

OPEN FILE

MINERAL CLAIMS N 1980-1981, 1988-1994, 1999-2011, 2016-2021,
2041-2058

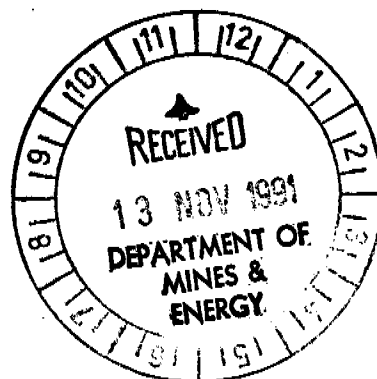
DRUMWEST

NEAR BAN BAN SPRINGS NORTHERN TERRITORY

FINAL REPORT

CR 91/535

ROSEQUARTZ MINING NL



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1. Introduction

Drumwest block of claims is situated near Ban Ban Springs, some 130 kilometres southeast of Darwin, and 55 kilometres northwest of Pine Creek in the Northern Territory (Figures 1 and 2).

The terrain is mainly alluvium and soil covered plains, but with a small area of low hills in the extreme southeast corner of the claim block (Figure 3). Vegetation is fairly open savannah woodland typical of the region, and the sole land use is for domestic buffalo grazing. Dry season access to the area is possible from the Ban Ban - Compass Creek track which passes two kilometres to the north. The Darwin to Alice gas pipeline easement crosses the southwest corner of the area.

The claims lie close to a number of significant gold deposits, notably the Woolwonga orebody (currently being developed by Dominion), situated four kilometres to the west, and Fountainhead, Glencoe and the Yam Creek/Mt Bonnie group of mines eight to ten kilometres to the southwest (Figure 5). However, there are no records, presumably due to almost complete concealment of potentially prospective formations by superficial deposits.

This report covers preliminary literature surveys and field reconnaissance carried out on these tenements.

2. Regional Geology Geophysics and Mineralisation

Drumwest is in the central part of the Early Proterozoic Pine Creek Geosyncline. The general geology is covered by the Geological Series 1:100,000 Mckinlay River map (BMR 1985), and is fully described in various BMR publications. The relevant portion of the published map is reproduced in Figure 5.

In brief, the prospect is near the eastern margin of a synclinal or saddle like structural domain, lying between complex domal structures surrounding the Burnside granite to the west, and the Prices Springs Granite/Golden Dyke Dome to the east. The synclorium is underlain by dominantly fleisch type sediments of the Burrell Creek and Mt Bonnie Formations, while underlying felsic volcanics, black shales, exhalites and clastics of the Gerowie Tuff, Koolpin Formation and Wildman Siltstone, and associated Zamu Dolerite sills, crop out around the perimeter of the updomed areas.

Within the synclorium, the general regionals northwest-southeast fold trend is maintained, but this swings to conform to radial dips on the dome margins. This is well displayed in regional magnetics and air photo trends (Figures 4 & 6). Late north to northwest trending faults (often quartz filled) displace the earlier folding.

The most important gold deposits in this vicinity all occur in complex quartz vein systems emplaced along the hingelines of anticlines which splay out radially, or tangentially, from the domes. Woolwonga, Glencoe, Fountainhead and Zapopan all lie along a parallel series of anticlines plunging southeast from the Burnside dome. Other smaller gold deposits are found in stratiform situations associated with exhalites (eg. Mt Bonnie, Golden Dyke), or as small quartz vein systems in a variety of host rocks.

Accordingly, a first priority in exploration of an essentially grass roots area, such as the Drumwest claims, is to identify any favourable anticlines. General trends of bedding, as identified on air photography (Figure 4), indicate that the Woolwonga anticlinal trend probably swings around to a near north-south orientation and passes to the southwest of the claim block. This view is supported by the regional magnetics and by the BMR mapping which shows mainly north-south folding in areas immediately southeast of the claims.

