

Quarter ending 30 September 2015

# Quarterly Report



## Highlights

- Outstanding drill results at the Bygoo North Tin prospect
- Best intercepts to date include 35m at 2.1% Sn, 10m at 2.0% Sn and 13m at 1.0% Sn
- Multiple similar prospects in the Ardlethan tin field
- Mt Paynter tin-tungsten project granted

### Bygoo North Prospect

During the quarter drilling by Thomson confirmed the discovery of a new, high grade tin greisen at its Bygoo North tin prospect located 7km north of the Ardlethan tin mine, south west NSW (Figure 1).

Thomson drilled 15 RC holes for approximately 1,660m in two programs testing below and along strike from old shallow tin workings discovering high grade tin in three greisen zones, one of which was unknown prior to Thomson drilling.

Exceptional, high grade tin intersections were recorded in drilling (shown in Figure 2), with the standout intersections as follows –

**BNRC003 - 8m at 0.8% Sn from 118m**

**BNRC004 - 5m at 1.3% Sn from 130m**

**BNRC010 - 13m at 1.0% Sn from 66m**

**BNRC011 - 35m @ 2.1% Sn from 44m including 6m @ 3.1% Sn from 56m, 5m @ 6.0% Sn from 66m, and 4m @ 3.8% Sn from 75m**

**BNRC013 - 6m @ 0.8% Sn from 67m, 11m @ 1.4% Sn from 88m, and 10m @ 2.0% Sn from 108m**

The good intercepts recorded in BNRC3, 4 and 13 all lie within the main greisen (Greisen B). Work to date by Thomson has defined this greisen zone over an inferred strike length of more than 200m to a depth exceeding 100m (Figure 2).

The thick, high grade intersections recorded in holes BNRC010 and BNRC011 are within the “hidden” greisen, termed Greisen A, which is interpreted to dip steeply north and sits in the footwall to Greisen B. Modelling work indicates that the BNRC011 intersection is between 10-15m in true thickness.

The BNRC011 intersection contains some impressive grades, with individual metres up to 11.1% Sn. The length of the intersection has provided some good detail on the tin distribution and also shows that deleterious elements are very low or undetectable. This is a consequence of the “clean” occurrence of coarse cassiterite in quartz and feldspar with very little of the sulphide mineralisation that often occurs with tin (and does at Ardlethan).

The forward plan is to define and extend Greisens A, B and C, drilling from north to south. This program should underpin modelling to provide a JORC resource and is planned to take place before the end of the year.

