DUKE EXPLORATION

ASX ANNOUNCEMENT | ASX: DEX Media Release

17 December 2021

NEW GEOPHYSICAL MODELLING DEMONSTRATES EXPANDED PROSPECTIVITY AT BUNDARRA AND DRILLING UPDATE AT QUORN AND ISENS PROSPECTS

Duke Exploration Limited (ASX: DEX) ("Duke" or "the Company") is pleased to announce the results of new geophysical data processing and drill target ranking at the Bundarra project in Central Queensland, consistent with Duke's previously outlined pluton-wide expanded and accelerated exploration strategy. Very encouraging preliminary observations from new diamond drilling at Quorn and Isens prospects are also reported.

HIGHLIGHTS

- New modelling of historical airborne EM data was completed. A total of 39 km of linear conductive trends were identified through this targeting analysis from which 19 km were associated with anomalous copper in soil.
- Duke geologists have incorporated this newly processed geophysical data into a prospectivity model for the area with very encouraging results.
- Conductivity highs were detected that correlate with known mineralisation and copper in soil anomalies, as previously predicted.
- Multiple other conductivity anomalies with associated copper in soils exist that have not been tested by drilling and represent priority targets.
- Quorn diamond drill hole intersects visible copper mineralisation in breccia and vein style zones.
- Isens diamond drill hole intersects copper sulphide bearing alteration zone down-dip from historic workings.

Commenting on progress – Philip Condon, MD:

"The completion of the historic VTEM data remodelling using up-to-date technology, represents the next significant step in Duke's expanded Bundarra resource development strategy, building on the recently completed and very successful Bundarra pluton-wide geochemical soils survey. The interpretation of the results and integration into the exploration model is now generating further focused and refined target identification and prioritisation, as planned. The next very exciting stage is

the drill testing of the generated primary targets, which has begun with the Quorn and Isens holes having been completed and sent for assay, and 3 diamond holes remain to be drilled on the Rogers prospect. Our initial diamond drill hole at Quorn is very significant as it confirms the potential for bulk-style breccia hosted copper mineralisation in the Bundarra area in addition to the vein styles seen in the same prospect and at Mount Flora. This is a very important and positive outcome of our revised strategy in action, as there are now two distinct styles of mineralisation that have been identified and confirmed to be present at Bundarra. Duke will continue to advance the understanding of geology and mineralisation at Bundarra with mapping and drill testing of targets into Q1, 2022."

Future Work Program

Future work planned at Bundarra includes:

- Further detailed ground checking and geological mapping in vicinity of priority targets.
- Diamond drill testing of best conductivity anomalies.
- Further diamond drilling in Quorn area

This announcement has been authorised for release by the Board.

Philip Condon
Managing Director
p.condon@duke-exploration.com.au
Ph +61 417 574 730

Toko Kapea
Chairman
t.kapea@duke-exploration.com.au
Ph+64 27 534 2886

Technical Information

VTEM Data Modelling and Coincidental Geochemical Anomalies

Duke Exploration has interpreted historic Versatile Time-Domain Electromagnetics (VTEM) data that was acquired over the Bundarra area in 2011 by previous owners of the project. VTEM data was reprocessed by TechnoImaging LLC of Utah, USA, who are experts in providing 3D imaging solutions of a variety of geophysical data, including airborne electromagnetics. TechnoImaging utilised their proprietary EMVision® software and GlassEarth® technology to produce a 3D model of conductivity and chargeability to a depth of 300 m below surface covering most of the Bundarra project area. When combined with Duke's soil sampling data, the 3D geophysical model highlights numerous coincidental conductivity and copper in soil anomalies around the Bundarra pluton's 50 km long contact.

The announcement on 15 September 2021 outlined Duke's profile targeting system that utilised conductivity derived from processed Gradient Array IP (GAIP) data and pXRF copper in soil results to define the location and likely size of mineralisation targets around the Bundarra pluton. Processing the historic VTEM data and extending soil surveys has allowed the technique to be further modified and applied over an expanded area where there was no GAIP coverage. Figure 1 demonstrates the utility of the processed VTEM data at Mount Flora, where the modelled higher conductivity response is correlated with mineralisation in fresh rock at a depth of approximately 70 m below surface. The new processing allows both the horizontal and vertical extent of conductors to be defined by manually examining successive depth slices (at 100 m, 170 m and 240 m) through the 3D conductivity model. A set of linear trends were digitised on each depth slice to define conductive zones (Figure 2), which were then correlated with surface copper in soil anomalies.

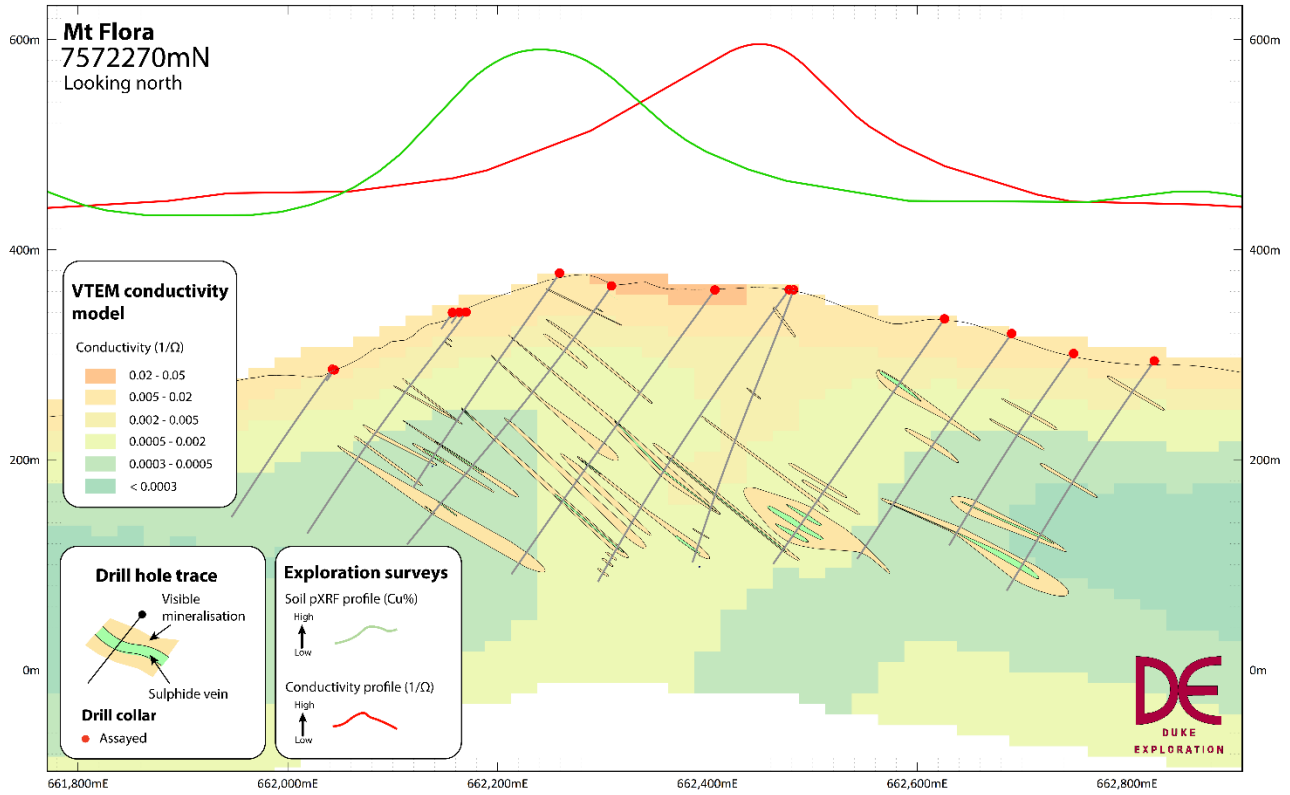

Figure 1. Section 7,572,270 mN of the most northern line of resource drilling relative to pXRF soil and electrical geophysical anomaly profiles

A total of 39 km of linear conductive trends were identified through this targeting analysis from which 19 km were associated with anomalous copper in soil (Figure 2). The majority of conductive trends associated with copper in soil anomalies are untested by drilling. The large scale of the combined geophysical and geochemical anomalism provides excellent exploration potential.