The magnetic contours show a pronounced northwest-southeast linear feature of regional extent passing through Woolwonga, continuing through the southwest of the Drumwest claims (after displacement by a northeasterly fault), and continuing southeast to the Burrundie area where it is seen to correspond with an outcropping mafic dyke. Photogeological indications of the dyke are also evident just southeast of the claims and at Woolwonga.

As noted above, the northerly eighty percent of the claims area is devoid of outcrop; it is probably underlain by Burrell Creek Formation. About half of this concealed area is covered by alluvium; the remainder has a cover of thin more or less residual rubbly soil overlying bedrock. Low hills in the southeast expose phyllites and greywackes of the Mt Bonnie Formation. Rubble turned by gas pipeline trench excavations in the southwest consists of carbonaceous shale, siltstone and sandstone (also probably belonging to the Mt Bonnie Formation), together with abundant vein quartz, some of which contains abundant coarse sulphide boxworks and fibrous tourmaline.

A minor gold prospect, just to the east of the claims, occurs in roughly north-south quartz veins cutting Mt Bonnie Formation and Zamu Dolerite.

3. Exploration Work Completed

During this phase work was limited to a review of pre-existing company and BMR information, interpretation of aerial photography (1987 Darwin-Kakadu Regional 1:60,000) and a field reconnaissance with limited rock chip sampling.

The results of the research work and photogeology are summarised in Section 2 above; the sampling information is given in Appendices I and II.

4. Conclusions

The Drumwest Claims are underlain by Burrell Creek and Mt Bonnie Formation metasediments, folded about north-south axes, and largely concealed by alluvium and soil. Limited sampling indicates that gold anomalous quartz veins are present in the area.

The prospect lies on a major structure, which passes through Woolwonga to the northwest, and near a number of significant mineral deposits in the Pine Creek Embayment to the southeast, and which is identified by the presence of a strongly magnetic mafic dyke.

The area has moderate potential for significant gold mineralisation which has not been explored because of very poor outcrop.

APPENDIX I - ROCK SAMPLE DESCRIPTIONS.

<u>SAMPLE NUMBER</u>	<u>DESCRIPTION</u>	<u>ASSAY ppm Au.</u>
327141	blue-grey to pink quartz with coarse sulphide boxworks and fibrous tourmaline.	-0.01
327142	metasediment with large sulphide boxworks and small quartz stringers.	0.20 0.40
327143	banded quartz and fibrous tourmaline, strong ironstaining.	0.03
327144	massive grey-white quartz.	-0.01
327145	metasiltstone with sparse quartz stringers.	-0.01

NB. all are composite chip samples from rubble turned up by the gas pipeline excavations in the southwest corner of MCN1997.

APPENDIX II.

Analytical Report.



