



ASX ANNOUNCEMENT

ASX: NWM

18 June 2019

Drilling reaffirms Arunta West Project's iron-oxide-copper-gold (IOCG) potential

Highlights:

- **Diamond drilling intersected favourable iron-oxide-copper-gold (IOCG) bearing geology at Norwest's North Dovers target in Western Australia**
- **Alteration observed in North Dover diamond core typical of Olympic Dam IOCG system¹**
- **Primary copper mineralisation intersected in minor amounts in drill core**
- **Assays anticipated to be available by late July**
- **Follow-up drilling of large (8-kilometre-long) North Dovers IOCG target scheduled to commence early September**
- **Soil sampling over the greater Arunta West Project area recently completed (assays anticipated to be available in July)**

Norwest Minerals Limited ("Norwest" or "the Company") (Australia ASX: NWM) is pleased to announce its maiden drilling program at the Company's North Dovers prospect in central Australia has successfully intersected thick sequences of favourable IOCG geology and alteration including minor occurrences of chalcopyrite, pyrite and sphalerite mineralisation.

The Proterozoic basement occurs relatively close to surface allowing future exploration drilling to be conducted using cost effective - high production reverse circulation (RC) rigs. Norwest is planning a return to North Dovers in early September (with RC rigs) to continue testing the 8-kilometre long anomaly and those targets generated by recent XRF soil sampling.

¹ Ehrig, K, Kamenetsky, VS, McPhie, J, Cook, NJ and Ciobanu, CL 2017, 'Olympic Dam iron oxide Cu-U-Au-Ag deposit', in GN Phillips (ed.), *Australian Ore Deposits*, Australasian Institute of Mining and Metallurgy, Melbourne, pp. 601-610.

North Dovers is defined by an 8km x 4 km coincident magnetic-gravity anomaly and geological features analogous to world class **IOCG** deposits such as those hosting Olympic Dam and Ernest Henry.

North Dovers was identified by BHP in 1999 as the area's primary **IOCG** target but due to strict access regulations at the time no exploration drilling was completed.

The commencement of diamond drilling has established Norwest Minerals as the first company to drill into this very large **IOCG** target since its identification 20 years ago.

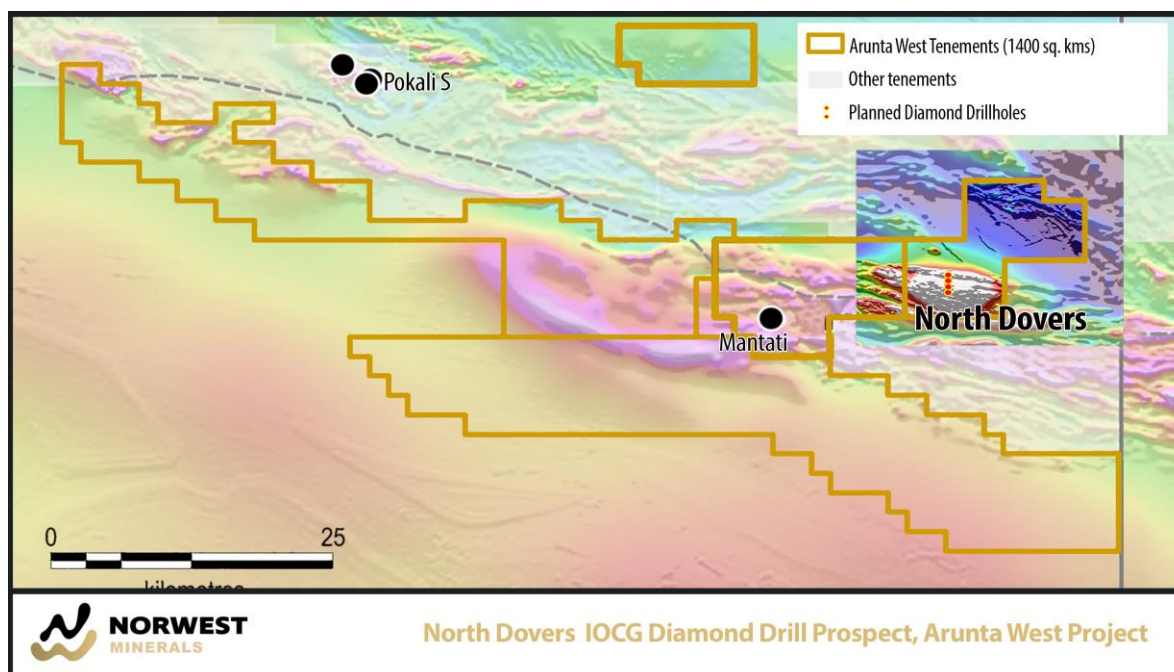


Figure 1 – Norwest's 1,400Km² Arunta West tenement holding with North Dovers target anomaly