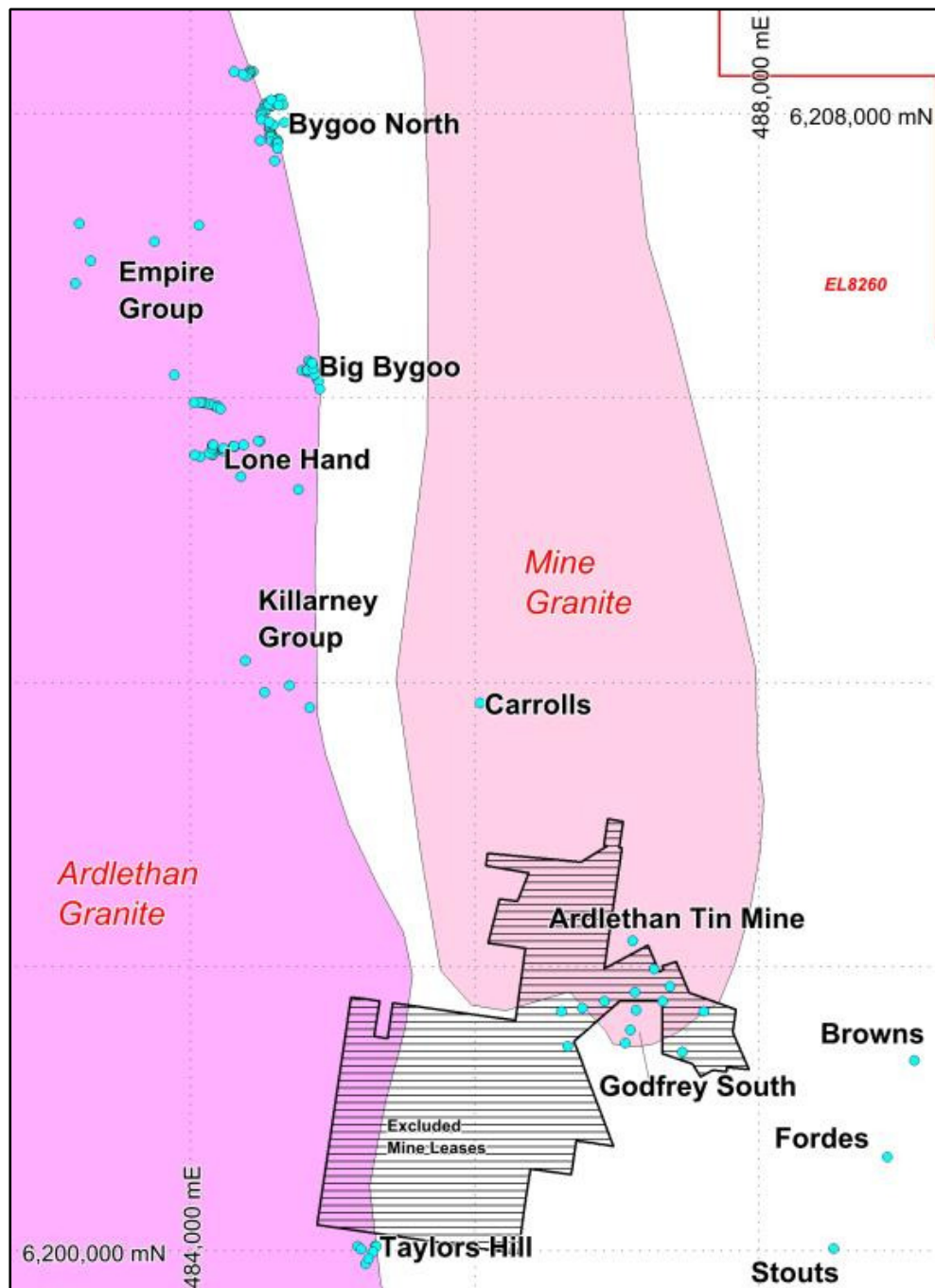


Figure 1: Ardlethan area showing hard-rock tin prospects

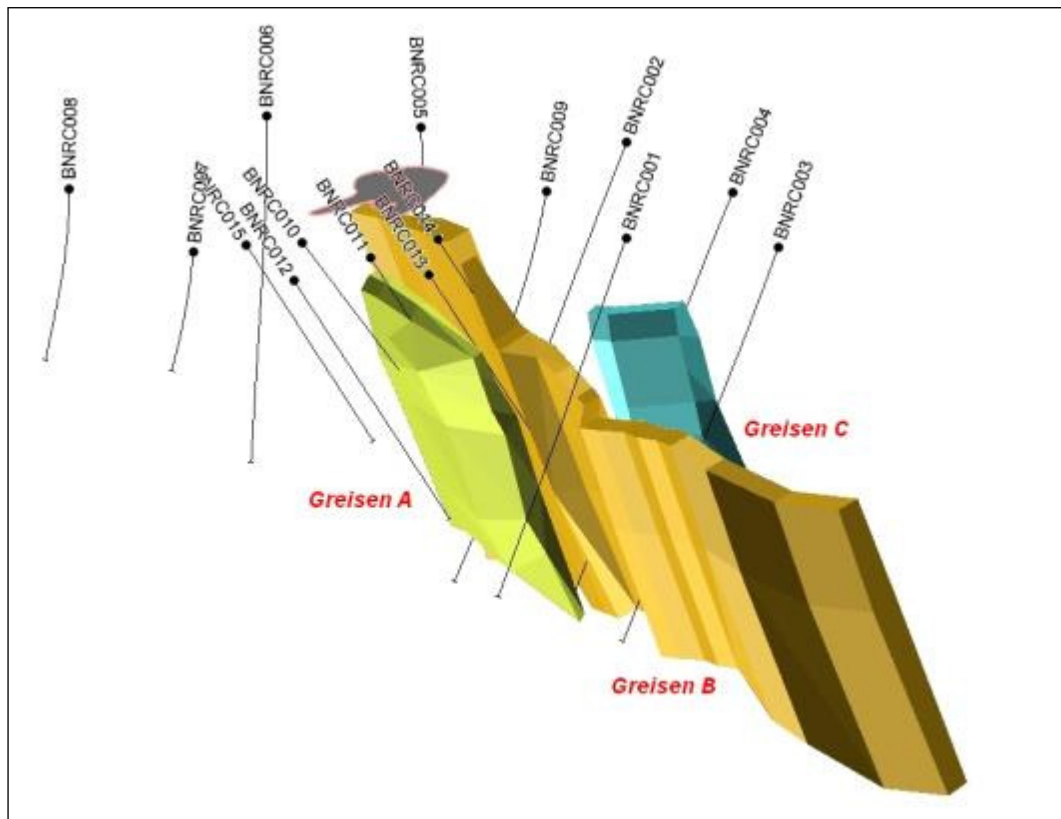


Figure 2: Bygoo North oblique view from above, with Ardlethan Granite surface removed. The three modelled greisens all dip north; Greisen B is 210m long and has been projected to about 130m depth.

