DUKE EXPLORATION

ASX Announcement

Media Release

Company Announcements Office
Australian Securities Exchange

QUORN AND ABSOLON DRILLING RESULTS CONFIRM RESOURCE DEVELOPMENT POTENTIAL

28 JULY 2021

Highlights

Duke Exploration (ASX Code: DEX) is pleased to announce that all planned exploration RC holes drilled at Quorn and Absolon, intersected anomalous copper mineralisation, with grades up to 7.84% Cu, 103 g/t Ag and 1.24 g/t Au in individual metres. The Quorn and Absolon targets covers a 6km² (3.0 km by 2 km) area of pXRF copper in soil and conductivity anomalies, representing a target area that is twice the size of Mt Flora. These exploration drill results confirm that the Quorn and Absolon target areas are included in the Bundarra Project high priority targets for resource development evaluation.

- ***Significant intersections*** *from the new RC exploration holes at Quorn and Absolon include:*
  - ***15.0 m at 1.39 % Cu, 30.10 g/t Ag and 0.12 g/t Au from 32.0 m in ABRC004,***
  - ***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 and***
  - ***27.0 m at 0.58 % Cu, 14.86 g/t Ag and 0.05 g/t Au from 26.0 m in QNRC002,***
  - ***1.0 m at 3.48 % Cu, 6.00 g/t Ag and 0.03 g/t Au from 116.0 m in ABRC001,***
  - ***5.0 m at 0.28 % Cu, 6.24 g/t Ag and 0.01 g/t Au from 41.0 m in QNRC004 (water bore).***

- *A total of 9 exploration RC holes were drilled for 1,969 m at targets at Quorn and Absolon where there is no evidence of historic mining activities and all intersections of copper, silver and gold massive sulphide mineralisation are* ***new discoveries****.*

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- *The veins, like at Mt Flora, seem to form stacked narrow and wider sheeted en-echelon systems with copper grades up to 7.84% Cu, 103 g/t Ag and 1.24 g/t Au in individual metres.*

- *The intersection in ABRC004 of 15m at 1.39% Cu, 30.1 g/t Ag and 0.12 g/t Au from 32m provides evidence that wider higher-grade zones of mineralisation, similar to that intersected in the hornfels, are present in the main granodiorite intrusion at Bundarra. This enhances the prospectivity of the 2.5 km long pXRF copper soil and conductivity anomalies within the granodiorite recently mapped between the Quorn and Rogers prosects*

- *The mineralisation was intersected from the surface to a depth of 200 m in a 6 km2 area that, based on copper soil and conductivity anomalies, could extend to the Rogers and Isens mines and cover a combined area of 15 km2.*

- *The drilling confirms that pXRF copper soil and conductivity anomalies are related to bed rock copper sulphide mineralisation, which confirms the increasing the scale of the mineralised systems in the southwest of the Bundarra Pluton.*

- *Duke Exploration currently has identified more than 103 similar untested pXRF copper soil and conductivity anomalies around the 50km of Bundarra pluton contact. More are being identified progressively as the soil geochemical and conductivity survey coverage increases across the pluton.*

- *The exploration results are another significant step forward in developing a successful mining operation at Bundarra and is providing more confidence in the project hosting additional resources of copper, silver and gold in a much larger area to that already developed at Mt Flora.*

Commenting on progress – Philip Condon, MD:

"The results from the exploration drilling surpass our expectations as all holes, including a water bore at Quorn, intersected copper mineralisation at the surface to a depth of 200 m. These results enhance the prospectivity of the southwestern part of the Bundarra Pluton and suggest a large-scale mineralising system is present there. The grades of the copper, silver and gold mineralisation intersected are similar to those at Mt Flora but over a much larger area. The style of the copper, silver and gold massive sulphide veins that host the mineralisation also appears to be like those that host the Mt Flora Resource, giving us confidence that these new discoveries will likely become a high priority for resource development. Given the copper, silver and gold mineralisation covers such a large area it is important for us to understand the geological controls and geometries of mineralisation, so the highest grade and most continuous parts of the mineral system are prioritised for development drilling first. Drilling to provide the required geological data will start immediately after the Prairie Creek Gold prospect drilling is completed using the same drill rig."

Future Work Programme

- *Start extension RC resource drilling at Mt Flora and the Quarry Anomaly to test the new mineralisation discovered to the north, aiming to update and increase the Mt Flora resource by the end of the year,*
- *Started accelerated pXRF soil sampling, to be completed by the end of the year, to sample the entire Bundarra Pluton to help prioritise resource development work,*
- *Extend the gradient array IP surveying to cover anomalous areas around the Bundarra Pluton, staring with the prospective areas between Absolon, Quorn and Rogers,*
- *Start exploration diamond drilling to collect geological data to help prioritise resource development work of the anomalies around Absolon, Quorn and Rogers.*
- *Start development RC drilling to determine the highest priority target for resource development drilling,*
- *Complete drilling of the Prairie Creek gold target.*

This announcement has been authorised for release by the Board.

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Technical Information

Quorn and Absolon Exploration Drilling Results

The assays from the exploration RC drilling completed at Quorn and Absolon (Figure 1,) to test the potential for copper, silver and gold mineralisation spatially associated with pole-dipole, GAIP and 3D IP conductivity anomalies and pXRF copper soil anomalies, have been finalised. The main aim of the drilling was to confirm the lithological and geometric relationships of any copper, silver and gold mineralisation intersected to help plan and prioritise new resource development drilling to add to the current Mt Flora resource. There is no evidence of historic mining activities in any of the areas targeted and all intersections of copper, silver and gold mineralisation are new discoveries.

