

**ZAPOPAN N.L.**

**EXPLORATION LICENCE 5419**

**TANAMI REGION**

**NORTHERN TERRITORY**

**FIRST RELINQUISHMENT REPORT  
1992**

**MT SOLITAIRE 1:250,000 SHEET SF 52-4**

**Date: August, 1992  
Our Ref: 92.566-RM:AH**

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## 1. SUMMARY AND CONCLUSIONS

This report is submitted as a requirement of the statutory relinquishment of 155 blocks out of Exploration Licence 5419 and summarises work carried out on the relinquished areas. This has consisted of literature searches, aerial photography acquisition, open file airborne magnetic data acquisition and subsequent image processing and interpretation and the collection of one (1) laterite and two (2) rock chip samples.

The results of the work in the relinquished area did not warrant any further work being undertaken.

## 2. INTRODUCTION

Exploration Licence 5419 was granted on 3 May, 1989 to Harlock Pty Ltd. A 50% interest was subsequently transferred to Zapopan NL. Harlock's interest was held in trust on behalf of Kumagai Gumi Co Ltd (30%) "Kumagai" and Kintaro Metals Pty Ltd (20%) "Kintaro". Zapopan, Kumagai and Kintaro comprised the Tanami Joint Venture (TJV). Zapopan acquired the remaining 50% of the Tanami Joint Venture in September, 1991 and EL 5419 was transferred totally to Zapopan on 28th November, 1991.

The EL covered an area of 998 km<sup>2</sup>, equivalent to 310 blocks, and is located approximately 70 km north-east of The Granites Gold Mine. There are no access roads into the area, the nearest road being at Mt Davidson Outstation, 20 km south of the licence area.

The EL lies totally on Aboriginal land within the Central Desert Land Trust area.

The area is predominantly a sand plain with scattered low rises and pediments, red earth plains and quartz ridges.

A total of 155 blocks was relinquished from EL 5419 effective from 3rd May, 1992 and the attached portion of the 1:250,000 scale tenement plan for the Mt Solitaire sheet shows the areas relinquished.

## 3. GEOLOGY

EL 5419 is predominantly covered by sand plains with scattered low rises and pediments, red earth plains and quartz ridges.

Interpretation of airborne magnetic data suggest that much of the area is underlain by granite with "islands" of magnetic rocks. The latter form part of the Lower Proterozoic Lander Rock Beds (Offe and Kennewell, 1978) which are equivalent to the Mt Charles Beds to the west. In the Mt Solitaire Sheet area the Lander Rock Beds have been metamorphosed and folded and form steeply dipping biotite-muscovite phyllite and schist, sandy schist and minor gneiss intruded by granite and pegmatite.

North-west trending quartz ridges of assumed Lower Proterozoic age occur in the northern part of the EL. The quartz intrudes along major fracture zones.

A veneer of Cainozoic sediments restricts most outcrop to small, low areas of generally weathered rock. These sediments include areas of silcrete, ferricrete, gravel, calcrete lacustrine clays, red soil, alluvium, colluvium and aeolian sand. The latter forms a few dunes in the north-east part of the licence. The area forms part of an old land surface in an advanced stage of planation known as the Tennant Creek surface (Hays, 1967).

#### 4. EXPLORATION COMPLETED

All relevant open file, geological, geophysical and historical data for the region has been obtained. This data included the regional airborne magnetic survey compiled by the Northern Territory Geological Survey for the Davidson 1:100,000 sheet. The remainder of EL 5419 was covered by an airborne magnetic survey.

Colour aerial photography at 1:50,000 scale was flown by Airesearch Mapping and these photographs were used to interpret relevant landforms, outcrop extent, drainage, lineaments, etc to assist in target selection for initial exploration sampling.

Landsat images at 1:250,000 scale and black and white NASA photography covering The Granites - Tanami region were purchased and used to assist in target selection.

During Year 2 of the licence, as part of an overall sampling programme, one (1) laterite and two (2) rock chip samples were collected from the relinquished area. Sample locations are shown on Figure 2 and sample descriptions and results are at Appendices I and II.

Following evaluation of the sample results no further ground work was undertaken on the relinquished area.

