

# **EL28/2007 – BELL’S HILL**

## **ANNUAL REPORT**

**27<sup>TH</sup> SEPTEMBER 2010 – 26<sup>TH</sup> SEPTEMBER 2011**

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ABN: 31 079 634 692

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## VERIFICATION LISTING

Exploration Work	File_name	Type	Format Description
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### Office Studies

Report	EL282007_201011_01_report	pdf	Report Body
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### Drilling

Drilling	EL282007_201011_02_dhlocation	txt	Drill hole collar locations
Drilling	EL282007_201011_03_dhassay	txt	Drill hole assay data
Drilling	EL282007_201011_04_dhsurvey	txt	Down hole survey
Drilling	EL282007_201011_05_lithology	txt	Drill hole lithology
Drilling	EL282007_201011_06_lithcode	txt	Lithology Codes
Drilling	EL282007_201011_07_standards	txt	Assay standards data
Report	EL282007_201011_02_appendix1	pdf	Drill hole collar locations
Report	EL282007_201011_03_appendix2	pdf	Drill hole assay data
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Report	EL282007_201011_05_appendix4	pdf	Drill hole lithology
Report	EL282007_201011_06_appendix5	pdf	Lithology Codes

## TENEMENT DETAILS

LICENSEE: **Low Impact Diamond Drilling Specialists Pty Ltd & N.B., & S Brown**  
Grant date 1: 27/09/2007

ABN: 31 079 634 692

## **ABSTRACT.**

Exploration Licence 28/2007 comprises 1 square kilometre near Ringarooma was granted on 27<sup>th</sup> September 2007 to N.B., & S Brown and Low Impact Diamond Drilling Specialists Pty Ltd (LIDDS). LIDDS are acting as managers of the Licence.

During 2010 – 2011 only minor work was able to be undertaken on the Bell's Hill area. The key target for the lease remains the re-testing of areas drilled using alternative drilling methods such as Reverse circulation to minimise the sample loss experienced previously.

## **KEY WORDS**

Location Name:	Bells Hill, Ringarooma, Weldborough
Earth Science Related Terms:	fault, shear, post mineralisation shear, brittle offset.
Environment of Mineralisation:	shear hosted mineralisation, vein stockwork, greisen veining.
Commodities:	tin, gold, silver, copper.
Exploration Methods:	Historical research, drill testing based on model, rock chip sampling/field mapping.
Mine / prospect name:	Bells Hill.
Stratigraphic Name:	Mathinna Supergroup
Geological province name:	Blue Tier Batholith
Geological age:	Devonian, Silurian.

## **1.0 Introduction.**

Exploration Licence 28/2007 comprises 1 square kilometre near Ringarooma was granted on 27<sup>th</sup> September 2007 to N.B & S Brown and Low Impact Diamond Drilling Specialists Pty Ltd (LIDDS).

- During 2010 – 2011 limited work was undertaken to continue review all available data and literature pertaining to the Bell's Hill

## **2.0 Exploration Objectives.**

The philosophy and objectives of the exploration undertaken by LIDDS is directed to the definition of a significant hard rock tin resource that would be amenable to economic extraction.

The presence of historic surface alluvial sluicing and hard-rock exploration of stanniferous veining indicates that the licence has exploration potential.

Primary exploration has focussed on testing discrete anomalies as defined by independent re-interpretation of historic data.