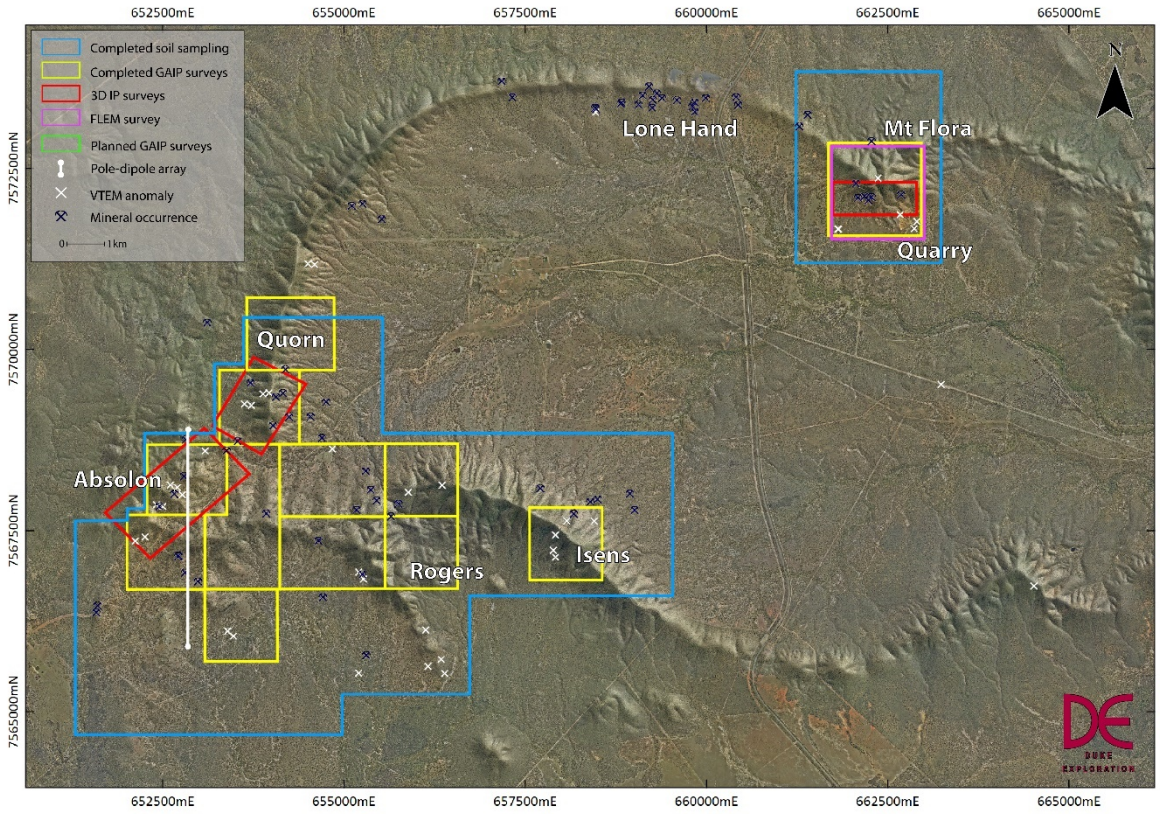

Figure 1. Location map of Absolon and Quorn exploration drilling areas in relation to the Bundarra Pluton, regional survey areas, pole-dipole IP line and VTEM anomalies.

A total of 9 exploration RC holes were drilled for 1,969 m at targets at Quorn and Absolon compared to a plan of 9 holes for 2,241 m (Figure 2; Table 1). The drilling averaged 116 m per day, including break downs and weather delays. The results for all the new holes assayed have been entered into the drill databases and quality control reviews completed. All check samples, blanks, and sample weights have been reviewed as part of an ongoing quality control process and returned results within accepted expected statistical ranges, which confirms the validity of the assay results.

QNRC001 to QNRC005 were drilled to test coincident conductivity and copper pXRF soil anomalies at Quorn, and QNRC004 was a water bore for the station owner (Figure 2; Table 1). ABRC001 to ABRC003 were drilled to test the pole-dipole IP anomaly south of Absolon and ABRC004 was drilled to test the coincident conductivity and copper pXRF soil anomaly at Absolon (Figure 2; Table 1).