## FIGURE 1

● EL 5419 - BLOCKS RELINQUISHED 1:250,000 SCALE

●

118

EL 5419

Clayton 3

130°48'

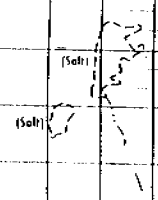
20°19'

EL 7109A

131°10'

MT DAVIDSON

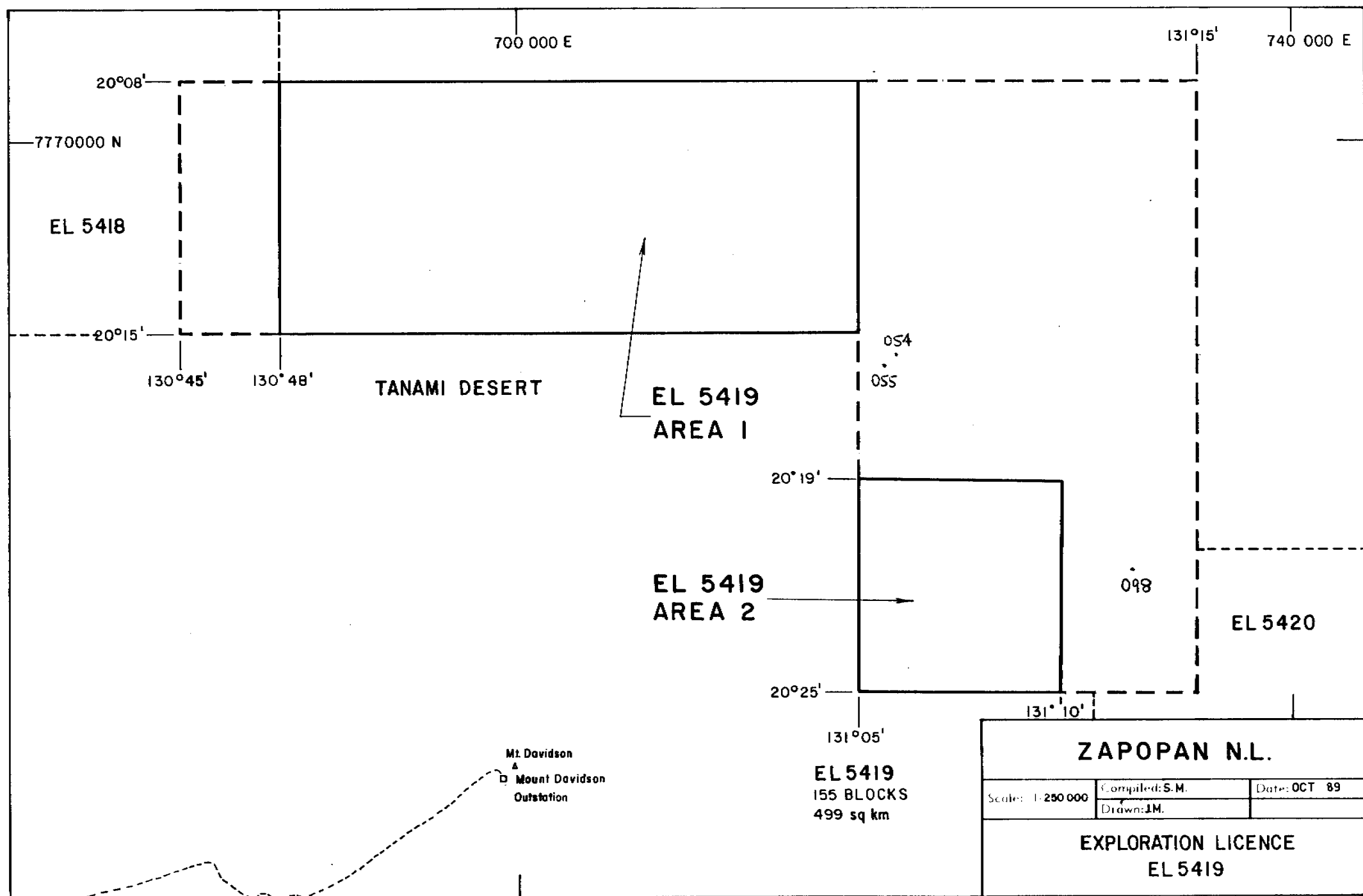
A



## FIGURE 2

### SAMPLE LOCATIONS





## **APPENDIX I**

### **SAMPLE DESCRIPTIONS**

TENEMENT NO: EL 5419

| Sample Number | Type | Run No./Photo No. | Coordinates      | Description                              | Comments |
|---------------|------|-------------------|------------------|--|----------|
| 80054         | LAT  | 7/093             | 7757199N/720057E | laterite ferruginous quartzite           |          |
| 80055         | RC   | 7/093, 8/106      | 7756130N/719610E | ferruginous quartzite                    |          |
| 80098         | RC   | 6/067             | 7747700N/732200E | green-brown weathered quartz mica schist |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |
|               |      |                   |                  |  |          |

