REPORT FOR THE YEAR ENDING 18TH DECEMBER 1990.

OPEN FILE

Prepared for Rosequartz Mining N.L.,

by

G.R. Orridge,
GEONORTH Pty. Ltd.,
Darwin N.T.

January 1991.





CONTENTS.

- 1. INTRODUCTION.
- 2. GEOLOGY.
- 3. PREVIOUS WORK IN THE AREA.
- 4. EXPLORATION WORK IN 1990 AND RESULTS.
- 5. CONCLUSIONS AND RECOMMENDATIONS.

APPENDIX I. Analytical Report.

FIGURE 1. Locality Map.

FIGURE 2. Tenement Map; 1:50,000.

FIGURE 3. Regional Geology. 1:100,000.

FIGURE 4. Geology & Sample Locations. 1:50,000.

1. INTRODUCTION.

Exploration Licence 6727 covers two graticular blocks, with a total area of three square kilometres, and is situated four kilometres east of Pine Creek township. Excluded from the area is an old dredging claim now included in MCN's 541 & 542. Access can be obtained from the Kakadu Highway in the north, and from the old Wandie- Pine Creek track in the south (Figures 1 & 2).

The Licence area falls within the Pine Creek l:100,000 and l:50,000 sheet areas, and the Bonrook and Mary River pastoral leases.

The Licence was granted to Rosequartz Mining NL on 18th December 1989. This report presents the results of work conducted during the first year of tenure.

2. GEOLOGY.

The area is situated in the Cullen Mineral Field in the central part of the Early Proterozoic Pine Creek Geosyncline. The Geology is described in the BMR 1: 100,000 Geological Series map and Explanatory Notes "Pine Creek" (1985), a portion of which is reproduced in Figure 3.

The prospect lies on the eastern edge of the so called Pine Creek Embayment, a southeasterly trending roof pendant of metasediments surrounded by the granitoid complex of the Cullen Batholith. The Embayment contains widespread gold, tin and silver/lead/zinc mineralisation, the most important being the Pine Creek and Union Reefs gold mining areas.

EL 6727 includes only a very small area of metasediments (about 20 hectares) in its extreme southwest corner; the remainder of the area is underlain by granite (Figure 4). The metasediments comprise phyllites and minor metagreywackes belonging to the Burrell Creek Formation in the upper part of the Early Proterozoic succession. They form a single low ridge with good outcrop along the crest. Outside the southwestern corner of the EL area the Burrell Creek Formation contains a series of sizable northwest-trending quartz reefs. One low quartz outcrop was observed within the prospect.

The granite which occupies most of the area forms low undulating country with an extensive cover of sandy soils. It is mainly a medium grained pink to grey adamellite with minor bodies of finer grained leucogranite. It is assigned to the Allamber Springs Granite by the BMR. No significant pegmatite or quartz veining were noticed.

Alluvial sands and gravels within MCN's 541/542, along the course of Pine Creek, have been tested for alluvial gold by occasional pitting. Otherwise their are no indications of past mining or prospecting activity in the area.

3. PREVIOUS WORK IN THE AREA.

Prior to being taken up by Rosequartz, the area formed part of Exploration Licence 4926 held by Eastern Gold. This Company carried out photogeology and limited rock chip sampling; however no samples were taken in the present area of interest. The area was surrendered on the grounds that it was unprospective since it was underlain largely by granite (J.H. Thom, 1989; EL4926 Relinquished Area Report, unpublished report by Union Reefs Gold NL.).

Before Eastern Golds tenure the area was part of the Mount Wells Policy Reserve, and there is no documentation of significant exploration work.

4. EXPLORATION WORK IN 1990 AND RESULTS.

During the first year of the Licence exploration work undertaken included vehicle and foot traversing of the granite areas, and detailed prospection and soil sampling of the small area of metasedimentary rocks in the southwest.

Traversing of the granitic areas confirmed the BMR mapping and did not encounter any evidence of mineralisation.

In the southwest, the Burrell Creek Formation outcrops were found to be lacking indications of quartz or sulphide veining, although one small quartz outcrop occurs in soil-covered ground on the north slopes of the hill.

One traverse of soil sampling was carried out on an ENE trending line extending from the ridge top to the edge of an alluvial plain lying to the north (Figure 4). Samples were taken at 50m intervals, and consisted of about 1.5kg of minus 5mm soil material. They were analysed for gold by bulk cyanide leach, and the results are given in Appendix I.

