

ASX Release

17th July 2014

GROUND EM SURVEY IDENTIFIES NEW STRONG CONDUCTOR AT ZANTHUS

Highlights

- Moving loop electromagnetic (MLTEM) survey defines new conductor at Oaktree North
- Ultramafic rocks containing magmatic Ni-Cu sulphides previously identified at Oaktree South during previous RC drilling program
- MLTEM response at Oaktree North is stronger than that at Oaktree South and could represent massive or semi-massive Ni-Cu sulphides
- ~1,000m RC drill program planned to test the newly defined conductor plus additional encouraging anomalies confirmed during Buxton's maiden Ni-Cu drill program

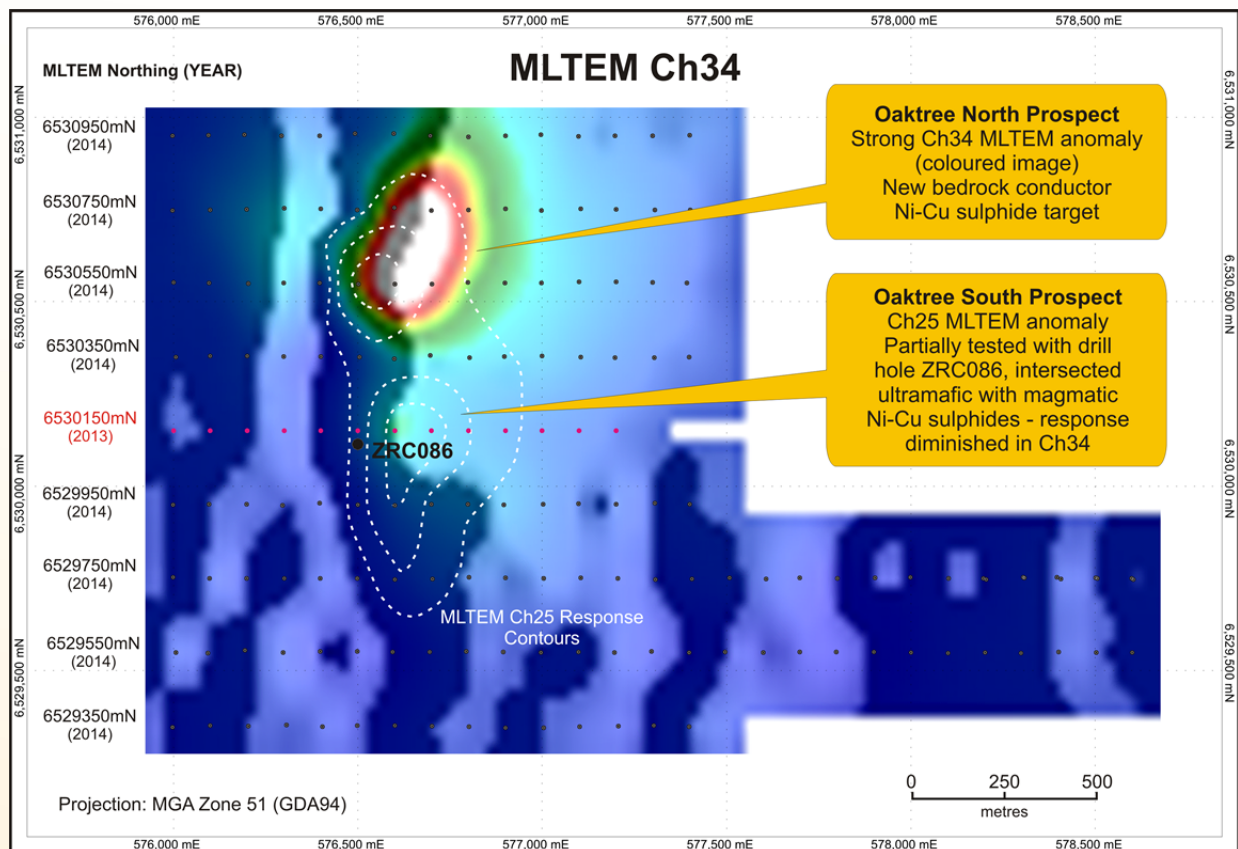


Figure 1. Oaktree Prospect (previously ZV10) showing MLTEM lines from 2013 & 2014, location of drill hole ZRC086 that intersected magmatic nickel-copper sulphides, MLTEM Z component Channel 25 (18msec) contours, over MLTEM Z component Channel 34 (125msec) image showing the strong bedrock conductor at Oaktree North.