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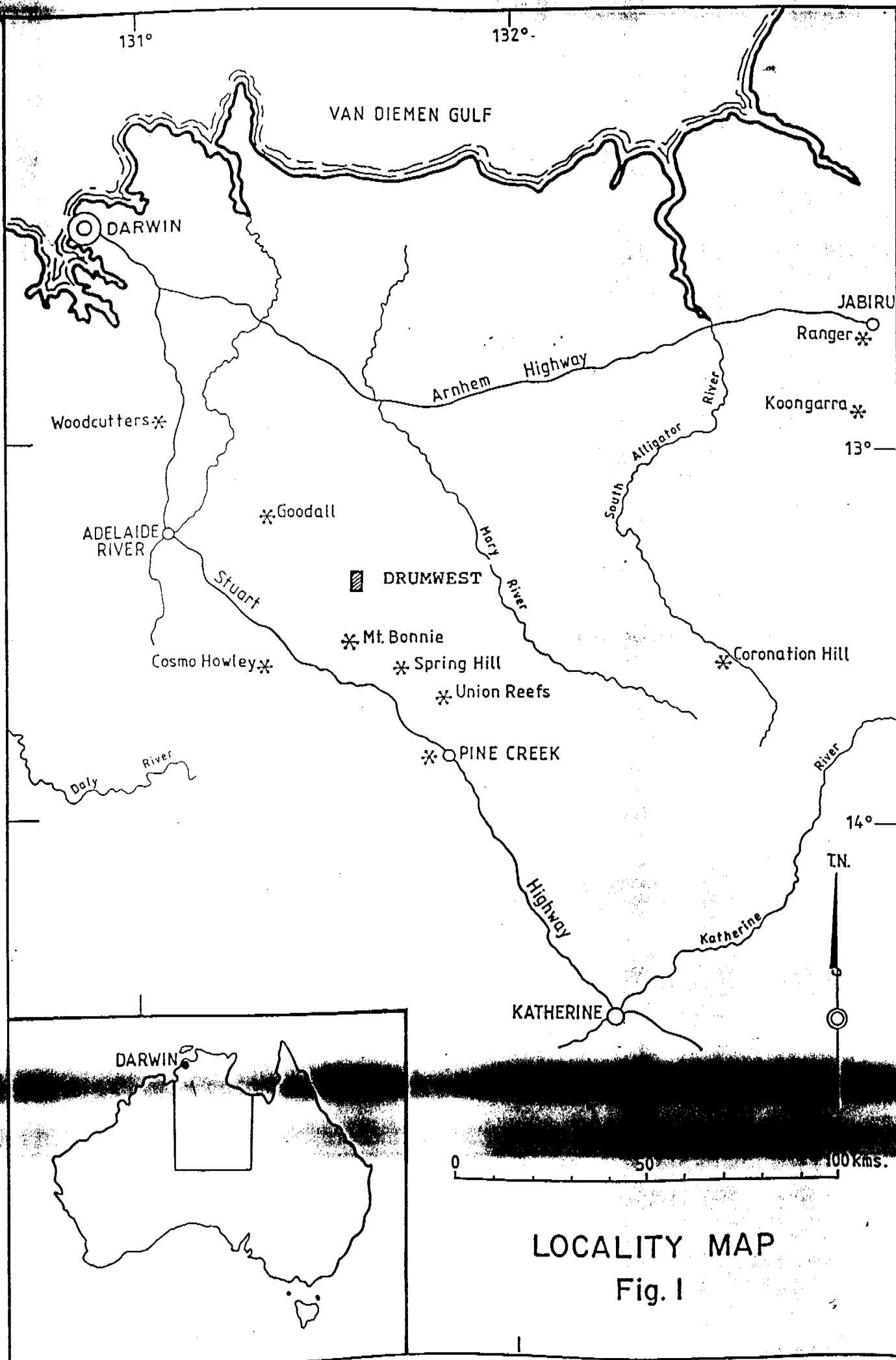