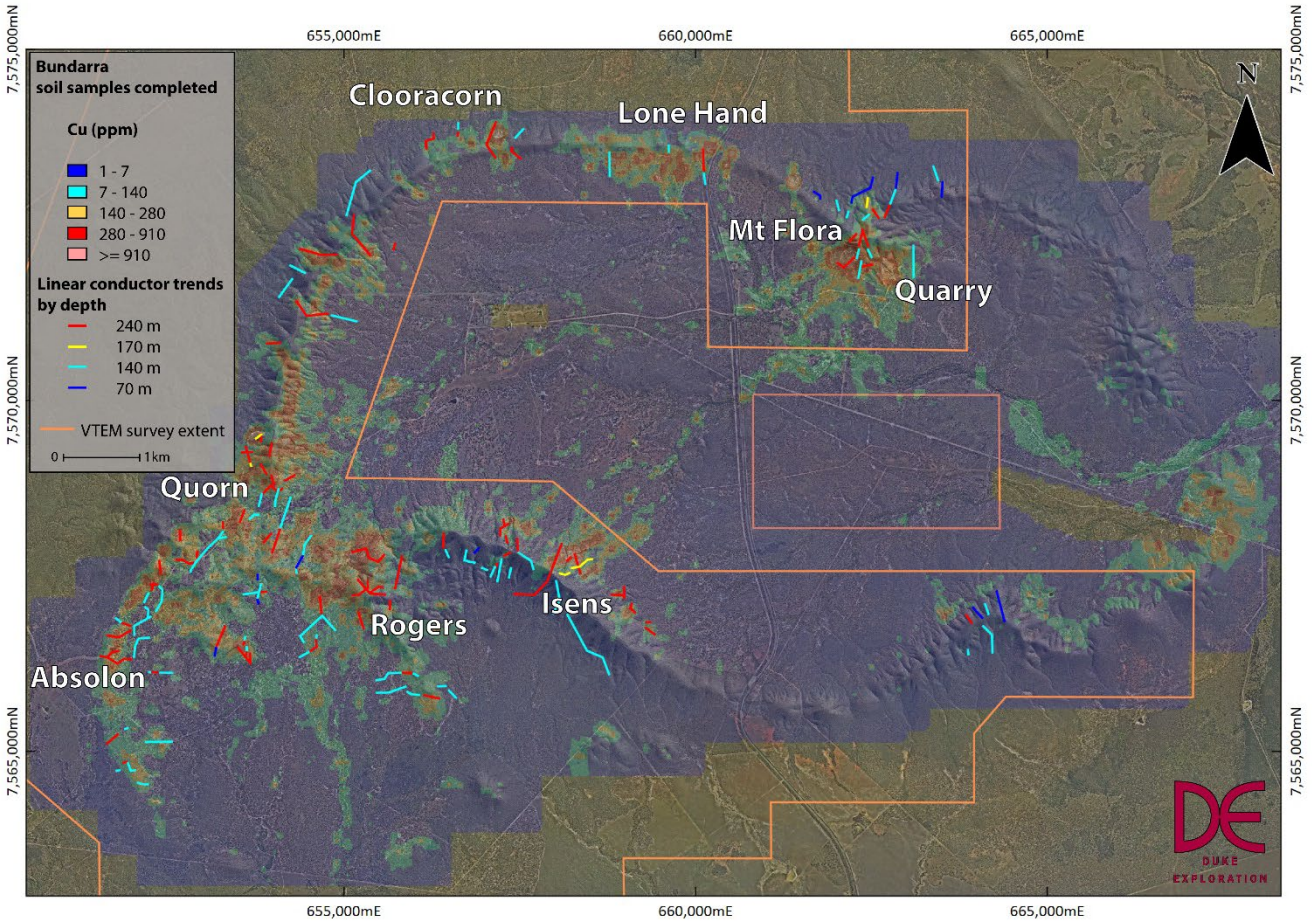

Figure 2. Interpreted linear trends form pXRF copper soil and conductivity profile targets from survey areas

The interpreted VTEM conductivity inversion model data was added to Duke's spatial prospectivity database that includes data from soil samples, drilling results, historic workings, defined resource and exploration target size. Prospect areas are defined by polygons, which are weighted according to the strength of the various inputs, e.g. higher copper in soil assays contribute to a higher rank for a prospect. Rankings are relative and allow Duke geologists to assign priorities for drill testing. Geological mapping and assessment of the highest ranked targets has begun to help guide RC drill-testing planned for early 2022. Figure 3 shows a total of 74 outlined prospect areas that are colour coded by their prospective ranking with red highlighting the top ten that will be given priority.