### Bygoo Exploration Targets

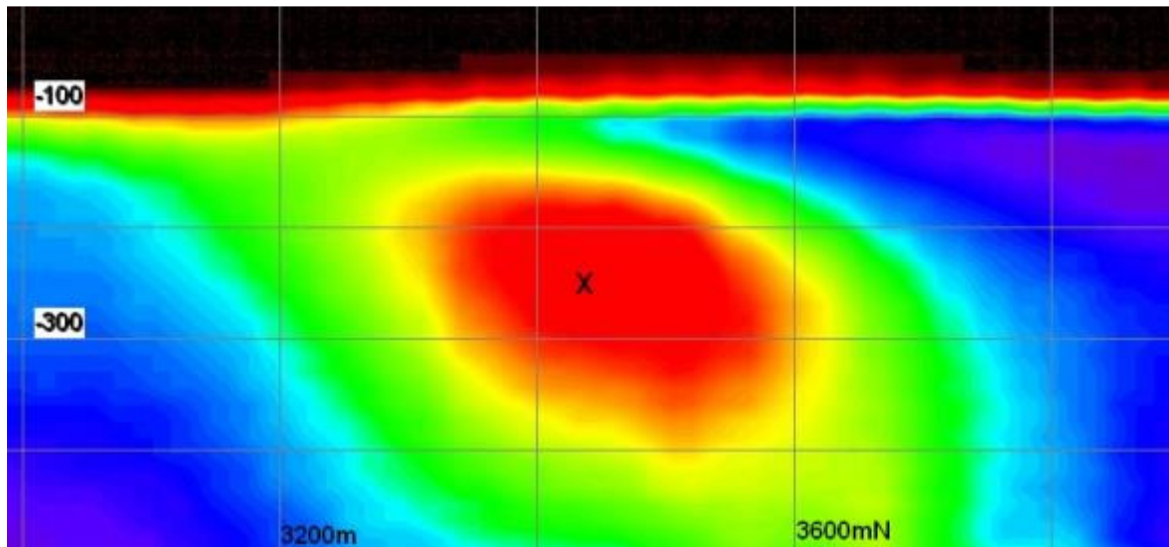
Several other similar targets on the Bygoo EL also warrant testing. The Bygoo North tin mineralisation is hosted within and adjacent to the Ardlethan Granite which is thought to be responsible for the tin mineralisation in the region. Along the granite contact, between Bygoo North and the Ardlethan mine site several other tin prospects are present including Big Bygoo, Lone Hand and Taylors Hill (Figure 1). All have shallow historic workings and the latter three have yet to be significantly drill tested with only a handful of holes drilled to date. For example, limited drilling at the Lone Hand workings yielded an intercept of **7.6m at 1.7% Sn from 41m** (see note below).

Thomson's EL 8260 also includes a small part of the hard rock resource below and adjacent to the Ardlethan mine open-cuts.

Overall the Company believes that EL 8260 has the potential to host a stand-alone tin project. This could be developed either separately or in tandem with a restart of the neighbouring Ardlethan Mine operation.

### Byrock copper-zinc

A drill hole test of the strong ground EM and VTEM anomaly at Wilga Downs near Byrock has been planned. The anomaly and its geological setting are consistent with a Tritton-type volcanogenic massive sulphide (VMS) deposit: the Tritton copper mine, operated by Straits Resources, occurs in the same Ordovician age rock package 100km to the southeast. The top of the Tritton orebody is at about 180m below surface and it was discovered by a ground EM survey in 1995.



*Figure 3: Wilga Downs EM anomaly. This is a conductivity-depth image showing a strong anomaly dipping to the right (north). The X marks the drill target - the centre of the strongest conductivity at about 250m below surface.*

### **Mullagalah aeromagnetic survey**

During the quarter Thomson completed an aeromagnetic survey over an anomaly on EL 8102 (Mullagalah). The survey comprised 1,194 km at a line spacing of 50m, providing high resolution magnetic and radiometric data to detail the prominent anomaly.

EL 8102 is the subject of a farm-in, funded by a private investor who has now earned a 50% interest in the tenement.

The Mullagalah anomaly has previously been explored by YTC Resources Ltd in 2010, which drilled two deep diamond holes near the edge of the anomaly (Figure 4). Both holes intersected anomalous copper and gold with accompanying mineral alteration of the types often found in intrusion-related mineralisation.

The intrusion is of quartz-granodiorite to tonalite composition, medium-K, calc-alkaline and I-type in character and dated at 414.9 million years old ( $\pm 4.2\text{Ma}$ , Early Devonian). This is similar in age to the mineralising events that were taking place in the Cobar Basin to the southwest.

The intrusion lies on major structures (blue lines in Figure 4) and its pattern is suggestive of significant deformation, thought to be necessary for the mineralizing process.

Thomson considered that the existing magnetic data was too coarse to provide compelling drill targets and that a high resolution survey was necessary to identify discrete targets. These might be either magnetic highs caused by pyrrhotite related mineralisation or magnetic lows caused by destructive alteration of magnetite to pyritic mineralisation. The detailed magnetic imagery seen in Figure 4 (right hand side) shows ample evidence of potential drill targets.