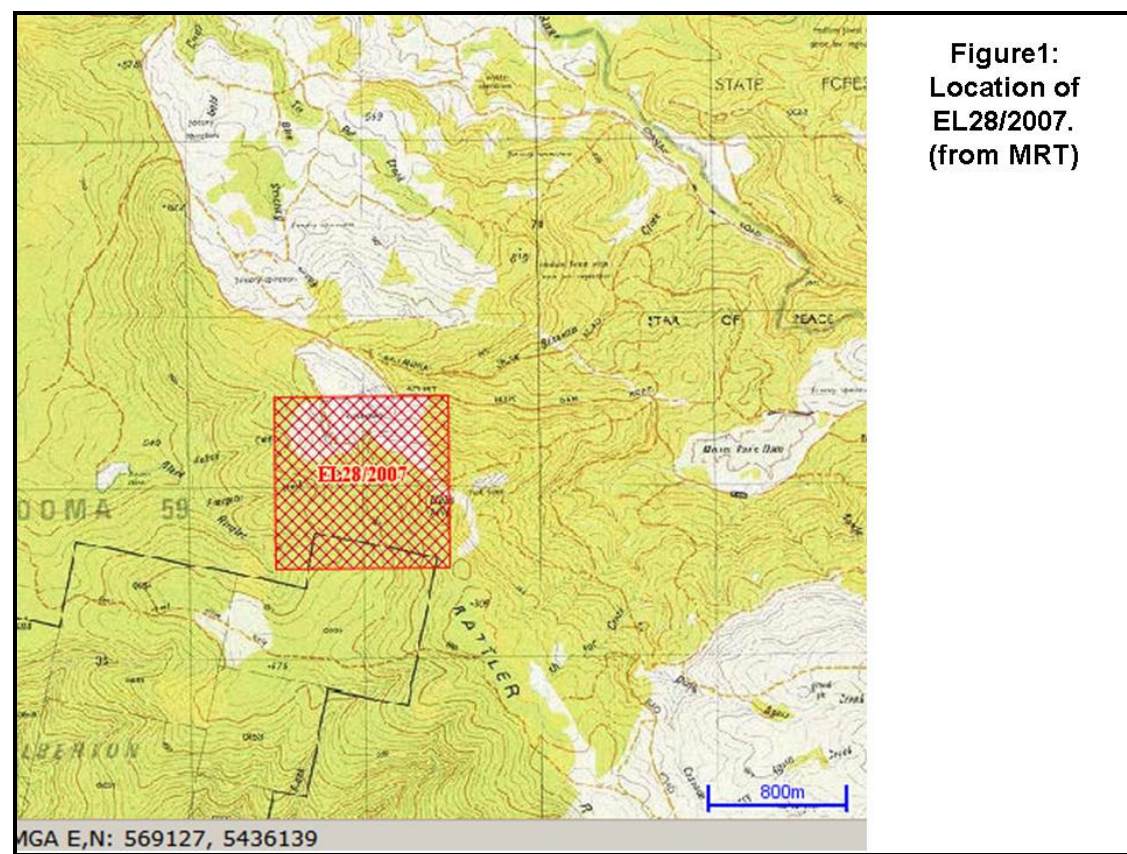
- Confirm the veracity and extent of previous mapping and anomalous tin mineralisation,
- Inspect and sample any available underground openings.
- Drill test around historic underground workings at depth to determine structural controls and geometry of primary source.

### 3.0 Location and Access.

The Bell's Hill Prospect is located in North East Tasmania, about 7 kilometres north-east of Ringarooma and 7.5 kilometres South-west of Weldborough. The main access route to the area is via the sealed New River Road and the unsealed Dead Horse Hill and Mount Paris Dam Roads.

The licence covers 1 square covering a portion of previously sluiced workings.

