Thick Intercepts of Strong Copper-Cobalt Mineralisation at Notlor Confirm Outstanding Potential of Cloncurry East Project

Significant mineralisation now intersected across two prospects with further assays to come

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Key Points

- **Highly encouraging copper, gold and cobalt assays returned from four holes drilled within the northern part of the Notlor prospect, at Cloncurry East in Queensland:**
  - **78m @ 1.36% Cu, 0.127% Co and 0.55g/t Au from 22m to end-of-hole (100m), including:**
    - **50m @ 0.182% Co from 22m (MNRC 009)**
  - **24m @ 0.98% Cu, 0.307% Co and 0.43g/t Au from 60m (MNRC 010)**
  - **12m @ 1.01% Cu, 0.078% Co and 0.36g/t Au from 114m (MNRC 006)**
  - **18m @ 0.091% Co from 66m (MNRC 005)**
- **The initial composite results demonstrate broad continuity of mineralisation over at least 180m of strike, including a thick core which will assist in future resource delineation.**
- **The results from Notlor follow the high-grade intercept of 6m @ 5.0% Cu and 14.4g/t Au from 42m returned in hole MNRC014 at the King Edward prospect.**
- **Further assays awaited from the December drill program, with planning already underway for follow-up work.**

Magnum CEO Grant Button said: *"These impressive results build further on the initial results from King Edward reported last month, further identifying the exceptional copper and cobalt potential at Cloncurry East.*

"Our maiden drilling program has clearly demonstrated the potential to establish copper-cobalt resources in close proximity to the regional centre of Cloncurry. The strategic location of our tenements close to infrastructure enhances the potential value of this project for Magnum."

Further to the results reported from the King Edward prospect on 22 January 2018, Magnum Mining and Exploration (ASX: MGU) is pleased to announce further highly encouraging initial assay results from drilling completed in December 2017 at the Notlor Prospect, part of its Cloncurry East Joint Venture with Exco Resources

The results confirm the significant prospectivity of the Cloncurry East Project for copper, cobalt and gold mineralisation, with significant assay results having now been returned from two prospect areas.

Overview

Magnum's Cloncurry East Project consists of two tenement groups, both located between 10-20km east of Cloncurry in North West Queensland.