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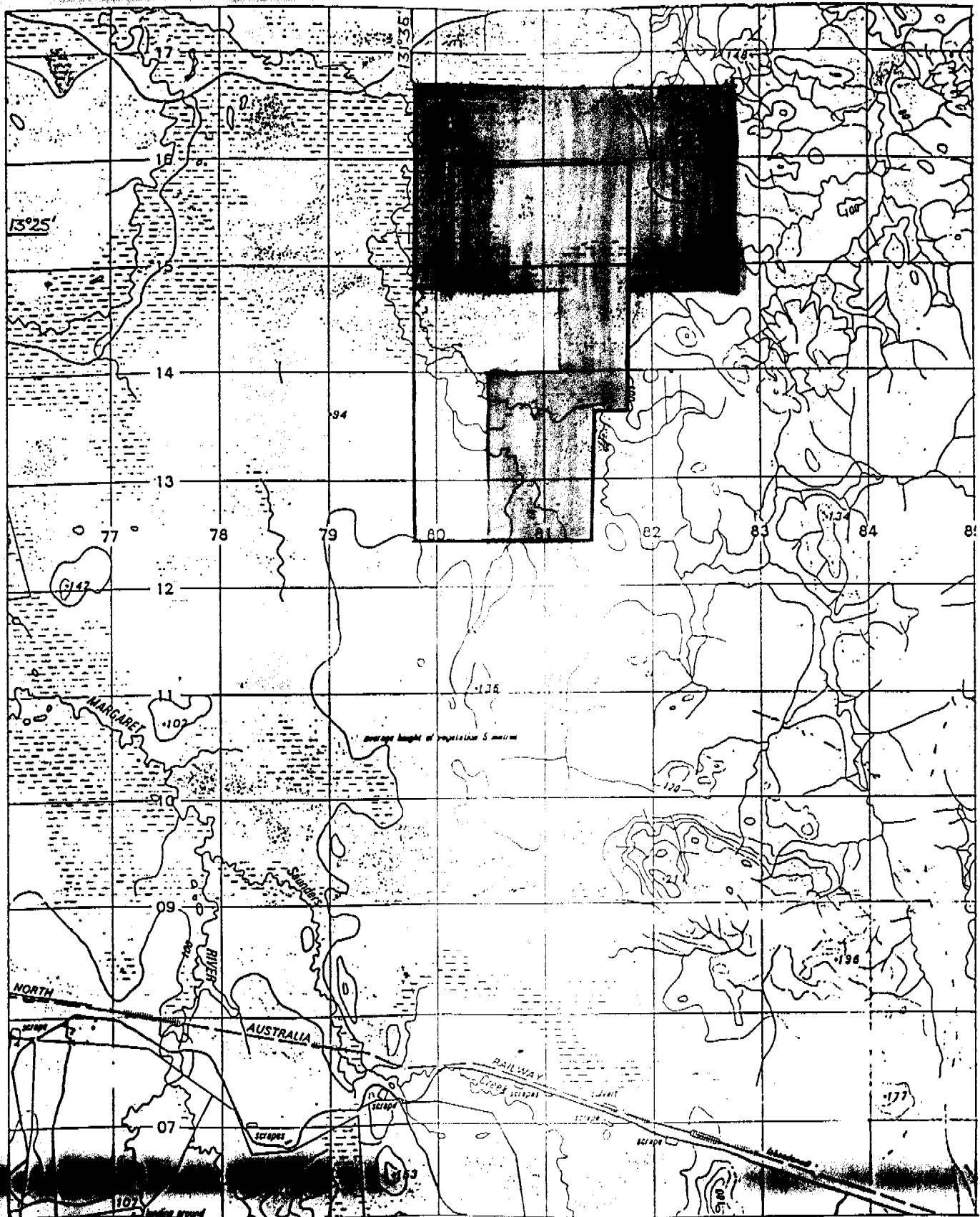
Final

