

## 19 February 2024

## **ASX Release**

# **Queenslander Gold Prospect Diamond Drilling Results**

## HIGHLIGHTS

- MinRex has completed four diamond drill holes for 552m to test for extensions of high-grade gold mineralisation previously intercepted.
- Assays confirm several narrow high-grade intersections from drilling, including:
  - 1.0m @ 9.69 g/t Au from 74m (MQD001).
  - 1.0m @ 6.30 g/t Au from 105m (MQD003).
  - 0.6m @ 16.10 g/t Au from 45.8m (MQD004).
- MinRex continues to assess the numerous historic gold workings to generate additional drilling targets at its Sofala Project.

**MinRex Resources Limited (ASX: MRR) ("MinRex"** or "the **Company**") is pleased to announce the results of diamond drilling at the Queenslander Gold Prospect, within the Company's Sofala Project on EL7423. During December 2023 and January 2024, 4 diamond drillholes for 552m were completed to test high-grade gold mineralisation intersected in historic drillholes and those completed in 2021 (refer to ASX Announcement 24 January 2022 High-Grade Gold Drilling Results Intersected at Queenslander Gold Mine).

## About the Queenslander Gold Prospect

The Queenslander Gold Prospect is centred around the historic Queenslander Gold Mine, which is approximately 2km south-west of the township of Sofala in central NSW. Sofala is about 260km north-west of Sydney and can be accessed by the Great Western Highway. The Queenslander Mine was discovered in 1888 and worked on a small scale until around 1935. The total tonnage mined was more than 7,000 tonnes from which around 3,696 ounces of Au was produced at an average grade of 6 g/t of Au.

## Local Geology

The historic Queenslander Gold Mine occurs within an imbricated thrust zone at the point where the Big Oakey Fault intersects the line of the Wiagdon Thrust and the Thrust veers to 205° along an 025° lineament. The Wiagdon Thrust separates the Silurian Tanawarra Shale from the Sofala Volcanics. Imbricated thrust sheets under the main Wiagdon Thrust have been intruded by diorite dykes, along and adjacent to the thrust planes. The margins of the dykes are frequently associated with brecciation and shearing of the surrounding rocks, within the thrust zones. The thrust planes dip to the west at between 45° and 55°.

The diorite has locally been altered to clay minerals and associated with the alteration are stockworks and veinlets of quartz, carbonate, and sulphides - principally pyrite and arsenopyrite. Associated with carbonate and sulphide stockwork and veinlets is free gold and gold incorporated within the sulphide lattices. Gold also occurs disseminated within the altered diorite.

The zone of imbricated thrusts is cut by a sub-vertical fault, part of the Big Oakey Fault zone, which appears to have a variable displacement and has probably been active pre and post mineralisation. All structures are cut by 065° trending normal faults.



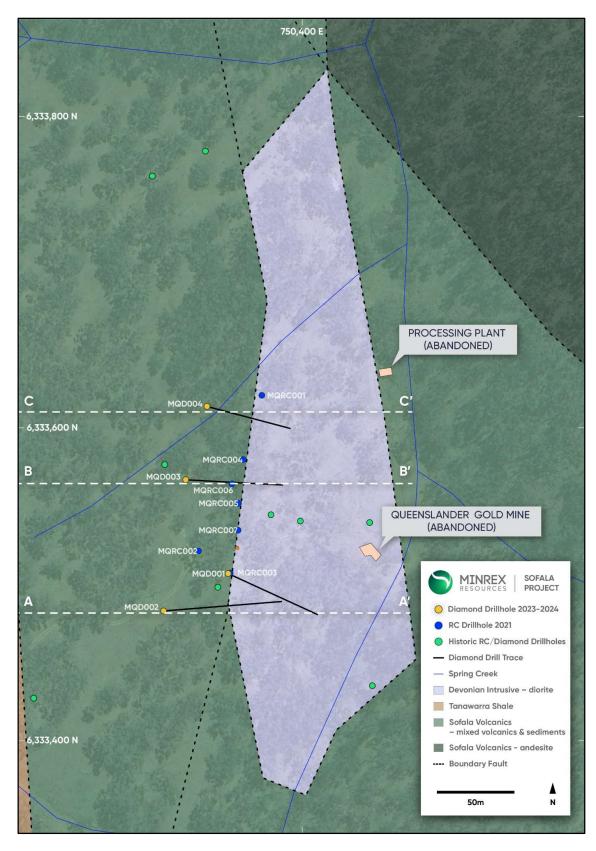
Hole ID	Depth From (m)	Depth To (m)	Interval (m)	Au (g/t)
MQD001	1.0	1.5	0.5	0.89
MQD001	74.0	75.0	1.0	9.69
MQD002	26.0	27.05	1.05	0.76
MQD003	70.0	71.0	1.0	1.26
MQD003	105.0	106.0	1.0	6.30
MQD003	106.0	107.0	1.0	0.57
MQD003	115.0	116.0	1.0	2.43
MQD003	147.0	147.7	0.7	1.27
MQD004	45.8	46.4	0.6	16.1