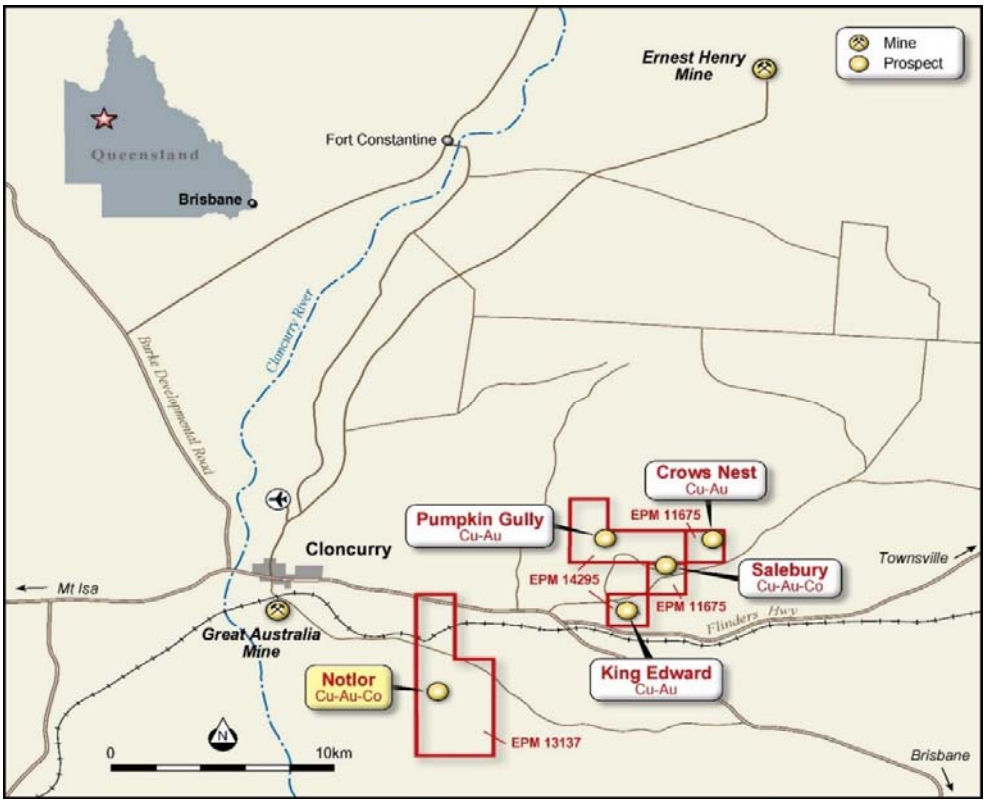

Figure 1: Cloncurry East Project: Location of Notlor EPM

The Project lies within the highly mineralised Mt Isa Eastern succession with nearby mining operations and advanced projects including Ernest Henry (Cu-Au), Monakoff (Cu-Au-Pb-U), Great Australia (Cu-Au), Rocklands (Cu-Au) and Dugald River (Zn-Pb-Ag).

The Cloncurry East Project area is at an advanced stage of exploration and is considered to be highly prospective for iron oxide copper gold ("IOCG") +/- cobalt mineralisation and variants of this style of mineralisation.

A 17-hole, 2,004m Reverse Circulation drilling program was completed within the Project area in December 2017. Three prospects – Notlor, Salebury and King Edward – were drill tested. All drill samples have been presented to the laboratory and the assay results for the six metre composites submitted have now been received and are being collated and reviewed.

In addition, assay results from a number of two metre splits are being received progressively and, where available, are being incorporated into the dataset.

Notlor North

The Notlor Prospect area hosts numerous small historical pits developed on outcropping copper oxide mineralisation over an approximate 3km strike length. The copper oxide mineralisation is associated with a graphitic black shale sequence at or near the contact with banded and brecciated calc-silicate rocks. Dolerite intrusives occur sporadically in the area but are not associated with the copper-gold mineralisation. Outcrop in the area is relatively sparse with thin alluvial sediments masking the underlying geology.

Within the Notlor Prospect, a technical review by Magnum identified three drill target zones that appeared to offer potential for greater continuity of the copper-gold mineralisation and therefore, ultimately, resource potential.

Of these zones, the northern section of Notlor was rated as a primary target on the basis of historical drilling that had intersected wide zones of copper-gold mineralisation with, in some cases, anomalous cobalt values also occurring.

This part of the Notlor prospect was also recognised as being structurally complex. As a consequence, of the four holes completed over this zone as part of the RC drilling programme completed in December 2017, three were drilled to test for continuity and depth extensions across strike while the fourth was drilled along section to assist with the structural interpretation at depth.

Hole	Intersection width	Cu	Au	Co	Downhole Depth
MNRC 005	36 metres	0.35%			66m – 102m
including	12 metres		0.26 g/t		66m -78m
including	18 metres			910ppm	66m – 84m
MNRC 006	12 metres	1.01%	0.36g/t	780ppm	114m – 126m
MNRC 009	78 metres	1.36%	0.55g/t	1270ppm	22m - 100m
including	50 metres			1820ppm	22m -72m
MNRC 010	24 metres	0.98%	0.43g/t	3074ppm	60m – 84m
including	18 metres			3139 ppm	66m 84m

Results for holes MNRC 5, 6, 9 and 10 (see Figure 2) have now been received. In addition to **confirming wide down-hole thicknesses of copper-gold mineralisation in the northern section of the Notlor prospect, the four holes drilled have also returned highly encouraging cobalt values over significant widths.**

Holes MNRC 005 and MNRC 009 were drilled in the southern part of this Notlor northern section targeting a higher grade mineralised envelope that had been only partially tested at depth through historical drilling.

