Exceptional Assays of up to 1.38% Cobalt Confirm Potential across Multiple Prospects at Cloncurry East

Planning for follow-up exploration work now underway

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KEY POINTS

- Final assay results received from drilling completed in December 2017 at the Cloncurry East Joint Venture Project in north-west Queensland.

Notlor North

- Two-metre analytical samples have confirmed previously released highly encouraging cobalt (Co), copper (Cu) and gold (Au) results from six-metre composites:
  - **78m @ 1.36% Cu, 0.55g/t Au and 0.13% Co** from 22m to end of hole (100m), incl.
    - **48m @ 1.78% Cu, 0.66g/t Au and 0.19% Co** from 22m (MNRC 009)
  - **30m @ 0.81% Cu, 0.37g/t Au and 0.27% Co** from 60m, incl.
    - **18m @ 0.92% Cu, 0.4 g/t Au and 0.42% Co** from 66m (MNRC 010)
- The peak two-metre sample within the MNRC 009 intersection assayed an outstanding **1.38% Co.**

Notlor Central & South

- Multiple intersections received with elevated cobalt, including:
  - **4m @ 0.36% Cu, 0.05 g/t Au and 0.11% Co** from surface (MNRC004)
  - **22m @ 0.67% Cu, 0.17 g/t Au and 730ppm Co** from 8m, incl.
    - **10m @ 1.16% Cu, 0.28 g/t Au and 0.08% Co** from 14m (MNRC004)
  - **30m @ 0.66% Cu and 0.92 g/t Au** from 72m, incl.
    - **18m @ 0.97% Cu and 1.43 g/t Au** from 82m (MNRC007)
- Planning for follow-up exploration work now underway.

Magnum Mining & Exploration Limited (ASX: MGU – "Magnum" or "the Company") is pleased to advise that final assay results have now been received for drilling at the Cloncurry East Joint Venture in north-west Queensland, confirming outstanding potential for copper, cobalt and gold mineralisation.

The latest results confirm previously-reported assays from Notlor North (see ASX Announcement 19 February 2018), where the Company has now returned an exceptional peak assay result of 1.38% cobalt, as well as confirming the presence of elevated cobalt mineralisation at the Notlor Central and South zones.

High-grade Au results have previously been reported from the King Edward prospect (see ASX Announcement 22 January 2018), indicating stand alone Au targets are also available within the project area.

Magnum CEO Grant Button said the results provide the Company with an important insight into the structure and controls of copper-cobalt mineralisation at Cloncurry East.

“Our maiden drilling program has delivered very positive results from across a wide area at Cloncurry East, with highly anomalous copper-cobalt mineralisation at Notlor indicating strong potential for the completion of a maiden resource estimate,” he said.

“We’re now working to integrate these latest results with our existing data to determine the primary targets for our next round of drilling,” Mr Button continued.

