheets of magnetic contours had been received and these were only in preliminary form, and some time will elapse before the final contour maps of all the area are available for interpretation. From the maps received the area is quite a complex one and the complexity of the job is obviously the reason for the delays.

The spectrometer tapes have been received by Mr. Peter Woyzbun and these have not revealed any major anomalies due to uranium. Further examination of these tapes will be used to assist any geological correlation of rock types.
HARTS RANGE AREA N.T. EXPLORATION
A TO P 2434, 2450, 2580, 2703, 2705
2768. MONTHLY REPORT FOR FEBRUARY 1971

In the early part of February the preparation for the 1971 field season was continued. An "Area Office" was established in Alice Springs and the prospecting unit has been operating in the area searching mainly for access tracks and routes, suitable camp sites and, to a minor extent, for mineralisation.

The interpretation of the airborne magnetic survey data (draft maps), commenced in January, has resulted in three tentative target areas (16th February 1971) and the ground investigation in terms of geological mapping of these target areas (anticipated to take three months) was initiated with the Geologist and Field Assistant leaving Sydney for Alice Springs on the 15th February.

Since the completion of the interpretation mentioned above, we have received the "final" magnetic contour maps (still minor corrections to be carried out) and the first stage preliminary interpretation is expected to be completed late in March month.

In the last week of February two new appointments were made:

Mr. K.I. Nielsen was appointed Exploration Manager, based in Sydney

Mr. I.R.F. MacCulloch - Geologist for the Harts Range area.

Mr. MacCulloch will arrive in Alice Springs early in March.

K.I. NIELSEN
Exploration Manager
June 5th, 1971

HARTS RANGE AREA, N.T.: EXPLORATION A TO P 2434, 2450, 2580, 2703, 2705, 2768. MONTHLY REPORT FOR MAY 1971

Late April and during the month of May, several administrative changes have taken place in the Company: The Managing Director, Mr. R.A. Hancock has resigned and in Alice Springs the Area Manager, Mr. G.D. Louth, has resigned and the District Geologist, Mr. I.R.F. MacCulloch has taken over the duties of the latter.

The regional exploration in the Harts Range Area has been temporarily stopped with the completion of one north-south traverse as too much assay and petrological data is outstanding and the correlation of all this data is paramount to the efficient continuation of the regional programme.

A detailed (alidade and plane table) mapping and sampling programme was therefore, undertaken on the Gonagalabi Copper Occurrence in the eastern part of the area (A to P 2580) and although this programme is not completed, results to date indicate copper and zinc surface mineralisation, carbonates and sulphides with assays ranging from 0.1% to 5.6% Cu and 0.2% to 6.9% Zn (several higher values), over an area 5,000 feet plus long and an average width of 400 feet. It is anticipated that an access track preparation, costeasting and "down-hole-hammer" drilling programme will commence early in June 1971.

During the month, the area was visited by the Exploration Manager.

Ken I. Nielsen
EXPLORATION MANAGER
RUSSGAR MINERALS N.L.

29th July, 1971

HARTS RANGE AREA, N.T. EXPLORATION A TO P 2434

2450, 2580, 2703, 2705, 2768, MONTHLY REPORT

FOR JUNE 1971

In the period from the 31st May 1971, the exploration in the Company's Harts Range Area, Northern Territory, was continued with emphasis on the Oonagalabi Copper-Zinc Prospect.

The detailed alidade and plane table geological mapping commenced in May 1971 has been completed and copper, zinc and minor lead mineralisation occurs over a strike length of 8,000 feet, over 4,500 feet continuously with intermittent barren surface zones in the remaining 3,500 feet with width varying from some tens of feet to 700 feet.

A survey of access track bulldozing and grading, bulldozer costeaming and down-hole-hammer drilling was undertaken and completed on the 1st July 1971 with a total of 2,103 feet drilled in 14 vertical holes (deepest hole 295 feet) and some 1,400 linear feet of costeaming.


Ken I. Nielsen
EXPLORATION MANAGER
18th August, 1971.

HARTS RANGE AREA, N.T. EXPLORATION A TO P 2434, 2450, 2580, 2703, 2705, 2768, MONTHLY REPORT
FOR JULY, 1971.

The field work in the month of July 1971 in the Company’s Harts Range Area consisted of some regional work and the completion of the Oonalgalabi Copper-Zinc Prospect 1st stage survey.

The regional work comprised aerial photography based geological mapping in the vicinity of Oonalgalabi and experimentation away from Oonalgalabi (eg. the Virginia copper mineralisation) with VLF electromagnetic instrumentation.

The field work at Oonalgalabi comprised costeans sampling, completion of mapping (accurate location of drill holes and costeans etc.) and VLF electromagnetic orientation survey and consequent execution of a VLF electromagnetic survey covering the surface mineralised area, the latter survey indicating a strong "good conductor" body over 1,200 feet strike length, an anomaly which was confirmed in a resistivity traversing survey.

In June 1971 Mr. K. Johansson joined our Alice Springs staff (qualified geophysicist as well as geologist) and casual labour was employed to assist in costean sampling etc. The Exploration Manager visited the area during the month.

Ken I. Nielsen.
EXPLORATION MANAGER.
The Company's exploration effort for the month of November, 1971 in the Harts Range Area consisted entirely of the continuation of the regional exploration programme and strong emphasis was given to field work in order to complete as much field work as possible before the hot summer months.

The field work, especially in the latter part of the month, was limited to areas where a minimum of climbing and excessive walking was required. The programme was again geological mapping based on aerial photography and rock geochemical sampling and 623 samples were collected during the month. It is anticipated that field work for the 1971 season is now largely completed and during the month of December, 1971 and January and February, 1972 exploration staff in Alice Springs will be engaged in the recording of geological data, aeromagnetic interpretation, geochemical data interpretation and aerial photography geological interpretation. With reference to the latter item the contractor for aerial photography to the Department of National Mapping has advised that the aerial colour photography will be forwarded before the end of 1971.

In the monthly reporting until now the Harts Range Area has been referred to according to their PA numbers. The six Prospecting Authorities are presently under Exploration Licence Applications and their respective Exploration Licence numbers are listed below:

<table>
<thead>
<tr>
<th>PA</th>
<th>EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2434</td>
<td>183</td>
</tr>
<tr>
<td>2450</td>
<td>283</td>
</tr>
<tr>
<td>2580</td>
<td>Application to be lodged 346</td>
</tr>
<tr>
<td>2703</td>
<td>154</td>
</tr>
<tr>
<td>2705</td>
<td>155</td>
</tr>
<tr>
<td>2768</td>
<td>110</td>
</tr>
</tbody>
</table>

The Exploration Licence Application for PA 2580 will be lodged within the next few days.

Ken I. Nielsen,
EXPLORATION MANAGER