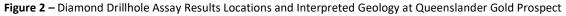
Table 1 – Significant Gold Intersections from 2023-24 Diamond Drilling (Cut-Off Grade ≥0.5 g/t Au)



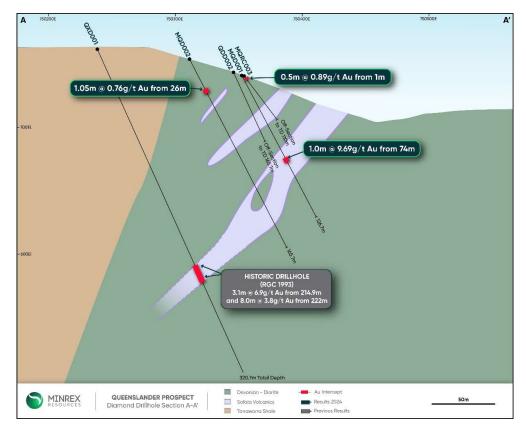
Figure 1 – Diamond Drilling MQD001 at Queenslander Deposit on EL7423











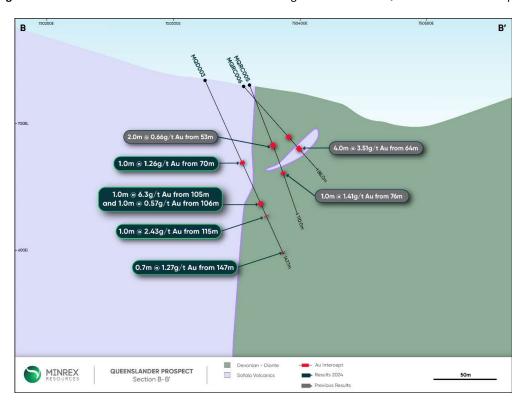
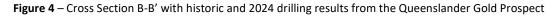


Figure 3 – Cross Section A-A' with historic and 2024 drilling results from the Queenslander Gold Prospect





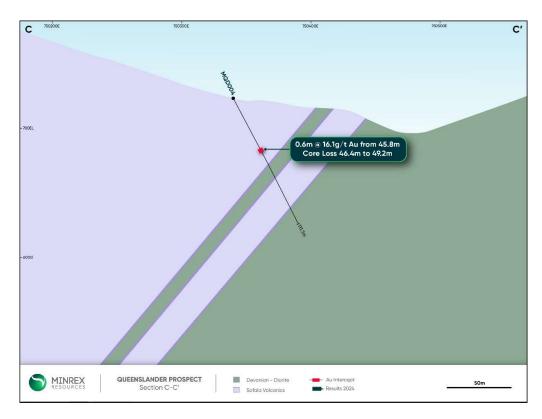


Figure 5 – Cross Section C-C' with 2024 drilling results from the Queenslander Gold Prospect

## **Next Steps**

MinRex will continue to explore the tenement for gold mineralisation focusing on extensive old workings that remain untested by modern exploration techniques.