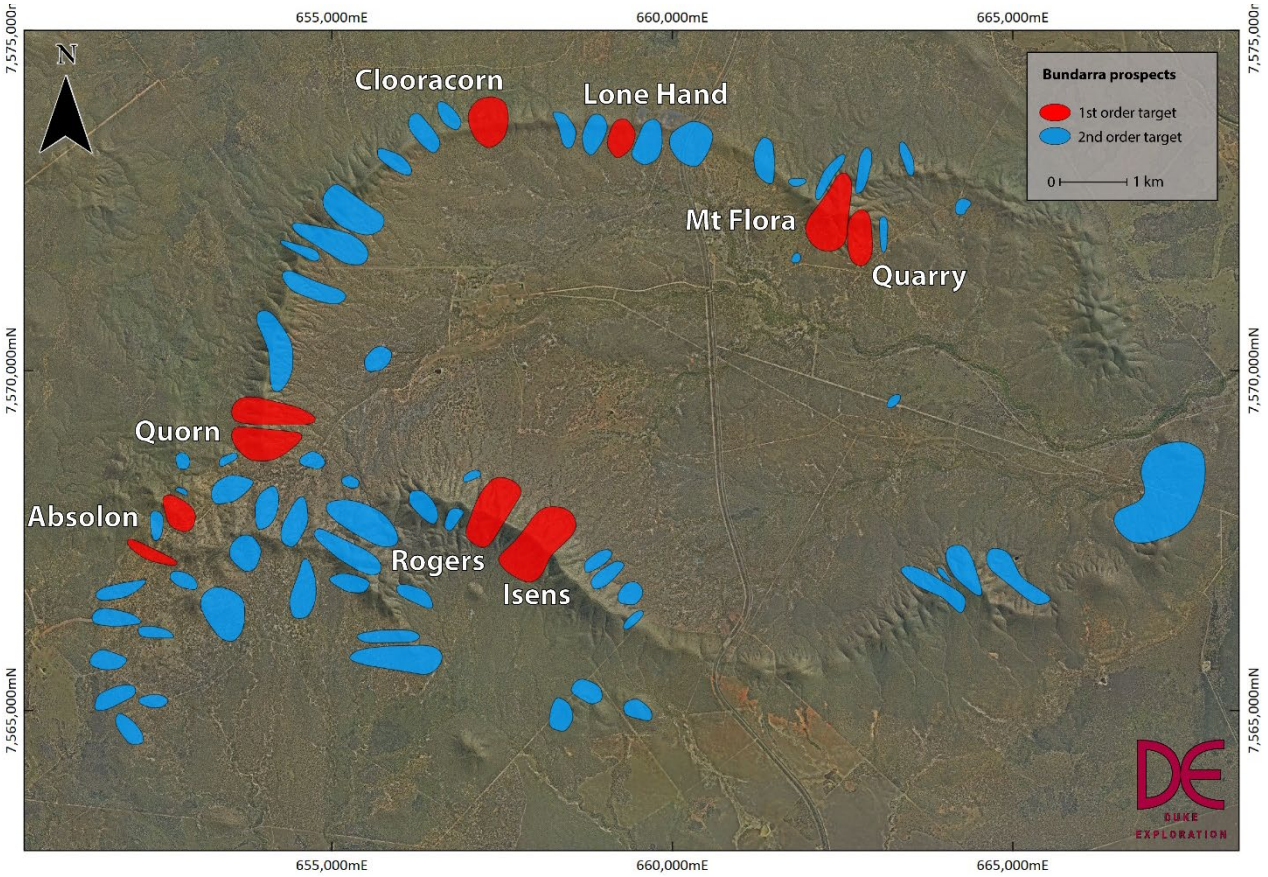

Figure 3: Identified prospective areas colour coded by red – high prospectivity and blue – lower prospectivity

Quorn and Isens Preliminary Exploration Drilling Results

As reported in the announcement of 5 November, five diamond holes for 880 m were planned at Quorn, Isens and Rogers to test the exploration targeting technique outlined above. These holes were designed to:

- Test selected high priority coincident copper in soil and zones of high Gradient Array Induced Polarisation (GAIP) conductivity,
- Collect petrophysical downhole survey data to map geological and structural geometries,
- Review and categorise the relevant rock classes present downhole,
- Review orientations of structures and mineralisation downhole, and
- Review and interpret the geometry and controls on the copper and silver mineralisation intersected to date.

Two holes (one hole at Quorn and one hole at Isens) have been completed, with three holes remaining to be drilled at Rogers (Table 1 and Figure 4). Drilling was severely impacted by adverse weather conditions and will continue into January 2022.

Table 1. Bundarra exploration diamond drill hole details

Hole ID	Prospect	Plan ID	NORTH	EAST	RL	DIP	Azimuth	DEPTH
BNDD001	Quorn	PLQN001	7569541	653712	322	-60	180	250
-	Rogers	PLQN002	7567776	655231	337	-55	180	150
-	Rogers	PLQN003	7567757	655416	354	-55	180	150
-	Rogers	PLQN004	7567374	655131	378	-55	180	150
BNDD002	Isens	PLQN005	7567626	658272	366	-55	325	180

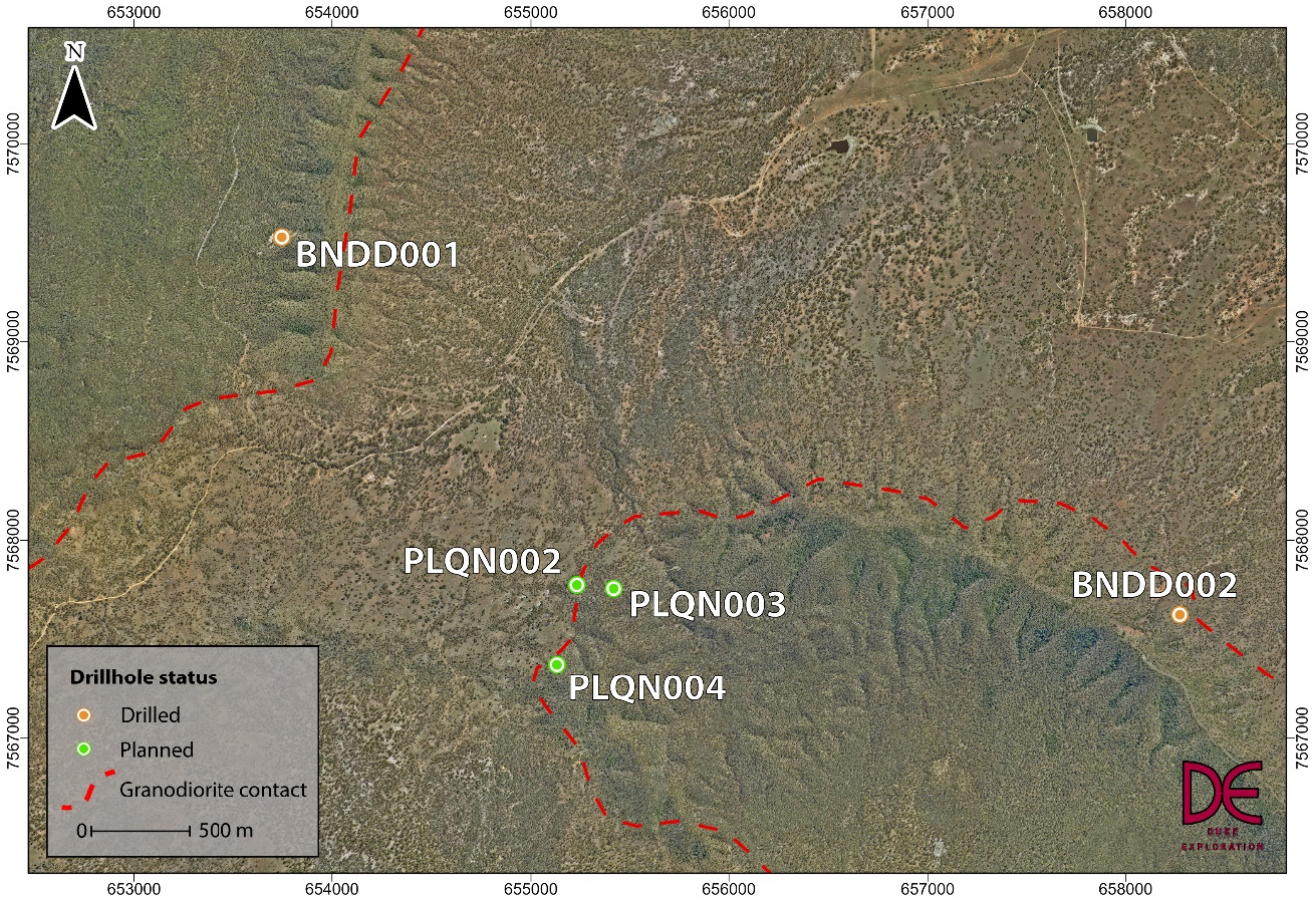

Figure 4. Locations of drilled and planned exploration diamond drill holes, Q4 2021 and Q1 2022