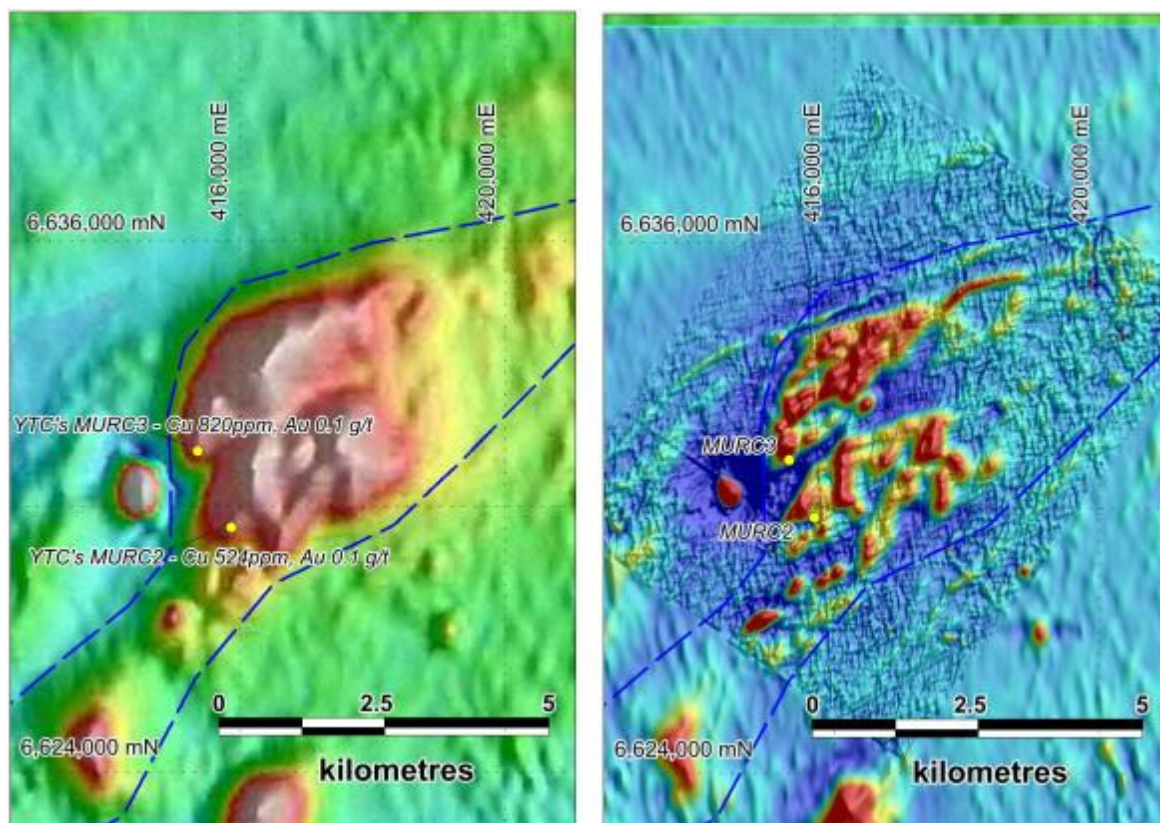


Figure 4: Mullagalah magnetic anomaly: comparison of old data (left) versus new data acquired in the quarter (right).

### Mt Paynter Project: tin and tungsten

Thomson was granted exploration licence EL 8392 on October 6<sup>th</sup> over a significant tin-tungsten (Sn-W) exploration project at Mt Paynter in southern NSW (Figure 8). Mt Paynter is located within the Lachlan Fold Belt within a similar geological setting to Thomson's Ardlethan project.

A small inferred JORC 2004 resource was defined on the Main Lode in 2007 for a previous operator. This comprises **245,000 tons grading 0.45% tungsten and 0.27% tin (1100 tons of tungsten and 660 tons of tin)**. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The JORC resource is over a 200m strike length of the Main Lode, which continues to east and west outside the resource area (Figures 5 and 6). Potential remains to extend the resource east and west, and also down dip.

Additionally, there are several other veins in the area that have not been drill tested. Previous mining and exploration mainly focused on tin, and there is evidence that tungsten bearing greisens may have been overlooked (Figure 5).