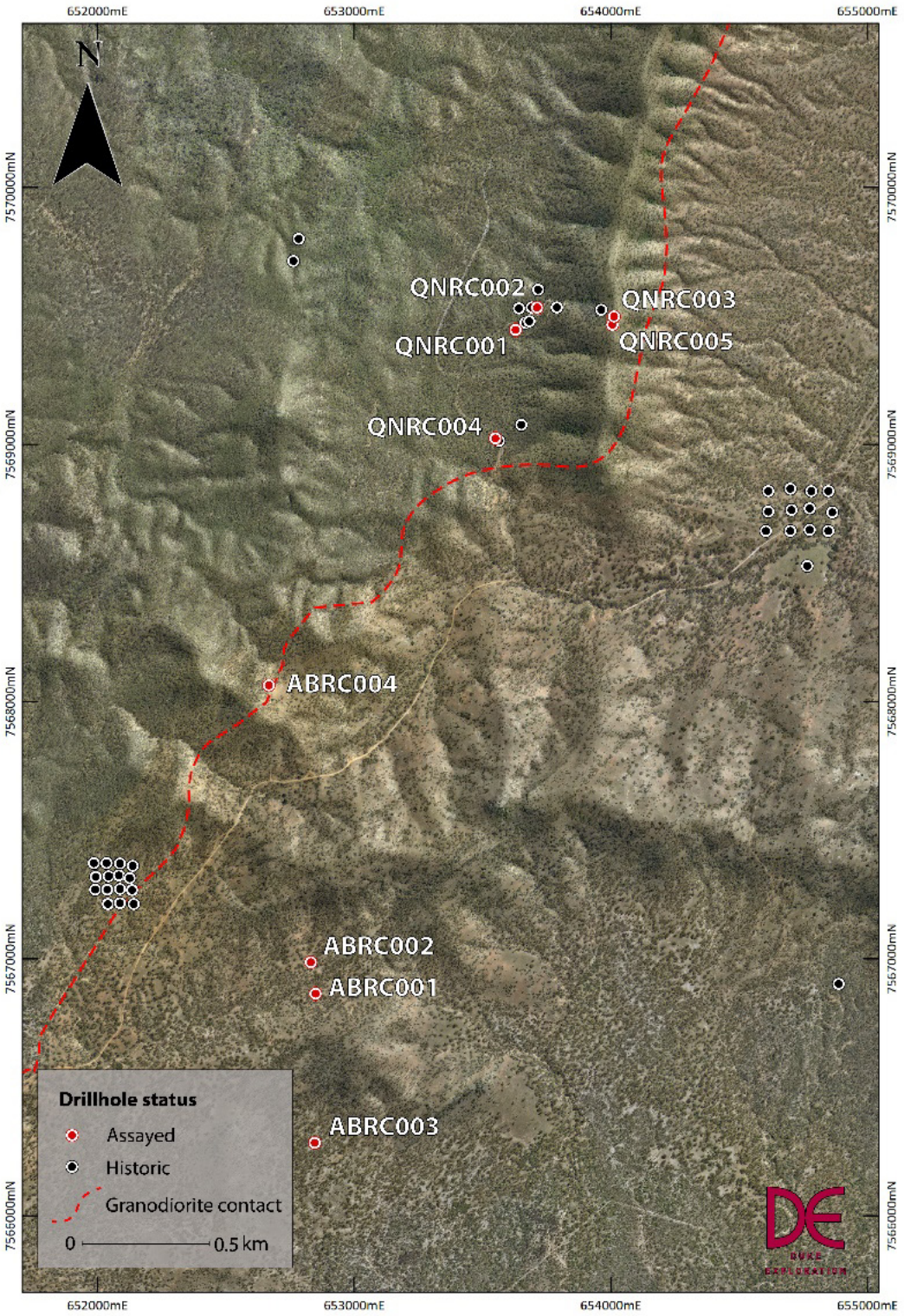

Figure 2. Location of completed exploration RC drill holes at Quorn and Absolon in relation to historic drill holes and granodiorite contact.

Prospect	Phase	Hole	Type	Easting	Northing	RL	Depth	Az	Dip	Status
Absolon	E1	ABRC001	RC	652,850	7,566,860	271	249	187	-56	Mineralised
Absolon	E1	ABRC002	RC	652,835	7,566,984	275	249	181	-55	Mineralised
Absolon	E1	ABRC003	RC	652,850	7,566,281	248	147	181	-55	Anomalous
Absolon	E1	ABRC004	RC	652,673	7,568,062	343	249	226	-56	Mineralised
Quorn	E1	QNRC001	RC	653,633	7,569,444	316	249	89	-55	Mineralised
Quorn	E1	QNRC002	RC	653,715	7,569,533	322	249	91	-55	Mineralised
Quorn	E1	QNRC003	RC	654,013	7,569,493	410	249	184	-55	Mineralised
Quorn	E1	QNRC004	RC	653,557	7,569,021	294	79	0	-90	Water Bore
Quorn	E1	QNRC005	RC	654,006	7,569,463	400	249	221	-50	Mineralised

Table 1. Drill collar details (MGA94 Zone 55) of exploration holes at Quorn (Figure 2).

All the exploration holes at Quorn and Absolon intersected anomalous copper, silver and to a lesser extent gold mineralisation that corresponds to the chalcopyrite that was logged in all the exploration holes from the surface to a vertical depth of 200 m as announced on 7 June (Figure 3 and Figure 4). Better intersections include:

- 1.0 m at 3.48 % Cu, 6.00 g/t Ag and 0.03 g/t Au from 116.0 m in ABRC001,
- 3.0 m at 0.61 % Cu, 2.63 g/t Ag and 0.05 g/t Au from 27.0 m in ABRC002,
- 15.0 m at 1.39 % Cu, 30.10 g/t Ag and 0.12 g/t Au from 32.0 m in ABRC004,
- 4.0 m at 2.66 % Cu, 4.51 g/t Ag and 0.54 g/t Au from 199.0 m in QNRC001,
- 22.0 m at 0.35 % Cu, 8.77 g/t Ag and 0.03 g/t Au from 0.0 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,
- 11.0 m at 1.04 % Cu, 14.70 g/t Ag and 0.07 g/t Au from 122.0 m in QNRC002,
- 12.0 m at 0.47 % Cu, 0.92 g/t Ag and 0.05 g/t Au from 179.0 m in QNRC003 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 (water bore).