This ASX announcement has been authorised for release by Ian Shackleton, Technical Director.

-ENDS-

## For further information, please contact:

Ian Shackleton MinRex Resources Limited T: +61 8 9481 0389 info@minrex.com.au

#### About MinRex Resources Ltd

MinRex Resources Limited (ASX: MRR) is an Australian based ASX-listed battery metals explorer with lithium-tin-tantalum projects in the Pilbara region of WA near the Global Lithium Archer Deposit. MinRex also has a highly prospective portfolio of gold and other metals projects in the Lachlan Fold Belt of NSW. The Company's tenements package of around 500km<sup>2</sup> of highly prospective ground targeting multi-commodities type deposits. The Company also currently has JORC 2012 Resources totalling 352,213 oz gold at its Sofala Project in NSW.

#### **Competent Persons Statement**

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Ian Shackleton. Mr. Shackleton is the Technical Director of MinRex Resources Limited and is a Member of the AIG of whom have sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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. Mr. Shackleton has verified the data disclosed in this release and consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

#### Forward Statement

This release includes forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning MinRex's planned exploration programs and other statements that are not historical facts. When used in this release, the words such as "could", "plan", "estimate", "expect", "anticipate", "intend", "may", "potential", "should", "might" and similar expressions are forward-looking statements. Although MinRex believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve known and unknown risks and uncertainties and are subject to factors outside of MinRex's control. Accordingly, no assurance can be given that actual results will be consistent with these forward-looking statements.

#### References

Arundell, M. 1994. Second Combined Annual Report 5th February to 4th February 1994. Exploration Prospecting Licence EL4191, 4223,4224 and 4276. RGC Exploration. Open file report GS1994/196.

Lennox, M. 2002. First Annual Report EL5807- Wattle Flat 5 February 2001 – 5 February 2002. Mineral Ventures and Resources NL. Open file report R00046822

RGC Exploration Pty Ltd, Combined Exploration Reports on EL 3747, 4191, 4223, 4224, 4276, 4709, 4989, 5264 & 5280, Annual Reports Nos. 1, 2, 4, 5, 6 & 7. GS1993/107, GS1994/196, GS1996/133, GS1996/337, GS1997/498 and GS1999/401.

Stevens, B.P.J. 1972. Historical production figures are extrapolated from Mine Data Sheets to accompany Metallogenic Map Bathurst 1:250,000 Sheet. New South Wales Geological Survey. 513 pp.



