

MT. SHOOBRIDGE PROJECT, NT

MLN 544

ANNUAL REPORT

FOR THE PERIOD

1st January 2014 to 31st December 2014

Tenement	:	ML N544			
Owner	:	Altura Exploration Pty Ltd (AEPL)			
Operator	:	Altura Mining Ltd (AJM)			
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FIGURES

Figure 1: Shoobridge Project – Tenement Location Plan.

SUMMARY

No technical exploration studies were completed on MLN544 during the 2014 reporting period with the exception of the mandatory reporting and meeting tenement administration requirements.

1. INTRODUCTION

This report covers exploration work carried out by Altura Exploration Pty Ltd, a wholly owned subsidiary of Altura Mining Ltd (AJM), during the reporting period 1st January 2014 to 31st December 2014.

The tenement is part of the Shoobridge Project which includes EL29549, MC1N60, ML1N296 and the subject of this report MLN544 – see Figure 1.

2. LOCATION AND ACCESS

The Shoobridge Project is located approximately 160km south southeast of Darwin; approximately 19km west northwest of Hayes Creek. Access is via the Old Stuart Highway and Douglas Station tracks, which become impassable in the wet season generally from November through to April.

The Licence lies on the Pine Creek 1:250,000 (SD52), and Tipperary (5170-1) 1:100,000 scale topographical and geology sheets.

3. TENEMENT STATUS

MLN544 (0.024km²) was granted to R.M. Biddlecombe on 7th May 1982 for a period of twenty-one (21) years. In 2002 the licence was renewed for a further twenty (20) years.

Tenement	Holder	Grant Date	Expiry	Area Km²	Rent \$	Commitment \$
MLN544	AEPL	01.01.2003	31.12.2022	0.024	\$33	N/A

Table 1: ML N544 – Tenement Details.



Figure 1: Shoobridge – Tenement Location Plan – MLN544 – MLN544 – MLN544

4. GEOLOGY

4.1. Regional Geology and Structure

The project area geology comprises the Lower Proterozoic Burrell Creek Formation which consists of feldspathic meta-greywackes, minor lenses of volcanilithic pebble conglomerate, laminated phyllite, slate and mudstone. The underlying Mt Bonnie Formation of the South Alligator Group comprises interbedded carbonaceous slate, phyllite, mudstone and siltstone; feldspathic metagreywacke and ferruginous phyllite with chert bands, lenses and nodules.

The Middle Proterozoic Shoobridge Granite lies within the Shoobridge project area and intrudes the sediments of the Burrell Creek Formation. Numerous prospects proximal to the Shoobridge Granite display potential for polymetallic Cu, Pb, Zn and Ag vein mineralisation and these include the Full Hand and Jackson's prospects with the latter falling within MCN60.

The Shoobridge Granite is also considered to be the parent granite to the pegmatites of the Shoobridge pegmatite field (Frater, 2005), which includes the Barrett's, Plateau Point, Chinese, Halls, Halls Creek and Old Company (Mount Shoobridge) Pegmatites.

Two parallel, north-south trending faults comprising the Plateau Point and Shoobridge Faults, cross cut the Shoobridge Project tenements, and may have provided the structural control for pegmatite intrusion.

South of Plateau Point, the Plateau Point Fault assemblage consists of a northnorthwest-trending bifurcating and en-echelon series of major faults, which displace early Proterozoic meta-sediments and the Fenton Granite.

Within the Fenton Granite, the Koolpin Formation is incorporated as rafts associated with the Plateau Point fault assemblage. A number of prospects, including the Gold Ridge open pit, are located within these rafts, and are prospective for polymetallic vein style mineralisation. The Wildman Siltstone is displaced against the Koolpin Formation, the fault zone being characterised by sheared phyllites, abundant quartz blows and numerous contorted pegmatites.

4.2. Mineralisation Occurrences.

ML N544, known as the Chinese prospect, is located about 1 km to the north from the Barrett's tin workings which are located within ML N296.