These results include QNRC004, which was drilled as a water bore for the Station owner (Figure 2; Table 2), that did not specifically target pXRF copper or conductivity anomalies. Mineralisation was intersected both in the granodiorite and hornfels with mineralisation discovered more than 1,000 m from the contact entirely in the granodiorite (Figure 2, Figure 3 and Figure 4). The exploration drilling confirms that mineralised sulphide veins and breccia are widely distributed in the south of the Bundarra pluton even in areas with less anomalous copper soil and conductivity anomalies. The veins form stacked narrow and wider sheeted en-echelon systems with copper grades up to 7.84% Cu, 103 g/t Ag and 1.24 g/t Au in individual metres. The mineralisation was intersected from the surface to a depth of 200 m in a 6 km^2 area that based on coper soil and conductivity anomalies reported on 13 July could extend to the Rogers and Isens mines and cover a combined area of 15 km^2 (Figure 5).

Hole QNRC002 was planned to twin and test deeper than the historic intersection of 44.0 m at 0.48 % Cu and 12.2 g/t Ag from 16 m in MFP1 (Figure 2 and Figure 3). The copper and silver assays in QNRC002 confirm the width of the mineralised intersection in MFP1, with 22m at 0.35% Cu, 8.77 g/t Ag and 0.03 g/t Au and 27m at 0.58% Cu, 14.86 g/t Ag and 0.05 g/t Au intersected from surface. The assay results also confirm that the copper, silver and gold mineralisation continues at depth as stacked zones of veins with 11m at 1.04% Cu intersected from 122m (Figure 3). The geometry of stacked zones of mineralisation in this hole appears to be like the ore body geometry at Mt Flora.

The intersections in the holes drilled at, and to the south of, Absolon are within the Bundarra granodiorite and well away from the contact with the sediment hornfels (Figure 2). This confirms the interpretation from the discovery of the Quarry Lode at Mt Flora that the granodiorite may also be host to mineralisation. The intersection in ABRC004 of 15m at 1.39% Cu, 30.1 g/t Ag and 0.12 g/t Au from 32m provides evidence that wider higher-grade zones of mineralisation, similar to that intersected in the hornfels are there to be discovered in the main granodiorite intrusion at Bundarra (Figure 4; Table 2). This enhances the prospectivity of the 2.5 km long pXRF copper soil and conductivity anomalies within the granodiorite recently mapped between the Quorn and Rogers prosects (Figure 5).

Hole	Prospect	Easting	Northing	RL	From	To	Width	Cu %	Ag g/t	Au g/t
ABRC001	Absolon	652,843	7,566,798	183.4765	107.0	108.0	1.0	0.20	0.60	0.02
ABRC001	Absolon	652,842	7,566,793	176.2034	116.0	117.0	1.0	3.48	6.00	0.03
ABRC001	Absolon	652,838	7,566,759	129.1675	174.0	175.0	1.0	0.32	0.80	0.01
ABRC001	Absolon	652,833	7,566,719	71.9985	244.0	245.0	1.0	0.28	0.50	0.01
ABRC002	Absolon	652,835	7,566,968	251.6542	27.0	30.0	3.0	0.61	2.63	0.05
ABRC002	Absolon	652,835	7,566,964	245.9201	35.0	36.0	1.0	0.33	0.25	0.01
ABRC004	Absolon	652,663	7,568,053	323.4949	23.0	24.0	1.0	0.35	9.80	0.26
ABRC004	Absolon	652,657	7,568,047	310.1988	32.0	47.0	15.0	1.39	30.10	0.12
QNRC001	Quorn	653,659	7,569,444	278.7617	45.0	46.0	1.0	0.27	7.20	0.10
QNRC001	Quorn	653,724	7,569,436	172.3321	170.0	171.0	1.0	0.30	12.20	0.01
QNRC001	Quorn	653,729	7,569,435	164.1334	177.0	183.0	6.0	0.35	6.63	0.02
QNRC001	Quorn	653,739	7,569,434	145.9856	199.0	203.0	4.0	2.66	4.51	0.54
QNRC002	Quorn	653,721	7,569,533	313.0147	0.0	22.0	22.0	0.35	8.77	0.03
QNRC002	Quorn	653,738	7,569,533	289.627	26.0	53.0	27.0	0.58	14.86	0.05
QNRC002	Quorn	653,754	7,569,533	265.9835	65.0	71.0	6.0	0.20	4.92	0.03
QNRC002	Quorn	653,763	7,569,532	252.2433	84.0	85.0	1.0	0.32	10.40	0.04
QNRC002	Quorn	653,768	7,569,532	244.7369	93.0	94.0	1.0	0.28	6.60	0.02
QNRC002	Quorn	653,777	7,569,532	230.5405	109.0	112.0	3.0	0.39	11.20	0.03
QNRC002	Quorn	653,786	7,569,532	216.3265	122.0	133.0	11.0	1.04	14.70	0.07
QNRC002	Quorn	653,811	7,569,532	177.7139	173.0	174.0	1.0	1.14	4.20	0.11
QNRC002	Quorn	653,820	7,569,532	164.226	189.0	190.0	1.0	0.23	0.25	0.04
QNRC002	Quorn	653,845	7,569,533	123.6083	237.0	238.0	1.0	0.36	0.80	0.03
QNRC003	Quorn	654,012	7,569,411	293.631	142.0	143.0	1.0	0.34	1.60	0.66
QNRC003	Quorn	654,012	7,569,408	289.5533	147.0	148.0	1.0	0.28	0.80	0.06
QNRC003	Quorn	654,012	7,569,395	270.807	170.0	171.0	1.0	0.24	0.70	0.03
QNRC003	Quorn	654,012	7,569,386	258.9978	179.0	191.0	12.0	0.47	0.92	0.05
QNRC003	Quorn	654,013	7,569,366	230.847	219.0	220.0	1.0	0.21	0.90	0.02
QNRC004	Quorn	653,557	7,569,021	250.5	41.0	46.0	5.0	0.28	6.24	0.01
QNRC005	Quorn	653,971	7,569,422	336.0353	83.0	84.0	1.0	0.98	10.20	0.07
QNRC005	Quorn	653,936	7,569,380	270.5385	168.0	170.0	2.0	0.35	1.60	0.04
QNRC005	Quorn	653,927	7,569,369	253.3025	191.0	192.0	1.0	0.35	1.20	0.04

Table 2. Drill intersections from the Quorn and Absolon exploration RC drilling, using a 0.2% Cu cut off, with a minimum width of 1 metre and including 3 metres of internal waste (MGA94 Zone 55).