Quorn

Quorn was tested by the first Bundarra exploration scout drilling program as announced on 28 July 2021. A total of four exploration holes and one water bore were drilled - all intersecting copper, silver and gold mineralisation (Figure 5). Better results from that program included:

- 4.0 m at 2.66 % Cu, 4.51 g/t Ag and 0.54 g/t Au from 199.0 m in QNRC001,
- 11.0 m at 1.04 % Cu, 14.70 g/t Ag and 0.07 g/t Au from 122.0 m in QNRC002,
- 27.0 m at 0.58 % Cu, 14.86 g/t Ag and 0.05 g/t Au from 26.0 m in QNRC002 and
- 5.0 m at 0.28 % Cu, 6.24 g/t Ag and 0.01 g/t Au from 41.0 m in QNRC004.

The recently drilled diamond hole followed up previous drilling undertaken by Duke and confirmed two distinct mineralisation styles and orientations at Quorn that can be seen in outcrop. The top 120 m comprises an angular breccia with clasts of foliated metasediment and granodiorite in a matrix of hydrothermal infill minerals. Mineralisation below the breccia zone comprises 1 – 10 cm thick chalcopyrite-pyrite-pyrrhotite veins associated with hematite-magnetite alteration within foliated metasedimentary rock. The approximate boundary of the breccia zone can be mapped at surface and forms a roughly ellipsoidal shape 100 m by 50 m elongated in a northeast-southwest direction (Figure 5). Vein-style copper mineralisation in historic workings in granodiorite on the eastern side of the Quorn prospect strikes east-west and dips to the north.

Mineralised zones within the breccia matrix hosting up to 5% secondary copper minerals (predominantly malachite and azurite) were logged in the oxide zone and up to 5% sulphides (chalcopyrite and pyrite) in fresh rock (Figure 6). Significant logged mineralised intervals in include:

- 4.0 m from 14.0 m (oxide)
- 18 m from 29 m (oxide)
- 10.8 m from 87 m (fresh)
- 6 m from 100.7 m (fresh)

BNDD001 was drilled to the south to intersect the north-dipping vein set interpreted to extend from historic workings to the east (Figure 7). Although north-dipping veins are present towards the bottom of the drill hole it is now apparent that the breccia zone represents a more interesting target in the immediate future and that the significant intercepts in Duke drill hole QNRC002 represent breccia style mineralisation rather than vein style as was previously presumed.

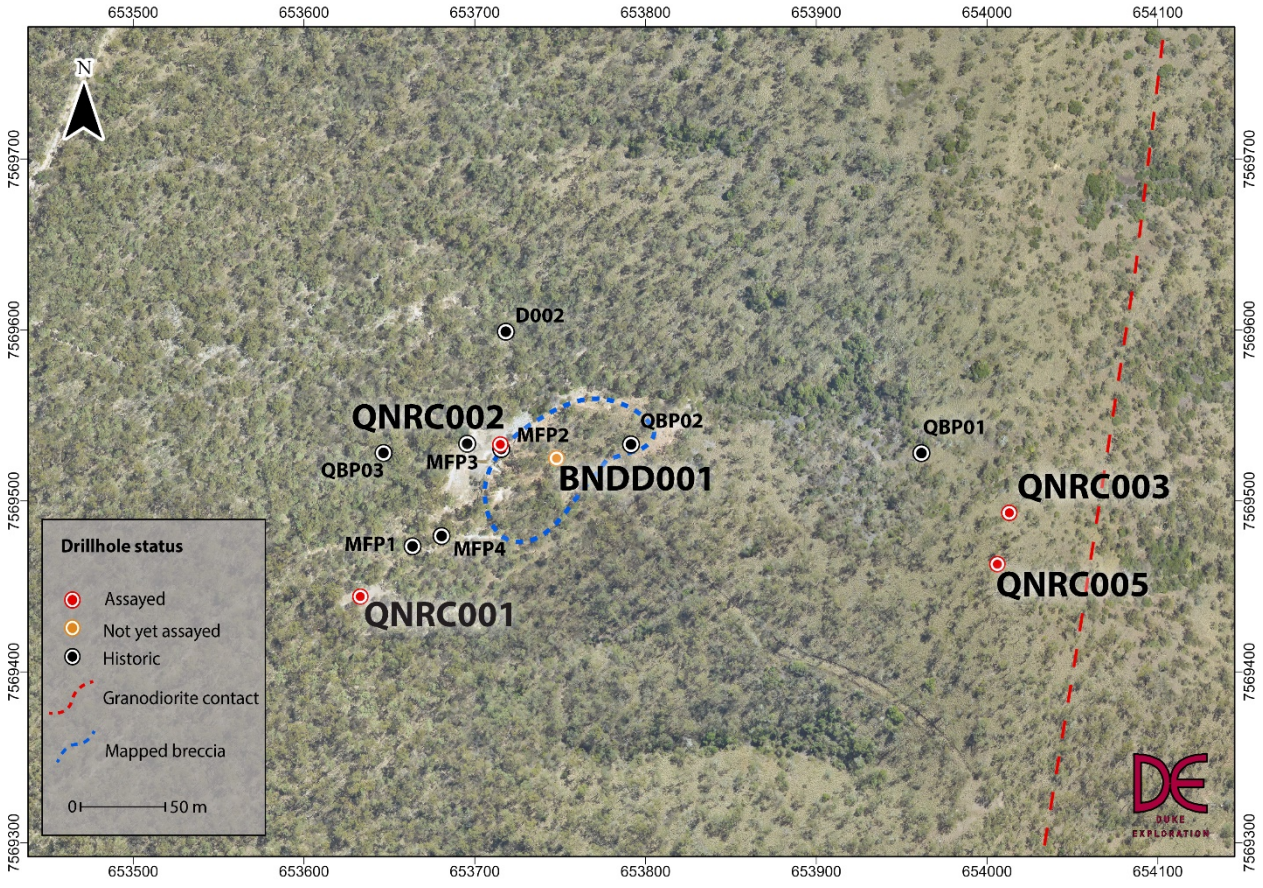

Figure 5. Completed drill hole locations at Quorn including historic drill holes, breccia outcrop and granodiorite contact

Figure 6. Quorn BNDD001 mineralised zones intersected downhole showing breccia style mineralisation