ANALYTICAL REPORT

SAMPLE	Au	AuDupl
327141	<0.01	--
327142	0.20	0.40
327143	0.03	--
327144	<0.01	--
327145	<0.01	<0.01

UNITS	ppm	ppm
DET.LIM	0.01	0.01
SCHEME	FA1	FA1

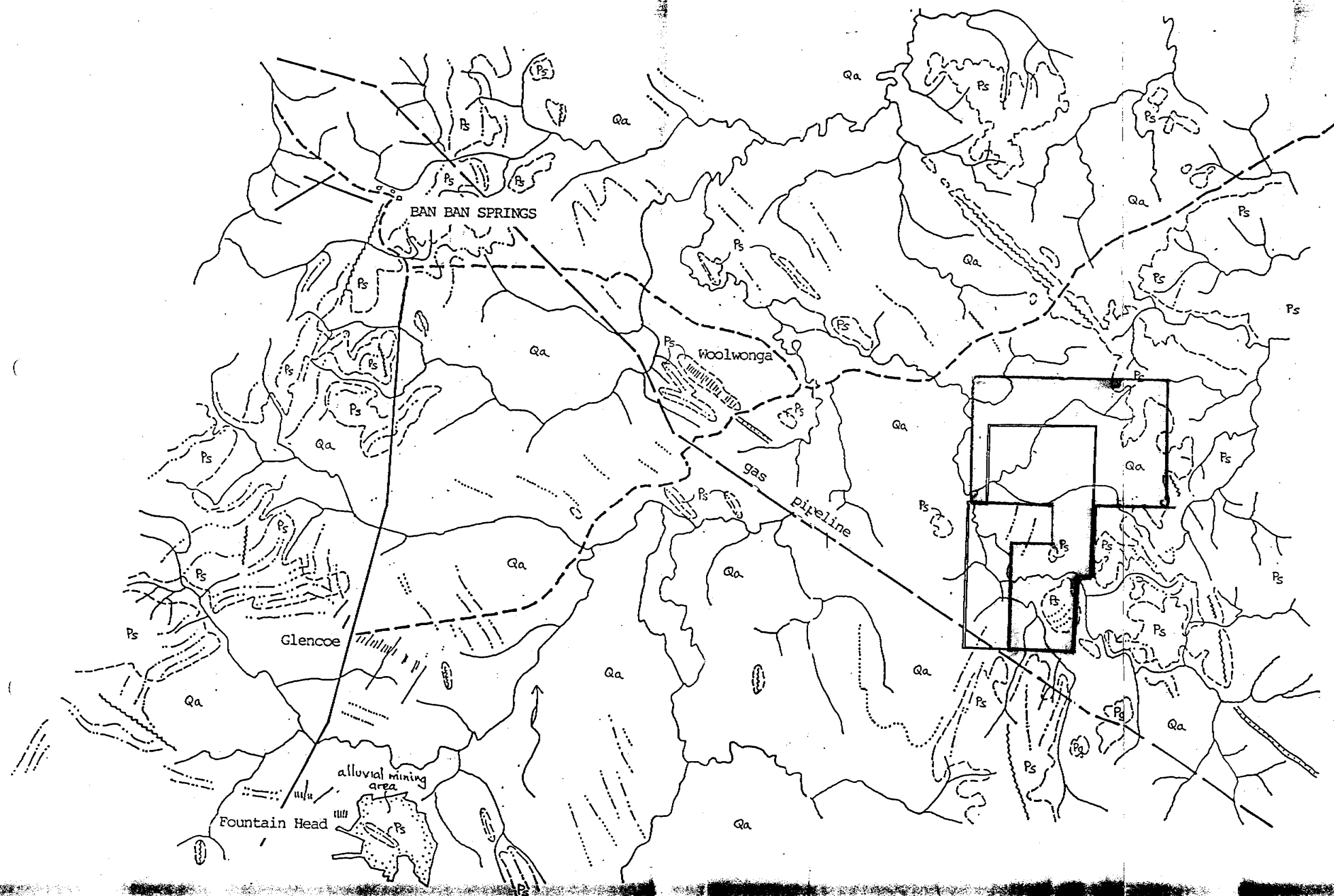




DRUMWEST MINERAL CLAIMS
TOPOGRAPHIC MAP

Scale 1 : 50,000

Figure 3.



Qa Cainozoic soil and alluvium.
 Ps Proterozoic metasediments.
 Pg Proterozoic granite.