Exploration drilling of the conductive anomalies at Quorn confirm the ability of 3D IP to directly map the presence of copper and silver mineralisation in the region around the Bundarra pluton contact at the surface and to a depth of around 200 m. Down hole data will now be acquired to better understand the geology and the geometry of the copper sulphides and controls on the mineralisation intersected, which will allow the planning of pattern drilling to start resource development work in the Quorn-Absolon-Rogers prospect areas.

The results from the drilling even at this early exploration stage are another significant step forward in developing a successful mining operation at Bundarra and is providing more confidence in the project hosting additional resources of copper, silver and gold in a much larger area to that already found at Mt Flora. The scale of the mineral system in the southwestern part of the Bundarra Pluton and the number of new targets being found provide confidence that a near surface long life mining operation can be developed at Bundarra.

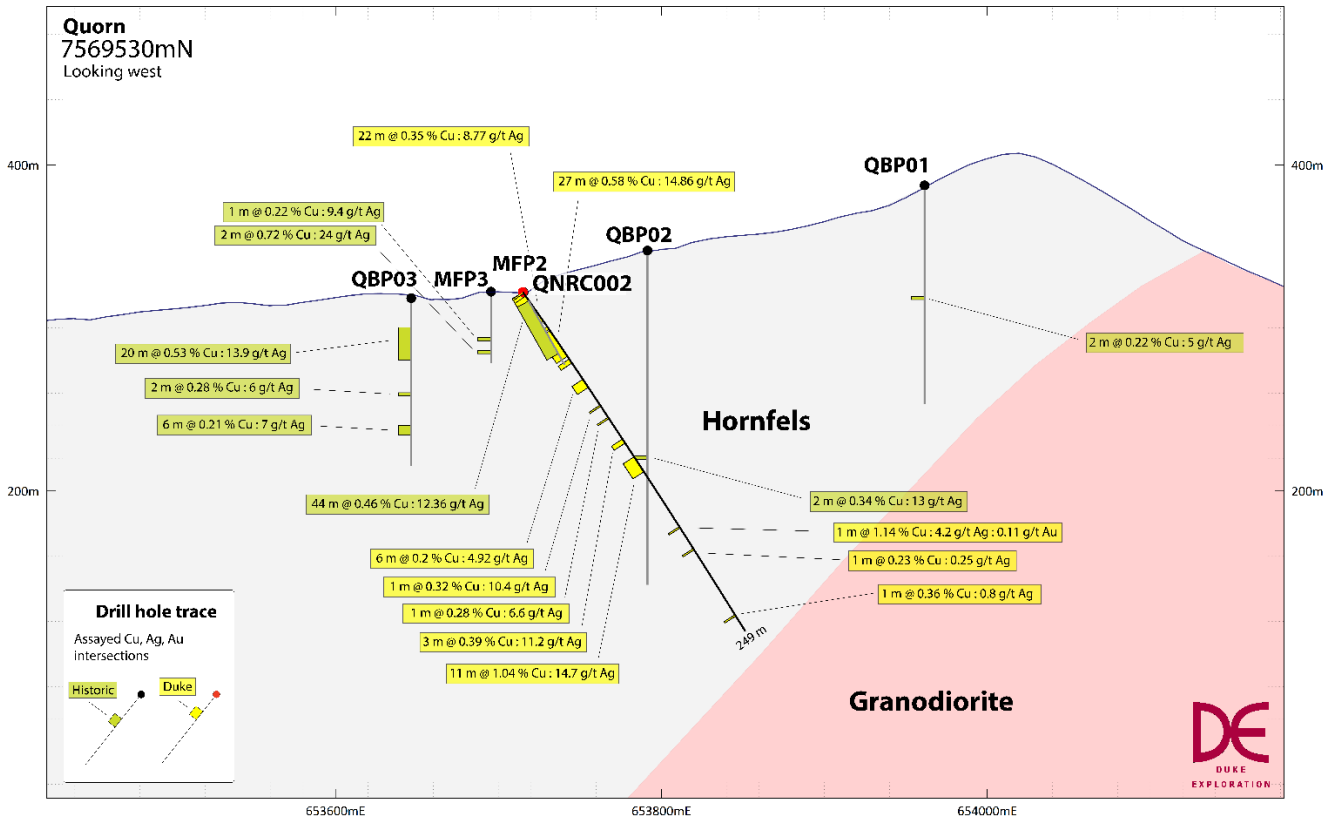

Figure 3. Drill section of the first exploration hole at Quorn where visible chalcopyrite (copper and silver) was logged relative to historic holes, 3D IP conductivity model and the granodiorite contact.