The North Dovers Project is located 600 kilometres west of Alice Springs and flanked by Independence Group NL (ASX:IGO) and their joint venture partners Prodigy Gold's (ASX:PRX) exploration ground. The IGO/PRX joint venture recently increased their ground holdings from 13,000km² to 19,000km² in the highly prospective Lake MacKay region and have commenced a 10,000m RC drilling programme as part of IGO's \$4.4 million FY19 commitment to unlocking the potential of the area.

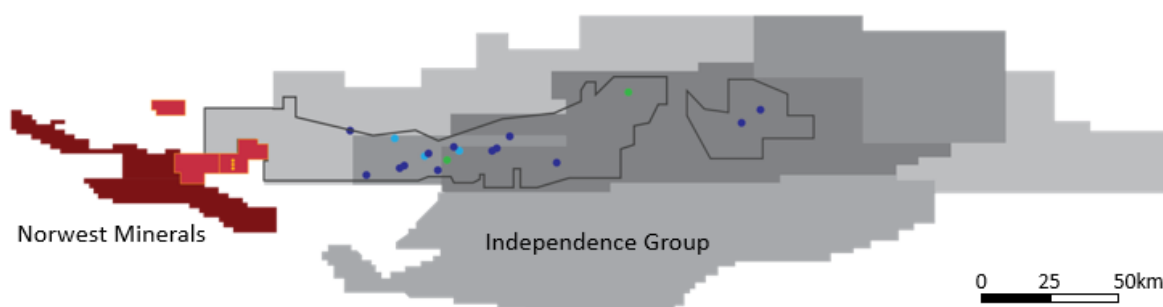


Figure 2 – NWM tenements relative to those held by the IGO/PRX joint venture

Arunta West Project – Diamond Drilling of the North Dovers anomaly

At Arunta West, three diamond holes totaling 1,524 metres were drilled into the North Dovers Iron-Oxide-Copper-Gold (**IOCG**) target (Table 1). The HQ and NQ drill core shows encouraging signs of **IOCG** potential including hematite altered granite located adjacent to highly magnetic diorite units plus minor amounts of pyrite, chalcopyrite and sphalerite mineralization.

The Proterozoic basement was encountered near surface with holes NDD1901 (695m) and NDD1902 (624m) collared into a unit of magnetic diorite prior to intersecting hematite altered granites up to 80m wide and ending in a syenogranite. Early structural data indicates the units dip moderately to steeply south.



Figure 3 – Hematite alteration in granitic rock

Two main sedimentary sub-units were also encountered including: 1) a graphitic shale (NDD1902) with abundant pyrite and minor chalcopyrite and 2) a quartzite (metasandstone/siltstone) interbedded with patchy hematite alteration.

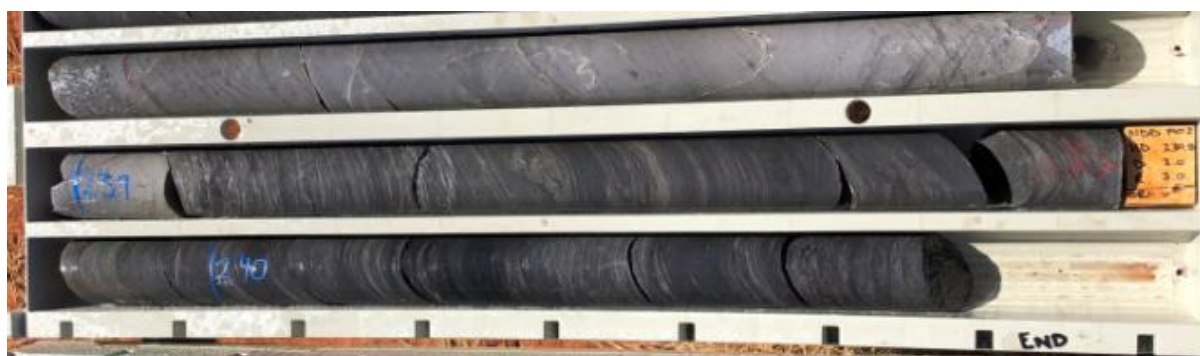


Figure 4 – Graphitic shale – pyrite and chalcopyrite present

The diamond core is currently being transported from site to Perth (via Alice Springs). Once in Perth the core will be cut, sampled and multi-element assays completed with result available late July.