Overview

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

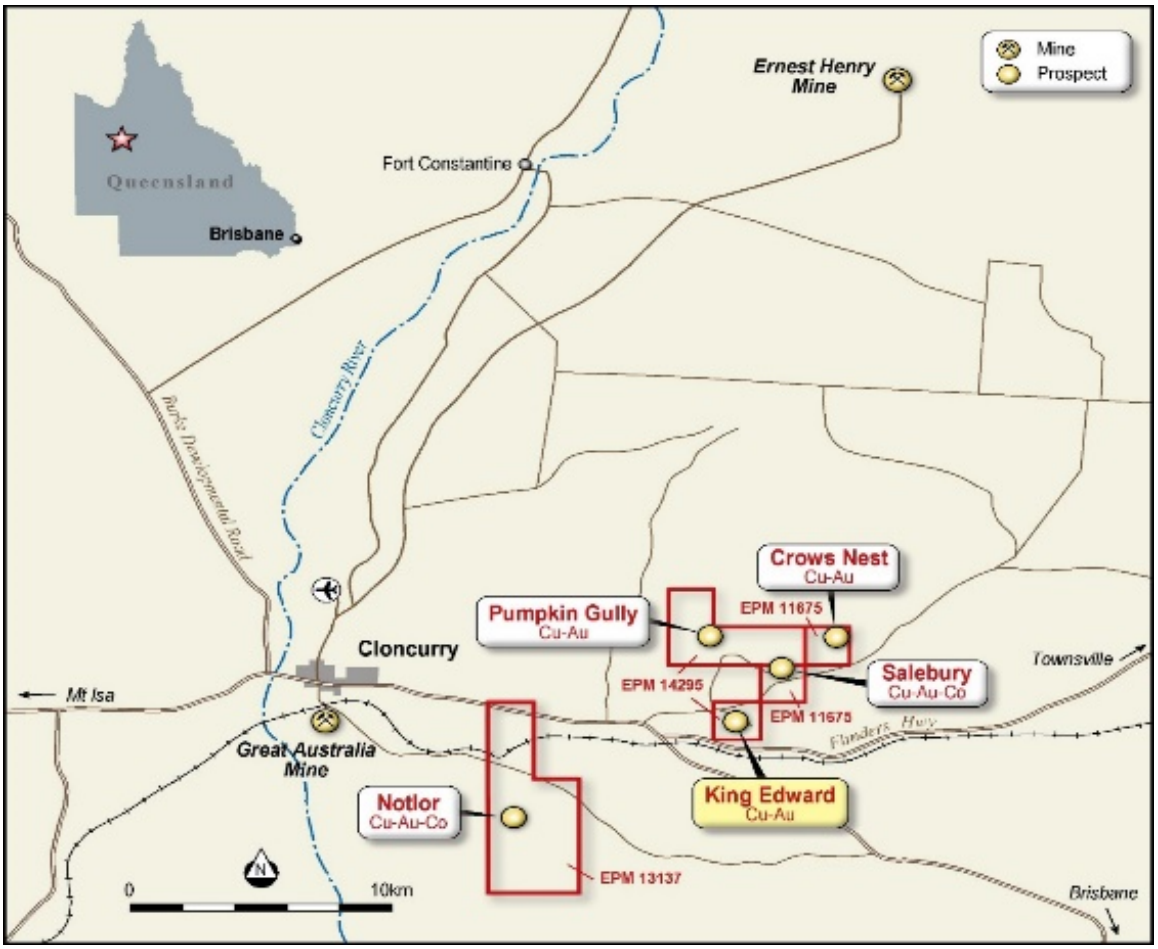

Figure 1: Cloncurry East Project: Location of EPM’s

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, 2,004 metre Reverse Circulation drilling programme 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 data set.

Notlor North

Two-metre samples have confirmed previously released six-metre composite sample results for Notlor North.

MNRC 009 returned **78 metres @ 1.36% Cu, 0.55g/t Au and 0.13% Co** from 22m to end of hole (100m). This intersection included **48m @ 1.78% Cu, 0.66g/t Au and 0.19% Co** from 22m.

MNRC 010 returned **30 metres @ 0.81% Cu, 0.37g/t Au and 0.27% Co** from 60m. This intersection included **18m @ 0.92% Cu, 0.4g/t Au and 0.42% Co** from 66m, with a peak two-metre sample within this intersection assaying an outstanding **1.38% Co.**

Notlor Central and Southern Zones

The remainder of results have been received from drilling in the central and southern portions of the Notlor prospect and have delivered encouraging results.

Multiple zones of mineralisation and significant anomalous zones of the target geology have been intersected in drilling, with highly elevated cobalt values also returned in some areas.

MNRC004 intersected **4m @ 0.36% Cu, 0.05g/t Au and 0.11% Co** from surface, **and 22m 0.67% Cu, 0.17g/t Au and 730ppm Co** from 8m, including **10m @ 1.16% Cu, 0.28g/t Au and 756ppm Co** from 14m.

Additional drilling on the same section intersected sub parallel zones of mineralisation, with MNRC007 intersecting **30m @ 0.66% Cu, 0.92g/t Au and 79ppm Co** from 72m, **including 18m @ 0.97% Cu, 1.43g/t Au and 80ppm Co** from 82m.

MNRC008 intersected **4m @ 1.12% Cu, 0.75g/t Au and 118ppm Co** from 26m on a separate structure.

Three holes (MNRC001-003) were drilled towards the southern end of the Notlor prospect. The target zone was highly anomalous in copper, with wide zones greater than 0.1% Cu. Of these holes, MNRC003 returned a best interval of **2m @ 1.40% Cu, 1.29g/t Au and 348ppm Co** from 94m.

