

HADDINGTON RESOURCES LIMITED ACN 093 391 774 ABN 39 093 391 774

MT. SHOOBRIDGE PROJECT, NT

EL 24528

ANNUAL REPORT

FOR THE PERIOD

24th November 2006 TO 23rd November 2007

Tenement	:	EL24528	
Owner	:	Australian Tantalum Pty Ltd	
Operator	:	Haddington Resources Ltd	
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Date	:	December 2007	
Report Number	:	SHOO/EL24528-2/2007	
Project Number	:	SH001	
Distribution	:	Haddington Resources Ltd	(1)
		Department of Primary Industry,	
		Fisheries and Mines (DPIFM)	(1)

TABLE OF CONTENTS

1. SUMMARY	
2. INTRODUCTION	3
3. LOCATION AND ACCESS	3
4. TENEMENT STATUS	3
5. LOCAL GEOLOGY	5
6. PREVIOUS EXPLORATION	
7. CURRENT EXPLORATION – HADDINGTON RESOURCES LTD	
8. CONCLUSIONS / RECOMMENDATIONS	11
9. PROPOSED WORK	11
10. REFERENCES	12

FIGURES

Figure 1.	Shoobridge Project Tenement Location Plan
Figure 2.	Shoobridge Regional Geology
Figure 3.	Phillip Greets Prospect Rock Chip Locations

TABLES

Table 1.	EL24528 Tenement Details
Table 2.	EL24528 Rock Chip Results

APPENDICES

- **ppendix 1.** Laboratory and Analysis Details
- ppendix 2. Expenditure Statement 2007.

ILES ATTACHED ON CD

EL24528_2007_A_01_ReportBody.pdf EL24528_2007_A_02_SufaceGeochem.txt EL24528_2007_A_02_SufaceLocation.txt

1. SUMMARY

Exploration conducted on EL24528 during the reporting period included reconnaissance field mapping and sampling of the old workings in the vicinity of the Phillip Greets prospect.

2. INTRODUCTION

This report covers exploration work carried out by Australian Tantalum Pty Ltd, a wholly owned subsidiary of Haddington Resources Limited (HDN) during the reporting period (23rd November 2006 to 24th November 2007).

The tenement is part of a project which also includes EL22186, EL23105, EL25181, ERL88, MCN60, MLN296, and MLN544 (Figure1).

3. 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, in the wet season (November to April), access roads into EL23105 become impassable.

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

4. TENEMENT STATUS

EL24528 was granted to Australian Tantalum Ltd 24th November 2005 for a period of six (6) years.

Tenement	Holder	Grant Date	Expiry	Area Km²	Rent\$	Commitment \$	
EL24528	ATL	24.11.2005	23.11.2010	10.02	\$33	\$10,000 (first year) \$12,700 (second year)	

 Table 1.
 EL24528 – Tenement Details.



Figure 1. Shoobridge Project - Tenement Location Plan

5. LOCAL GEOLOGY

The project area consists primarily of the Lower Proterozoic Burrell Creek Formation (feldspathic metagreywackes, minor lenses of volcanilithic pebble conglomerate, laminated phyllite, slate and mudstone), and the underlying Mt Bonnie Formation of the South Alligator Group (interbedded carbonaceous slate, phyllite, mudstone and siltstone; feldspathic meta-greywacke and ferruginous phyllite (metasiltstone) with chert bands, lenses and nodules).

The Wildman Siltstone crops out within the western outcrop area of the Fenton Granite (EL23105), and in the core of the Howley Anticline (EL25181 and EL23105). Within the Fenton Granite, the formation is incorporated as rafts associated with the Plateau Point fault assemblage. A number of prospects (including Gold Ridge open pit), are located within these rafts, and are prospective for polymetallic vein style mineralisation.

The Middle Proterozoic Shoobridge Granite lies completely within EL22186, 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 (these include the Full Hand, Jacksons, Pyromorphite and Phillip Greets prospects).

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

Two parallel, north-south trending faults (the Plateau Point and Shoobridge Faults) cross cut the Project area. These regional faults may have provided the structural control for pegmatite intrusion (Barrett's, Hall's and Chinese all occur immediately west of the Shoobridge Fault, whilst the Carruthers pegmatite is located immediately west of the Plateau Point Fault).

According to Frater (2005), Barretts pegmatite is irregular in outline, intertonguing with, and containing blocks of country rock. Fifteen percent of the pegmatite body is considered to include xenoliths of country rock (high grade pockets of ore are commonly on the contact of country rock). The pegmatite dips to the northeast at an average of 30°, with most shafts, costeans and pits less than 7 m deep. The only recorded production from Barretts is 117 t of tin concentrate that was won prior to 1910.

The Chinese pegmatite is located approximately 1 km north of Barretts. Workings consist 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 Barretts, and is located approximately 200m north of the Chinese workings. Blanchard (1937) reported that Halls was a 2m wide greisen lode, worked for its high grade, 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 020o over a strike distance of 30m. Average results of two grab samples taken from the prospect by Frater (2005) returned 124ppm Ta and 203ppm Sn.

South of Plateau Point, the Plateau Point Fault assemblage consists of a north-northwesttrending bifurcating and en echelon series of major faults, each up to 8km in length, tributary to a principal fault which parallels the Mount Shoobridge fault. These faults displace early Proterozoic metasediments and Fenton Granite. The Wildman Siltstone is displaced against the Koolpin Formation, the fault zone being characterised by sheared phyllites, abundant quartz blows and numerous contorted pegmatites.

