

# ASX/Media Announcement 06 September 2016

### **RED BORE RC DRILLING UPDATE**

Thundelarra is pleased to announce that the latest Reverse Circulation ("RC") drilling programme at its Red Bore Project has been completed and samples from selected intervals have been collected and submitted for laboratory analysis. Down-hole electromagnetic ("DHEM") surveys have been carried out on all holes, extending to the end of hole unless prevented by blockages.

The geophysical survey data will be processed and collated with the geological logs and assay data from the drillholes. The resulting interpretations will be reported to the market in due course and appropriate follow-up programmes will be designed as necessary to continue testing targets.

The programme comprised seven RC holes for a total advance of 2,566m and tested a number of mainly geophysical targets at greater depths than have been drilled to date. Volcaniclastic rocks of the Narracoota Formation were intersected in each hole, as anticipated, and peperitic textures (indicative of potential VHMS setting) were observed in a number of intervals. Metal sulphides in the form of chalcopyrite and pyrrhotite were recorded in several locations, either as disseminations or as fiamme, as shown in Figure 1.

The significance of the geological features encountered will be evaluated fully in the context of the DHEM survey results and multi-element geochemical analyses when they have been received and interpreted.



Figure 1. Chalcopyrite (brassy yellow) and pyrrhotite (light brownish) fiamme within basaltic lavas at 114m in hole TRBC113. Chip shown is approximately 1cm across in size.

Red Bore is 90%-owned by Thundelarra. It is a two square kilometre granted Mining Licence (M52/597) located about 160km NE of Meekatharra in Western Australia's Doolgunna Region.

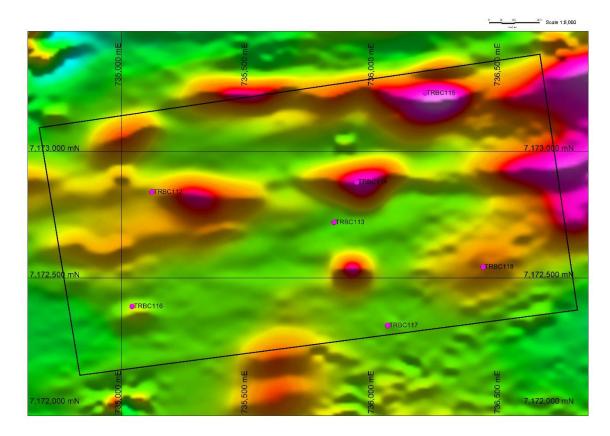


Figure 2. Drill collars shown on TMI magnetic image of Red Bore.

Hole ID	Easting	Northing	RL	Depth	Azimuth	Dip
TRBC112	735120	7172840	570m	400m	Vertical	-90°
TRBC113	735840	7172720	576m	400m	Vertical	-90°
TRBC114	735930	7172879	572m	400m	210°	-75°
TRBC115	736200	7173232	572m	400m	Vertical	-90°
TRBC116	735042	7172388	574m	400m	133°	-60°
TRBC117	736052	7172312	585m	166m	60°	-60°
TRBC118	736430	7172544	578m	400m	329°	-80°

Table 1: Details of the holes drilled in this RC programme at Red Bore. All locations on Australian Geodetic Grid GDA94-50. The Azimuth Column records the magnetic azimuth of the drilling direction.

A full analysis of the test findings from the RC drilling at each target will be provided when all survey and assay data has been received, compiled, and evaluated.

Drilling results from Thundelarra's Garden Gully gold prospect are being collated. The report, due shortly, will provide further context for the excellent result of **7m at 24.5gpt gold** reported in the announcement of 29 July 2016.

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THUNDELARRA LIMITED Issued Shares: 423.5M ASX Code: THX

#### **Competent Person Statement**

The details contained in this report that pertain to Exploration Results, Mineral Resources or Ore Reserves, are based upon, and fairly represent, information and supporting documentation compiled by Mr Costica Vieru, a Member of the Australian Institute of Geoscientists and a full-time employee of the Company. Mr Vieru has sufficient experience which is relevant to the style(s) of mineralisation and type(s) 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" (JORC Code). Mr Vieru consents to the inclusion in this report of the matters based upon the information in the form and context in which it appears.