— Mafic dyke.
 ~~~~~ Quartz filled fault zone.

----- photo-lineament certain.  
 ..... photo-lineament uncertain.  
 - - - limits of outcrop.

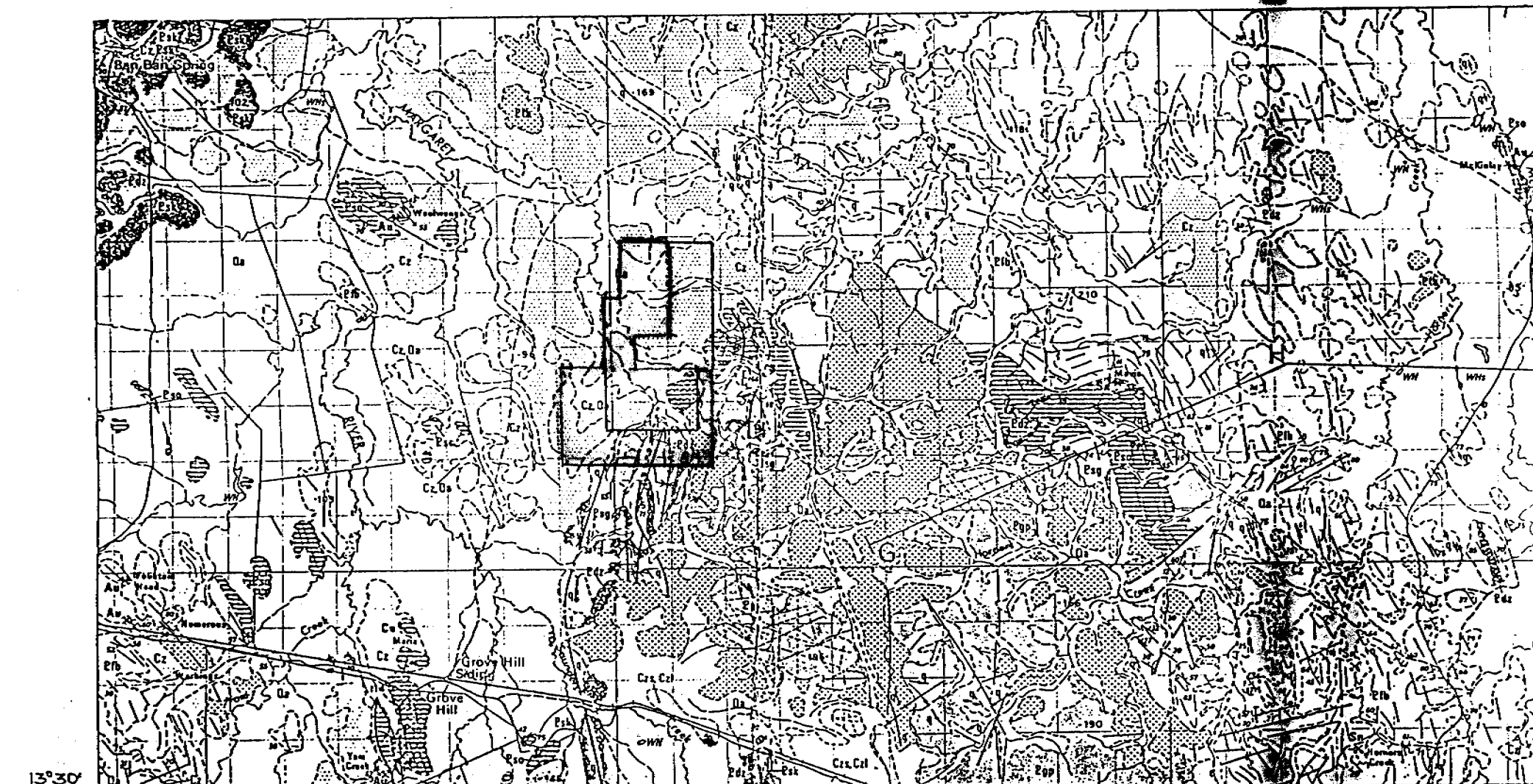
||||| exploration trenching.

0 5 km

DRUMWEST MINERAL CLAIMS ENVIRONS  
 PHOTOGEOLOGICAL MAP

scale 1 : 50,000 approximately

Figure 4.



# CAINOZOIC

Qa Alluvium  