These results have demonstrated that the density of drilling over the 2km strike length needs to be increased to evaluate what is a complex, but generally coherent zone of mineralisation, with some significant high grades with complex geometry.

Metallurgical samples have been collected and frozen from the recently completed program to determine potential recovery parameters of the Cu-Au-Co mineralisation.

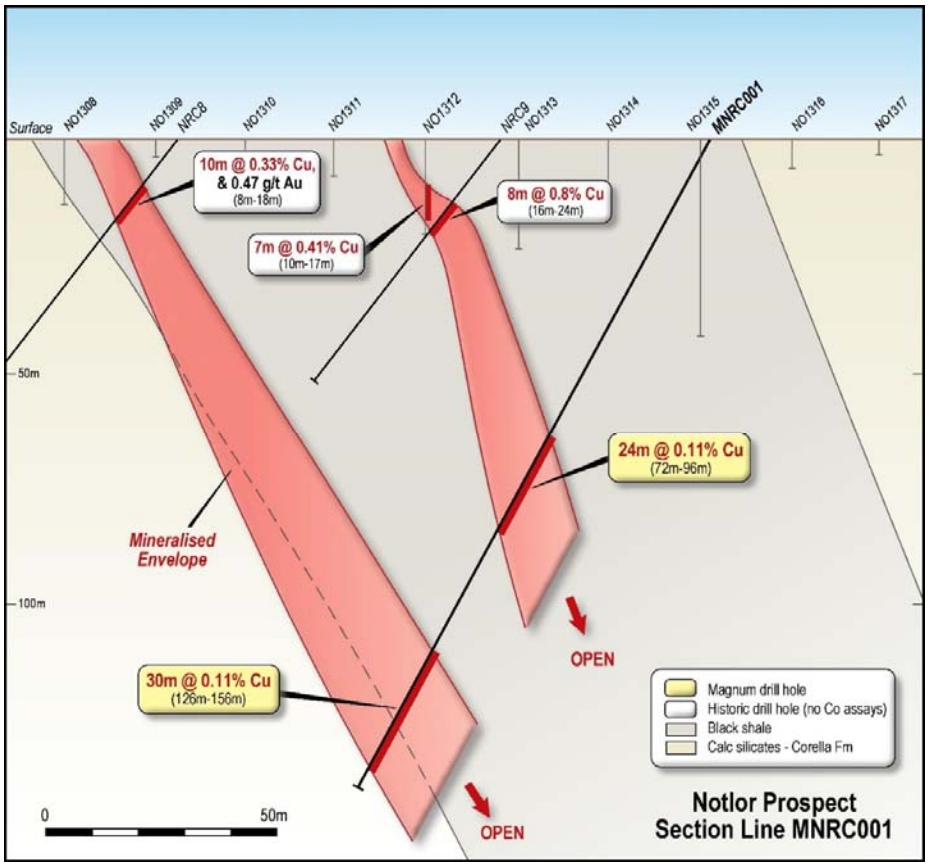

Figure 2: Notlor (North) prospect, cross-section showing results from MNRC001

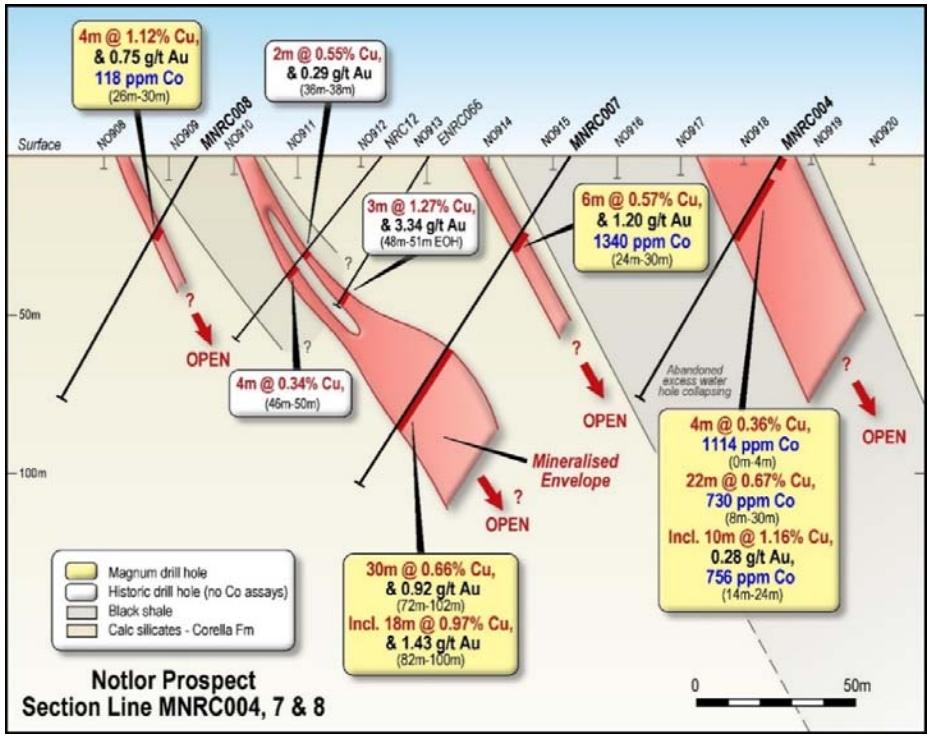