### JORC Table 1 Checklist of Assessment and Reporting Criteria

### **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling	Nature and quality of sampling (eg cut channels, random	This was a reverse circulation (RC) drilling programme.
techniques	chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	RC sample was collected through a rig mounted cyclone with cone splitter attachment and split in even metre intervals. RC drill chips (from each metre interval) were examined visually and logged by the geologist. Any visual observation of alteration or of mineralisation was noted on the drill logs. All intervals were tested by hand-held XRF and any reporting
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant</li> </ul>	metal concentrations were bagged and numbered for laboratory analysis.  • Duplicate samples are submitted at a rate of approximately 10% of total samples taken (ie one duplicate submitted for every 10 samples).  • The presence or absence of mineralisation is initially determined visually by the site geologist, based on experience and expertise in evaluating the styles of mineralisation being sought.
Drilling	disclosure of detailed information.  Drill type (eg core, reverse circulation, open-hole hammer,	Holes were drilled by a truck-mounted Atlas-Copco E220RC
techniques	rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	rig with 1260cfm@365psi or 1050cpm@450psi compressor. The rig has a full lock-out isolation and emergency shut-out system.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>Volume of material collected from each metre interval of drilling completed is monitored visually by the site geologist and field assistants. Dry sample recoveries were estimated at ~95%. Where moisture was encountered the sample recovery was still excellent, estimated at &gt;80%.</li> </ul>
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul> <li>Samples were collected through a cyclone and split using a riffle splitter. One duplicate sample is submitted for every 10 samples.</li> </ul>
	<ul> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No evidence has been observed of a relationship between sample recovery and grade. The excellent sample recoveries obtained preclude any assumption of grain size bias.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	RC chips are logged visually by qualified geologists.  Lithology, structures when possible, textures, colours, alteration types and minerals estimates are recorded.

	Whether logging is qualitative or quantitative in nature.	Representative chips retained in chip trays for each metre
	Core (or costean, channel, etc) photography.	interval drilled, with sections of interest photographed
	The total length and percentage of the relevant	The entire length of each drillhole is logged and
	intersections logged.	evaluated.
Sub-sampling	If core, whether cut or sawn and whether quarter, half or	Not core
techniques	all core taken.	
and sample	If non-core, whether riffled, tube sampled, rotary split,	Samples were collected through a rig-mounted cyclone
preparation	etc and whether sampled wet or dry.	and split using a riffle splitter. The majority of the samples obtained were sufficiently dry for this process to be
		effective. Material too moist for effective riffle splitting was sampled using a 4cm diameter spear. Each such sample submitted to the laboratory comprised three spear samples taken from different directions into the material for each metre interval.
	For all sample types, the nature, quality and	The samples were sent to SGS in Perth for Au by 50g fire
	appropriateness of the sample preparation technique.	assay and a 49-element analysis by 4 acid digest. Sample preparation techniques are well-established standard industry best practice techniques. Drill chips and core are dried, crushed and pulverised (whole sample) to 85% of the sample passing -75µm grind size.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field QC procedures include using certified reference materials as assay standards. One duplicate sample is submitted for every 15 samples, approximately.
	Measures taken to ensure that the sampling is	Evaluation of the standards, blanks and duplicate
	representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	samples assays has fallen within acceptable limits of variability.
	Whether sample sizes are appropriate to the grain size of	Sample size follows industry standard best practice and is
	the material being sampled.	considered appropriate for these style(s) of mineralisation.
Quality of	The nature, quality and appropriateness of the assaying	The assay techniques used for these assays are
assay data and laboratory tests	and laboratory procedures used and whether the technique is considered partial or total.	international standard and can be considered total. Samples were dried, crushed and pulverised to 85% passing -75µm and assayed using ICP AES and ICP IMS following four-acid digest for the 49 element analyses; and Fire Assay for gold
	• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	following a four-acid digest in Teflon tubes of a 50g charge • The handheld XRF equipment used is an Olympus Delta XRF Analyser and Thundelarra follows the manufacturer's recommended calibration protocols and usage practices but does not consider XRF readings sufficiently robust for public reporting. Thundelarra uses the handheld XRF data as an indicator to support the selection of intervals for submission
		to laboratories for formal assay.
	Nature of quality control procedures adopted (eg	The laboratory that carried out the assays is ISO certified
	standards, blanks, duplicates, external laboratory checks)	and conducts its own internal QA/QC processes in addition
	and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	to the QA/QC implemented by Thundelarra in the course of its sample submission procedures. Evaluation of the relevant data indicates satisfactory performance of the field sampling protocols in place and of the assay laboratory. The
		laboratory uses check samples and assay standards to complement the duplicate sampling procedures practiced by Thundelarra.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic)</li> </ul>	<ul> <li>All significant intersections are calculated and verified on screen and are reviewed by the CEO prior to reporting.</li> <li>The programme included no twin holes.</li> <li>Data is collected and recorded initially on hand-written logs with summary data subsequently transcribed in the</li> </ul>
	<ul><li>protocols.</li><li>Discuss any adjustment to assay data.</li></ul>	field to electronic files that are then copied to head office.  No adjustment to assay data has been needed.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	Collar locations were located and recorded using hand- held GPS (Garmin 62S model) with a typical accuracy of ±5m. Down-hole surveys are carried out on each holes with readings taken every 50m at least using a gyro tool.
	Specification of the grid system used.	The map projection applicable to the area is Australian Geodetic GDA94, Zone 50.