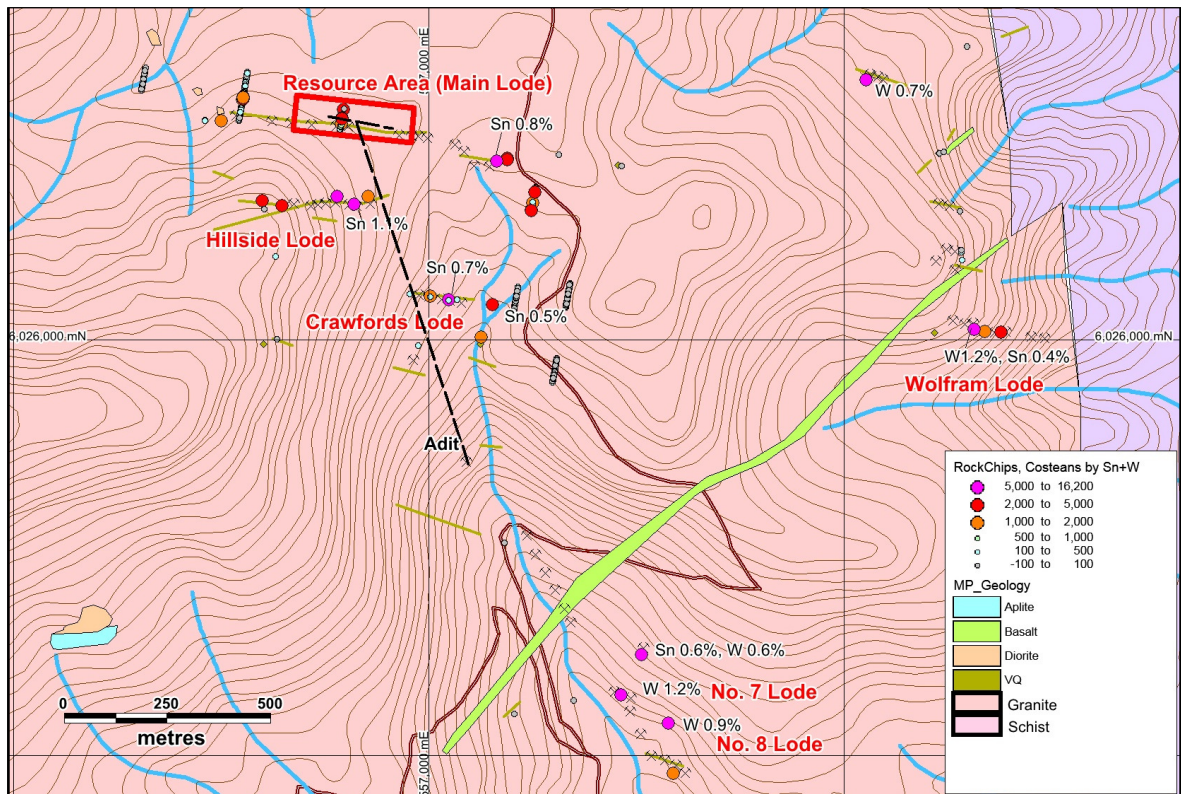


Figure 5: Mt Paynter map showing area of resource and other Sn, W anomalies in the area