## APPENDIX II

### SAMPLE RESULTS

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## ANALYTICAL DATA

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| TUBE No. | SAMPLE No. | Sc   | Cr  | Fe    | Co | Ni | Cu | Zn | Zn   | As |
|----------|------------|------|-----|-------|----|----|----|----|------|----|
| 1        |            |      |     |       |    |    |    |    |      |    |
| 2        |            |      |     |       |    |    |    |    |      |    |
| 3        | 80054      | 10.0 | 320 | 34.10 | 8  | 10 | 20 | 6  | <100 | 37 |
| 4        | 80055      | 10.0 | 170 | 33.80 | 3  | 5  | 32 | 10 | <100 | 12 |
| 5        |            |      |     |       |    |    |    |    |      |    |
| 6        |            |      |     |       |    |    |    |    |      |    |
| 7        |            |      |     |       |    |    |    |    |      |    |
| 8        |            |      |     |       |    |    |    |    |      |    |
| 9        |            |      |     |       |    |    |    |    |      |    |
| 10       |            |      |     |       |    |    |    |    |      |    |
| 11       |            |      |     |       |    |    |    |    |      |    |
| 12       |            |      |     |       |    |    |    |    |      |    |
| 13       |            |      |     |       |    |    |    |    |      |    |
| 14       |            |      |     |       |    |    |    |    |      |    |
| 15       |            |      |     |       |    |    |    |    |      |    |
| 16       |            |      |     |       |    |    |    |    |      |    |
| 17       |            |      |     |       |    |    |    |    |      |    |
| 18       |            |      |     |       |    |    |    |    |      |    |
| 19       |            |      |     |       |    |    |    |    |      |    |
| 20       |            |      |     |       |    |    |    |    |      |    |
| 21       |            |      |     |       |    |    |    |    |      |    |
| 22       |            |      |     |       |    |    |    |    |      |    |
| 23       | 80098      | 11.5 | 170 | 4.10  | 12 | 20 | 24 | 78 | 100  | 9  |
| 24       |            |      |     |       |    |    |    |    |      |    |
| 25       |            |      |     |       |    |    |    |    |      |    |

Results in ppm unless otherwise specified

T = element present; but concentration too low to measure

X = element concentration is below detection limit

— = element not determined

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| TUBE No. | SAMPLE No. | Se | Br | Rb  | Mg | Ag | Sb   | Cs | Ba  | La   |
|----------|------------|----|----|-----|----|----|------|----|-----|------|
| 1        |            |    |    |     |    |    |      |    |     |      |
| 2        |            |    |    |     |    |    |      |    |     |      |
| 3        | 80054      | <5 | <2 | 84  | 14 | <5 | 0.9  | <1 | 120 | 4.6  |
| 4        | 80055      | <5 | 2  | 91  | <5 | <5 | <0.5 | <1 | 150 | 12.0 |
| 5        |            |    |    |     |    |    |      |    |     |      |
| 6        |            |    |    |     |    |    |      |    |     |      |
| 7        |            |    |    |     |    |    |      |    |     |      |
| 8        |            |    |    |     |    |    |      |    |     |      |
| 9        |            |    |    |     |    |    |      |    |     |      |
| 10       |            |    |    |     |    |    |      |    |     |      |
| 11       |            |    |    |     |    |    |      |    |     |      |
| 12       |            |    |    |     |    |    |      |    |     |      |
| 13       |            |    |    |     |    |    |      |    |     |      |
| 14       |            |    |    |     |    |    |      |    |     |      |
| 15       |            |    |    |     |    |    |      |    |     |      |
| 16       |            |    |    |     |    |    |      |    |     |      |
| 17       |            |    |    |     |    |    |      |    |     |      |
| 18       |            |    |    |     |    |    |      |    |     |      |
| 19       |            |    |    |     |    |    |      |    |     |      |
| 20       |            |    |    |     |    |    |      |    |     |      |
| 21       |            |    |    |     |    |    |      |    |     |      |
| 22       |            |    |    |     |    |    |      |    |     |      |
| 23       | 80098      | <5 | <2 | 230 | <5 | <5 | <0.2 | 27 | 740 | 45.0 |
| 24       |            |    |    |     |    |    |      |    |     |      |
| 25       |            |    |    |     |    |    |      |    |     |      |