Figure 3: Notlor (North) prospect, cross-section showing results from MNRC004, 7 & 8

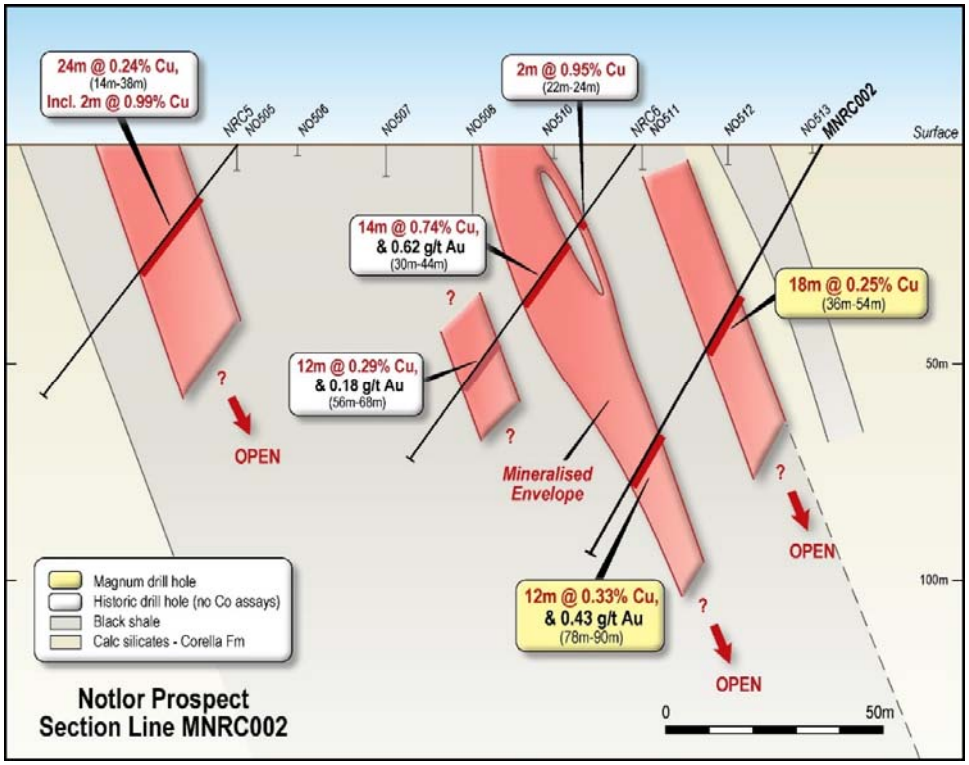

Figure 4: Notlor (North) prospect, cross-section showing results from MNRC002

King Edward

Magnum has previously announced a six-metre composite result for MNRC014, which delivered a high grade intersection of **6m @ 5.0% Cu and 14.4g/t Au from 42m depth** (see ASX Announcement 22 January 2018).

The 2m samples have shown that the high-grade chalcopyrite dominated mineralisation is situated within a broader lower-grade zone.