With the Proterozoic bedrock close to surface, Norwest is confident the North Dovers area can be effectively drilled using reverse circulation (RC) rigs. This will allow greater drill coverage across the North Dovers target zone with considerable cost and time savings. The company is planning a second drilling program (using RC rigs) to continue testing the North Dovers anomaly as well as targets generated by recent surface sampling work. The Company expects to remobilise to site in September following the completion of Heritage Study work.



Figure 5 - Vein with chalcopyrite mineralization in NDD1902

A total of 3,100 soil samples covering large tracks of the Arunta West tenements were analysed by XRF. The data is currently being compiled and analysed by the Company's geological consultants with the results identifying potential drill targets to be available within the coming fortnight.

For further information:

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Competent Person's Statement

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Charles Schaus (CEO of Norwest Minerals Pty Ltd). Mr. Schaus is a member of the Australian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to its activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Schaus consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

Table 1
North Dovers drill hole location details

Hole Id	Type	Easting (GDA94z52)	Northing (GDA94z52)	Elevation (m)	Maximum Depth (m)	Dip (°)	Azimuth (°)
NDVRC01	Water bore	484933	7445116	450	110	-90	0
NDD1901	Diamond	485001	7443092	466	695	-80	180
NDD1902	Diamond	485008	7443115	466	624.4	-55	360
NDD1903	Diamond	484996	7443887	460	204.4	-80	360

Diamond Drilling– June 2019

Arunta West Project / North Dovers Prospect

Appendix 1: JORC Code, 2012 Edition - Table 1

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	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralization that are Material to the Public Report.</i> <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> Drilling was conducted on the North Dovers prospect within the Arunta Project, WA. Drilling was supervised and samples collected by geologists from Apex Geoscience Australia Pty Ltd which is an independent geological consultancy. All drilling was completed along the 485000 mE section and spaced between 25 and 770m separation. Drill holes on the project included 3 diamond (DD) holes for 1524m of HQ3/NQ2 diameter drilling. There was previously no drilling completed over the North Dovers prospect. Drill holes ranged in Dip from -80° to -55°. Holes were drilled both north and south. The drill hole collar locations were pick up with a hand held GPS and the down hole positions were surveyed using a Reflex EZ-trac device and a camera shot was taken every 30 to 50m depth. The diamond core has yet to be sampled as it is still in transit from the field, but it is anticipated that the majority of the core will be sampled at 1 m intervals and selective niche samples will be chosen which will be based has been lithological, mineralisation and structural logging.



Criteria	JORC Code explanation	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> The drilling was conducted by Terra Drilling of Boulder, using a Boart Longyear KWL 1600H diamond drill rig. A combination of HQ3 and NQ2 was utilised. Holes were triple tubed from surface.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample recovery and sample condition was recorded for all drilling. There were zones of poor recovery but overall the recovery for the three holes is considered to be good (>95%). As no samples have been submitted to the laboratory there is no known relationship between grade and sample size.
<i>Logging</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Diamond drill holes were logged for various geological attributes, including colour, lithology, oxidation, alteration, mineralization and veining. The holes were also structurally logged and had regular magnet susceptibility and density recordings collected down the hole. All holes were logged in full by geologists from Apex Geoscience Australia Pty Ltd. All of the core was photographed.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The drill core will be ½ cut and then ¼ cut. ¼ of the core will be sampled and submitted for analysis. The same side of the ¼ core will be sampled. Samples will generally be collected at 1m intervals. Samples will be submitted to Intertek Genalysis Perth for analysis.

