

High-Grade Gold Resource for Mauretania at Tennant Creek

Highlights

- Shallow, high grade maiden Mineral Resource Estimate (MRE) for the Mauretania gold deposit at Tennant Creek:
 - **256,216t at 3.5g/t Au for 28,974oz Au**
- Emmerson is entitled to a free carried 6% gold revenue royalty at Mauretania.
- Mauretania resource remains open and unexplored at depth.
- Significant scope exists to increase the resource with further drilling:
 - Drill hole MTDD010 returned a bonanza intercept 70m below this reported resource of 3.95m at 57g/t gold and 0.23% copper from 207m (ASX: 5 July 2021)
 - Preliminary high-resolution magnetic drone survey results indicate the host ironstone unit to continue at depth
- Joint Venture partner, Tennant Consolidated Mining Group (TCMG) is undertaking advanced studies across several future mines including Mauretania and the recently announced Chariot MRE, ahead of finalising mining and production schedules within the Joint Venture areas

Emmerson's Managing Director, Rob Bills commented:

"This Maiden Mineral Resource Estimate for Mauretania adds to the Chariot MRE of 138,800oz at 7.8g/t gold (ASX: 2 December 2021, Table 2) which boosts the inventory of high-grade resources at Tennant Creek that supports our JV partner, TCMG, establishing a central processing facility this year.

The MRE for Mauretania is focussed solely on a shallow resource to a maximum depth of 140m that is potentially open pit. There is immediate potential to extend the resource at depth, into the underlying primary zone of mineralisation with drilling.

The Exploration and Mining Joint Venture with TCMG – whereby TCMG fund \$10.5m in exploration over five years and complete mining studies ahead of establishing the central processing mill continues to unlock value for Emmerson. This pipeline of advanced projects entitles Emmerson to a stream of low risk, free carried 6% gold production royalties.

There is significant potential for further high-grade resource additions from our pipeline of brownfields projects that will undergo drill testing and studies during the year, with planning of our 2022 drilling program now close to finalisation."

Estimation of Mineral Resource for the Mauretania Gold Deposit

Emmerson Resources Limited (“Emmerson” | ASX: ERM) advises of a maiden Mineral Resource Estimate (MRE) for the Mauretania Gold Project at Tennant Creek, Northern Territory (Figure 1). The MRE is an important part of the mining studies being undertaken by JV partner TCMG and provides a further boost to the previously announced Chariot MRE (Table 2); with a view to commencing future mining and processing.

A total of 28,974 ounces of gold have been estimated and classified as Indicated and Inferred under the JORC 2012 Code. The MRE (Table 1, Figure 2) is reported above a 0.5g/t gold cut-off grade and above the 190mRL (within 140m of surface).

Table 1: Mauretania Mineral Resource Estimate March 2022

Mauretania MRE at a cut-off grade 0.5 g/t gold, above 190mRL			
Classification	Tonnes (K)	Gold grade (g/t)	Ounces (K)
Indicated	159	4.8	25
Inferred	97	1.4	4
Total	256	3.5	29

Note: Inconsistencies in total tonnage and ounces reporting are due to rounding

In 2021, TCMG engaged Optiro, (as part of TCMG’s obligations under the Small Mines Joint Venture with Emmerson) to complete an MRE on the Mauretania gold prospect. This scope of work included geologically modelling the ironstone and the surrounding, gold-bearing chlorite alteration halo incorporating all results from Emmerson drilling.

The Mauretania orebody remains open and poorly explored at depth. For instance, the recently announced intersection from MTDD010 of 3.95m at 57g/t gold and 0.23% copper from 207m (ASX: 5 July 2021) sits 70m below the base of the currently reported MRE (Figure 2, Figure 3). The recent results from the high-resolution drone geophysical survey also indicates that the host ironstone continues at depth.

The Mauretania MRE is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the Australian Securities Exchange Listing Rules. This report summarised the information contained in the JORC Code Table 1 which is included in the Appendix to this report. The breakdown of the total Mineral Resource estimate into the categories specified in the JORC Code is contained in Table 1.

A summary of JORC Table 1 is provided below in line with requirements of ASX listing rule 5.8.1.