**Figure 1. Exploration Licence 28/2007**



## 4.0 Regional Geology.

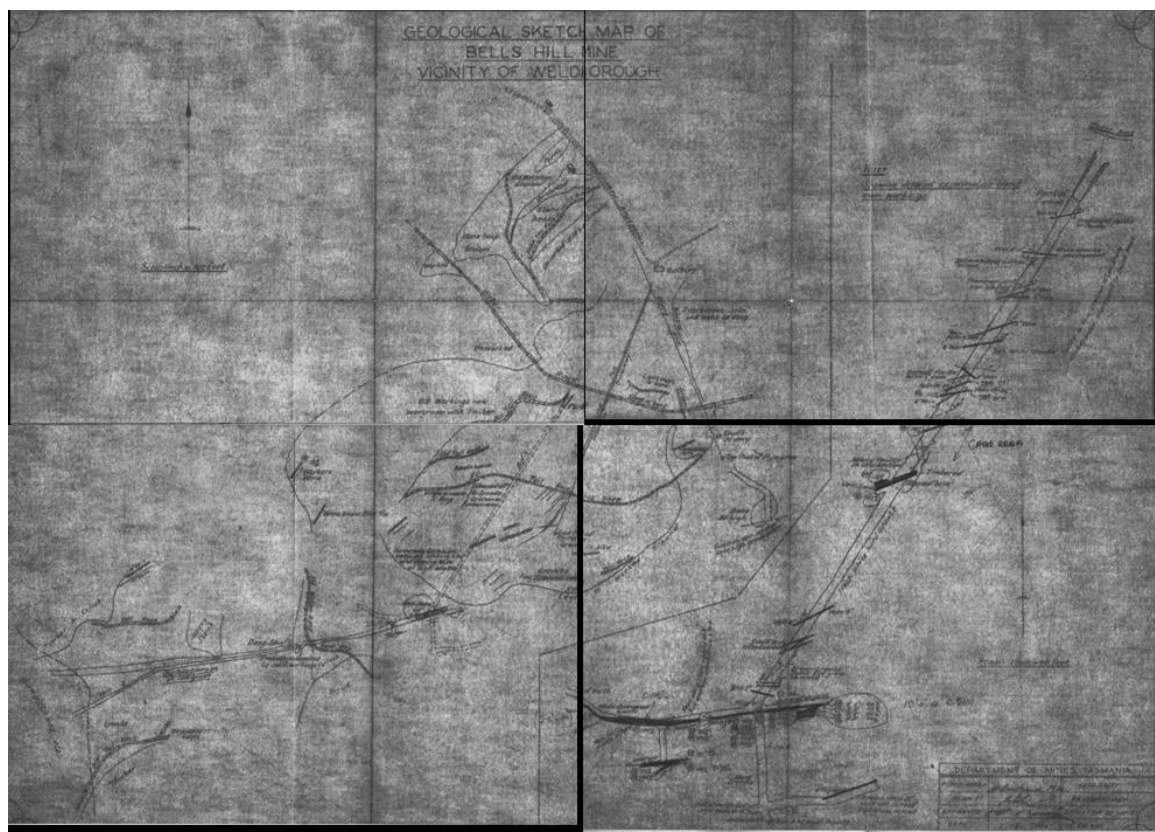
The regional geology is described as the south – western extension of Devonian aged, Blue Tier batholith that have been exposed through the erosion of Devonian – Silurian sandstones, slates and mudstones of the Mathinna Group (Solomon, 1971).

The mineralisation at Bell's Hill consists of quartz – topaz +- cassiterite +- sulphides hosted by soft altered, medium to coarse grained, equigranular, muscovite granite.

## 5.0 Previous Work.

The area has been subject to both limited production of tin from both surface and underground sources (Nye 1925, Cundy 1925). Early reviews concentrated on the underground prospectivity with both authors mentioning the presence of multiple mineralised vein systems being developed along underground. Cundy stated that 300 tons of 3% tin ore were extracted from a No3. Lode (Figure 2).

**Figure 2. Plan of Bell's Hill Workings (Cundy 1925).**





Significant exploration sampling was completed by Union Corp which focussed on the presences of what was described broadly as a greisen vein swarm focussed around several preferential orientations.

Costeaning on a north-trending granite/sediment contact which dips approximately 30° west exposed the largest vein system (The Main Lode developed along from underground) which strikes approximately east-west and terminates against the Mathinna Beds. Coarse cassiterite and a fine network of Quartz-tourmaline veinlets occur in the main lode and Mathinna Bed sediments respectively.