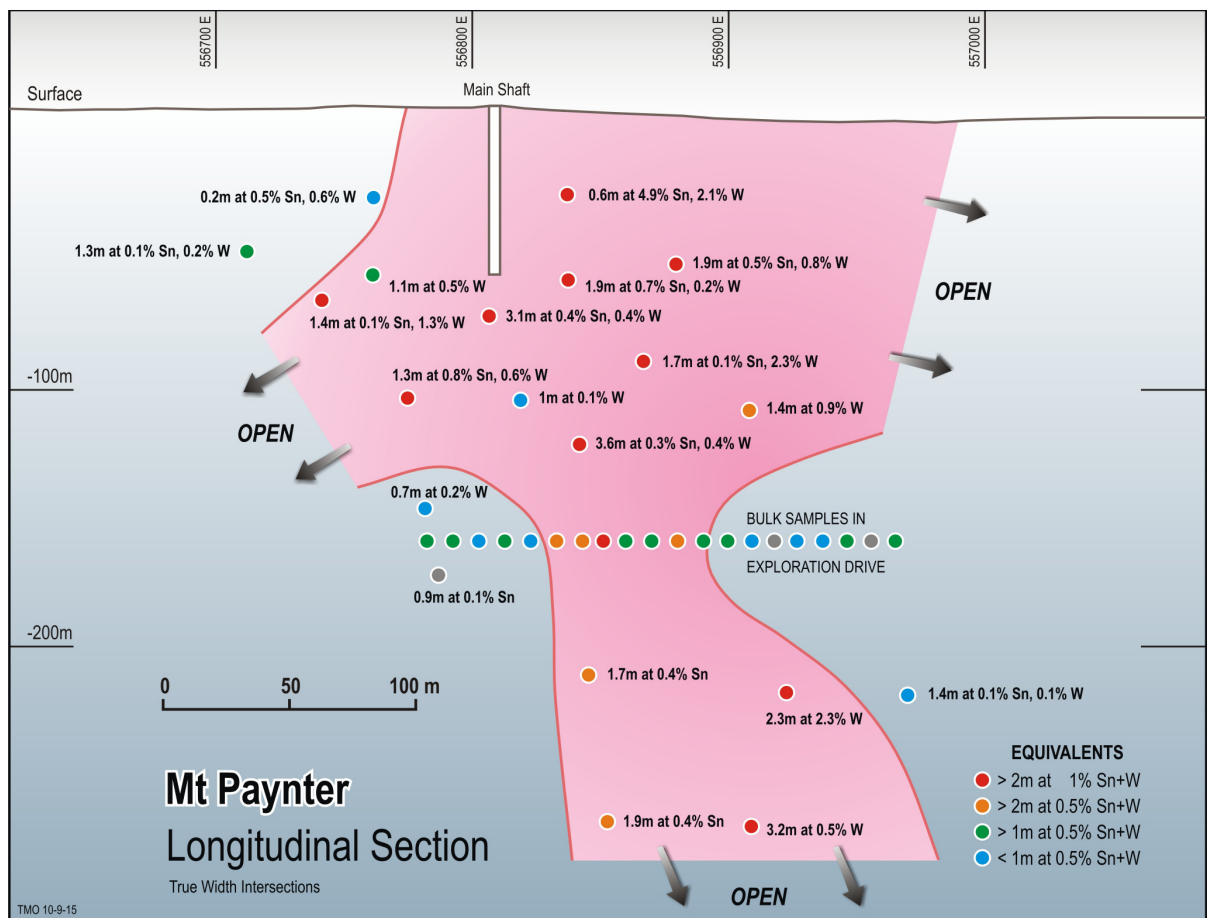


Figure 6: Mt Paynter Long Section showing True Width intersections in the Main Lode.



**Table A – best recorded intercepts at Mt Paynter**

Hole	Intercept
<b>MP4</b>	0.7m at <b>2.12% W</b> and <b>4.88% Sn</b> from 40.7m depth
<b>MP5</b>	3.1m at 0.22% W and 0.73% Sn from 66.5m depth
<b>MP8</b>	3.0m at 0.82% W and 0.49% Sn from 60.6m depth
<b>MP11</b>	4.2m at 0.43% W and 0.43% Sn from 86.5m depth
<b>MP12</b>	1.9m at <b>1.13% W</b> and 0.07% Sn from 79.8m depth
<b>MP13</b>	4.0m at <b>1.20% W</b> and 0.08% Sn from 99m depth
<b>MP14</b>	2.0m at 0.91% W from 120m depth
<b>MP17</b>	5.5m at 0.43% W and 0.33% Sn from 134.5m depth
<b>MP19</b>	1.7m at 0.09% W and 0.36% Sn from 227.7m depth
<b>MP20</b>	1.9m at 0.58% W and 0.76% Sn from 118m depth
<b>MP21</b>	4.5m at <b>1.59% W</b> from 236m depth

*All widths are down hole width: estimated true widths are shown on the Long Section (Figure 2).*



*Figure 7: Historic tin smelter chimney at Mt Paynter*

Small scale mining took place at Mount Paynter between 1873 to 1930, with around 1,200 tons of ore raised and crushed for tin. A smelter chimney was constructed (Figure 7). One shaft was sunk to a depth of 64m. The exploration adit and sampling crosscuts were completed in 1982, but no production was undertaken. The adit and crosscuts

access the Main Lode 183m below the surface outcrop and provide excellent control on the lode position and geometry.

The acquisition of the Mt Paynter tin-tungsten project adds to Thomson Resources strong tin-tungsten portfolio. The Company's top priority at present is the **Bygoo** project at **Ardlethan**, where drilling has been successful (see ASX announcement 21 October 2015).

The Company considers that there are strong fundamentals for future increases in tin and tungsten prices, providing high confidence in the significant value that these projects bring to Thomson.

### **Thomson Fold Belt**

Thomson was awarded three drilling grants under the NSW Government's New Frontiers Cooperative Drilling Scheme including for drilling at its discoveries under cover at Cuttaburra A and Cuttaburra B on EL 6224 in the Thomson Fold Belt. However, the grants were not sufficiently attractive (\$25,550 and \$26,750 respectively) for Thomson to commit to expensive deep drilling in this New Frontier area and the grants (not the ELs) have been allowed to expire. The Government has recently announced a revised scheme for the next round with up to 100% of drilling costs to be reimbursed and Thomson will resubmit these projects for additional funding later in the year.

### **Tenement Holdings**

Thomson holds 720 square kilometres in eight granted titles, with interests in an additional four titles covering 404 square kilometres in the Kidman joint venture and a 50% interest in two further titles covering 124 sq. km in the Mullagalalah joint venture. The Mt Paynter EL was granted post end of the quarter on October 6<sup>th</sup>.

### **Corporate**

Exploration expenditure incurred during the quarter totalled \$141,000. Cash at the end of the quarter was \$76,000, before a research and development refund of \$129,732 that was received after the quarter end. Thomson has no debt and had 87,894,506 shares on issue at end-September.