Geology and Geological Information

The Mauretania deposit is a recent greenfields discovery in the Tennant Creek Mineral Field made by Emmerson in October 2015. Mauretania is a blind deposit with no outcrop and was identified from the correspondence of a subtle magnetic anomaly along a major WNW trending structure. The mineralisation occurs within a structurally controlled, pipe-like ironstone, that has a sub-vertical plunge and presents a challenging target to fully delineate from surface drilling. Additionally, up until the advent and recent application of the high-resolution aeromagnetic drone surveys, these hematite dominant deposits were previously overlooked due to their subtle magnetic signature.

Mineralisation in the oxide zone (above 190mRL) at Mauretania is hosted in brecciated hematite-rich ironstone, locally vuggy, and associated with jasper – quartz ± magnetite. The mineralisation in the primary zone (below 190mRL) is hosted in brecciated magnetite – hematite – quartz ironstone and also within the chlorite-hematite-magnetite alteration occurring on the footwall, with gold associated with hematite. The extent of mineralisation in the primary zone remains the subject of further drilling.

The geological interpretation of the deposit is based on detailed logging and sampling combined with a 3D model of the lithology domains. The high-density Reverse Circulation (RC) and Diamond drilling throughout the deposit has supported the development of this geological model plus a robust understanding of the distribution of mineralisation; reflected in the MRE where the majority (86%) of the mineralisation is classified as Indicated. The host rocks are also well defined in the lithology the model.

Drilling Techniques

Mauretania was drilled by Emmerson from 2015 to 2021 with Rotary Airblast (RAB) drilling, RC, and Diamond drilling (DDH). Logging and sampling of Diamond (PQ, HQ, NQ) and RC (4.5 inch and 5.25-inch sampling bit) were used in the estimation. Industry standard inner tube was used for diamond drilling, with selected intervals of triple tube.

The Mauretania MRE (Optiro, March 2022) is based on logging and sampling of 61 drillholes, with approximately 9,951m of samples (predominantly 1m interval), with ranges from 0.5m to 1.4m. Drilling type include surface DDH (21% of samples) and RC (79% of samples).

Sampling and Sub-sampling techniques

Sampling procedures from RC drilling during 2015-2019 have samples collected from the cyclone with three chutes providing a 3m composite, a 1m sample and a 1m bulk sample. The 3m composite sample is riffle split on site to produce two samples, with one side going into a pre-numbered calico sample bag, effectively providing a 3m composite sample for analysis, weighing ~3kg.

The sampling procedure in 2020 RC drilling was changed, so that samples were collected from the rig's fixed cone splitter with two sample chutes providing a 1m sample and a 1m bulk sample. The 1m sample is riffle split to obtain a representative sample for each 1m interval. This method is repeated for every 3m interval. The 1m riffle split samples are then combined in a bigger Calico bag with a pre-numbered Sample Number effectively providing a 3m composite sample for analysis, weighing ~3kg.

Diamond cores are sampled based on geological boundaries to a maximum length of 1.5m, marked up prior to being cut using an automatic core saw. Samples are collected from the same side of drill core and dispatched for analysis. Diamond core sample weighs ~4kg.

All RC and core samples are prepared by Intertek Genalysis Laboratory in Alice Spring, Northern Territory. Preparation involved weighing and drying the sample, crushing the sample (to 10mm) and pulverising to >85% passing at 75µm where 200g pulp samples are sent for analysis.

Sample Analysis Method

Emmerson field QC procedures involve the use of certified reference material (CRM) as assay standards and include blanks. Certified reference material or blanks are inserted at least every 20 samples.

All RC and diamond pulp samples were analysed at Intertek Genalysis Laboratory in Perth, West Australia. A suite of ancillary elements (Au, Ag, Bi, Co, Cu, Fe, Mo, Pb, Sb, Se, and Zn) were analysed with 25g charge by Aqua Regia (AR) digestion and Inductively Coupled Plasma Mass Spectrometry (ICP-MS).

Intervals with anomalous gold and copper results (from the 3m composite) are collected and re-split every 1m and send for analysis by AR/ICP-MS and Fire Assay with Atomic absorption spectroscopy (AAS) finish.

Mineral Resource Classification

Mineral Resource classification criteria are based on the level of data informing both the geological model and grade estimation.