Summary

In early July, the Company completed a new MLTEM survey to cover the ~1km strike length of the VTEM/MLTEM conductors associated with magmatic nickel-copper sulphides at Oaktree (Figure 1). The survey identified a higher conductivity response to the north that could represent massive or semi-massive nickel-copper sulphides.

Modelling of MLTEM data shows two possible conductor geometries at Oaktree North. The Company plans to test the newly defined conductor(s) at Oaktree with ~1,000m of RC drilling in the coming months. Additional encouraging targets identified during Buxton's maiden Ni-Cu drilling program in 2014 will also be tested (Figure 2).

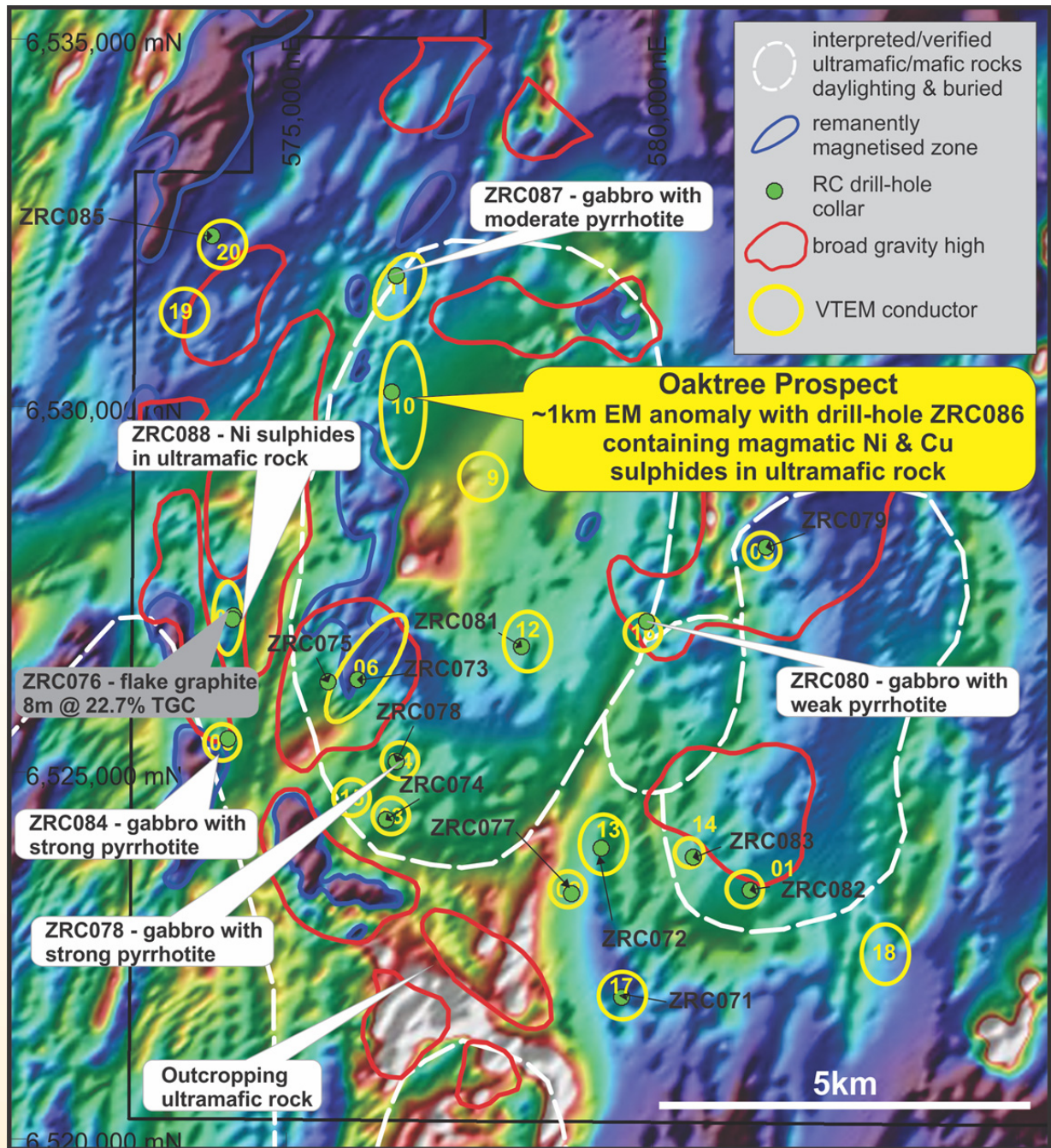


Figure 2. Location of the Oaktree Prospect (ZV10 showing hole ZRC086) with 2014 RC drill-holes over airborne magnetics with gravity and EM features indicated.

MLTEM Modelling and Interpretation

In 2013, a moderately conductive, large depth extent conductor (ZV10) was modelled from a single MLTEM line. Hole ZRC086 tested this target and intersected ultramafic rock with abundant magmatic blebs of composite pyrrhotite, pentlandite and chalcopyrite. This encouraging intersection was followed up with a 13.6 line km MLTEM program in early July, 2014.

Results of the combined 2013 and 2014 MLTEM surveys show a moderately conductive zone centred on line 6530150mN, where it was drill tested with ZRC086 (Figure 1). However, the new MLTEM data has detected a more highly conductive target to the north of the original ZV10 target (Figure 1) which may represent semi-massive or massive Ni-Cu sulphides, or other strongly conductive minerals.

Two alternative models fit the MLTEM data at Oaktree North (Figure 3). These models have been utilized during drill hole planning for the upcoming RC drill program at Zanthus.