Within the Fenton Granite, the principal fault extends some 10 km south of Plateau Point and is recognised by a prominent narrow quartz or quartz-hematite-capped ridge.

The Plateau Point Pegmatites are confined to the older rocks of the Mount Partridge Group, and intrude the Wildman Siltstone, immediately southeast of Plateau Point. The pegmatites can be traced 3.3 km south-southwest from the scree slopes of Plateau Point, to the edge of the Fenton Granite, and occur within or close to the margin of the Plateau Point Fault.

The pegmatites consist of coarse grained K-spar, microcline, perthite, plagioclase, quartz and muscovite, with accessory garnet and tourmaline. Interlayered meta-sediment and pegmatite widths are between 1m and 10m and overall the mixed unit attains widths of up to 230m.

In the northern section of EL23105, the K-Mesa prospect consists of a flat-lying a Cretaceous mesa, approximately 2km in length and 1km in width, displaying stratabound, supergene iron enrichment. Rock chip samples have assayed up to 57.6% Fe; average P content was ~0.5%.

The McLeans Prospect (abandoned mine) is located on a north-easterly trending ridge which continues northeast from the centre of K-Mesa. Mn-rich talus boulders around the Cretaceous mesa were hand-picked and sent to Rum Jungle for use as an oxidiser to process the uranium ore mined during the 1950's and 1960's.



Figure 2. Shoobridge Regional Geology

6. 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.

United Uranium Pty Ltd carried out an exploration program in search of tin, lead and copper over the property in the 1960's.

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.

Barretts 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 Barretts (1968) consisted of 117 tonnes of tin concentrate.

In 2001 Julia Corporation drilled 40 RC holes on 14 traverses at Barretts. 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 SnO₂.

7. CURRENT EXPLORATION – HADDINGTON RESOURCES LTD

In September 2007 three days were spent on reconnaissance geological mapping and sampling the Phillip Greets prospect.

The Phillip Greets historical workings consist of approximately 23 pits and old workings plus a single shaft. These historical workings are aligned north south with a strike length of 600m and appear to be located in a magnetic low. Geology consists of a series of greywacke, phylite and schist (Burrell Creek Formation).

A total of eight rock chip samples were collected to evaluate the dumps surrounding the old workings. Samples were sent to Kalgoorlie Assay Laboratories in Midvale Perth and assayed for As, Au, Th, U, Cu, Fe, K, Pb and Zn. The table in Appendix 1 outlines elemental analysis techniques and detection limits.

Six samples were found to contain anomalous copper values ranging from 468ppm Cu to 8,829 ppm Cu, with an average grade of 3,400ppm Cu (Figure 3). The highest values were from the old working located in the central and southern zones, 8,829ppm Cu and 5,489ppm Cu respectively.

Sample No.	MGAE	MGAN	As (ppm)	Au (ppm)	Th (ppm)	U (ppm)	Cu (ppm)	Fe (%)	K (ppm)	Pb (ppm)	Zn (ppm)
109340	750385	8501760	256	0	13.88	16.9	8,828	5.93	26023	38	36
109341	750385	8501784	910	0.01	14.62	19.28	7,992	12.18	28822	20	32

109342	750385	8501824	107	0.01	7.49	3.37	3,126	4.41	13693	106	18
109343	750365	8501896	17	0	13.81	3.46	1,308	0.77	23341	9	17
109344	750366	8501928	80	0.07	12.93	4.49	468	3.95	21100	8	12
109345	750342	8502102	1	0	0.95	0.15	16	1	1102	21	10
109346	750354	8502088	51	0	21.48	6.14	183	1.4	29164	11	28
109347	750431	8501482	483	0.02	9.84	13.02	5,489	2.94	23602	17	21

Table 2. EL24528 Rock Chip Results



Figure 3. Phillip Greets Prospect Rock Chip Locations.

8. CONCLUSIONS / RECOMMENDATIONS

The mullock dumps in the central and southern part of the Phillip Greets historical workings are anomalous in Cu mineralization and are located within a prospective region.

Future exploration will involve a detailed literature review of the Phillip Greets, Full Hand and Pyromorphite prospects followed by a broad soil and rock chip sampling program in the 2008 field season.

Ground geophysics techniques may also be used to locate potential drill targets at depth.

9. **PROPOSED WORK**

The budget for next year is based on a soil survey and rock chip mapping program over Phillip Greets, Full Hand and Pyromorphite prospects.

10. REFERENCES

Blanchard, R., 1937, Report on Mount Shoobridge tin. Anglo-Queensland Mining. Northern Territory. Northern Territory *Geological Survey, Open File Company Report* CR1937-0003.

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

Perrino, F.A., 1967, Preliminary Report – Iron Investigations, Shoobridge N.T., *United Uranium N.L.*

Young, J.A., 2005, Annual report for 2005. EL23105, Mt Shoobridge NT, Haddington Resources Ltd.

APPENDIX 1. LABORATORY AND ANALYSIS DETAILS

Tenement	No. of Samples	Sample Type	Element (Analysis Technique)	Det Lmt	Unit	Lab	Location
			As (ICPMS)	1	ppm		
			Au (ICPMS)	0.01	ppm	KalAssay	Perth
	8 (109340-347)	Rock Chip	Th (ICPMS)	0.01	ppm		
EL24528			U (ICPMS)	0.01	ppm		
			Cu (ICP)	5	ppm		
			Fe (ICP)	0.01	%		
			K (ICP)	5	ppm		
			Pb (ICP)	5	ppm		
				Zn (ICP)	1	ppm	