The Mineral Resource has been constrained to a maximum vertical depth of 190mRL, which is approximately 140m below surface. Blocks have been classified as Indicated and Inferred based on drill hole spacing, geological continuity and estimation quality parameters.

The Indicated Mineral Resource is supported by drilling with nominal 20m x 8m spacing, and predominately informed by the first estimation pass. Geological continuity is demonstrated by the geological interpretation from drilling. Geostatistical confidence is demonstrated by a slope of regression above 0.4.

The Inferred Mineral Resource was defined where there was a low to moderate level of geological confidence in geometry, there was still continuity of grade, and drill spacing was greater than 20m. Inferred blocks are informed by the first and second estimation pass. Geological support was defined to a lower level of confidence in terms of continuity and extent. Geostatistical confidence is demonstrated by a slope of regression less than 0.4.

Unclassified mineralisation has not been included in this Mineral Resource. This is the material that has no estimated grades above 0.5g/t gold and material unsupported by geology and drilling.

Estimation Methodology

The alteration and ironstone lithology wireframes were modelled by implicit modelling using Leapfrog Software resulting in two ironstone pods within a northwest striking alteration halo. All wireframe solids were snapped to RC and diamond drillholes.

A categorical indicator approach was applied to the material within the alteration domain to separate out the low, medium, and high-grade sub-domains. The categorical indicator process is based on the inflection grade threshold exhibited by the data at 0.1g/t gold for low to medium and a 5.0g/t gold threshold for medium to high. Categorical variography returned a nugget of 28% and a maximum range of 90m by 70m by 30m. The categorical processing resulted in the blocks being divided into low

and medium grade sub-domains using a 45% probability threshold; and a high-grade sub-domain using a 25% probability threshold. These blocks were then used to constrain grade estimation.

Drillhole intercepts were composited downhole to 1m lengths and gold estimation was carried out using ordinary kriging with Dynamic Anisotropy (DA), with hard boundaries between the indicator sub domains. DA allows the search ellipsoid to follow the vein reference plane to improve local estimation efficiency. Caps (top-cuts) were applied to the composites prior to estimation to reduce the influence of outliers, 140g/t gold to the high-grade domain, 7g/t gold to the medium grade domain and 0.3g/t gold to the low-grade domain. Gold variography was undertaken on each subdomain and gave a nugget between 26% and 32%. A maximum range of 50m by 46m by 29m was applied. Three search passes were used, with increasing search distances and decreasing minimum sample numbers employed.

Bulk density (SG) was assigned to the block model based on weathering type and lithology. The applied density values were derived from both the downhole density test work that was undertaken in December 2021 and previous determinations of density undertaken on the diamond drill core using the water immersion method.

Cut-off Grades

A nominal lower cut-off grade of 0.1g/t gold, with a 45% probability threshold was utilised for discriminating the low and medium grade sub domains within the alteration domain. A nominal lower cut-off grade of 5.0g/t gold, with a 25% probability threshold, was utilised for discriminating the high grade from the medium grade sub domains. For reporting, the cut-off grades applied to the estimate was material above 0.5/t gold above the 190mRL.

Mining and Metallurgical Methods Parameters

The MRE is constrained to a maximum vertical depth of 190m below surface to satisfy the Reasonable Prospects of Eventual Economic Extraction criteria for JORC compliance.

An approximate metallurgical recovery of 90% has been assumed in determining Reasonable Prospects of Eventual Economic Extraction, based on historical production data at the nearby Chariot gold mine, which is a similar mineralisation style. The mine was in recent production and treated at a conventional CIP gold plant at Warrego. There is extensive data supporting that gold mineralisation similar to Mauretania can be extracted using conventional processes.

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This release has been authorised by the Board of Emmerson Resources Limited.

About Emmerson Resources, Tennant Creek and New South Wales

Emmerson has a commanding land holding position and is exploring the Tennant Creek Mineral Field (TCMF), one of Australia's highest-grade gold and copper fields producing over 5.5Moz of gold and 470,000t of copper from deposits including Warrego, White Devil, Orlando, Gecko, Chariot, and Golden Forty. These high-grade deposits are highly valuable exploration targets, and to date, Emmerson's discoveries include high-grade gold at Edna Beryl and Mauretania, plus copper-gold at Goanna and Monitor. These Emmerson discoveries were found utilising new technology and concepts and are the first discoveries in the TCMF for over two decades.