Gold values ranged from 0.19 to 2.72 ppb Au. From experience elsewhere in the district it would be anticipated that significant gold mineralisation would be reflected in values of between 10 and 200 ppb Au in this sort of sampling. Accordingly these results suggest that the area is not mineralised.

It is estimated that expenditures made in completing this work amounted to \$2,228.

5. CONCLUSIONS AND RECOMMENDATIONS.

- 1. Most of the area is underlain by granite and is considered to be unprospective.
- 2. A small area in the southwest is underlain by Burrell Creek Formation, / and could conceivably have some prospectivity for gold. However detailed prospection and soil sampling indicated that significant mineralisation is not present.

FORWARD PROGRAMME

The proposed forward programme for EL 6727 for the 1991 year will be further systematic sampling for a variety of other types of mineralization (base metals).

The proposed expenditure committment for this programme is \$5,000.

EXPENDITURE FOR 1990 YEAR - EL 6727

Contract Geologist	\$	1,650.00
Field Assistant	\$	430.00
Vehicle	\$	640.00
Fuel	\$	78.00
Assaying	\$	200.00
	<u>\$</u>	2,998.00

APPENDIX I.

Analytical Results Soil Samples.



CLASSIC LABORATORIES LTD

Incorporated in WA; a wholly owned subsidiary of Amdel Ltd

Postal Address: P.O. Box 58, Berrimah, Northern Territory 0828 Marjorie Street., P.O. Box 58, Berrimah, Northern Territory 0828 Telephone: (089) 32 2637 Facsimile: (089) 32 3531

GEONORTH GPO BOX 3471 DARWIN

NT

0801

ANALYSIS REPORT

Your Reference : Our Reference : 1DN0015

amples Received: 07/01/91 Results Reported: 15/01/91

Number of Samples: 10 Report Pages: 1 to 1

This report relates specifically to the samples tested in so far as the samples supplied are truly representative of the sample source.

If you have any enquiries please contact the undersigned quoting our reference as above.

Approved Signature:

for

Alan Ciplys Manager - Darwin CLASSIC LABORATORIES LTD

*** RELIABLE ANALYSES AT COMPETITIVE COST ***



CLASSIC LABORATORIES LTD

Job: 1DN0015

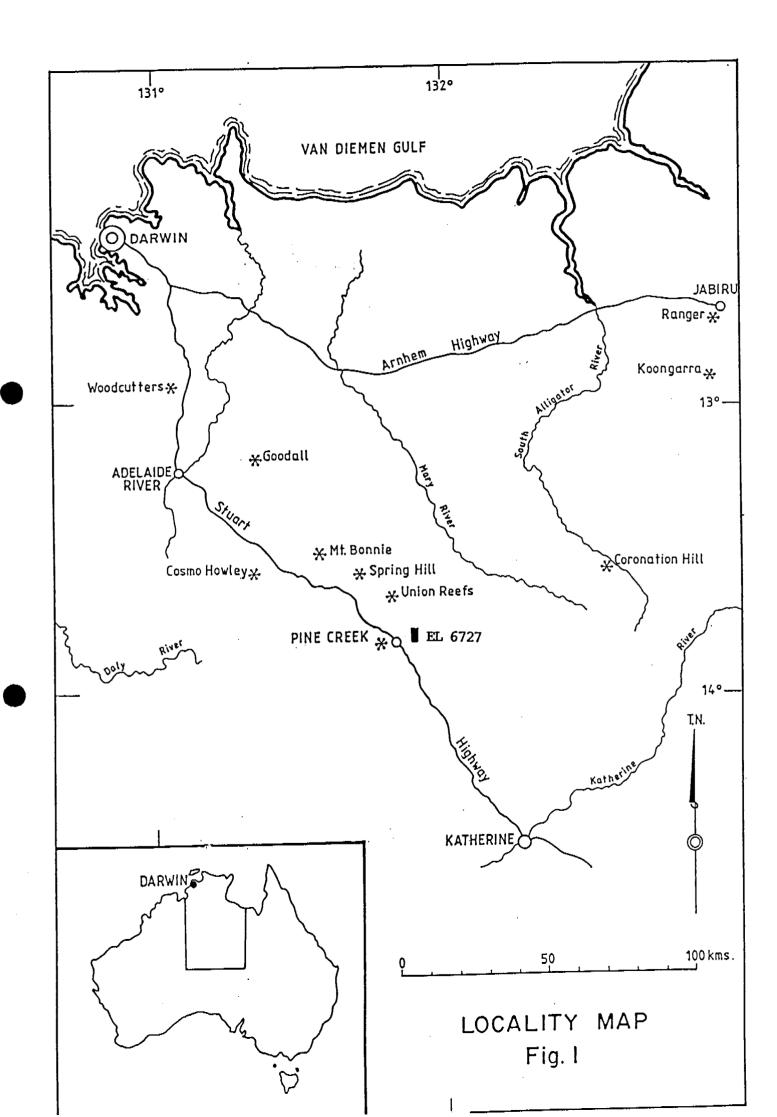
O/N:

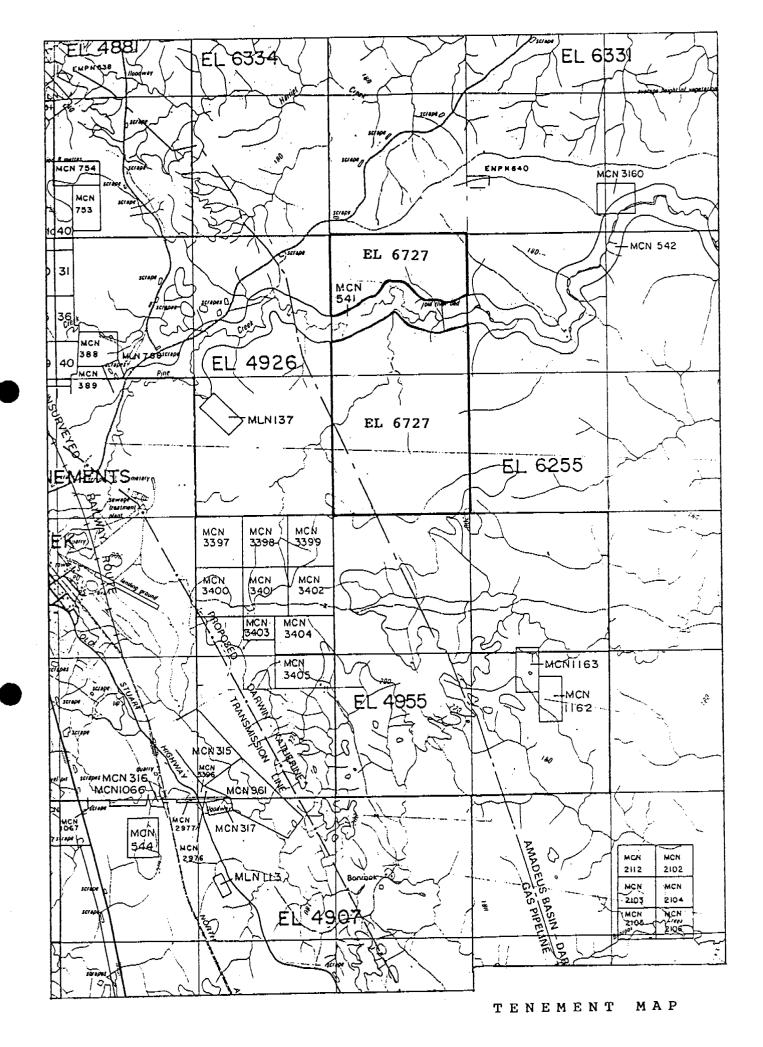
ANALYTICAL REPORT

SAMPLE	Au
324412	1.40
324413	0.56
324414	0.22
324415	0.19
324416	2.72
324417	0.39
324418	0.32
324419	0.60
324420	0.52
324421	0.48