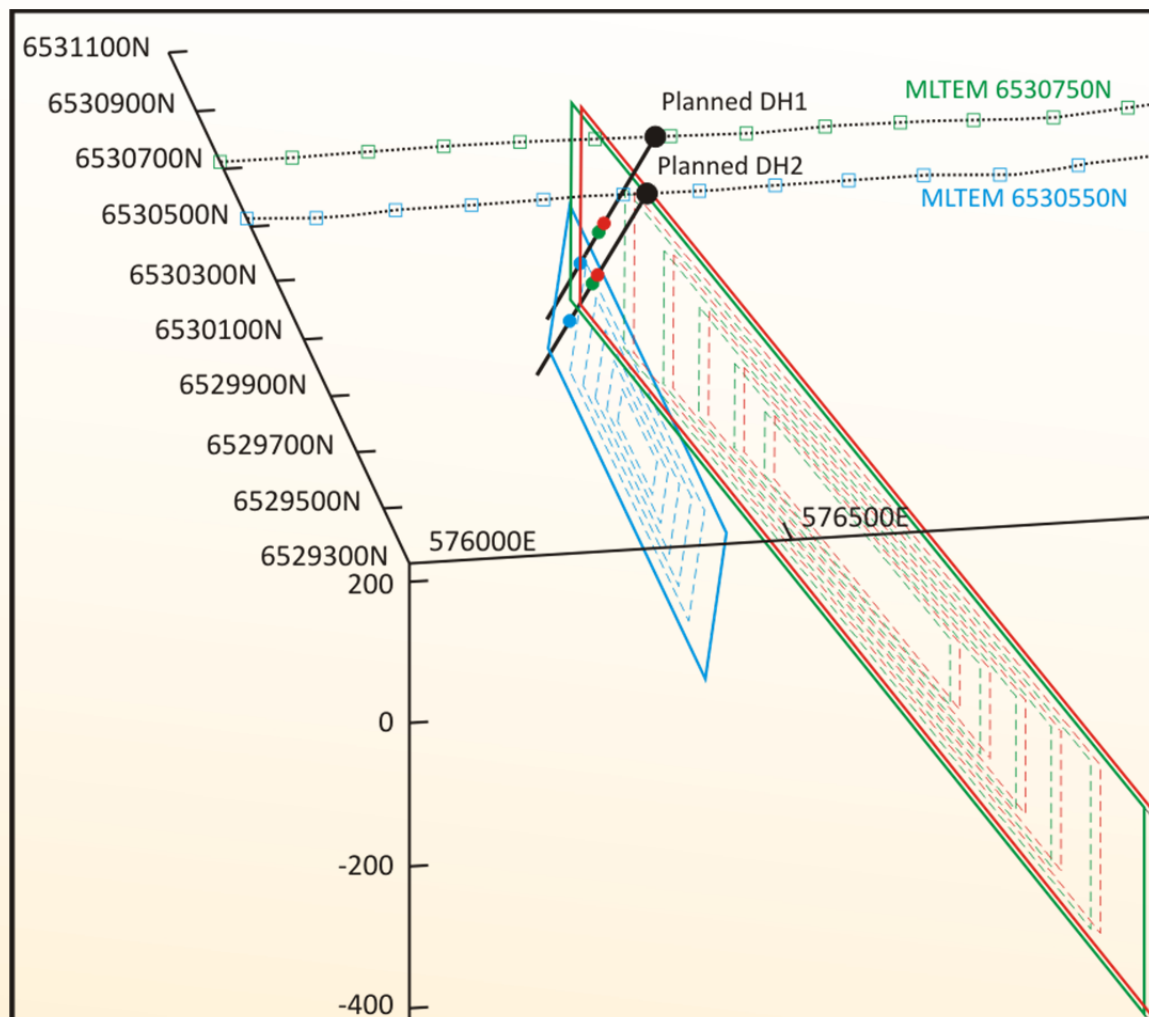


Figure 3. Oblique view of both MLTEM models (single plate model in red, two plate models in blue and green) at Oaktree North with proposed drill-holes and expected down-hole pierce points.

Project Overview

The planned drill program at Zanthus will primarily target the newly defined MLTEM anomaly at Oaktree North. The previous drilling, geophysical and geochemical surveys at Zanthus show a very large, ultramafic-mafic system that is “live” and highly prospective for economic nickel-copper sulphide mineralisation. Important features of this system include;

- Located in Proterozoic orogen in close proximity to major, crustal scale shear zone and broadly along strike from world class Nova-Bollinger discovery
- Very large ultramafic-mafic system with significant geological complexity and numerous smaller dyke and/or sill-like bodies
- Sulphur-rich country rocks to potentially contribute to sulphur saturation of ultramafic-mafic rocks
- Ultramafic rock with petrographically verified, abundant magmatic blebs of composite pyrrhotite, pentlandite and chalcopyrite
- Numerous thick intercepts in drill-holes of ultramafic to mafic (gabbro) rocks with weak to strongly disseminated sulphides (mainly pyrrhotite).

For further information regarding Buxton Resources Limited please contact:

Anthony Maslin

Managing Director

amaslin@buxtonresources.com.au

Competent Persons

The information in this report that relates to exploration results is based on information previously compiled and/or reviewed by Dr Julian Stephens, Member of the Australian Institute of Geoscientists and Non-Executive Director for Buxton Resources Limited. Dr Stephens has sufficient experience which is relevant to the activity previously undertaken 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 and consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear. The exploration results in this report were previously reported to the ASX on the 14th of May 2014. No material change to the results has occurred.