Both holes were successful in intersecting wide down-hole widths of mineralisation with MNRC 009 returning **78m @ 1.36% Cu, 0.55 g/t Au and 1270ppm Co from 22m** to end-of-hole at 100m. Included within this intersection was a higher grade section of Co from 22m to 78m (56m down-hole width) which averaged **1820ppm (0.18%).**

MNRC 005, which intersected this mineralised zone further down-dip than MNRC 009, returned a narrower and lower grade intersection of **36m @ 0.35% Cu from 66m which included 12m @ 0.26 g/t Au (66-78m) and 18m @ 910 ppm Co (66-84m).**

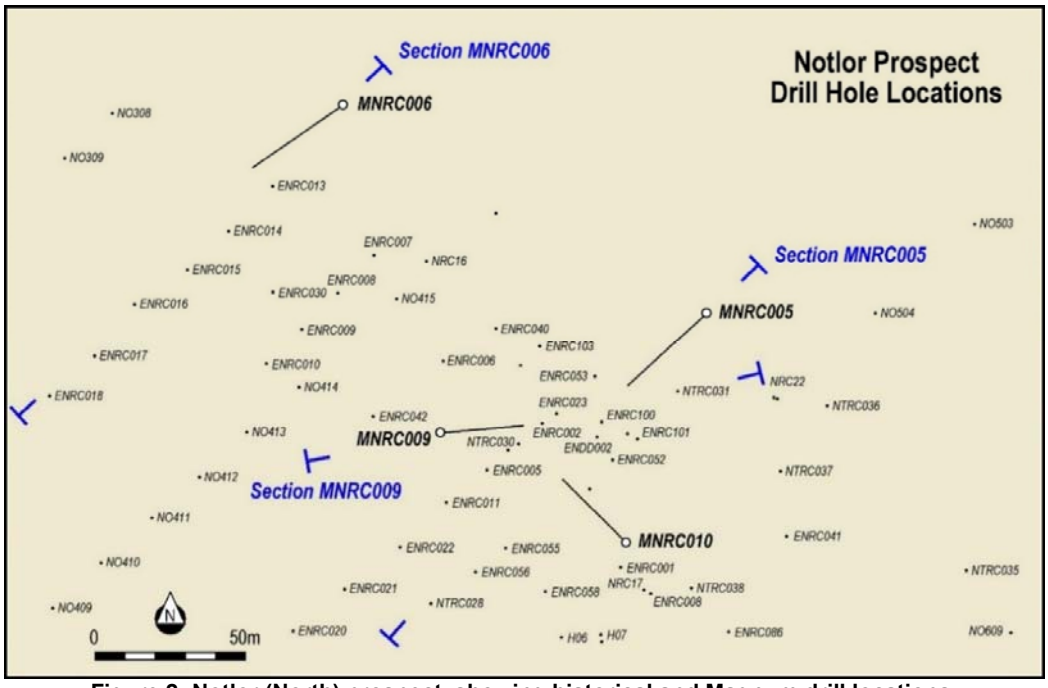

Figure 2: Notlor (North) prospect, showing historical and Magnum drill locations.