A recent rush of new tenement applications by major and junior explorers in the Tennant Creek district not only highlights the prospectivity of the region for copper and gold but also Emmerson's strategic 1,700km² land holding.

Emmerson's Strategic Alliance (ASX: 16 November 2020) with TCMG enables the value of projects such as Mauretania to be monetised via TCMG's future mining and processing activities. Emmerson retains a free carry, 6% production royalty as part of the Small Mines Joint Venture with TCMG.

In addition, Emmerson is exploring across four early-stage gold-copper projects in NSW, identified (with our strategic alliance partner Kenex/Duke Exploration ASX: DEX) from the application of 2D and 3D predictive targeting models – aimed at increasing the probability of discovery. Duke can earn up to 10% (to pre BFS) of any project generated providing certain success milestones are met.

The highly prospective Macquarie Arc in NSW hosts >80Moz gold and >13Mt copper with these resources heavily weighted to areas of outcrop or limited cover. Emmerson's four exploration projects contain many attributes of the known deposits within the Macquarie Arc but remain underexplored due to historical impediments, including overlying cover (farmlands and younger rocks) and a lack of effective exploration.

Competency Statement

The information in this report that relates to database used in the estimation is based on information compiled by Dr Ana Liza Cuison, MAIG, MSEG. Dr Cuison is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which she is undertaking 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 Cuison is a full-time employee of the Company and consents to the inclusion in this report of the matters based on her information in the form and context in which it appears.

The information in this report that relates to Mineral Resource estimate and classification for the Mauretania Gold deposit is based on information compiled by Justine Tracey. Justine Tracey is an employee of Optiro Pty Ltd, and a Chartered Professional of the Australasian Institute of Mining and Metallurgy. Justine Tracey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity she is undertaking 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 ('the JORC Code')". Justine Tracey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Emmerson Resources Limited's anticipated future events, including future resources and exploration results, and other statements that are not historical facts. When used in this document, the words such as "could," "estimate", "plan," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Emmerson believes that its expectations reflected in these forward- looking statements are reasonable, such statements involve risks, assumptions, uncertainties, and other important factors, many of which are beyond the control of the Company, and which may cause actual results, performance, or achievements to differ materially from those expressed or implied by such statements.

The Company does not undertake any obligation to update forward-looking statements even if circumstances or management's estimates or opinions should change. Forward-looking statements are provided as a general guide only and should not be relied on as an indication or guarantee of future performance. Given these uncertainties, investors should not place undue reliance on forward-looking statements. The Company cautions investors against using this announcement solely as a basis for investment decisions without regard for this disclaimer.

Table 2: Mauretania Mineral Resource Estimate March 2022

Mauretania MRE at a cut-off grade 0.5 g/t gold, above 190mRL			
Classification	Tonnes (K)	Gold grade (g/t)	Ounces (K)
Indicated	159	4.8	25
Inferred	97	1.4	4
Total	256	3.5	29

Note: Inconsistencies in total tonnage reporting are due to rounding

Table 2: Chariot Mineral Resource Estimate November 2021

Nov -21 Chariot MRE				
	Category	Tonnes (kt)	Gold grade (g/t)	Ounces (koz)
Open Pit	Indicated	64.5	18.1	37.6
	Inferred	8.2	14.4	3.8
	Total	72.7	17.7	41.4
Underground	Indicated	223	7	77
	Inferred	260.5	4.6	20.4
	Total	483.5	6.3	97.4
Total		556.2	7.8	138.8

Note: Inconsistencies in total tonnage reporting are due to rounding

*Open Pit model is Sept-13 and reported within an optimised pit shell at a cut-off grade of 1.0 g/t gold

*Underground model is Nov-21, reported below 180mRL at a cut-off grade of 2.0g/t gold

*All failure zone material is reported as Indicated as geotechnical study confirms material is mineable by caving