At the Barrett's workings the pegmatite is irregular in outline, and dips to the northeast at an average angle of 30° . The pegmatite body intertongues with, and contains blocks of country rock, which account for approximately fifteen percent of the pegmatite. High grade pockets of ore are common on the contacts of these xenoliths. Most shafts, costeans and pits are less than 7 m deep. The only recorded production from Barrett's is 117 t of Sn concentrate that was won prior to 1910.

The Chinese prospect located within ML N544 is located approximately 1 km north of the Barrett's Mine. Workings consist of a series of collapsed pits and costeans. One 45m long, deep costean has exposed a 7m wide pegmatite, with sharp contacts that are conformable to bedding. Mineralisation appears to have been concentrated on the wall and border zone of the pegmatite, as shafts have been sunk on this zone. Average Ta values from 4 grab samples taken by Frater (2005), returned 116ppm Ta, and 2,355ppm Sn.

The Halls pegmatite lies on the same line of pegmatites as Chinese and Barrett's, and is located approximately 200 m north of the Chinese workings. Blanchard (1937) reported that Halls was a 2m wide greisen lode, worked for its high grade Sn and Ta, however no details of production are available. Today, the prospect consists of four collapsed pits, 4-5m wide and approximately 4m deep, on a line trending 0200 over a strike distance of 30m. Average results of two grab samples taken from the prospect by Frater (2005) returned 124 ppm Ta and 203ppm Sn.

The Old Company Mine is located on the Shoobridge Fault within the former tenement ERL88. The main lode consists of a steeply dipping quartz-muscovite pegmatite about 0.5 to 5m's in width, trending NNW, and containing cassiterite shoots over an interval of about 100m. Historic (pre 1900) workings yielded 145 tonnes of SnO₂ concentrate (unrecorded grade). A tailings sample has yielded results of 1.48% Sn and 252ppm Ta.

The Mount Shoobridge Gold deposit also lies on the Shoobridge Fault within the former tenement ERL88. The gold resource from 11,250mN to 11,550mN is stated at 600,000 tonnes at 1.7g/t Au, although gold mineralisation has been intersected from 10,000mN to 12,000mN. All gold mineralisation appears to lie parallel to, and are often co-incident with pegmatites hosting tin and tantalum mineralisation.

5. PREVIOUS EXPLORATION

Tin was first discovered at Shoobridge by *George Barrett* in 1882. Since that time mining has primarily been confined to shallow alluvial and small lode underground mining at the Old Company Mine.

Barrett's has been explored by various parties, and Blanchard (1937) estimated that it contained a total of 237,000 tonnes of mineralised pegmatite to a depth of 30m. Total recorded production from Barrett's (1968) consisted of 117 tonnes of tin concentrate.

In 2001 Julia Corporation drilled 40 RC holes on 14 traverses at Barrett's. The best intercept was 11m @ 270g/t Ta_2O_5 from 20m in BARC04. Julia announced a preliminary resource of approximately 280,000 tonnes to a depth of 60m at a grade of 125g/t Ta_2O_5 and 380g/t SnO_2 .

United Uranium Pty Ltd carried out an exploration program in search of tin, lead and copper over the property in the 1960's. In 1983 the ground was taken up by R.M. Biddlecombe, where a number of joint venture partners were involved.

From 1983 to 1986, Talmina Trading carried out stream and soil sampling. Cassiterite, tantalite and tapiolite were identified, including the identification of tantalite in streams south of recognised pegmatite loads.

6. CURRENT EXPLORATION – Altura Exploration Pty Ltd

No field studies were undertaken within MLN554 during the 2014 reporting period.

7. CONCLUSIONS & RECOMMENDATIONS

No field or technical studies were undertaken in the 2014 reporting period.

8. **REFERENCES**

Frater, K.M., 2005, Tin-tantalum pegmatite mineralisation in the Northern Territory. Northern Territory Geological Survey, Report 16.

de Kever N., 2010, MLN544, Mt Shoobridge Project, N.T., Annual report for 2010. Altura Exploration Pty Ltd

Bourke B G, 2011, MLN544, Mt Shoobridge Project, N.T., Annual report for 2011. Altura Exploration Pty Ltd

Bourke B G, 2012, MLN544, Mt Shoobridge Project, N.T., Annual report for 2012. Altura Exploration Pty Ltd