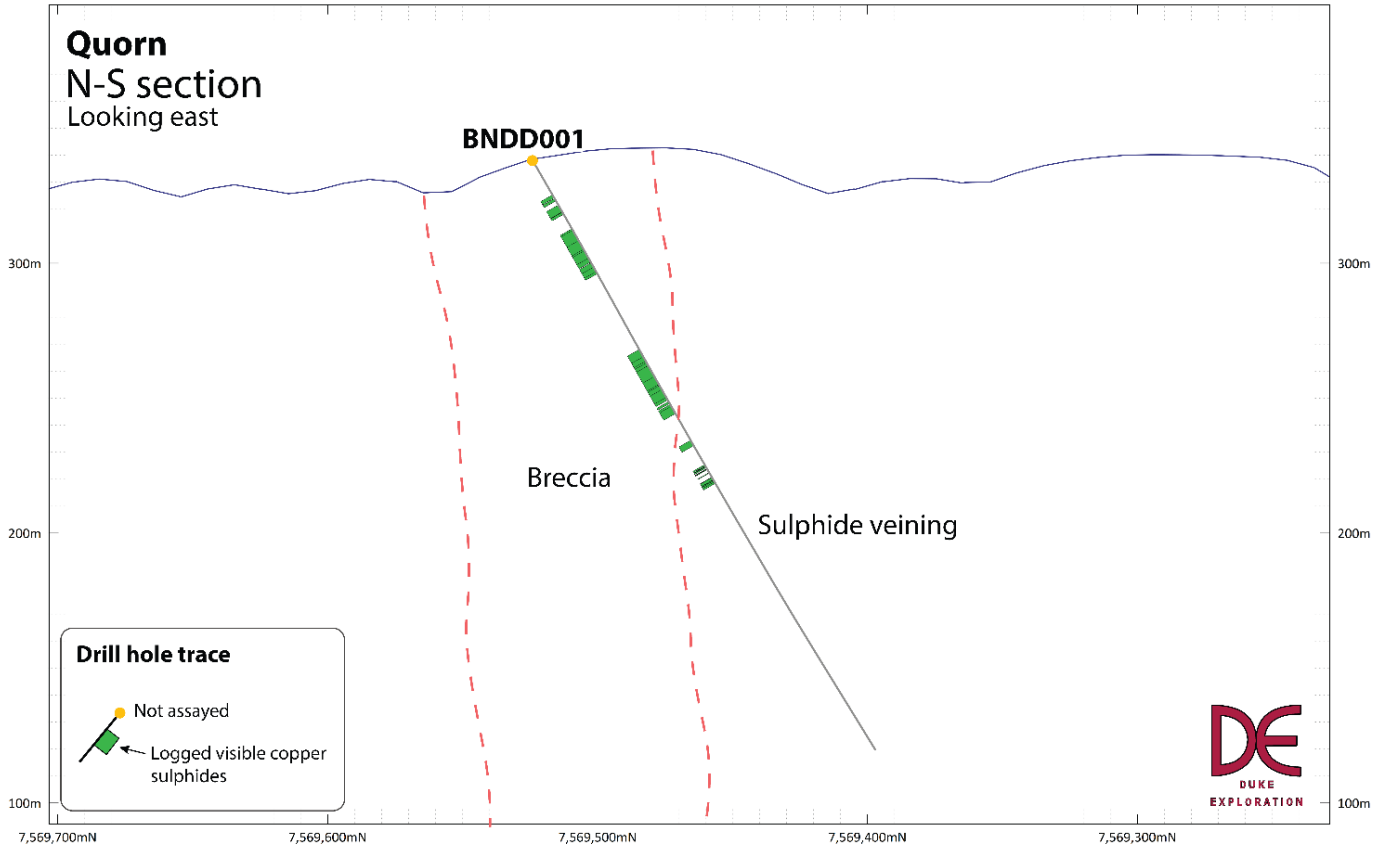

Figure 7. Cross section on 653750m E showing the logged mineralisation relative to the breccia and vein style mineralisation

Isens

The first hole drilled into the Isens prospect was targeted at the down-dip extension of mineralisation exposed in historic workings to the northwest, with the additional aim of testing for a stacked parallel lode system similar to Mount Flora (Figure 8). A 4 m wide zone of strong to intense sericite-chlorite-albite alteration with pyrite-chalcopyrite veinlets (Figure 9) was intersected from 110.6 m downhole, at the expected position of the down-dip projection of the historic workings. The footwall contact of the mineralised zone is marked by about 15 cm of a more sulphide rich siliceous shear zone cut by a thin (20 cm) feldspar porphyry intrusion. Additional zones of thin sulphide veining / veinlets were intersected above and below the main lode zone, as shown in Figure 10. Drilling issues due to poor ground conditions resulted in the hole being abandoned at 147 m depth despite intersecting several minor 1 cm chalcopyrite-pyrite veins near the bottom of hole.

This drill hole has confirmed the mineralisation style and orientation of the Isens prospect. The mineralisation striking NE – SW has also confirmed the validity of the exploration targeting technique using VTEM and mapping Cu from soil sampling. The strike and dip of the 3D conductivity model from the VTEM data replicated the mineralised intersections downhole and indicate the lode may extend an additional 500 m along strike.