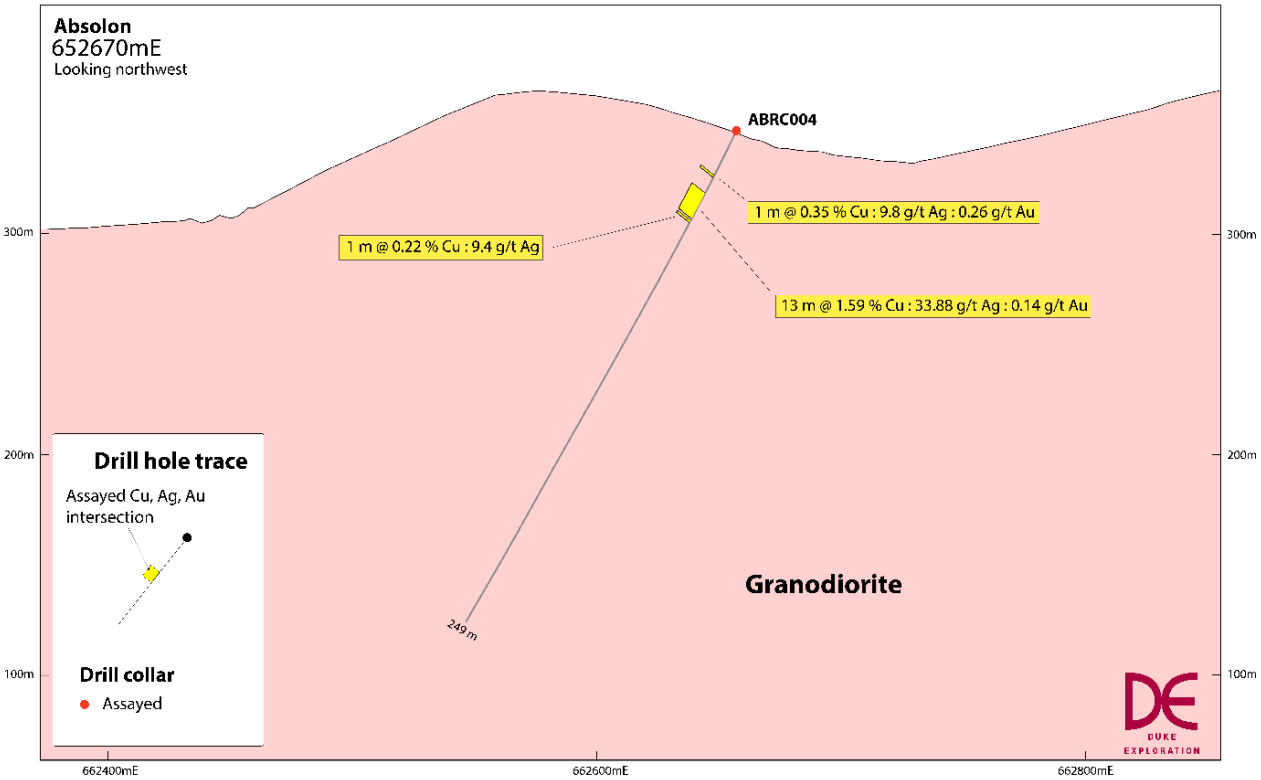

Figure 4. Drill section of the first exploration hole at Quorn where visible chalcopyrite (copper and silver) was logged relative to historic holes, 3D IP conductivity model and the granodiorite contact.