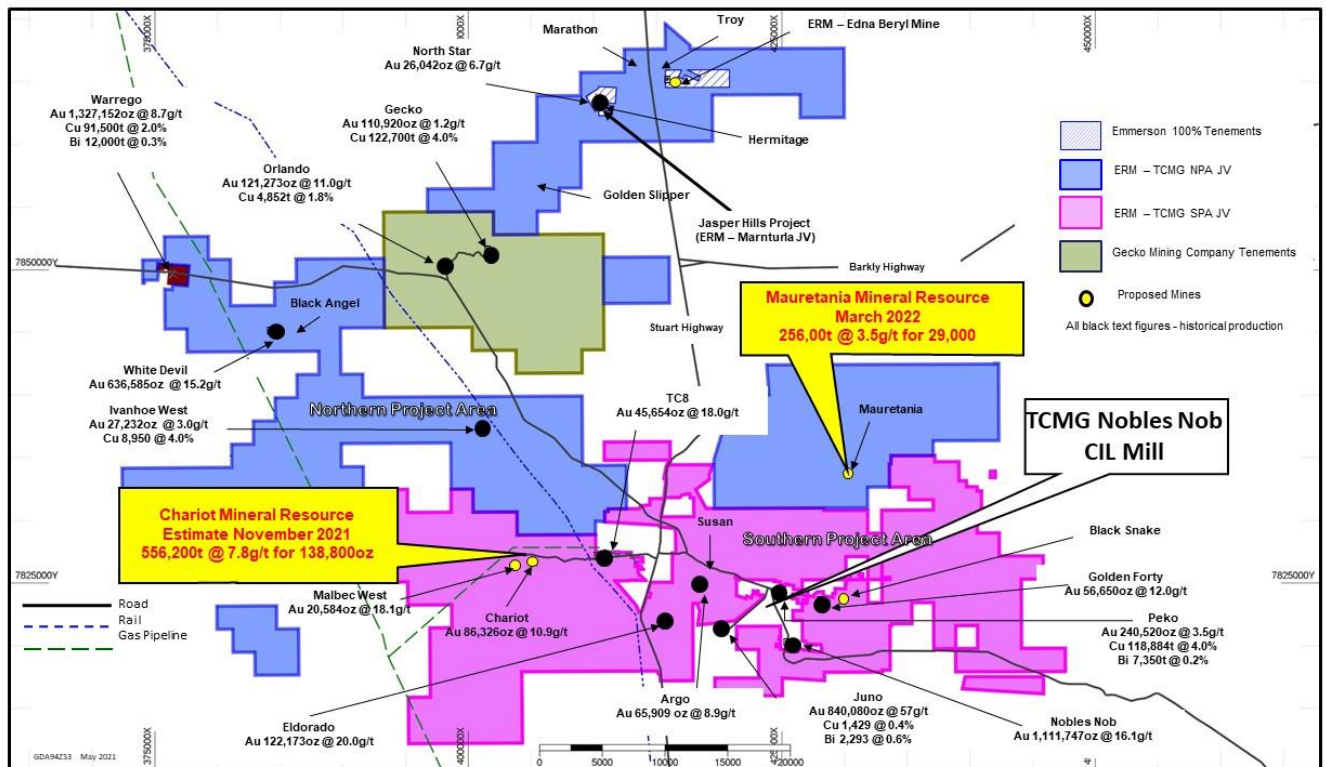


Figure 1: Map of the Emmerson Tennant Creek Project showing the Northern Project Area (NPA), and Southern Project Area (SPA), which is covered by the Exploration (EEJV) and Small Mines (SMJV). Yellow dots are potential small mines and/or remnant resources. Noting that Emmerson has retained 100% of the Jasper Hills and Edna Beryl projects.

Note: Quoted production from major historical deposits after Ahmad, M. and Munson, T.J. (2013). Geology and mineral resources of the Northern Territory, Special Publication 5, p. 9:37.

For Chariot mine and Malbec West mine, quoted production from Giants Reef Mill Reconciled Production to end of month September 2005 (internal report).