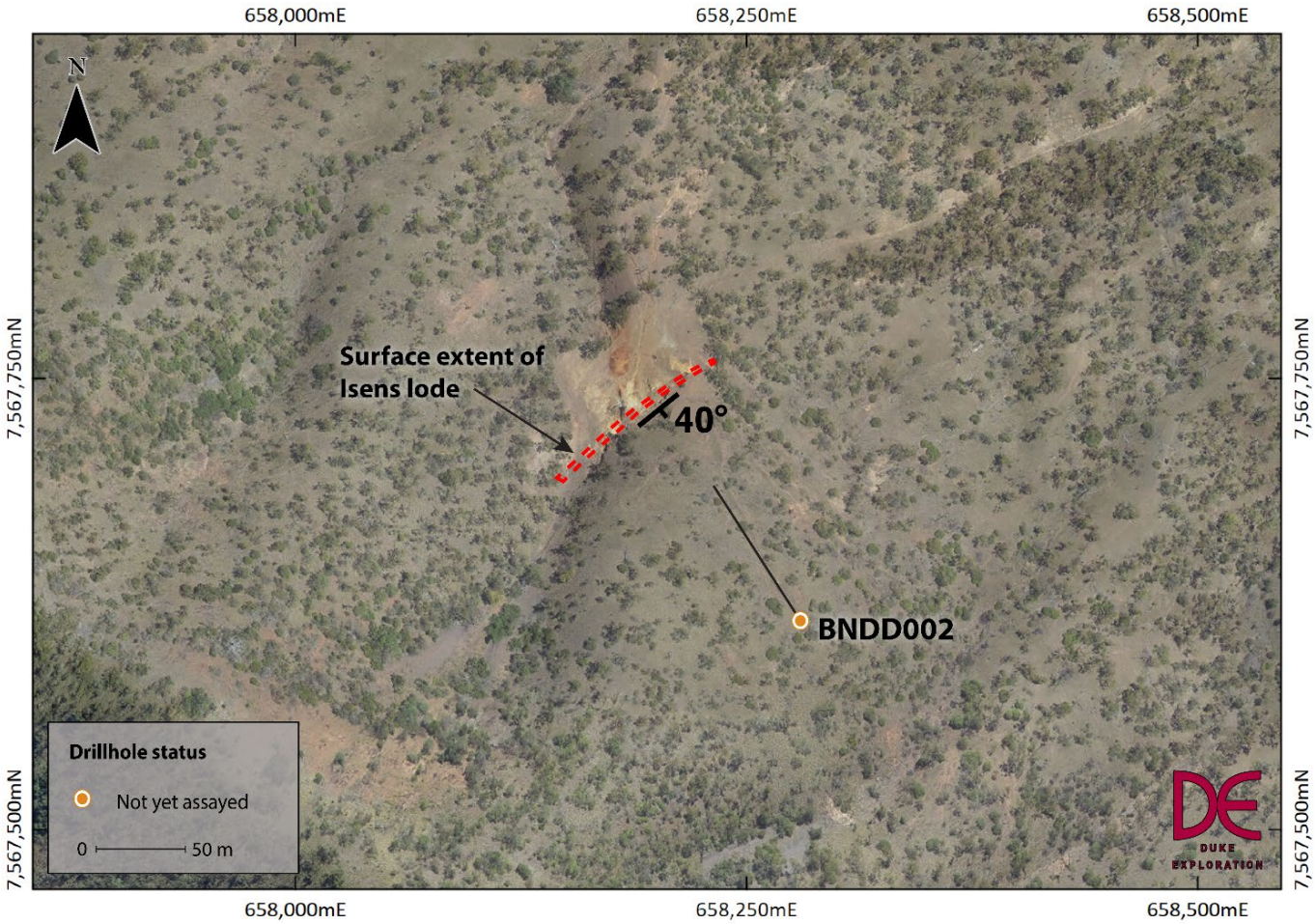

Figure 8. Isens plan highlighting the relative location of BNDD002 to the surface expression of the Isens lode.

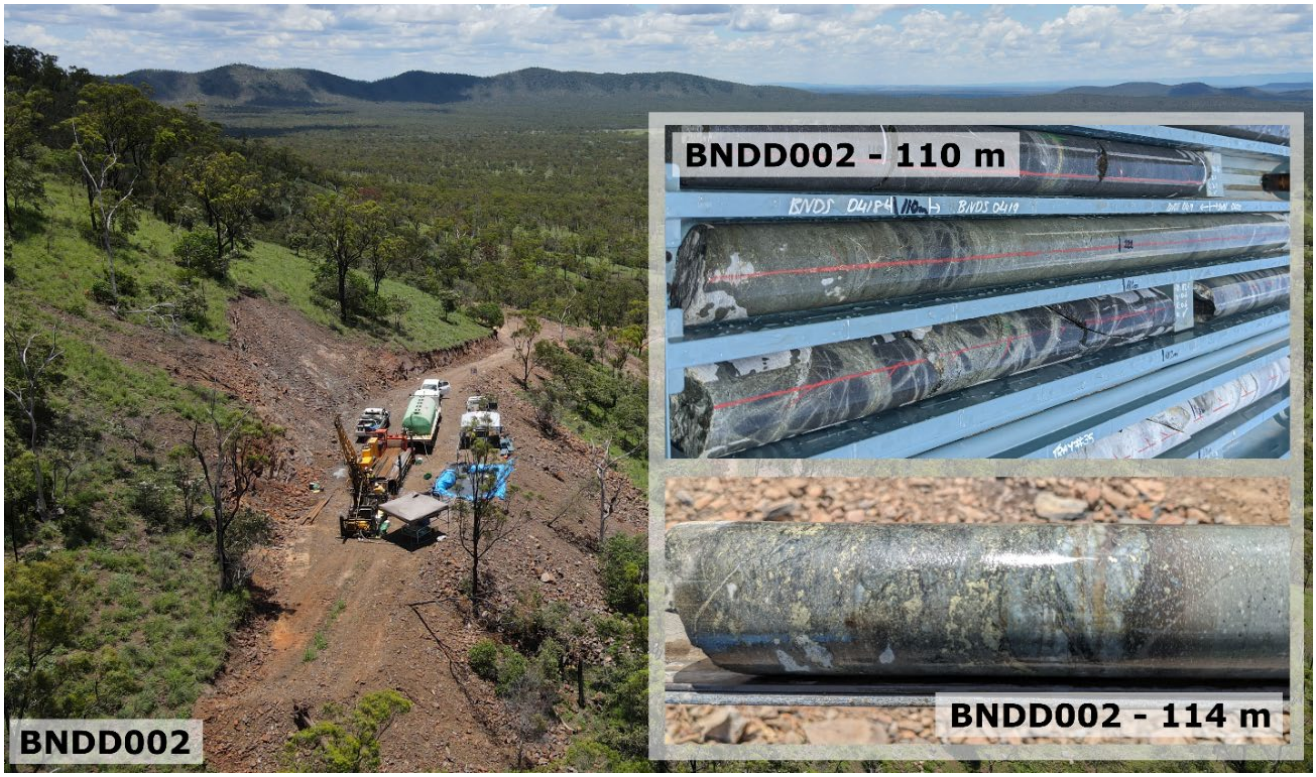

Figure 9. Isens drill rig set up on the pad drilling NW with examples of mineralised lodes intersected downhole