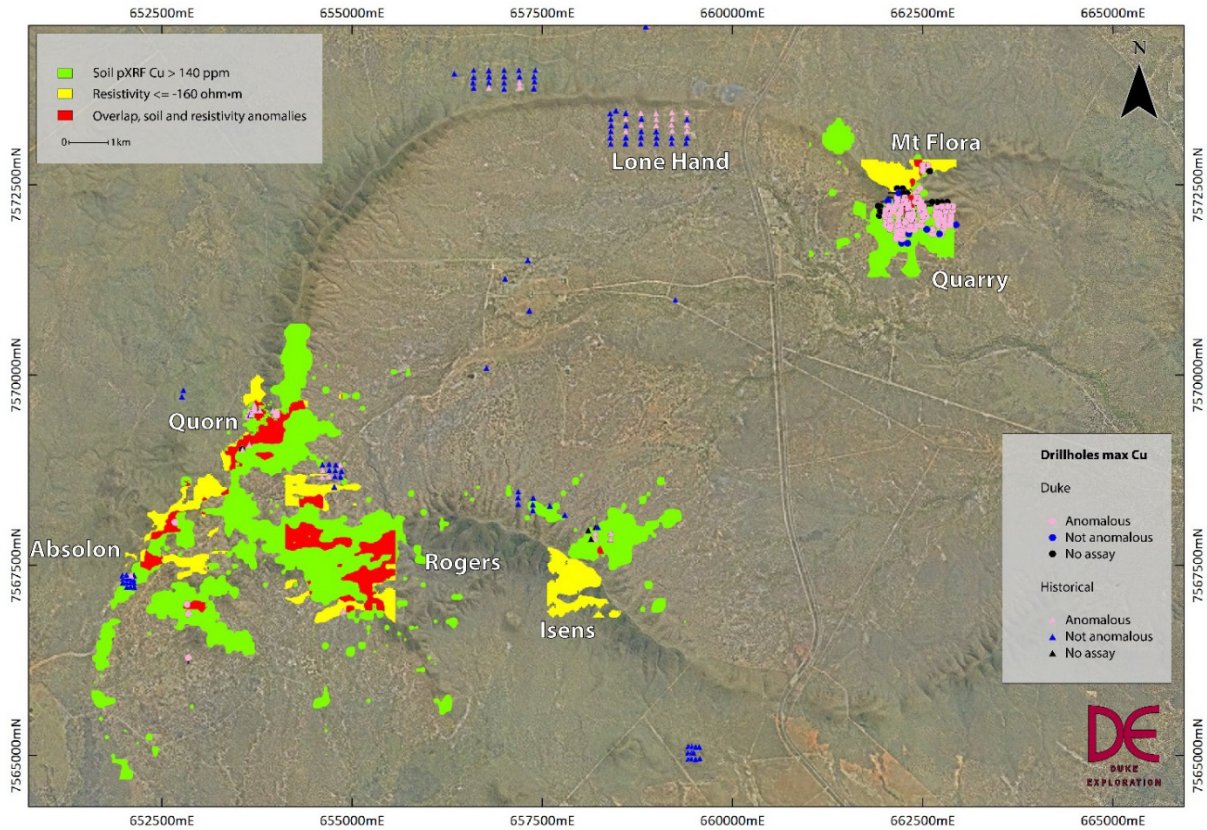

Figure 5. Copper soil and GAIP resistivity anomalies from the regional sampling to date over the southwestern part of the Bundarra Pluton compared to drill collars showing anomalous copper intersected by drilling, VTEM targets and historic mine and prospects.

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 Mt Flora prospect in the Bundarra project, one of the numerous Bundarra project's prospects, which has resource development potential for copper, silver and gold. All historical data from the mine at the Mt Flora prospect have been checked in the field by diamond drilling and ground geophysics, which have confirmed the tenor and scale of copper, silver and gold mineralisation mined previously. There are five other areas with similar development potential on the Bundarra project as defined by historical mining, geology and geophysics.

Our aim is to develop an Indicated Mineral Resource at the highest priority prospect as a priority to allow feasibility studies to be undertaken to establish an economic mining operation and to delineate additional Inferred Mineral Resources from the current known exploration target areas to grow the project into the future. The Company also intends to drill 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 exploration and development strategies are to 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. pXRF soil sampling and gradient array resistivity and induced polarization (GAIP) surveys continue to be carried out to the south and east of the surveys, towards the Roger and Isens prospects. Detailed 3D IP data have been acquired, targeting the GAIP anomalies at Quorn and Absolon. The geophysical results from the Quorn target area have been used to carry out scout exploration drilling, which has intersected new zones of copper, silver and gold mineralisation outside the Mt Flora resource area.

Competent Person Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr Greg Partington, 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 Partington is employed by Duke Exploration Pty Ltd as a consultant through Kenex Pty Ltd. He has over 30 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 Partington 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.*
		• One-metre primary samples were collected using a reverse circulation drill rig, which when split is approximately 10% of the total meter sample. The quality of the sample has been being actively measured using various quality control techniques, focusing on keeping holes dry, reducing dust loss and optimising sample delimitation. The quality of the sampling has been independently reviewed and is deemed to be high, and fit-for-purpose to be used in mineral resource estimations. Various quality control metrics are actively monitored to ensure the quality of samples collected. Such measures include:
		  • Every effort is made to ensure all samples are drilled dry and when this is not possible samples are logged as wet, and the quality designation ranking lowered and considered in the resource estimation.
		  • The measuring and monitoring of total RC sample weights to measure total recovery and metre delineation of the drilling (after correcting for density based on lithology averages and volume differences based on bit size)
		• pXRF analysis for some alteration and common rock-forming elements was carried out on every metre by taking a small ~25g sample from the bulk RC sample and analysing using an Olympus Vanta M series XRF Analyser with all three beams enabled with each beam set to 10 seconds each.
		• Calibration checks were performed by the handheld XRF analysers at least once fortnightly to ensure that the analyser was operating within factory specifications

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 equipment with face sampling hammers were used to collect samples. The drilling was conducted by a _McCulloch DR 800 drill rig with Sulli 350/1100 compressor, a Mercedes powered 350/1100 Sulli compressor. Boosters is a Detroit 8V92 type 650 psi to a maximum of 900psi. All drill bits used were face sampling Schramm 650 series 143 mm, had a shroud size of 141 mm, and they were sized to suit as they wore. Teeth are 8 PCD outer and 9 tungsten inner teeth. All rods were Manutech Rods which are 6 metres long 4 inch outside diameter. All sample hoses are 3 inch Inside diameter.
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.*	• All sample recovery information was digitally recorded on the rig using locked auto-validating excel spreadsheets. Samples were weighed using digital scales and recoveries were estimated based on average density of logged lithology, bit diameter (indicating volume of sample) and total sample weight. The recovery was constantly monitored using live-updating graphs indicating when recoveries were out of control or showing unfavourable trends. • An auxiliary booster was used to maximise air pressure to improve sample recovery, which allowed holes to be drilled dry. Where samples were drilled wet, they have