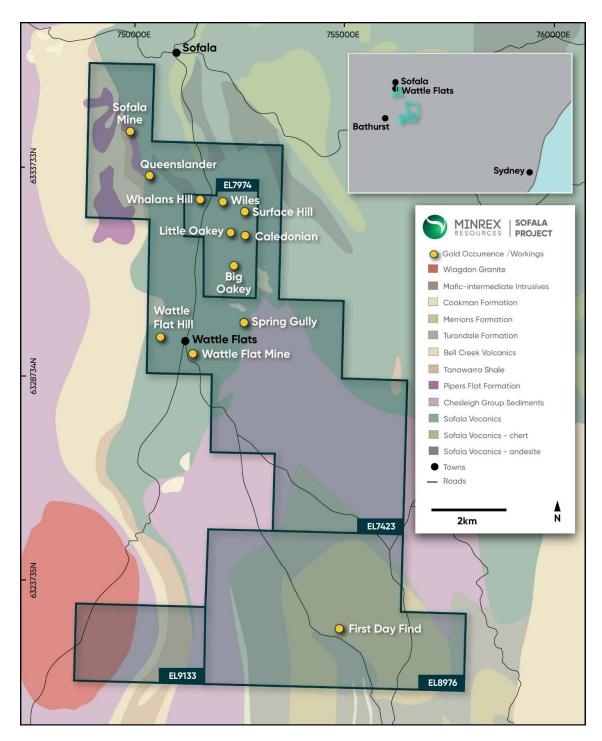


Figure 6- MinRex Resources Sofala Project in NSW



Hole ID	MGA_Easting	MGA_Northing	AHDRL	Datum	Zone	Dip	Azimuth	Total Depth
MQD001	750352.76	6333506.40	738.95	MGA94	55	-60.3	113.4	126.7
MQD002	750311.40	6333482.46	752.50	MGA94	55	-62.4	82.1	165.7
MQD003	750325.60	6333566.85	732.39	MGA94	55	-65.7	92.3	147.7
MQD004	750339.21	6333613.88	724.11	MGA94	55	-61.9	103.3	111.7
Total								551.8m



## Appendix 2

## JORC Code, 2012 Edition – Table 1 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 (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. 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 (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 mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	<ul> <li>Diamond drillholes were drilled/sampled under the supervision of a geologist.</li> <li>Diamond core samples were taken, generally on 1.0m intervals or on geological boundaries where appropriate (minimum 0.2m to maximum of 1.3m).</li> <li>Diamond drilling was undertaken to produce core for geological logging and assaying. Core recovery for all metres drilled was &gt;96% for the 551.8m drilled.</li> <li>Samples for gold and multi-element analysis were prepared using a coarse-crush and then were riffle split to between 2.5 to 3.0 kg for pulverising to 85% passing 75 microns (ALS methods CRU-21 &amp; PUL-22a). For gold assays samples were analysed by a 50gm charge fire assay with an AAS finish (ALS method Au-AA25). All drilled and recovered metres were assayed for gold.</li> <li>Selected intervals, based on geological logging, were also assayed for 34 multi-elements using a 4-acid digest with determination using ICP-AES (ALS method ME-ICP61). All gold and multi-element assays were performed by ALS in Orange, NSW. The assay techniques used are robust and are industry standard for this style of mineralisation.</li> <li>Standards or CRM (Certified Reference Materials) were submitted at the rate of every 50 samples for assay. There were total of 6 blanks submitted with at least one per drill hole for analysis mostly with the samples assayed for gold. The Blanks and CRM are considered consistent with industry standard practices and were used to ensure sample representivity.</li> </ul>
Drilling techniques	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).	Drilling was undertaken using a Sandvik type rig by Ophir Drilling (Rig 1) to deliver HQ3 core diameter (Ophir are based in Orange NSW). All reported diamond drillhole collar and survey details are included in Table 1.



		Core was orientated using a Reflex ACT III digital core orientation 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 diamond drill core recovered is physically measured by tape measure and the length recovered is recorded for every run. Core recovery is calculated as a percentage recovery. This is confirmed by Company geologists during core orientation activities on site. Average recovery for all metres drilled is over 96%. No relationship between grade and recovery has been identified.
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.	<ul> <li>Geological logs exist for all drill holes with lithological codes via an established reference legend.</li> <li>Drill holes have been geologically logged, including as appropriate major &amp; minor lithologies, alteration, structure, and weathering in their entirety from the start to the end of the hole. Where logging was detailed, the subjective indications of sulphides and other gold pathfinder attributes were estimated and recorded. Logging and sampling have been carried out to industry standards.</li> <li>The project area is currently classified as at an early stage of exploration and these results do not form part of a Mineral Resource Estimate.</li> </ul>
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.	<ul> <li>Half core samples were taken, generally on 1.0m intervals or on geological boundaries where appropriate (minimum 0.2m to maximum of 1.3m).</li> <li>Sample preparation is according to industry standards, including oven drying, coarse crush, and pulverisation to 85% passing 75 microns.</li> <li>Field blanks, standards, laboratory standards and laboratory repeats were used to monitor the quality of analyses.</li> <li>Sample sizes are considered to be appropriate and correctly represent the style and type of mineralisation.</li> </ul>
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,	The industry standard assay techniques used are considered to be robust and appropriate for the style of mineralisation being targeted.