The information in this report that relates to geophysical results and interpretation is based on information compiled and interpreted by Southern Geoscience Consultants Pty Ltd under the supervision of Mrs. Anne Tomlinson, a Principal Geophysicist and full time employee of Southern Geoscience Consultants, who reviewed the electromagnetic survey interpretation. Mrs. Tomlinson is a Member of the Australian Institute of Geoscientists and has sufficient experience relevant to the type of activity being undertaken 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 and consents to the inclusion in this report of the matters reviewed by her in the form and context in which they appear.

Appendix: JORC code tables and commentary

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (eg cut channels, random 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.</i>	Exploration at the Oaktree Prospect (Zanthus Project) consisted of 13.6 line kilometers of Moving Loop Electromagnetic (MLTEM) Survey
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	At least two readings were taken at taken at each station to ensure data repeatability. Quality assurance and quality control of the MLTEM data was independently verified by Southern Geoscience consultants in Perth.
	<i>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 1 m samples from which 3 kg was pulverised to produce a 30 g 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 disclosure of detailed information.</i>	MLTEM Survey Particulars Line spacing: 200m Station spacing: 100m Transmitter loop size: 200m x 200m Receiver: SMARTem 24 Transmitter: TX-50 Current: 35 Amp Base Frequency: 1Hz Sensor: Fluxgate B-field Components: Bz, Bx, By
Drilling techniques	<i>Drill type (eg core, reverse circulation, open-hole hammer, 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).</i>	Not applicable - no drilling was conducted
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable - no drilling was conducted
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	