Several other greisen vein swarms returned significant zones of elevated tin mineralisation. The greisen veins contain between 0.002% and 3.26% tin, commonly 0.15% (Windall, 1981)

Union Corps conclusions prior to their relinquishment of the area were that the area had the potential to host a significant low grade tin resource. A diamond drill hole was proposed but never completed prior to the licence being dropped.

Preliminary analysis of sulphides collected from the surface was undertaken for Union Corp (Taylor, Rubenach, 1981) and it was concluded that “the veins were essentially quartz (topaz?) +- cassiterite, arsenopyrite and chalcopyrite with accompanying quartz-topaz alteration of the surrounding granite. Surface samples had apparently given grades up to 3% copper with some silver. Taylor suspected that the presence of both the elevated copper and silver were a result of supergene mineralisation.

Analysis was undertaken during 2008 - 09 on a piece of siliceous greisen material (BH01) confirmed that anomalous tin, silver and copper existed on the site (Table 1).

**Table 1. Analysis of Rock Sample BH01 – Genalysis Laboratory Services.**

Element	Au	Ag	As	Cu	Sn
Unit	ppb	ppm	ppm	ppm	Ppm
Detection	1	1	10	1	10
Method	B/ETA	AT/OES	AT/OES	AT/OES	AT/OES
BH01	2	50	8,973	6,694	2,160

Drilling undertaken during 2009 (BHDDH001 and BHDDH002) confirmed anomalous mineralisation in approximately the positions as per the old 1925 plan by Cundy.

Two drill holes (BHDDH001 and BHDDH002) were drilled in 2009 and were interpreted to have intersected at least one of the previously mapped lode structures, however BHDDH001 failed to intersect significant visible tin mineralisation associated with the 'Main Lode' structure immediately below the main adit level.

The depth of weathering encountered in both BHDDH001 and BHDDH002 was significantly deeper than anticipated with both holes terminating in moderately to highly weathered granite.

Better assays from the hole are listed in Table 2.

**Table 2: Significant Assay Results – Diamond Drilling 2009.**

Hole_Id	From	To	Sn (%)	As (ppm)	Cu (ppm)	Ag (ppm)
BHDDH001	47.80	48.80	0.11	77,100	3,137	25
BHDDH001	48.80	49.70	0.01	102,000	529	19
BHDDH002	1.90	2.30	0.34	9,150	1,130	8
BHDDH002	6.00	6.50	0.44	1,100	79	<1

## 6.0 Exploration Completed During the Reporting Period

During this period the Licence was subject to review of possible exploration drilling alternatives as well as other minor literature reviews. Several drilling contractors were approached to determine the availability of Reverse Circulation drill rigs, however none were available to undertake the small program proposed at Bells Hill.

The Ringarooma area has experienced an extremely wet summer and winter during the reporting period. The wet weather precluded most attempts at field work.

One of the two licence holders (Mr N Brown who lives in Ringarooma) experienced serious health issues during the year which has also restricted any attempts to undertake surface field work and a more judicious search for potential RC drilling contractors.

## 7.0 Discussion and Conclusions.

As concluded in the previous year's report, the depth of weathering encountered is still believed to be significantly deeper than that shown from historic data. As a result it is still considered that any future drilling at Bell's Hill should attempt alternative drilling methods such as Reverse Circulation (RC) to improve recovery of samples.

The presence of silicified greisen zones indicates that significant fluid movement has occurred in the vicinity of Bells Hill and does not distract from the exploration model that a significant low grade stanniferous deposit may exist.

## 8.0 Expenditure.

### Geoscientific Costs

- Geology Nil
- Geochemistry
- Geophysics
- Remote Sensing

### Drilling & Gridding Costs

- Gridding
- Drilling

### Land Access Costs

### Rehabilitation Costs

### Feasibility Study Costs

### Other Items

<b>Administration Costs</b>	\$	0
<b>Total Costs</b>	\$	0

## 9.0 References

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