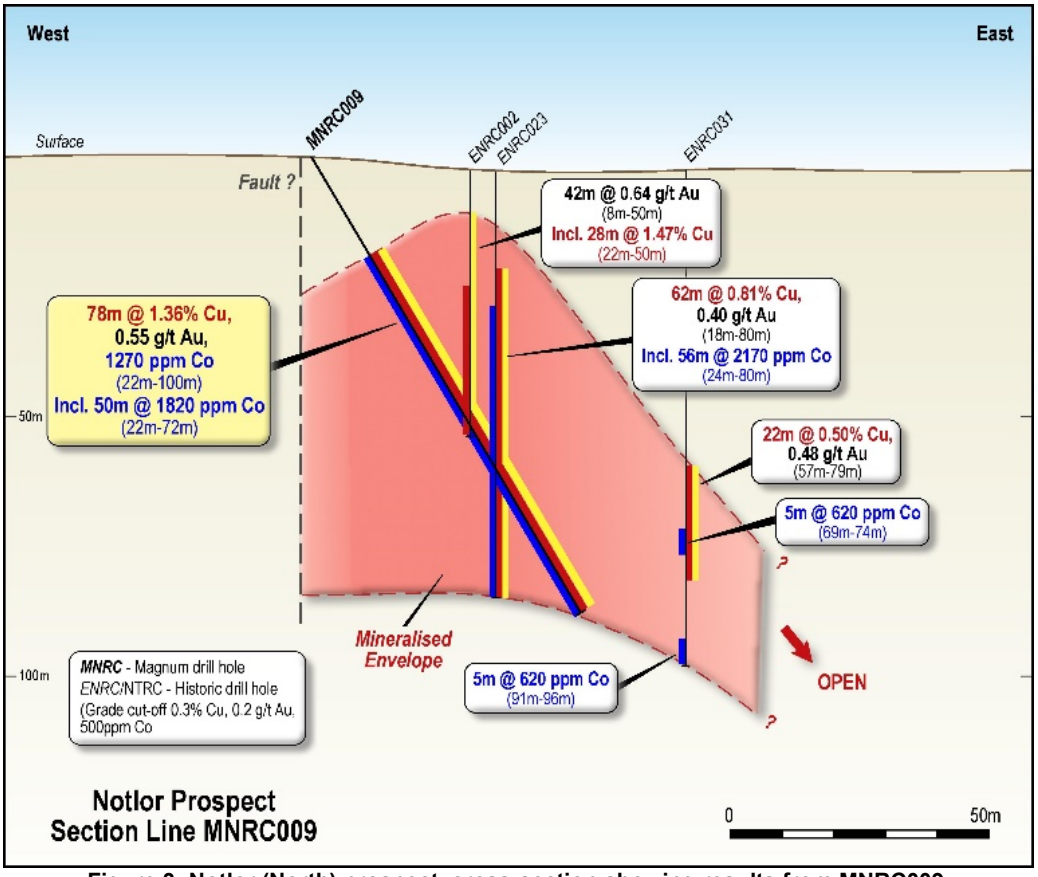

Figure 3: Notlor (North) prospect, cross-section showing results from MNRC009.