	calibrations factors applied and their derivation, etc. 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.	<ul> <li>Blanks and standards are inserted at the time the core is cut for dispatch to the laboratory with the latter at the rate of 1 sample in every 50. No duplicate samples were submitted.</li> <li>Approximately 3% of submitted samples are blanks and standards and were submitted with the normal batches of samples.</li> <li>A statistical review of the blanks and CRM data by independent database management firm Rocksolid has not identified any bias with the sampling or assays.</li> <li>All samples were submitted for analysis to ALS Laboratories in Orange, NSW.</li> <li>No geophysical downhole surveys were completed on the drillholes – not applicable.</li> </ul>
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.	The diamond drilling programs were supervised by RME Geological Services Pty Ltd (RME) and overseen by staff from Minrex Resources Limited (Minrex). All data was collected and entered to an Excel spreadsheet in the field before being transferred, validated, and loaded into a database by independent consultants Rocksolid. There were no twin holes drilled during the diamond drilling program. Significant assay results are verified against visual logs by the geologist from Minrex. No adjustments are made to primary assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	<ul> <li>Prior to drilling, collar coordinates are situated using handheld Garmin GPS considered accurate to within +/- 3 m.</li> <li>Post drilling all hole collars were picked up using a DGPS (Trimble GeoExplorer 6000) with a quoted accuracy of +/-10cm.</li> <li>All holes have surveyed with a Reflex Ez-Gyro north seeking gyro to determine hole deviation.</li> <li>The datum for data is GDA94, Zone 55.</li> </ul>



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.	Data spacings and distribution is considered adequate for estimation of a Mineral Resource.
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.	<ul> <li>Mineralisation is interpreted to dip moderately to steeply (60° to 75°) to the west with all the holes orientated at around -60° to the east, which is considered the most appropriate to achieving as close to possible an unbiased true thickness of any potential mineralised zones.</li> <li>The relationship between the drilling orientation and the orientation of the mineralisation is not considered to have introduced any material sampling bias to the assays.</li> <li>Drill spacing is irregular and generally varies anywhere between 15m and 80m north-south along strike and 15m to 30m east-west along sections.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples were stored on site prior to being transported directly to the laboratory by RME. Sample pulps are stored at the laboratory and will be returned to the Company and stored in a secure location.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been undertaken.

## 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.	MinRex Resources Limited via its 100% subsidiary Sofala Minerals Pty Ltd (Sofala) is earning a 51% interest in EL7423 from Fortius Mines Pty Ltd. Minrex anticipate completing their earn-in during 2024. EL7423 is subject to a 2% NSR royalty in respect of all mineral production from the tenement. There are no material issues associated with the tenement and it is in good standing with no known impediments to continuing exploration.



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The area has undergone small hard rock gold mining. RGC completed geological mapping, rock chip sampling and limited RC and diamond drilling during the period from around 1993-97.
Geology	Deposit type, geological setting, and style of mineralisation.	Orogenic style gold mineralisation associated with sulphides (arsenopyrite-pyrite) in quartz veins.
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.	Refer Appendix 1 and Table 1 and the diagrams included in the report.
Data aggregation methods	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.	No weighting or cut-off values were used other than where stated. No metal equivalents were used to report the results.
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 (eg 'down hole length, true width not known').	The true width and geometry of the gold mineralisation has been intersected at an interpreted angle of approximately 60° with interval widths reported in Table 1. The intervals reported in Table 1 should not be considered proxies for the true width.
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.	Plan view drillhole collar maps and cross sections have been included in the announcement.
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.	Significant gold results have been calculated using a 0.5 g/t Au cut-off grade, minimum 0.6m thickness with no dilution included.



Criteria	JORC Code explanation	Commentary
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.	There is no other substantive data / information pertaining to these drilling intercepts to report.
Further work	The nature and scale of planned further work (eg 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.	Minrex will consider whether the results warrant estimating a Mineral Resource Estimate.