Criteria	JORC Code explanation	Commentary
		been logged as such. Furthermore, constant monitoring of recoveries via measurement and evaluation of total sample weights on the rig enable recoveries to be maximised. • There is no relationship between sample recovery and grade and no correction or weighting factors were required.
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.*	• Chip samples have been geologically and geotechnically logged to a level of detail to support mineral resource estimation, mining studies and metallurgical studies. All chip samples have been geologically logged to 1m resolution on the rig recording information on rock type, mineralogy, mineralisation, fabrics, and textures. This logging is paired with logging conducted using the downhole Televiewer information which can log to at least 10cm resolution and records structural information for contacts, foliation, banding, veining etc. in the form of dip and dip direction measurements., resistivity, natural gamma and density measurements are also used to assist this logging. • The logging for the RC drilling was qualitative for the geological data collection and quantitative for structural, geotechnical and geochemical data. A handheld XRF was used to collect continuous geochemical data and Televiewer optical and acoustic data collection allows the measurement of structural and geotechnical data. • All one metre samples from the drilling have been geologically logged and the geological data recorded in the drill database. Subsamples were also collected and stored in chip trays for future reference.
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.*	• All other samples were split using a cone splitter fixed to the side of the drill rig, a device aimed at reducing splitting variance. Holes were kept dry wherever possible using an auxiliary booster. The cone Splitter is able to deal with wet samples without introducing bias. This has been independently reviewed and is considered an appropriate technique to collect large-volume samples when extractor, delimitation and preparation errors are well managed. • For this project, the quality assurance and quality control on the primary calico sample were excellent, resulting in good metre delineation, minimal sample loss and good water management. • RC drill chips were delivered to a cone splitter, then weighed on receipt at the laboratory and dried in an LPG oven for 24hrs @ 95° C. Samples to 3kg are full pulverised to 85% passing 75µm in a FLSmidth LM5 mill. Samples >3kg are spilt 50:50 using a 25mm aperture riffle splitter prior to pulverising. Samples were then scooped from the LM5 bowl and put into brown paper bags, after which the final charge weight was prepared by scooping from the bag using a spoon. • The quality of the sampling preparation has been discussed in the announcement text and is considered of very good quality, supported by sufficient quality control data (duplicates). The techniques have all been independently reviewed and are all considered appropriate and fit for purpose. • The sample size is considered appropriate for the mineralisation style.
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.*	• The nature of the laboratory processes has been discussed in the announcement text in more detail. The total 50g fire assay technique with aqua regia digest and AAS finish is considered appropriate for Au analysis. ME-ICP was used to analyse a total of 33 elements, including Cu and Ag. When a sample returned a value exceeding the analysis limit of Cu or Ag, the sample was re-analysed using an ore grade analysis method to

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	• *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.*	accurately define the final analysis grade. The quality was carefully controlled by both Duke and ALS. • A pXRF Vanta m-series analysed 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, specifically anomalous copper. The pXRF Vanta m-series was calibrated once a week and the prolene pXRF windows were changed upon noticing any imperfection on the surface. A blank standard was analysed once a week or following the prolene window change. • QC samples were inserted in the form of Certified Reference Materials, blanks, crush duplicates and pulp duplicates. The results showed the laboratory delivered consistent results throughout the campaign. Bias and variance acceptance testing showed positive results, with the only issue noted the elevated variability in pulps.
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.*	• All significant intersections were inspected and verified by the Competent Person. • The data is collected via Duke Exploration Ltd.'s auto-validating, controlled spreadsheets with drop down menu entry. These sheets are loaded into an Access database using automatic scripting and are then subjected to a range of further tests for errors. Any issues were communicated to site within 24 hours and resolved before the data was accepted. The data is then validated within the database and brought into Micromine and further visual checks conducted. One database administrator conducts all data merging and storage into the database to ensure the integrity of the data. • No data has been 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 drill holes have been accurately surveyed using a mmGPS in MGA 94/Zone 54. • Downhole survey data was collected using a North seeking solid state gyro during the downhole data acquisition. The gyro results were checked by the down hole surveyor by comparing them with the deviation data obtained with other down hole tools (OPTV and ATV) and by duplicating a total of three surveys. The location accuracy of sample data points is considered by the Competent person to be highly accurate and properly quality controlled. • Topographic control has been adopted from a recent aerial geophysical programme and has been corrected to height values from the DGPS 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 reported has been carried out on a 60mx60m grid. The holes are drilled to an average depth of around180m. • Geological and grade continuity has been confirmed across the 60m drill spacing. • No physical compositing of samples has occurred in this drilling.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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 orientation has been determined via Televiewer structural interpretation and hole are oriented perpendicular to the main banding and veins. Where the terrain is challenging the drill pads were moved along the line and the drill dip was steepened to intersect the drill target at depth. In these circumstances the drill intersection is not perpendicular to the geological structures or mineralisation, particularly where the holes are vertical. • There is no apparent bias in any of the drilling orientations used.

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Sample security	• *The measures taken to ensure sample security.*	• All samples were removed from site on the day of drilling and stored inside a secure warehouse facility. The samples were transported by a certified freight company to ALS Laboratories. The samples are not left unattended and a chain of custody is maintained throughout the 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. Internal review by various company personnel has occurred.

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 programme 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,

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		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 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 1, Figure 2, Figure 3, Figure 4 and Figure 5 and Table 1 and Table 2 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 were 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 3D IP 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.*	• See Figure 1, Figure 2, Figure 3, Figure 4 and Figure 5 and Table 1and Table 2 in the main text. •
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.*	• All drill holes assays returned to date from the current drill programme have been reported.
Other substantive	• *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*	• 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

Criteria	JORC Code explanation	Commentary
exploration data	*method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	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.
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.*	• Further work will include drilling other prospects around the Bundarra Pluton to test results returned from GAIP, MLEM and 3D IP geophysical surveys and pXRF soil surveys. • Collection of GAIP data is ongoing to map conductive anomalies associated with historic workings and VTEM anomalies. • The regional scale pXRF soil survey mapping Cu anomalies on a 80x80 grid is ongoing and eventually planned to cover the 50km^2 area of the Bundarra Pluton and contact zone.