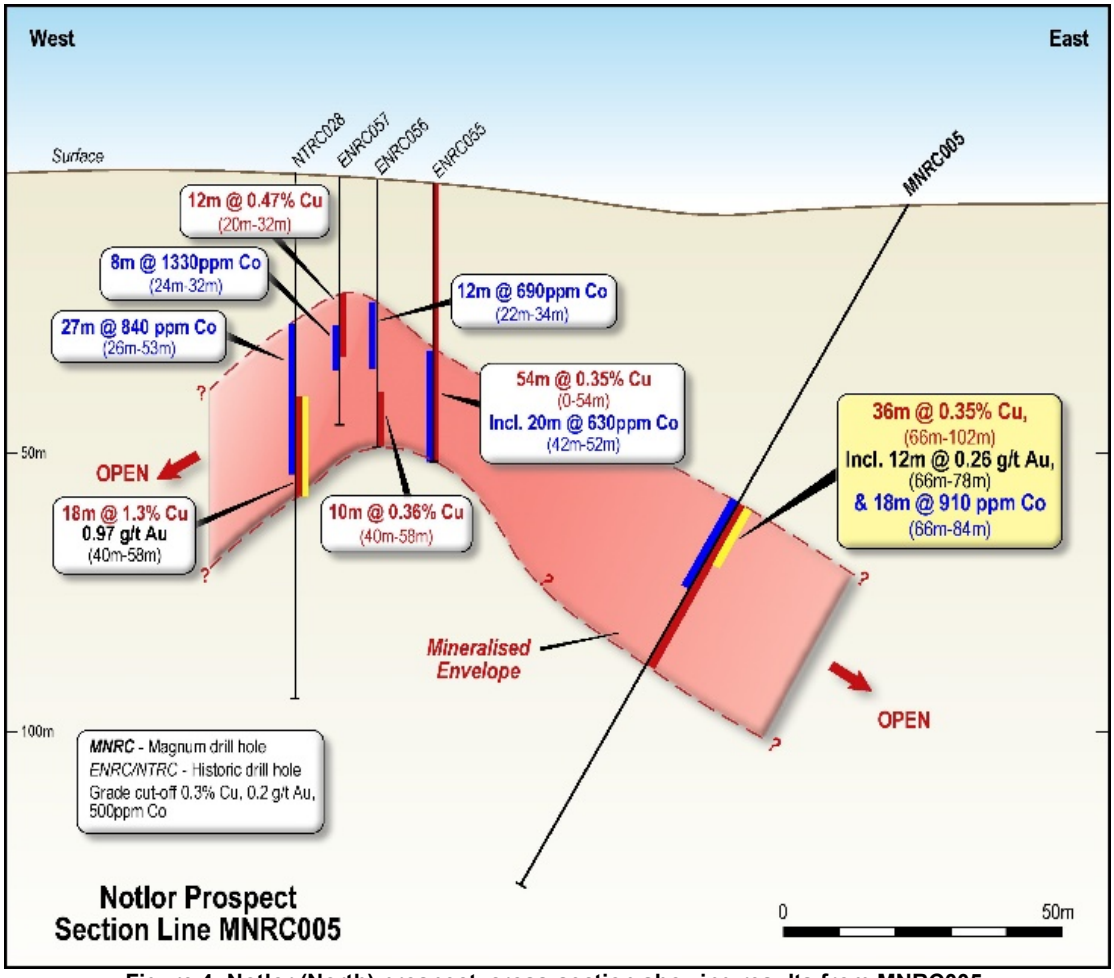

Figure 4: Notlor (North) prospect, cross-section showing results from MNRC005.

Hole MNRC 010 was drilled to test the interpreted southern plunge of this zone at depth and intersected **24m @ 0.98% Cu, 0.43 g/t Au and 3074ppm Co from 60m**. Included in this intersection was a higher grade cobalt zone **which assayed 3139ppm (0.32%) Co from 66m to 84m.**

The drilling of this section by these three holes suggest a zone that has been structurally thickened, possibly through fold repetition but with grade continuity continuing down-hole and down-plunge.

Hole MNRC006 was drilled to establish whether mineralisation continued near the northern end of Notlor by testing a section line where the large majority of previous drilling had been to sub 30 metres in depth but with a number of those holes finishing in mineralisation.