### **Thomson Resources Ltd**



#### **Eoin Rothery**

Chief Executive Officer

*The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Eoin Rothery, (MSc), who is a member of the Australian Institute of Geoscientists. Mr Rothery is a full time employee of Thomson Resources Ltd. Mr Rothery has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking*



to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Rothery consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

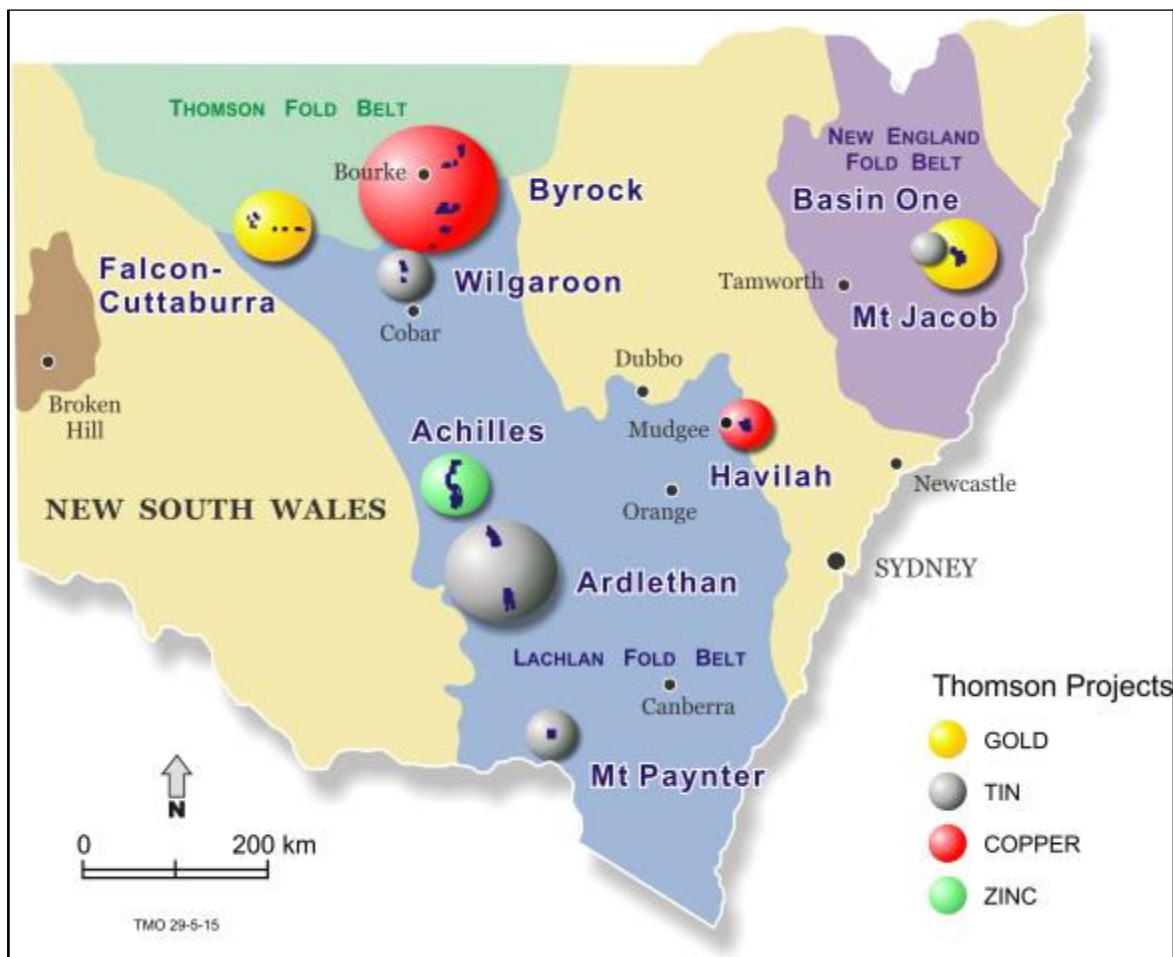


Figure 8: Thomson Projects in NSW

#### **JORC Code, 2012 Edition – Notes**

This quarterly report contains a summary of previously reported exploration results and a JORC resource, the JORC Code Tables for which are presented in previous Thomson Resources ASX releases of July 22<sup>nd</sup> (Ground EM at Wilga Downs); October 21<sup>st</sup> and July 13<sup>th</sup> (Bygoo Tin Drilling results); May 27<sup>th</sup> (Mt Paynter JORC 2004 resource) and April 13<sup>th</sup> (Acquisition of Bygoo Tin project and historic drill results).

The intercept quoted on page 3 above from the Lone Hand prospect is taken from NSW public information - DIGS report number GS1971\_279.R00024868, page 10 describing shallow blast hole drilling carried out by Magnum Exploration. Data compilation and review is continuing to place all historical information in context.

The JORC Code tables below provide additional information on Mt Paynter.