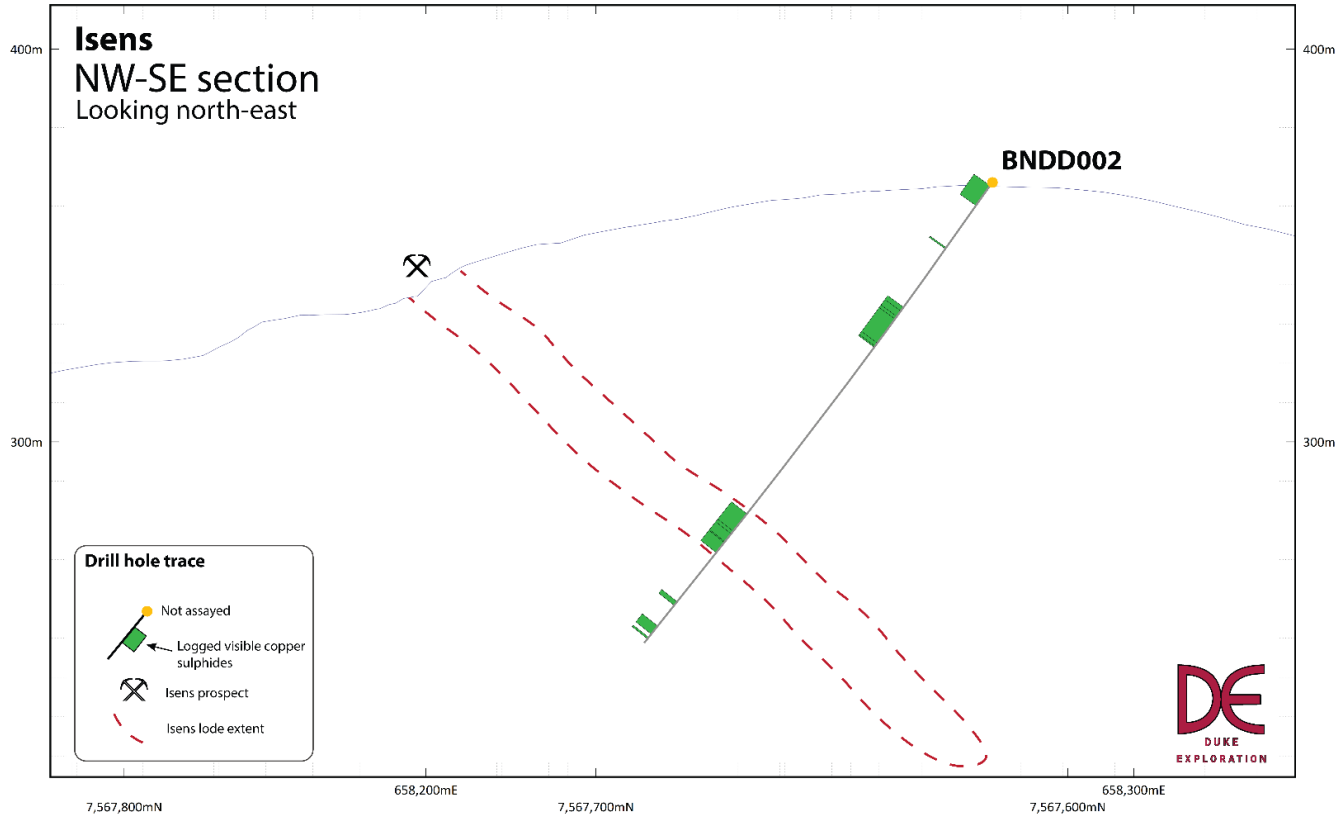

Figure 10. Isens cross section highlighting the relative locations of logged mineralisation and orientation of the Isens lode

The results from this recent drilling are another significant step forward in the discovery of additional resources of copper and silver at Bundarra to that already found at Mt Flora. The scale of the mineral system at the two recently drilled prospects and the number of new targets around the pluton suggest that a near surface long life mining operation may be present at Bundarra, particularly when the other electrical geophysical targets are included.

The drill program testing the exploration targeting method will resume in early January. The core from the first two holes has been sent to the ALS Townsville lab with assay results expected in early February. Upon completion of the drilling the next phase of the Duke Exploration strategy will commence involving drill testing of several high priority targets around the pluton.

About Duke Exploration

Duke is an Australian exploration company with majority interests in five granted exploration tenements for copper, gold and silver exploration areas located in Queensland and New South Wales, Australia.

Duke's key assets comprise:

- EPM 26499, EPM 27474 and EPM 27609 – Bundarra project (100% owned copper exploration project near Mackay, Queensland);
- EPM 26852 – Prairie Creek Project (91% owned (9% Capgold) gold exploration project near Rockhampton, Queensland); and
- EL 8568 – Red Hill Project (100% owned copper exploration project near Red Hill, New South Wales).

In addition, Duke also has an interest in four New South Wales Cu-Au porphyry tenements currently operated by Lachlan Resources Pty Ltd, a wholly owned subsidiary of ASX listed Emmerson Resources (ASX: ERM). Duke currently holds a 5% interest in two of these tenements and a 10% interest in the other two tenements that is free carried to BFS.

The most advanced target for the Company is the Bundarra project Mt Flora prospect, which has resource development potential for copper, silver and gold, and a recently announced Inferred resource of 16 Mt at an average grade of 0.5% Cu and 6.9 ppm Ag, reported at a 0.2% Cu cut-off grade as classified and reported in accordance with the JORC Code (2012), which equates to 78,000 tonnes of copper and 3.6 million ounces of silver (Table 3). There are currently five other target areas with similar development potential on the Bundarra project as defined by historical mining, geology and geophysics.

		Tonnes (Mt)	Cu%	Ag g/t	Cu tonnes	Ag ounces
Inferred	Oxide	1	0.3	4.2	2,000	87,000
	Sulphide	15	0.5	7.0	76,000	3,500,000
	Total	16	0.5	6.9	78,000	3,600,000

Notes:

- Reported at a 0.2% Cu-equivalent cut-off grade (Cu & Ag)
- The Mineral Resource is classified in accordance with JORC, 2012 edition.
- The effective date of the Mineral Resource estimate is 25 June 2021.
- The Mineral Resource is contained within EMP 26499.
- Estimates are rounded to reflect the level of confidence in these resources at the present time. All resources have been rounded to the nearest million tonnes.
- The Mineral Resource is reported as a global resource

Table 3. Mount Flora Mineral Resource Summary

The exploration and development strategy is to define sufficient resources at Mt Flora and the other prospective targets in the Bundarra project area as a priority to allow feasibility studies to be undertaken to establish an economic mining operation and to delineate additional mineral resources from the current known exploration target areas to grow the project into the future. The Company has also started to test the more conceptual exploration targets on the Prairie Creek project and Red Hill project (see *www.duke-exploration.com.au* for more project details). The business development strategy for the Company is to focus on the Bundarra project and simultaneously carry out resource development work on those targets evaluated and ranked as high priority,

starting at Mt Flora, while exploring the regional potential of the Bundarra pluton. The aim is to discover a pipeline of resource development projects around the Bundarra pluton to add to the Mt Flora project organically.

Competent Person Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr James Lally, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and a Member of The Australian Institute of Geologists.

Dr Lally is employed by Duke Exploration Pty Ltd as a consultant through Mining Associates Pty Ltd. He has over 25 years of 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Lally consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 1 - JORC Code, 2012 Edition, 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 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.*	• Triple-tube HQ sized diamond core samples to be collected via diamond drill rig. The recovery of core is measured and recorded by the driller and checked and corroborated by the logging geologist when metre marked. • pXRF analysis is conducted to provide indicative lithogeochemical data by taking 10 analyses per sample interval. These analyses were taken using an Olympus Vanta M series XRF Analyser with all beams enabled for 10 seconds each. • Core to be cut in half, with half retained and half assayed. Core was crushed and pulverised. Gold was assayed by 50g fire assay and AAS (ALS code Au-AA24) and 33 other elements by four acid digestion with ICP-AES (ALS code ME-ICP61).
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).*	• An AED Alton track mounted diamond rig to be used to recover HQ sized core. 3 m rods to be used, and triple tube methods used to ensure sample recovery, especially through fractured zones. Core was oriented using a Reflex tool.
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.*	• The drilling crew measured each run and record the amount of core recovered. This was double checked by the geologist when the core was metre marked. • Triple tubing was used to ensure maximum core recovery
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.*	• All core to be logged by a geologist at a centimetre resolution. Features of interest that were logged include lithology, alteration, structure and chemical composition (acquired through pXRF analysis). Downhole Optical Televiewer, Acoustic Televiewer and petrophysical logging, including magnetic susceptibility, resistivity, natural gamma and density measurements, to be conducted and integrated with geological and geotechnical logging. This logging provides information on structure, contacts, veining etc. in the form of dip and dip direction measurements at a 10 cm resolution. • Geological logging is considered qualitative while structural, geochemical and geotechnical logging via pXRF geochemical analysis, downhole Televiewers and petrophysical logging is considered quantitative. All core trays are photographed, as well as lithologies of