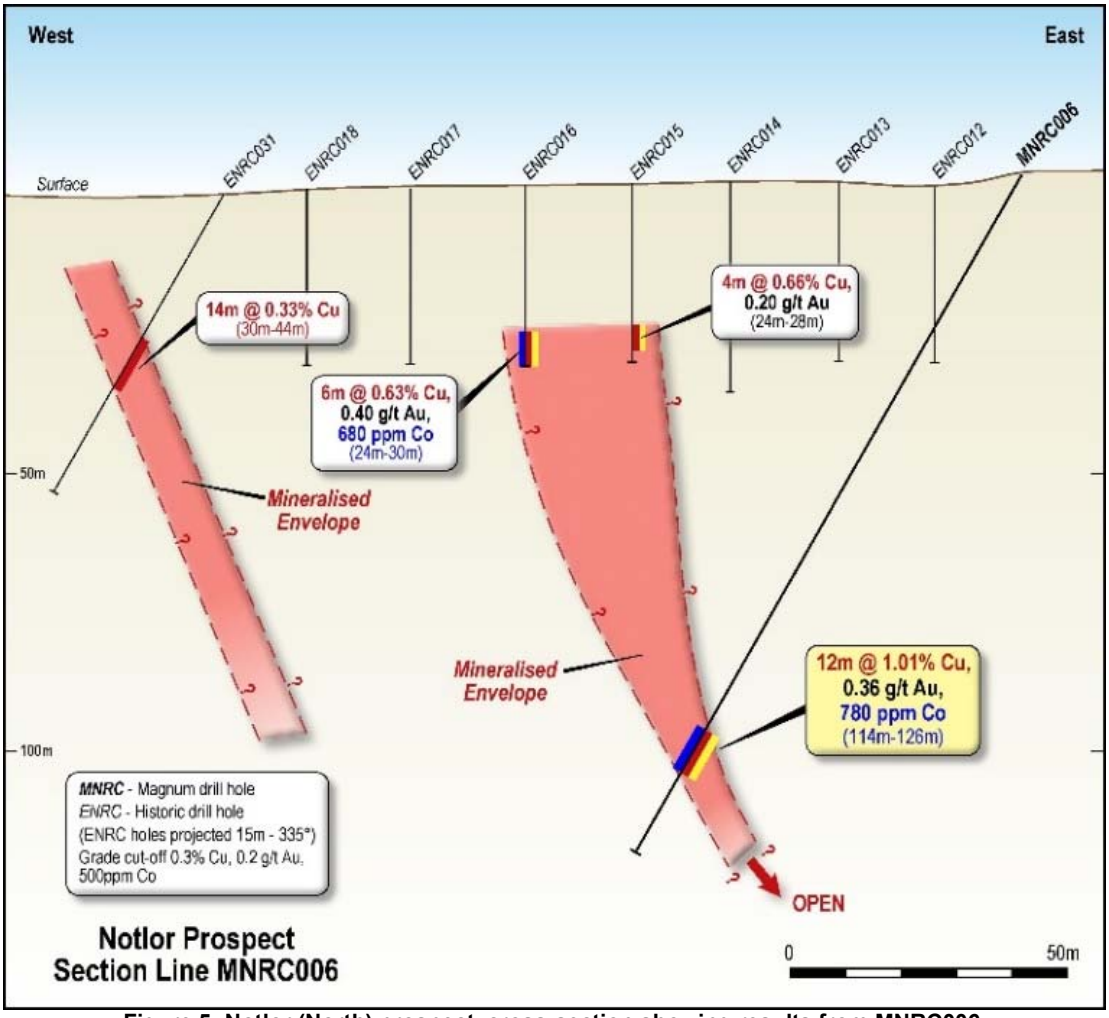

Figure 5: Notlor (North) prospect, cross-section showing results from MNRC006.

MNRC 006 was successful **intersecting 12m @ 1.01% Cu, 0.36 g/t Au and 780 ppm Co from 114m,** which may represent the down-dip extension of shallow mineralisation intersected by historical drilling. The cobalt mineralisation intersected by these holes appears to correlate with strong zones of pyrite.

The results from these four holes are highly encouraging, particularly with the grades of cobalt and copper that were intersected. While the mineralised envelope is structurally complex, the intersections from all four holes have demonstrated broad continuity **over at least 180 metres of strike and a thick core which will assist in determining a possible economic resource**.

Hole No.	Total Depth	East (metres)	North (metres)	Dip (degrees)	Azimuth (magnetic)	Elevation
MNRC 005	150 metres	455953	7703369	60	223	223.8 metres
MNRC 006	138 metres	455848	7703435	60	226	221.3 metres
MNRC 009	100 metres	455878	7703330	60	075	224.8 metres
MNRC 010	96 metres	455929	7703296	60	304	228.0 metres

Background

The Cloncurry East Project is a farm-in between Magnum Mining and Exploration Ltd ("Magnum"), and Exco Resources Ltd ("Exco") and Copperchem Limited ("CCL"). Together Exco and CCL form the CopperChem Group or "CCG".