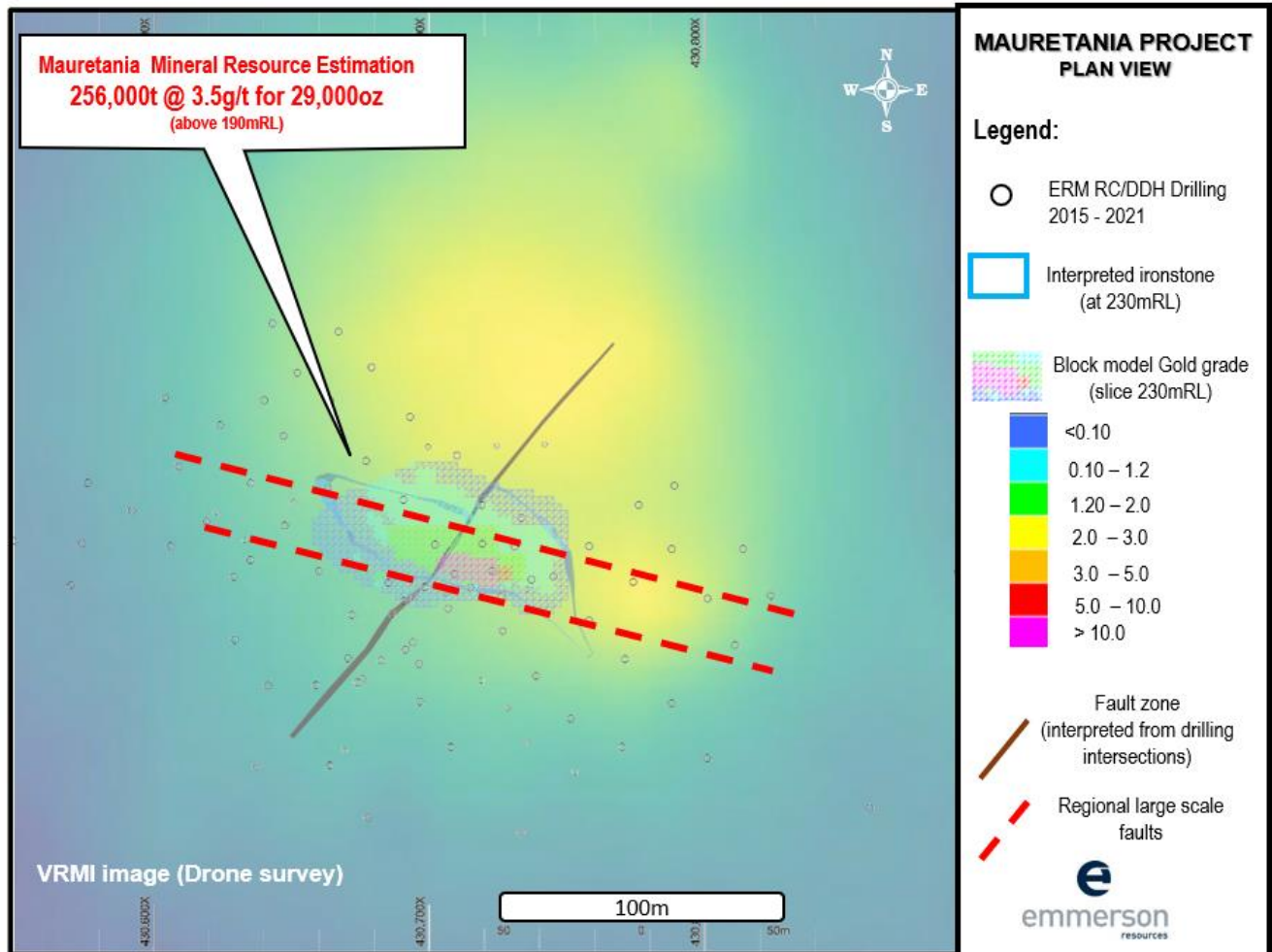


Figure 2: Plan view of Mauretania deposit and drill hole location. Also showing the grade colour at 230mRL and the interpreted ironstones, regional structures, and recent aeromagnetic survey.