## JORC Code, 2012 Edition – Table 1 report

### Section 1 Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	Samples were split NQ diamond drill core, analysed by XRF at AMDEL, Adelaide.
<i>Drilling techniques</i>	Holes were hammer drilled to fresh rock and continued as NQ diamond drill
<i>Drill sample recovery</i>	Reported recoveries are mostly 100% for drill core with minor core loss in places.
<i>Logging</i>	All holes were logged for geology. Copies of the logs are in various reports available on the NSW DIGS system.
<i>Sub-sampling techniques and sample preparation</i>	No sub-sampling bar some samples for petrography, were carried out.
<i>Quality of assay data and laboratory tests</i>	Industry standard quality checks were carried out by AMDEL and copies appear in the statutory reports submitted to the NSW Govt.
<i>Verification of sampling and assaying</i>	No independent verification has been carried out.
<i>Location of data points</i>	Drill hole collars are plotted on various maps included in the reports. Downhole surveying was carried out.
<i>Data spacing and distribution</i>	Data spacing is irregular, but of 19 holes that tested the projected Main Lode position, 17 returned significant tungsten or tin intercepts.
<i>Orientation of data in relation to structure</i>	Most holes were drilled at 60 degrees and made a 30-40 degree intercept in the steeply dipping structure.
<i>Sample security</i>	No security measures are reported. No particular high grade samples appear to be in question.
<i>Audits or reviews</i>	No independent audit or review undertaken as this was not thought to be required at this stage.

### Section 2 Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	All historic drill holes reported occur within NSW Exploration Licence EL 8392 granted to Thomson Resources Ltd on October 6 <sup>th</sup> , 2015.
<i>Exploration done by other parties</i>	The exploration reported above was carried out by Shaw River Alluvials NL and Pacific Copper Pty Ltd.
<i>Geology</i>	Geology is described in the body of the release.
<i>Drill hole Information</i>	Drill holes were reported in Thomson Resources ASX release of 27 May 2015
<i>Data aggregation methods</i>	Intercepts are composited at tin and tungsten cut offs of 0.1%. Composites are by weighted average lengths.
<i>Relationship between mineralisation widths and intercept lengths</i>	All intercepts listed are downhole widths. Mineralisation is steep, and true widths average around 1.5m and are shown on Figure 2.
<i>Diagrams</i>	All relevant drill holes are shown in the figures.

Criteria	Commentary
<i>Balanced reporting</i>	Details for all reported drilling is tabulated and shown.
<i>Other substantive exploration data</i>	No significant exploration data has been omitted. Data has been sourced from publicly available reports at the Geological Survey of NSW website – “DIGS”.
<i>Further work</i>	Data compilation is planned ahead an update of the resource to JORC 2012. This may require additional drilling.

Note: The JORC 2004 compliant Resource quoted above is contained in a prospectus lodged on the ASX by Noah Resources NL on 30<sup>th</sup> of October, 2007 and is available at: <http://www.asx.com.au/asxpdf/20071030/pdf/315h6xfhkbk353.pdf>

#### Reproduced from that report – *JORC Statement*

The information in this report relating to exploration results and resources is based on information compiled by Sue Border who is a fellow of the Australian Institute of Geoscientists and who is employed by Geos Mining. Sue has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.” Sue Border consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.”

#### Resource Note from the 2007 Report:

“This resource was estimated from historic diamond drilling (18 holes), underground chip samples (52 channel samples) and underground bulk samples (18), assuming a conservative bulk density of 2.5g/cm<sup>3</sup>. The resource was confined to the main lode structure. The grade was estimated using classical averaging of values from within the defined lode structure, while tonnage was estimated using the 3D modelled volume of the lode. A minimum cut-off of 0.12%W was used to define the edge of the resource. A minimum thickness of 1.3m horizontal width has been used, with narrower intersections being diluted out to this width (assuming where the diluting material was not analysed it has a grade of 50 ppm tin and 50 ppm tungsten). No specific allowance has been made for the previous mining, although the top 5 to 10m of the lode has been excluded from the resource, and most of the previous workings are confined to these shallow depths. On its own, this resource is considered too small for economic exploitation using conventional techniques under current economic conditions. However there are good exploration prospects for additional mineralization within the Exploration Licence. The mineralised shoot is open at depth and there is also potential for additional mineralization both along strike in the main lode and in other structures in the vicinity. Previous mining and exploration was mainly focused on tin, and there is evidence that tungsten bearing greisens may have been overlooked.

#### *Data Quality*

At Mount Paynter all mapping and hole locations are recorded in a local grid, and the accuracy of these locations has not been confirmed, but Geos considers the locations should be sufficiently reliable for an inferred resource. Most but not all the holes have internal surveys. Analyses were carried out by reputable laboratories and a check of underground bulk samples against chip samples showed variability (not unusual for this style of mineralisation) but no bias between the two data set