These tenements, are Exploration Permits for Minerals ("EPM"), EPM 13137 containing the Notlor Prospect (held by CCL), EPM11675 containing the Salebury Deposit (held by Exco) and EPM14295 which contains the King Edward, Pumpkin Gully and Crow's Nest Prospects (held by Exco).

Pursuant to the terms of the farm-in, Magnum can earn a 50% equity stake in the CEP by expending $2 million over a three year period with a minimum of $350,000 to be expended in year one. Magnum can withdraw from the farm-in at any time after its year one expenditure obligation has been fulfilled.

The Company can earn an additional 25% equity stake in the CEP through the expenditure of an additional $2 million in year four. CCG retains the right to claw back to 50% ownership in consideration of the payment of $2.66 million to Magnum.

Yours faithfully

Magnum Mining and Exploration Ltd

Grant Button
Director/CEO/Joint Company Secretary

Competent Persons Statement

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Howard Dawson, who a Director of the Company. Mr Dawson is a member of the Australian Institute of Geoscientists (AIG) and has sufficient experience of relevance to the style of mineralisation, the type of deposit under consideration and the activities undertaken to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results. The resources quoted in this announcement were estimated in accordance with the JORC Code 2004. They have not been updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. Mr Dawson consents to the inclusion of the information in the form and context in which it appears.

THIS IS ANNEXURE A OF 5 PAGES

JORC CODE, 2012 EDITION – TABLE 1 REPORT

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Reverse Circulation drilling was used to collect 1 metre bulk samples via a cyclone mounted on the drill Rig. A 2-3kg sample was also obtained via a splitter mounted on the rigs cyclone for each metre drilled. 6 metre composite samples were collected from the 1 metre split samples by spearing the 1m splits and were sent to Australian Laboratory Services, a reputable company with many laboratories operating worldwide. Where Cu is above 0.2% in the composite samples the intervals will be submitted for further analysis with duplicates standards and blanks inserted for each drill hole. Analysis is by fire assay using a 50 g charge for gold, and copper and cobalt will be assayed as part of a multi element suite. The multi element analysis is by mixed acid digest with HF and analysis by ICPAES. Ore grade samples are analysed by four acid digest and ICPAES finish.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).*	• Reverse Circulation drilling was conducted by a reputable contractor (Tulla Drilling) based in Mt Isa using a shramm drill rig with on board and auxiliary compressor to keep samples dry in the case of water in the hole. The vast majority of samples have been dry. Several holes were terminated early where excess water prevented collection of representative dry samples/
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• RC sample recovery is good with no issues encountered due to water as holes encountering excess water were terminated. Samples were dry and recovery good with uniform sample sizes. • Fine and coarse samples are all recovered in the bulk samples collected in large plastic bags. The fines of the sieved geological chip sampling has been collected to ascertain if there is any bias in the fine material but this is not expected to be the case as

Criteria	JORC Code explanation	Commentary
		samples are dry and recovery is good.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• RC chips are logged from a representative sample speared from the 1 metre samples. Due to the small size of these geological samples the logging is qualitative and visual estimates are therefore unreliable and laboratory analysis only will be reported. The logging will include noting whether mineralisation is visually present.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• A bulk sample at 1 metre intervals is collected via a cyclone on the rig with an on board splitter collecting a further representative sample of approximately 2kg per metre. These samples are then speared to produce composite samples of 6 metres. If these samples are anomalous then the I metre splits are sent to the lab for further assay using approximately 2 kg for each sample.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Australian Laboratory Services, a reputable company with many laboratories operating worldwide have analysed the samples. Where Cu is anomalous in the composite samples the intervals have been resampled at 2 metre intervals and submitted for further analysis with duplicates standards and blanks inserted for each drill hole. Analysis will be by fire assay using a 50 g charge for gold, and copper and cobalt will be assayed as part of a multi element suite. The multi element analysis will be by mixed acid digest with HF and analysis by ICPAES. Ore grade samples will be analysed by four acid digest and ICPAES finish.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data*	• Composite 2 metre sub samples will be compared for consistency but the shorter intervals will take priority. If there is a material discrepancy the intervals will be resampled. • Data will be collected and entered into a digital file.