Cz Soils

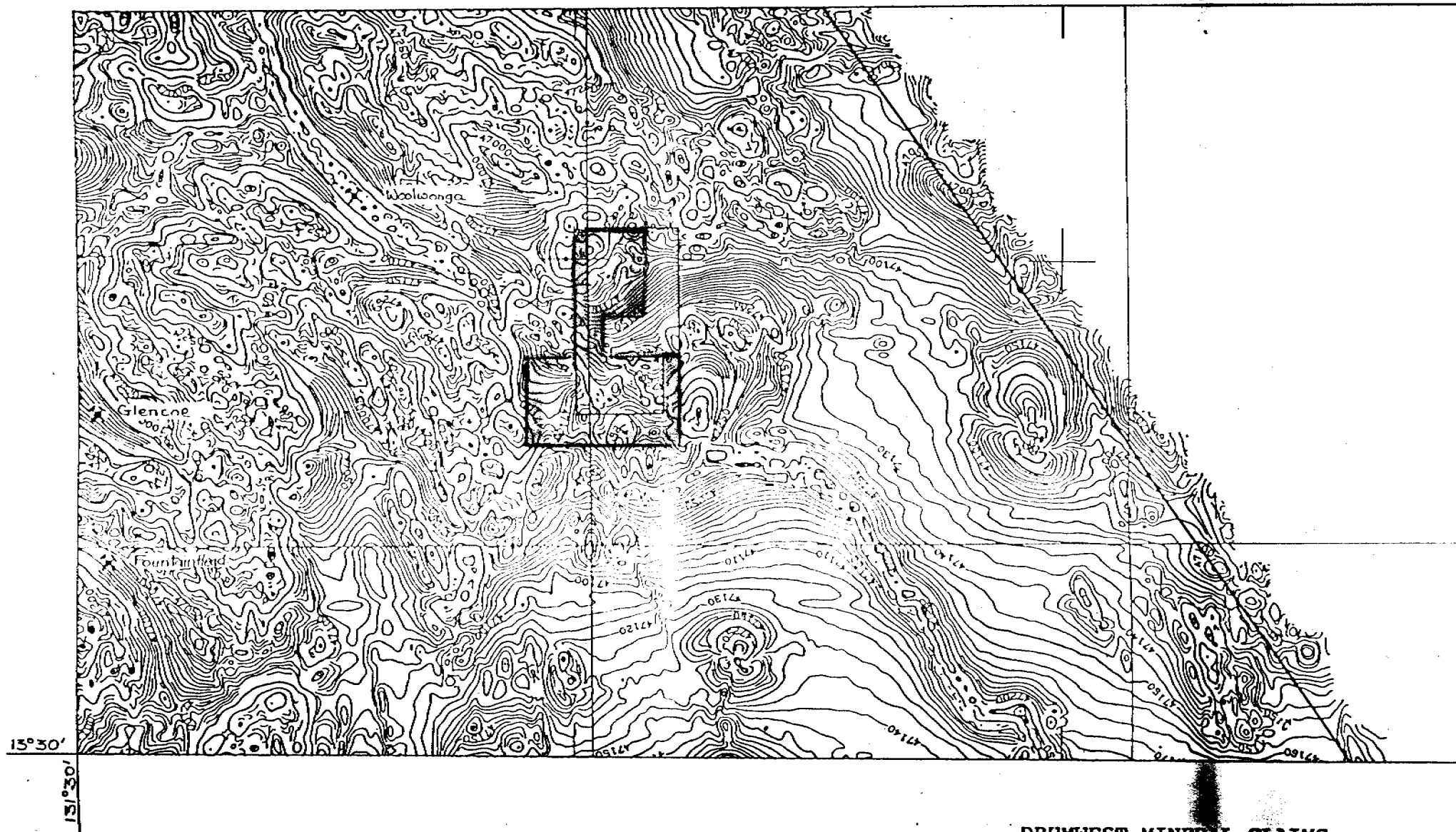
# PROTEROZOIC

Pgp Prices Springs Granite  
PdZ Zamu Dolerite  
Pfb Burrell Creek Formation  
Pso Mount Bonnie Formation  
Psg Gerowie Tuff  
Psk Koolpin Formation

# DRUMWEST CORNER CLAIMS REGIONAL GEOLOGY

Scale 1:100,000

Figure 5.



DRUMWEST MINERAL CLAIMS  
MAGNETIC CONTOURS

Scale 1 : 100,000

Figure 6.