	Quality and adequacy of topographic control.	Topographic control is based on standard industry practice of using the GPS readings. Local topography is relatively flat. Detailed altimetry is not warranted.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill hole collars were located and oriented so as to deliver maximum relevant geological information to allow the geological model being tested to be assessed effectively.
	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	<ul> <li>These drillholes are part of follow-up programmes to improve the understanding of the geometry and geological controls on the known mineralisation identified in previous programmes reported in 2014 and 2015 and most recently on 26 April 2016.</li> </ul>
	Whether sample compositing has been applied.	One metre sampling (no compositing) was applied to the Reverse Circulation drilling.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The complexity of the local geology, which includes extensive tectonisation / faulting, means that the exact orientation of the mineralisation and controlling structures has not yet been established with confidence. One of the primary objectives of this programme is to generate additional geological data that may assist in clarifying and correctly interpreting these parameters.
	<ul> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	The holes drilled to date are contributing valuable information that will assist in the interpretation of the attitude and geometry of the mineralisation. The normal thickness of the mineralisation is less than the length of the reported intersections. The exact conversion ratio has not yet been determined due to the complexity of the geology.
Sample security	The measures taken to ensure sample security.	When all relevant intervals have been sampled, the samples are collected and transported by Company personnel to secure locked storage in Perth before delivery by Company personnel to the laboratory for assay.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Internal reviews are carried out regularly as a matter of policy. All assay results are considered to be representative as both the duplicates and standards from work programmes at Red Bore to date have returned satisfactory replicated results.</li> </ul>

# **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	Red Bore is a granted mining licence M52/597 2 sq kms in area (2km x 1km). THX (90%) manages the project with 10% (free carried to decision to mine) partner Mr Bill Richmond. The project is located in the Doolgunna pastoral lease in the Doolgunna region of the Murchison of WA.      The licences are in good standing and there are no known impediments to obtaining a licence to operate.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• Regional exploration was carried out in the distant past by Western Mining. Subsequent drilling by Great Australian Resources identified a gold association with the copper mineralisation found by WMC. Mr Richmond pegged the lease over 20 years ago and entered into a JV agreement with THX in April 2010. THX conducted exploration that included mapping, rock chip sampling, geochemical surveys, and geophysical surveys, leading to several drilling campaigns until early 2012. Subsequently THX announced an indicated mineral resource (per the 2004 JORC code) on 04 May 2012 of 48,000t at 3.6% Cu and 0.4gpt Au. No additional work has been carried out on this resource since it was announced to the market.

Geology	Denosit type geological setting and style of	THY's exploration includes gravity, induced polarisation
Geology	Deposit type, geological setting and style of mineralisation.	• THX's exploration includes gravity, induced polarisation and magnetic surveys to 2011 followed by RC and diamond drilling. A horizon interpreted to be a VMS horizon was identified containing strong copper-gold-silver associations that displayed visual and geochemical similarity to Sandfire Resources NL's DeGrussa copper-gold deposit. The drilling carried out since April 2014 established the presence of massive primary copper sulphide (chalcopyrite) and magnetite that were interpreted to be magmatic feeder "pipes" (intrusive origin) at Gossan. New geological and lithological data from this programme indicates that a VHMS origin of the mineralisation at Gossan (previously discounted) is valid and that the primary mineralisation may be remobilised from a VHMS source at depth. The Impaler mineralisation continues to exhibit characteristics of VHMS provenance. The recent discovery at Monty (~5km to the east) has provided further support for the existence of a VHMS field at Doolgunna. The possibility remains that mineralisation at Gossan and Impaler derive from a deeperseated source. The principal objective of the current and planned future work programmes is to test new targets at depth that are consistent both with the geological setting observed in all past drillholes and also with the recent reinterpretation of historical gravity surveys, potentially leading to an as yet undiscovered larger primary source or new VHMS lens.
Drill hole	A summary of all information material to the	The primary copper mineralisation noted in the "pipes"
Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes:	identified provided encouragement for future programmes as the presence of near-surface chalcopyrite indicates the presence of a primary source somewhere at depth.  Whether the mineralisation is indeed in "pipes" or has been remobilised under the intense structural regime does not affect the possibility that primary source material exists at depth, and the search for such a deeper setting of primary mineralisation continues to be the main objective of future programmes. All details of the collar locations and technical parameters of each hole drilled, and assay results, are presented in Table 1 and Appendix 1.  All relevant information has been provided in this report consistent with the status of the current programme.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually material and should be stated.	No assay results are reported herein. Assay and DHEM results are pending.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Not applicable. No results reported herein.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable. No results reported herein.
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable. No results reported herein.
intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Not applicable. No results reported herein.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include,	Drill collar locations: refer to Table 1 and Figure 2.
	Significant discovery being reported. These should include,	]

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	but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Not applicable. No results reported herein.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including, but not limited to: geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density; groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not applicable. No results reported herein.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Follow-up programmes will be developed when the full results of the recently completed programme have been received, collated and interpreted.     Not applicable. No results reported herein.