Criteria	JORC Code explanation	Commentary
	verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Holes were surveyed by GPS with sub metre accuracy • Drill coordinates and azimuths are GDA_94 MGA zone 54 • Any Downhole surveys will have magnetic azimuths.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• At Salebury previous drilling has been completed on nominal north-south sections with 50m spacing. • A total of 6 Diamond holes and 87 RC holes intersect the mineralisation. • At Notlor Drill Spacing is variable but generally on lines 100m apart over a 2km strike length with approximately 20m spacing's in several zones of higher grade mineralisation.
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.* • *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.*	• Drill lines are generally at 90 degrees to the regional geological strike, and have both angled (60 degrees) and vertical holes. In areas of high grade mineralisation holes have been drilled in multiple directions to confirm geometry of mineralisation.
Sample security	• *The measures taken to ensure sample security.*	• Reputable Labs and transport companies will be used and field sampling is being carried out by trusted and experienced contractors.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A high level audit of the interpretation, compositing, top cuts, estimations, modelling parameters and classifications was carried out by Cube Consulting for the Salebury Resource Estimate. No matters were noted that would impair the validity of the Mineral Resource Estimate.

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	• *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.* • *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.*	• The drilling and geophysical data were collected within EPM 11675 EPM13137 and EPM14295 which are 100% owned by Exco Resources Ltd. A registered native title claim exists over EPM 25389 (Mitakoodi and Mayi People #5). Native title site clearances were previously conducted at each area drilled. Conduct and Compensation Agreements are in place with the relevant landholders. • The Abovementioned EPMs are secure and compliant with the Conditions of Grant. There are no known impediments to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Prior to Exco's drilling and geophysical surveys, previous exploration was carried out by a number of companies including RC and Percussion Drilling at the Notlor Prospect. This and other known drilling data is contained within Excos database. Open file airborne magnetic surveys also cover the area of these EPMs
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Within the eastern portion of Mt Isa Block targeted mineralisation styles include: • iron oxide Cu-Au (IOCG) mineralisation and variants of this style (e.g. Ernest Henry, Eloise), as well as sediment-hosted Zn+Pb+Ag deposits e.g. Mt Isa, Cannington.
Drill hole 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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *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.*	• Collar easting and northing plus drill hole azimuth, dip and final depth for Holes will be advised when results are released. • No data deemed material to the understanding of the exploration results have been excluded from this document.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Regarding previous drilling the weighted average of the mineralised intervals was calculated by multiplying the assay of each drill sample by the length of each sample, adding those products and dividing the product sum by the entire downhole length of the mineralised interval. No minimum or maximum cut-off has been applied to any of the assay data presented in this document. • No short lengths of high-grade copper-gold mineralisation have been aggregated with longer lengths of low-grade copper-gold mineralisation. All assays included in the quoted weighted average for the mineralised intervals were 1or 2 metre lengths. • No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	• *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.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Drill holes have been drilled as close as possible to perpendicular to the regional geological strike and particularly the strike of mineralised zones or geophysical target trends. • The geometry of the mineralisation with respect to the drill hole angle is uncertain in some areas with further drilling done to resolve this. • All depths and intervals referenced are downhole depths.
Diagrams	• *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.*	• The locations of the EPMs and prospects are shown in Figure 1 in the body of this document.
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.*	• Previously reported selective drill hole results are stated as being higher grade and some of the better results. The resource has been reported which indicates the overall grade of the mineralised zone.
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.*	• No other substantive data has been omitted in the context of this report. The extensive data is currently being reviewed and any material observations will be reported in due course.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions,*	• The Exploration program is currently in progress but has paused due to the northern monsoon season, and when resumed will probably include further geophysics, drilling and metallurgical test work after results are fully reviewed and interpreted.

Criteria	JORC Code explanation	Commentary
	including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	