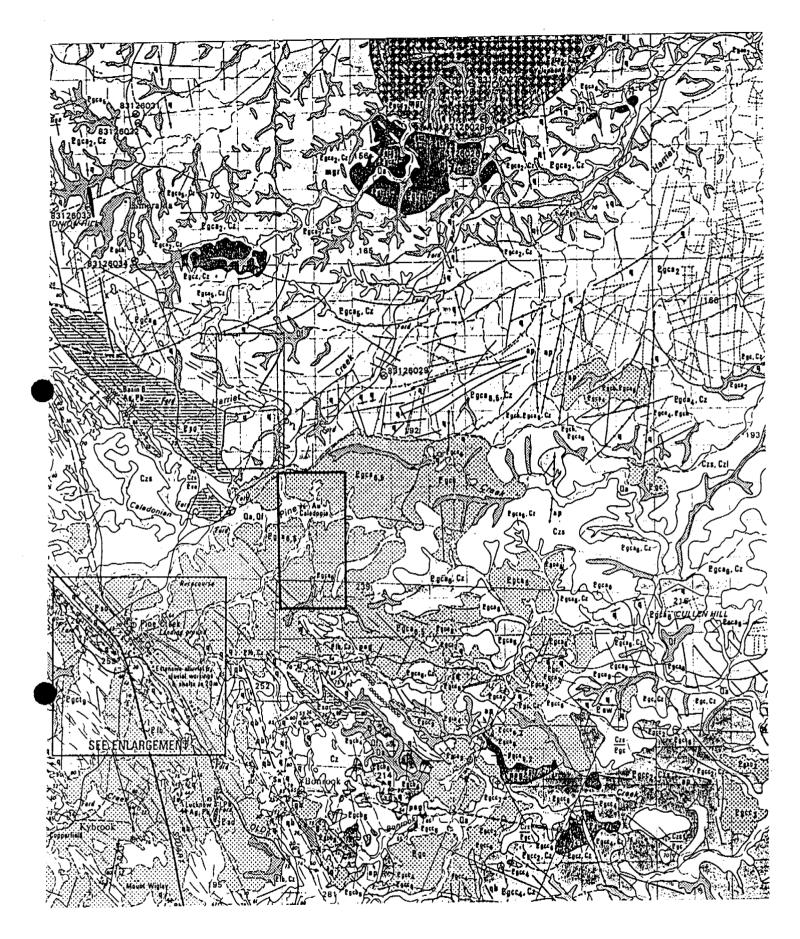
UNITS DET.LIM SCHEME

ppb 0.05 BLEG1B





Scale 1:50,000



EARLY

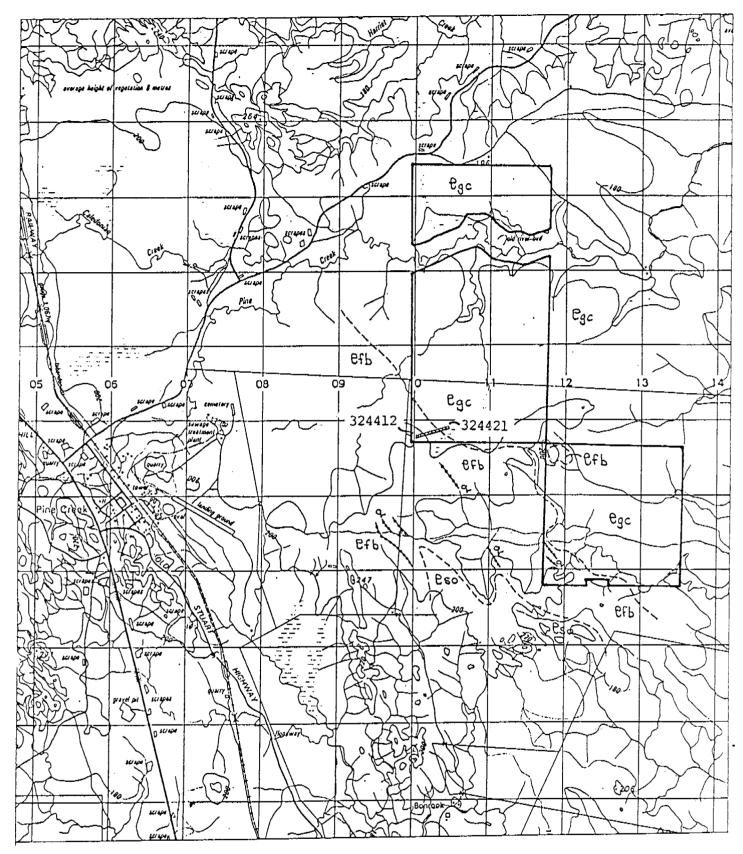
Pgc Cullen Granite.

PROTEROZOIC Pfb Burrell Creek Formation.

Pso Mount Bonnie Formation.

REGIONAL GEOLOGY

Scale 1:100,000



EARLY

Pgc Cullen Granite.

Soil Sample Traverse

PROTEROZOIC

Pfb Burrell Creek Formation.

Pso Mount Bonnie Formation.

q Quartz vein.

GEOLOGY & SAMPLE LOCATIONS

Scale 1:50,000