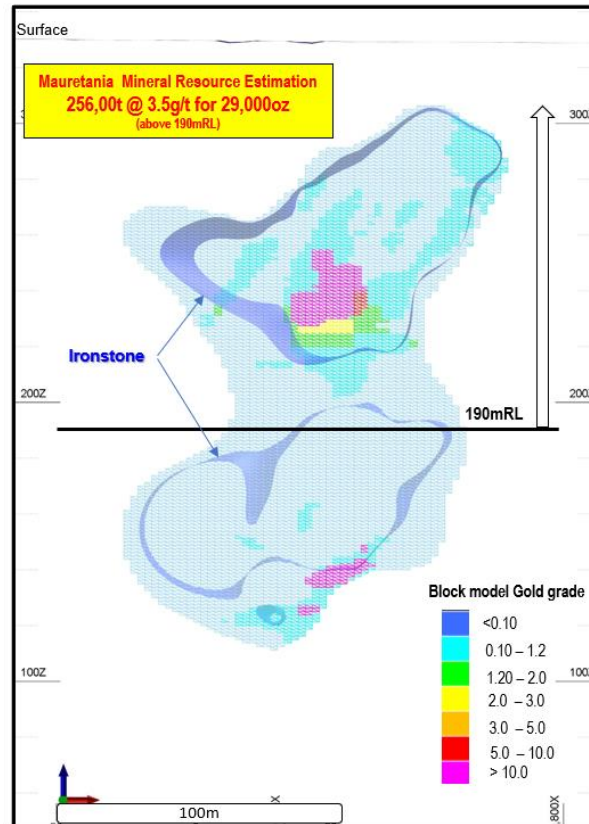


Figure 3: Mauretania Mineral Resource Estimate – cross section along 7833042 (± 5m) coloured by gold grades and showing the 190mRL which is the constraint for reporting the MRE.

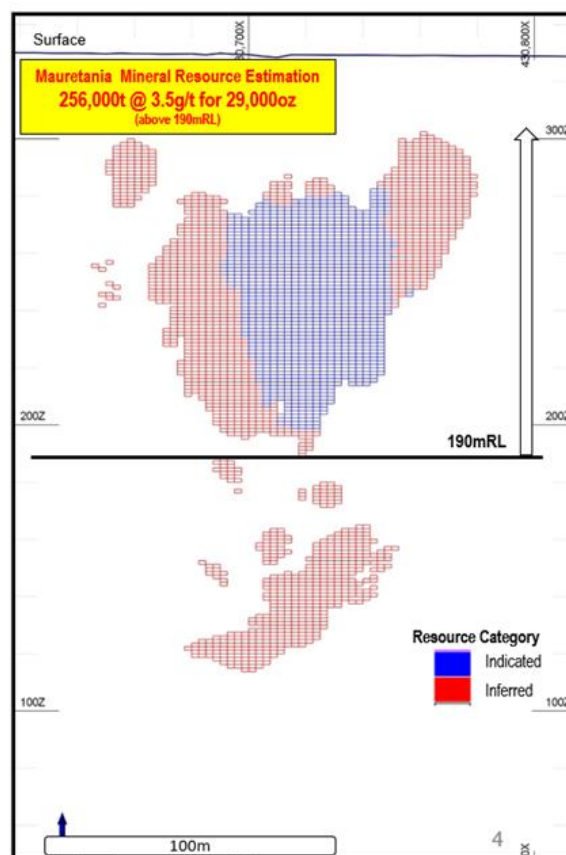


Figure 4: Mauretania Mineral Resource Estimate - coloured by resource classification, looking north, showing 190mRL which is the constraint for reporting the MRE.

Appendix 1

1. JORC Code Table 1 – Mauretania Deposit

The following table provides a summary and comment on important assessment and reporting criteria used at Mauretania for the determination of the Mauretania Mineral Resource estimate and in accordance with the requirements of the JORC Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code, 2012) on and 'if not, why not' basis.