Criteria	JORC Code explanation	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> A number of certified reference material (CRM) will be inserted into the sample stream. These will include standards and blanks. A portable XRF Bruker with a geo exploration calibration was used to periodically test mineral concentrations down the hole as they were being drilled. A standard was used to check the calibration of the device.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Consultant geologists, from Apex Geoscience, were involved in the logging of the Diamond drilling. Apex will be involved in the whole process from drill hole supervision, diamond cutting and sampling. Samples will be dropped to the laboratory for analysis by Apex personal. The entire chain of custody of this recent drilling was supervised by Apex. Apex collected the geological data via paper logs and then transferred them into excel before being loaded into an SQL database. As these were the first three drill holes at North Dovers prospect, twin holes have not been completed. As there has been no analysis completed on the diamond core there is no results available for potential adjustment or calibration.
<i>Location of data points</i>	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> Diamond drill hole locations were picked up using a handheld Garmin GPS, considered to be accurate to ± 5 m. Downhole surveys have been completed at 30m to 50m stations (and start and end of hole) using a downhole Reflex EZ-Trac survey tool (REFLEX). Examination of the downhole surveys show the maximum azimuth deviation in drilling to have been 2.9° over 30 m. The drill holes experienced minimal dip variation (most significant deviation 0.5° over 30 m), with an average maximum hole dip deviation of 0.1°. All coordinates were recorded in MGA Zone 50 datum GDA94. Topographic control is provided by a Digital Terrain Model based on



Criteria	JORC Code explanation	Commentary
		the 30 m Shuttle Radar Topographic Mission data.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • All drilling was completed along the 485000 mE section and spaced between 25 and 770m separation. • To date there is insufficient geological and grade continuity to support the definition of a mineral resource, and the classifications applied under the 2012 JORC code. • No compositing has been conducted.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • Drill holes at the North Dovers prospect were angled both to the north and south. Stratigraphy dips moderately to the south so the second hole was drilled perpendicular to any potential mineralisation. The other two holes which tested geophysical anomalies were sub parallel to mineralisation. This was only known at the completion of the holes and the collection of the structural orientations. • There have been no assays completed to date so no orientation bias has been identified.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • The sample security consisted for the Mount Laws drilling is considered good. The drilling was directly supervised by Apex Geoscience, who are independent geologists. After the core was logged it was palleted and strapped by APEX. It was then transported by Gully transport to Alice Springs before being trucked to Perth. From there Apex will take ownership back and the core can be cut and sampled. Besides the transportation the core was under direct control by Apex Geoscience personnel.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • No formal audits or reviews have been performed on the project, to date. • The work was carried out by reputable companies and laboratories using industry best practice.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The current exploration is located within Exploration Licences 80/4820 held by Jervois Mining Limited (Jervois). Norwest Minerals Limited are the controlling company (51%) of a joint venture arrangement with Jervois. The tenement E 80/4820 was granted on 14/11/2014 and is set to expire on 13/11/2019. This is the first term and is available for a four-year renewal period. Together with E 80/4987, these tenements make up the Arunta Project combined reporting group C 152/2018. Tenement E 80/4820 is situated on the Tjamu Tjamu land. A mineral exploration and land access deed of agreement has been compiled and signed with Norwest Minerals Limited. There is one heritage place of interest in the south eastern corner of the tenement. This is 3.5km from the drilling. The tenements are in good standing.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> There has been little drilling in the area. BHP between 1996 to 2000 identified the area as having IOCG potential with the identification of a co incident magnetic and gravity anomaly. Additionally, a strong potassium-thorium ratio anomaly, which spans the majority of target area, suggests there is coincident intrusive and/or dense alteration-related mineralisation zone located above the North Dovers target body. BHP completed on hole 2km to the North Dovers anomaly. This hole was terminated early due to excess water.
<i>Geology</i>	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralization. 	<ul style="list-style-type: none">
<i>Drill hole Information</i>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar 	<ul style="list-style-type: none"> All drill holes details have been included in Table 1 of the release.



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ 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. 	
Data aggregation methods	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • 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. 	<ul style="list-style-type: none"> • No samples have been submitted for analysis yet. • No high cuts have been applied. • Metal equivalent values are not being reported.
Relationship between mineralization widths and intercept lengths	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralization 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 (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> • No samples have been submitted for analysis as yet.
Diagrams	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • An appropriate exploration map has been included in the release.
Balanced reporting	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • No samples have been submitted for analysis as yet.



Criteria	JORC Code explanation	Commentary
	<i>Exploration Results.</i>	
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<ul style="list-style-type: none">An exploration plan from the RC drilling has been included in the release.
<i>Further work</i>	<ul style="list-style-type: none"><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<ul style="list-style-type: none">Future work is envisioned to comprise further RC drilling over the North Dovers anomaly's testing for IOCG mineralisation.