Criteria	JORC Code explanation	Commentary
		interest in the core.
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.*	• Core to be sawn in half, with half retained in trays, and the other half assayed. Sampling is considered representative of the in-situ lithologies collected and the consistent half-core sampling.
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.*	• Gold to be assayed by 50g fire assay and AAS (ALS code Au-AA24) and 33 other elements by four acid digestion with ICP-AES (ALS code ME-ICP61). ME-ICP61 is a near total method, with only the most resistant minerals partially dissolved. • A pXRF Vanta m-series was used to analyse each sample using 3 beams in geochemistry mode. Each beam was set to 10 seconds for a total of 30 seconds and targeting 39 elements. pXRF readings were taken at a rate of 5 per sample interval on the core. It is recognised this is an imperfect method and is only used to give an indication of geochemistry while waiting for laboratory assay results.
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.*	• No data were adjusted.
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.*	• The drillholes were initially located using a Garmin GPS unit. The holes were then surveyed accurately by a surveyor at the end of the program. Downhole surveys including a downhole gyro was used on all holes. • The grid system is MGA94 Zone 55 • Topographic control has been adopted from a recent aerial lidar survey. The topographic control is considered to be highly accurate.
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.*	• The drilling is targeting specific prospective zones with no pattern drilling planned period. • No physical compositing of samples to be done.
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.*	• The drilling was planned near perpendicular to the geology based on the current geological understanding.
Sample security	• *The measures taken to ensure sample security.*	• All samples were collected from the drill rig and taken to a core logging yard located on the same property as the drilling. Once logged the core was transported to ALS via Followmont. The samples were not left unattended and a chain of custody was maintained throughout the

Criteria	JORC Code explanation	Commentary
		shipping process.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits have been conducted by external parties at this stage.

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.*	• EPM 26499 'Bundarra' is located south of Nebo, QLD, and is held 100% by Duke Exploration Ltd. Parts of the tenement have native title interests with the Barada Barna people. • No known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Production at Mt Flora began in the 1880s. Numerous shafts, to a maximum depth of 38 m, adits and surface workings were developed. Mining continued during the 1970s. Exploration since the 1960s included geological mapping (Endeavour Oil 1974-75) soil surveys (CRA Exploration 1962, Endeavour Oil 1974-75, Regency Resources 2005), rock chip sampling (Endeavour Oil 1974-75, Chesterfield Mining and Exploration 1983, Elliot Exploration 1987, Dominion Gold Operations 1991, Queensland Metals Corporation 1994), Geophysics (magnetics by Planet Metals in 1967 and Elliot Exploration 1987, gravity by Carpentaria Gold in 1984, IP by Endeavour Oil in 1975, and VTEM by Regency in 2014). Endeavour Oil drilled six diamond drillholes in 1975, and Queensland Metals Corporation drilled two percussion holes in 1994. Endeavour Oil 1974-75 carried out trial underground mining, metallurgical test work and resource estimation. Endeavour Oil did extensive work at Mt Flora from 1974-76, including detailed 1:500 scale mapping, rock chip sampling, geophysics, drilling and extending adits and shaft sinking. Petrology was done on ore material taken from the base of a shaft sunk on the Flora lode in 1972 (Endeavour Oil, 1974). Near surface narrow lode mineralisation was detected in the Mt Flora area using IP geophysics, and Endeavour Oil considered IP to be a useful reconnaissance tool. Six diamond holes were drilled to successfully test IP anomalies at depth. In 1974-75 Endeavour Oil undertook a mining exploration program and used this work to complete a resource estimate for the Mt Flora lodes. • Elliot Exploration re-assayed the Endeavour Oil core for gold in 1987. In 1994 Normandy drilled two holes: MFP 01 and MFP 02 near the top of Mt Flora, and Regency Mines 2001-2013 did mapping and soil sampling, and apparently drilled RC holes in 2001, although no data were reported.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Copper, gold, silver and molybdenum mineralisation at Bundarra is located within 300 m

Criteria	JORC Code explanation	Commentary
		of the contact zone between the Bundarra Granodiorite and Back Creek Group sediments. Argillite, mudstone, siltstone and sandstone has been contact metamorphosed to an andalusite hornfels for a 800m wide zone surrounding the Bundarra pluton. Mineralisation at Mt Flora occurs in structurally controlled lodes, which crosscut the granodiorite-sediment contact, with mineralisation occurring on both sides of the contact. Mineralisation is hosted by faults and fractures, associated with sheeted quartz veins, hematite, limonite and pyrite. The lodes have massive sulphides with high copper percentages (>10%). Silver and zinc are present, as well as molybdenum and gold. It is interpreted the mineralisation at Quorn is similar.

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 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.*
		• See Figure 2 and Table 1 in the main text.

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.*	• Intervals to be composited in Micromine, using a weighted average technique at a 0.2% Cu cut off, allowing 3 m of internal dilution and a 1 m minimum width.
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').*	• These are the first holes drilled into the prospects and the orientation of the copper mineralisation is not known. The holes are thought to be drilling perpendicular to the mineralisation based off VTEM geophysical models and mapping surrounding outcrops.
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.*	• Relevant figures (maps and cross sections) are included in the body of the report
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*	• No assays to report.

Criteria	JORC Code explanation	Commentary
	Results.	
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.*	• A desktop study was completed by Core Metallurgy Pty Ltd, using the most recent drill data and flotation test work results to perform an order-of magnitude assessment of processing and operating options for a mine at Mt Flora. The goal of the study was to produce indicative flowsheets and the associated capital and operating costs to subsequently evaluate the feasibility and economic viability of producing a copper concentrate via conventional open pit mining and processing methods from deposits in the Bundarra project area. • The cost estimates provided within the review are of a preliminary nature and should have an expected accuracy range of 25% to 45%. Scoping test work to assess metallurgical processing options was conducted by Core in May and June 2019 and these data were used to constrain the review. • Key assumptions include all mining will be from an open-pit, throughput rate will be 500,000 tonnes per annum of sulphide ore, a concentrate grade for copper of 24% and silver of 398 g/t Ag, concentrate filter cake delivered to Mt Isa by road transport and a locally based drive in/out workforce is available at Mackay or in the surrounding area. • The study considered twelve processing options with the Base Case capital cost estimate for the supply and construction of a concentrator with a nominal capacity of 500,000 dry tonnes per annum to produce a saleable rougher copper concentrate is estimated at approximately A$56.3 million. • Order of magnitude operating costs for a greenfield EPCM and second-hand process plant, at A$31-34 per tonne, were significantly lower compared to Builder Owner Operator (A$47-51 per tonne) and Contract Crushing / Direct Shipped Ore (A$65-89 per tonne) options. • A copper cut-off grade of 0.2% Cu represents the economic cut-off grade for the project using the current copper price and cost estimates above. • VTEM inversion modelling undertaken to identify conductive trends associated with copper mineralisation has provided numerous targets around the Bundarra Pluton. The targeting method provides the strike and in some cases the dip orientation for the geophysical anomaly. The VTEM survey was flown from September 23rd to October 4th ,2011, and the flight lines were flown at 90° – 270°, except for block 2, which was flown at 019° – 199° to align with terrain and reduce terrain clearance. All inversions were carried out using TechnoImaging's proprietary Glass Earth® technology and EMVision software package.
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*	• Further work will include drilling other prospects around the Bundarra Pluton to test results returned from GAIP, 3D IP and VTEM geophysical surveys and pXRF soil surveys. • A regional scale pXRF soil survey on an 80m by 720m spacing mapping the surrounding area around the Bundarra Pluton to identify the

Criteria	JORC Code explanation	Commentary
	commercially sensitive.	additional prospective areas for copper, silver and gold mineralisation.