



**Annual Report for First Year Ended  
17 June 2005 -  
Exploration Activities at E/23912 at  
the Bynoe Project, NT.**

**Signed:**

A handwritten signature in blue ink, appearing to read 'H. Cornelius', is written over the 'Signed:' text.

**Authorised: Harry Cornelius**

***Harry Cornelius***

***July 2005***

## **EXECUTIVE SUMMARY**

This report outlines exploration activities carried out over E/23912 at the Bynoe Project area, south of Darwin, NT.

Current work on EL23912 has included the analysis of earlier mapping and rock-chipping work (that covered both EL23912 and MLN16).

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## 1 INTRODUCTION

This report outlines exploration activities carried out over EL23912 at the Bynoe Project area, around an area of known previous mining operations for Tantalum (Ta), and Tin (Sn) (the Observation Hill area). The Bynoe Project is located to the south of Darwin, on the Cox Peninsula Road. The map in **Figure 1** shows the location of the Exploration Lease.

Access to the site is via very good quality sealed road (Stuart Highway) south from Darwin for approximately 60km then via a very good quality sealed road (Cox Peninsula Road) northwest to the Observation Hill Plant (located approximately 100m south of the road) for approximately 30km. The journey takes 1 hour by vehicle.

The Observation Hill area is characterised by undulating topography with low hills and broad, shallow valleys. The climate is characterised by warm, dry weather in winter, and hot, humid weather, with a distinct monsoonal type rainfall in summer. The Bynoe area is sparsely populated, with small tourist accommodation parks located about 10km away near Berry Springs, servicing the nearby Litchfield National Park (about 45km south). The vegetation is typically low, open forest and grassland, with small areas of restricted denser tropical vegetation around billabongs.

There is a small accommodation camp on site (on MLN16), with potable water supplied by bore. This camp is currently being partially used by All Earth Contracting.

## 2 PREVIOUS WORK

The main group of Bynoe workings (shown in **Figure 1**) have been mined over an extended period throughout the last century, mainly for tin, with more extensive hard-rock and alluvial mining in the latter years being primarily for tantalum.

Previous exploration by SGW (up to 1995) in MLN16 delineated a number of 'indicated resources' in the Bynoe project, including:

- Ah Hoy                      100,000t @ 268ppm Ta<sub>2</sub>O<sub>5</sub> (to 30m depth)
- Henderson South 50,000t @ 190ppm Ta<sub>2</sub>O<sub>5</sub>
- Highland                    80,000t @ 171ppm Ta<sub>2</sub>O<sub>5</sub>
- Lees                         250,000t @ 128ppm Ta<sub>2</sub>O<sub>5</sub>
- P33                         340,000t @ 159ppm Ta<sub>2</sub>O<sub>5</sub> (to 40m depth)
- Yan Yams                  40,000t @ 317ppm Ta<sub>2</sub>O<sub>5</sub>
- **Total                        860,000t @ 173ppm Ta<sub>2</sub>O<sub>5</sub>.**

The drilling in most cases did not close-off any mineralised pegmatite, nor did it test all targets.

This area has been subject to alluvial/eluvial mining along a number of creek lines as well as at a number of shallow pits developed in oxidised pegmatite by a variety of operators. Greenbushes Ltd constructed and ran an 80tph alluvial plant at Observation Hill in 1985-86 and also in 1989. This plant has also been operated in a tribute arrangement (with Fieldcorp Ltd) from 1996-99.

More recently (during 2001-02) a rock-chip evaluation of the outcropping pegmatites across the eastern part of the tenement (and MLN16) was carried-out, with the results from this work displayed in **Figure 1**.