The revised MNRC014 intersection from the two-metre composites is **12m @ 1.92% Cu and 2.78g/t Au** from 36m, including **8m @ 2.76% Cu and 4.06g/t Au** from 36m.

This zone had a peak interval of **2m @ 9.98% Cu and 14.8g/t Au** from 42m downhole depth.

The mineralisation is hosted in dolerite within the Toole Creek Volcanics member of the Soldiers Cap Formation.

Further work will be undertaken to evaluate near term opportunities given the presence of nearby gold processing facilities.

Salebury

Drilling at the Salebury prospect targeted interpreted intersecting structural zones where higher-grade zones of mineralisation could potentially be developed.

Five holes were completed, with the drilling generally indicating low grade mineralisation within the targeted zones.

The most significant result was from MNRC013 which was drilled adjacent to a small historical pit and intersected strong mineralisation in several zones including significant cobalt.

The best result from this hole was **22m @ 1.46% Cu, 1.21g/t Au and 961ppm Co** from 14m, including **8m @ 2.58% Cu, 2.28g/t Au and 680ppm Co** from 26m.

Two other zones were intersected further downhole with **20m @ 0.65% Cu, 0.86g/t Au and 708ppm Co** from 72m, and **5m @ 1.25% Cu, 1.41g/t Au and 477ppm Co** from 126m to 131m where the hole was abandoned due to excess water and no sample return.

The remainder of holes intersected generally low-grade mineralisation and the results will be reviewed to determine alternate structural interpretations.

Background

The Cloncurry East Project (“CEP”) 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”.

The tenements are Exploration Permits for Minerals (“EPM”) comprising EPM13137 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 complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Mr Howard Dawson, Non-Executive Director of Magnum Mining and Exploration Limited. Mr Dawson is a member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Dawson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practices for drilling, logging, sampling, assay methods including quality assurance and quality control measures as detailed in Appendix A.*

Hole Number	Total Depth	Co-ordinates		Dip	Azimuth	Elevation
	(metres)	East	North	(degrees)	(degrees)	(metres)
MNRC001	162	456527	7702758	60	232	231.00
MNRC002	108	456597	7702554	60	232	235.20
MNRC003	108	456622	7702359	60	232	239.40
MNRC004	85	456263	7703069	60	232	229.70
MNRC005	150	455953	7703369	60	229	223.80
MNRC006	138	455848	7703435	60	232	221.30
MNRC007	120	456206	7703024	60	232	227.60
MNRC008	84	456139	7702949	60	232	223.90
MNRC009	100	455878	7703330	60	81	224.80
MNRC010	96	455929	7703296	60	310	228.00
MNRC011	76	465870	7710972	90	0	195.50
MNRC012	156	465812	7710925	60	360	197.00
MNRC013	131	466223	7711126	90	0	194.20
MNRC014	100	464864	7703519	60	232	199.50
MNRC015	84	465002	7708622	60	180	195.30
MNRC016	192	466220	7711001	90	0	197.20
MNRC017	114	465829	7710975	60	70	194.20

Table 1: Drill hole table December 2017 Drilling Programme

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 one 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. six metre composite samples were collected from the one 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*	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.

Criteria	JORC Code explanation	Commentary
	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.*	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 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 one 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 mineralization 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 one 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 six metres. If these samples are anomalous (generally greater than 0.1% copper or 0.05 g/t gold) then the one metre splits will be 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*	Australian Laboratory Services, a reputable company with many laboratories operating worldwide will be analyzing the samples. Where Cu is above 0.1% in the composite samples the intervals will be resampled at one and two 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

Criteria	JORC Code explanation	Commentary
	accuracy (i.e. lack of bias) and precision have been established.	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 verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Composite and one or two 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.
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 but these will be converted to grid.
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 mineralization.
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 mineralization holes have been drilled in multiple directions to confirm geometry of mineralization.
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.

Criteria	JORC Code explanation	Commentary
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:* *easting and northing of the drill hole collar* *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *dip and azimuth of the hole* *down hole length and interception depth* *hole length.* *If the exclusion of this information is justified on the basis that the*	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
	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.	
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 one or two 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 mineralized 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 mineralized zone.
Other substantive	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey*	No other substantive data has been omitted in the context of this report. The extensive data is currently being reviewed and any material

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