	<i>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.</i>	
<i>Logging</i>	<i>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.</i>	Not applicable - no drilling was conducted
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable - no drilling was conducted
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Not applicable - no assay data or laboratory tests performed
	<i>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.</i>	Not applicable - no assay data or laboratory tests performed
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	Not applicable - no assay data or laboratory tests performed
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	All geophysical data collected was reviewed by an independent consultant

	<i>The use of twinned holes.</i>	Not applicable - no drilling was conducted
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All primary electromagnetic digital data were recorded with a SmarTEM24 receiver by Outer Rim Exploration. Data were electronically transferred by email to Southern Geoscience Consultants for independent evaluation and have been securely archived.
	<i>Discuss any adjustment to assay data.</i>	Not applicable - no assay data
<i>Location of data points</i>	<i>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.</i>	Handheld GPS used for receiver/transmitter locations
	<i>Specification of the grid system used.</i>	MGA51 (GDA94)
	<i>Quality and adequacy of topographic control.</i>	The expected accuracy is +/- 5m for easting and northing and 10m for elevation which is considered sufficiently accurate for this type of geophysical survey.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Line spacing: 200m. Station spacing: 100m. Transmitter loop size: 200m x 200m. See Figure 1 for geographical representation of MLTEM lines and stations
	<i>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.</i>	Not applicable at this stage of exploration, no Mineral Resource or Ore Reserve
	<i>Whether sample compositing has been applied.</i>	Not applicable - no assay data
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	MLTEM data were collected perpendicular to the geological strike and sufficiently define the EM anomaly for modelling.
	<i>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.</i>	Not applicable - no drilling was conducted
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Not applicable - no physical samples taken
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	All geophysical data collected were reviewed by independent geophysical consultants Southern Geoscience Consultants. Several sources of conductors in the bedrock are possible, including but not limited to: concentrations of massive sulphide,

		<p>graphite, conductive clays, saline groundwater etc.</p> <p>Models of conductive sources are made from a combination of measured data and assumptions made according to industry best practice. The resultant models should therefore be considered a “best estimate” of the conductive sources, and not definitive characterization</p>
--	--	--

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	The Zanthus Project is located in Western Australia and consists of one exploration licence (E28/1959) held by Buxton Resources Ltd (Buxton). Buxton has a 100% interest in the tenement
	<i>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.</i>	The tenement is in good standing with the DMP and there are no known impediments for exploration on this tenement
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	No other parties were involved in this exploration program
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Overall, the geology of the project area is very complex. However, it has now been confirmed to contain large, gabbro-dominant, ovoid, mafic-ultramafic bodies that variably daylight and are locally capped by country rock paragneisses (derived from sedimentary parent rocks). Numerous thinner intercepts of gabbro that occur around the margins of the ovoid bodies and within paragneiss caps indicate a high density of associated smaller mafic-ultramafic bodies, possibly as dykes and/or sills
<i>Drill hole Information</i>	<i>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:</i>	Not applicable - no drilling was conducted
	<i>o easting and northing of the drill hole collar</i>	
	<i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	

	<ul style="list-style-type: none"> o dip and azimuth of the hole o down hole length and interception depth o hole length <p>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</p>	
<i>Data aggregation methods</i>	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	Not applicable - no drilling was conducted
<i>Relationship between mineralisation widths and intercept lengths</i>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	Not applicable - no drilling was conducted
<i>Diagrams</i>	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	Refer to figures in the body of the text
<i>Balanced reporting</i>	<p>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.</p>	Not applicable - no drilling was conducted

<i>Other substantive exploration data</i>	<i>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.</i>	<p>The geophysical anomalies are identified on figures and discussed in the body of text.</p> <p>The Company now has a large and detailed dataset including surface geochemistry, magnetics, gravity, EM, drilling and petrography. Details of previous work are provided in previous ASX announcements</p>
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	On-going work programs at the Zanthus Project are currently being reviewed, however the top priority is to drill the newly defined strong MLTEM Ch34 conductor at Oaktree North (as discussed in text)
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	See interpreted conductors and planned drill holes on Figures 1 & 3 within body of release, plus additional zones of interest in Figure 2