### 3 CURRENT WORK

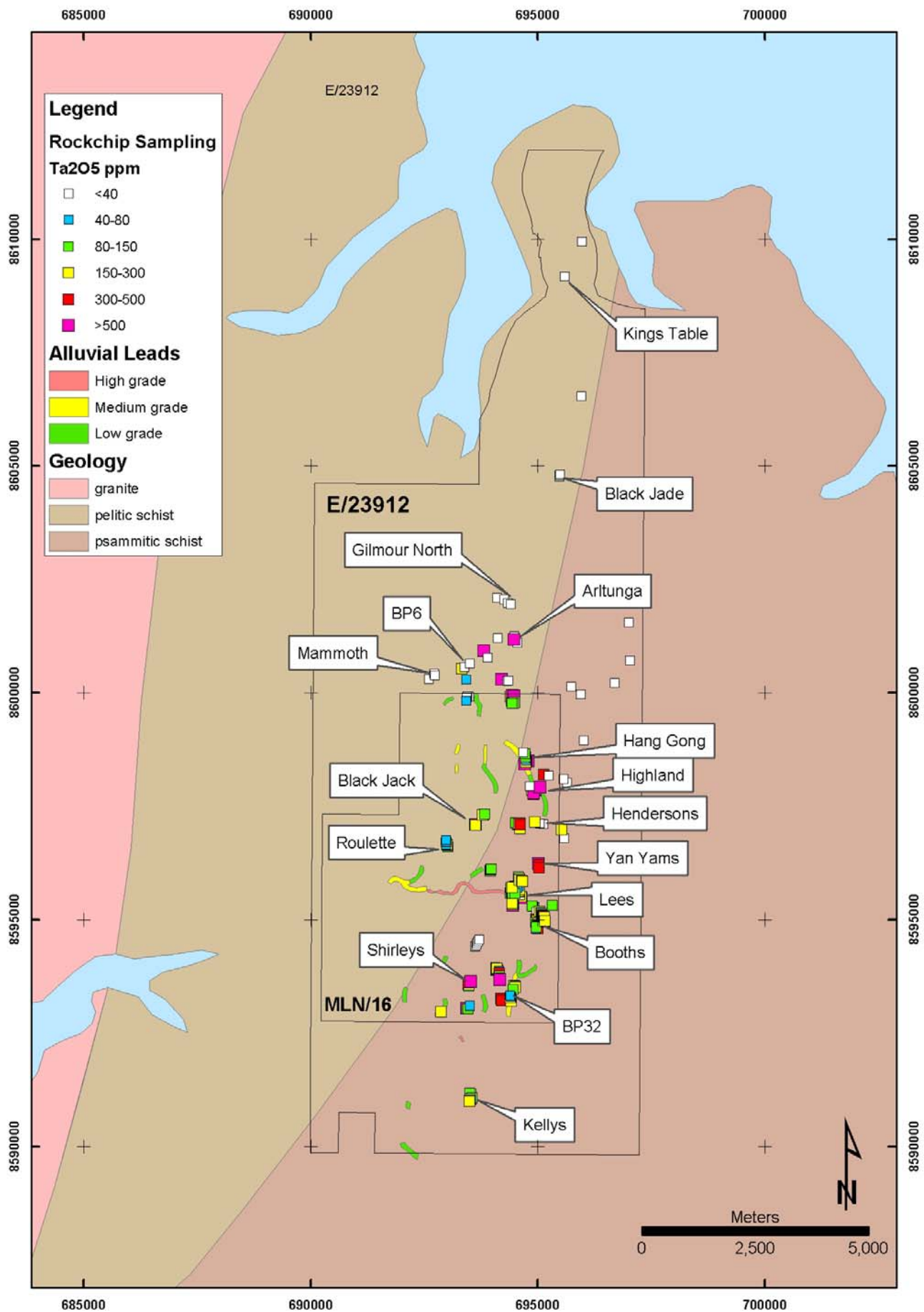
Current work on EL23912 has included the analysis of this earlier mapping and rock-chipping work (that covered both EL23912 and MLN16).

The principal conclusions from this work were:

- The known pegmatites have a geometry characterised by thin, steep-dipping irregular sheets.
- Higher grade mineralisation is erratically distributed within these pegmatite sheets.
- There is potential for modest-tonnage, modest-grade resources in multiple deposits (possibly up to 3Mt at 200-250ppm Ta<sub>2</sub>O<sub>5</sub>).
- The tonnage potential for high-grade mineralisation is small (<50,000t at >400ppm Ta<sub>2</sub>O<sub>5</sub>, with >1% tin).
- Extensive, shallow, flat-lying pegmatites would be required to significantly increase the tonnage potential. There is no evidence of this type of pegmatite occurring here.

### 4 EXPENDITURE

SALARIES – GEOLOGICAL (analysis and review incl management)	\$3000
REPORTING (incl drafting and support)	\$ 500
ANNUAL RENT	\$ 400
ADMINISTRATION	\$ 525
<b>TOTAL</b>	<b>\$4425</b>



**Figure 1:** Location of EL23912 and rock-chip sampling results at the Bynoe Project, NT.