Results in ppm unless otherwise specified

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|               |            | 999.16.21.04530 |     |      |     | 04/10/90      |    | DN 50387 |    |          |  |
| TUBE No.      | SAMPLE No. | Ce              | Sm  | Eu   | Yb  | Lu            | Hf | Ta       | W  | Ir       |  |
| 1             |            |                 |     |      |     |               |    |          |    |          |  |
| 2             |            |                 |     |      |     |               |    |          |    |          |  |
| 3             | 80054      | 11              | 1.6 | <0.5 | 2.1 | 0.3           | 8  | 2        | 4  | <20      |  |
| 4             | 80055      | 10              | 1.3 | <0.5 | 0.7 | <0.2          | 3  | <1       | <2 | <20      |  |
| 5             |            |                 |     |      |     |               |    |          |    |          |  |
| 6             |            |                 |     |      |     |               |    |          |    |          |  |
| 7             |            |                 |     |      |     |               |    |          |    |          |  |
| 8             |            |                 |     |      |     |               |    |          |    |          |  |
| 9             |            |                 |     |      |     |               |    |          |    |          |  |
| 10            |            |                 |     |      |     |               |    |          |    |          |  |
| 11            |            |                 |     |      |     |               |    |          |    |          |  |
| 12            |            |                 |     |      |     |               |    |          |    |          |  |
| 13            |            |                 |     |      |     |               |    |          |    |          |  |
| 14            |            |                 |     |      |     |               |    |          |    |          |  |
| 15            |            |                 |     |      |     |               |    |          |    |          |  |
| 16            |            |                 |     |      |     |               |    |          |    |          |  |
| 17            |            |                 |     |      |     |               |    |          |    |          |  |
| 18            |            |                 |     |      |     |               |    |          |    |          |  |
| 19            |            |                 |     |      |     |               |    |          |    |          |  |
| 20            |            |                 |     |      |     |               |    |          |    |          |  |
| 21            |            |                 |     |      |     |               |    |          |    |          |  |
| 22            |            |                 |     |      |     |               |    |          |    |          |  |
| 23            | 80098      | 88              | 7.1 | 1.1  | 2.5 | 0.4           | 6  | 2        | 6  | <20      |  |
| 24            |            |                 |     |      |     |               |    |          |    |          |  |
| 25            |            |                 |     |      |     |               |    |          |    |          |  |

Results in ppm unless otherwise specified  
 T = element present; but concentration too low to measure  
 X = element concentration is below detection limit  
 — = element not determined

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| TUBE No. | SAMPLE No. | Al | Pb | TH   | U  |  |  |  |  |  |
|----------|------------|----|----|------|----|--|--|--|--|--|
| 1        |            |    |    |      |    |  |  |  |  |  |
| 2        |            |    |    |      |    |  |  |  |  |  |
| 3        | 80054      | <5 | 25 | 53.9 | 4  |  |  |  |  |  |
| 4        | 80055      | <5 | 20 | 32.0 | <2 |  |  |  |  |  |
| 5        |            |    |    |      |    |  |  |  |  |  |
| 6        |            |    |    |      |    |  |  |  |  |  |
| 7        |            |    |    |      |    |  |  |  |  |  |
| 8        |            |    |    |      |    |  |  |  |  |  |
| 9        |            |    |    |      |    |  |  |  |  |  |
| 10       |            |    |    |      |    |  |  |  |  |  |
| 11       |            |    |    |      |    |  |  |  |  |  |
| 12       |            |    |    |      |    |  |  |  |  |  |
| 13       |            |    |    |      |    |  |  |  |  |  |
| 14       |            |    |    |      |    |  |  |  |  |  |
| 15       |            |    |    |      |    |  |  |  |  |  |
| 16       |            |    |    |      |    |  |  |  |  |  |
| 17       |            |    |    |      |    |  |  |  |  |  |
| 18       |            |    |    |      |    |  |  |  |  |  |
| 19       |            |    |    |      |    |  |  |  |  |  |
| 20       |            |    |    |      |    |  |  |  |  |  |
| 21       |            |    |    |      |    |  |  |  |  |  |
| 22       |            |    |    |      |    |  |  |  |  |  |
| 23       | 80058      | <5 | 15 | 19.0 | 4  |  |  |  |  |  |
| 24       |            |    |    |      |    |  |  |  |  |  |
| 25       |            |    |    |      |    |  |  |  |  |  |

Results in ppm unless otherwise specified

T = element present, but concentration too low to measure

X = element concentration is below detection limit

— = element not determined

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