Section 1: Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> The Mauretania Project was drilled by Emmerson Resources Ltd (ERM) from 2015 to 2021 with Rotary Airblast (RAB) drilling, Reverse Circulation (RC) and Diamond Drilling (DDH). Mauretania Mineral Resource Estimate (MRE) by Optiro (March 2022) is based on logging and sampling of 61 drillholes, with approximately 9,951m of samples (predominantly 1m interval), with ranges from 0.5m to 1.4m. Drilling type include surface DDH (21% of samples) and RC (79% of samples). RC sampling techniques 2015 – 2019: <ul style="list-style-type: none"> Samples were collected from the rig's fixed cone splitter with three sample chutes for collection and sampling - 3m composite, 1m sample and 1m bulk sample. The 3m composite sample directly off the cyclone is riffle split on site to separate and produce two samples, with one side going into a pre-numbered calico sample bag, effectively providing a 3m composite sample for analysis. The other is placed back into the original sample bag and left on site. 1m individual samples are also collected off the cyclone and retained on site (kept inside the bulk sample green bags). 3m composite samples weighs from ~3kg, from which a representative sample is pulverised (at Intertek - Genalysis in Alice Springs) to produce a 25g charge for analysis by Aqua Regia digestion/ ICP MS (ARU25/OM907). When the 3m composite assay results returned and assessed, intervals with anomalous and significant intersections are sampled from the 1m retained from the drilling. The 1m samples are then riffle split to separate and produce two samples, with one side going to a pre-numbered calico sample bag, effectively providing a 1m resplit for analysis. RC sampling techniques 2020 (MTRC039 to MTRC048): <ul style="list-style-type: none"> Samples were collected from the rig's fixed cone splitter with two sample chutes for collection and sampling – a 1m sample and a 1m bulk sample. One meter sample from the cyclone are riffle split to obtain a representative sample for each 1m interval. This method is repeated for every 3m interval (i.e., 0-1, 1-2, 2-3...). The 1m riffle split samples are then combined in a bigger Calico bag with a prenumbered Sample Number which is a composite of 3m intervals (e.g., 0-3, 3-6,6-9). The 3m composite samples weigh ~3kg. The samples are dried and pulverised (at Intertek - Genalysis in Alice Springs) to produce 25g charge for analysis by Aqua Regia digestion/ ICP MS (AR25/OM). When the 3m composite assay results returned and assessed, intervals with anomalous and significant intersections are sampled from the 1m retained from the drilling. The 1m samples are then riffle split to separate and produce two samples, with one side going to a pre-numbered calico sample bag, effectively providing a 1m resplit for analysis. DDH sampling technique 2015-2021: <ul style="list-style-type: none"> Diamond cores were logged for lithological, density, magnetic susceptibility, and geotechnical characteristics. The core interval for sampling is marked by Emmerson geologist during logging, taking into account the contact of mineralisation and alteration. Core is cut along a longitudinal line (core axis) and sampled on geological intervals (0.5 m to 1.5 m) as marked and bagged using the pre-designed sample number/cut sheet. Cut half core provide sample weighs ~4kg. Individual core samples are pulverised (at Intertek - Genalysis in Alice Springs) to produce a 25g charge for analysis by Aqua Regia digestion/ ICP MS (AR25/OM) & 50g charge Fire Assay (FA50/OE04).
Drilling techniques	<ul style="list-style-type: none"> Data used for Mauretania MRE are from ERM drilling from 2015 – 2021: <ul style="list-style-type: none"> Logging and sampling of Diamond (PQ, HQ, NQ) and RC (4.5 inch and 5.25-inch sampling bit) were used in the estimation. Generally, a standard inner tube was used for diamond drilling, with selected intervals used triple tube.

Criteria	Commentary
	<ul style="list-style-type: none"> For angled diamond holes, the core was oriented using downhole core orientation equipment provided by the drilling company.
Drill sample recovery	<ul style="list-style-type: none"> Drill sample recovery was not recorded for all RC drilling. DDH recoveries were logged and recorded in the database and are considered to be of fair standard. When available, recoveries for diamond drillholes range from 80% to 98%. No detailed analysis was conducted to determine relationships between sample recovery of metal grades. It is considered by Emmerson that there is preferential loss of fine to medium graine material within the ore zones. Emmerson consider that there is evidence for sample bias that may have occurred due to preferential loss/gain of fine/coarse material, especially on vuggy zones and where water was intersected.
Logging	<ul style="list-style-type: none"> The entire length of all drillholes has been logged for lithology, weathering/oxidation, alteration, mineralisation, veining, and structures by ERM. Standard logging/operating procedures (SOPs) were employed by ERM for logging RC chip and diamond core. Drill Hole Data including meta data, any gear left in the drill hole, lithological, mineral, downhole survey, sampling, magnetic susceptibility is collected and entered to Logchief/excel spread sheet logging template. All digital logs are uploaded to a secure server (Datashed). The merged and complete database is then imported and plotted to Micromine software for assessment. Data back-ups (onsite) are employed to external drive. All holes are logged both qualitative (discretionary) and quantitative (% volume). Logging is to a level of detail to support appropriate MRE.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> No exploration results are reported in this report. ERM employed sampling protocols for sampling RC samples and DDH core samples. RC samples: <ul style="list-style-type: none"> RC samples from the cyclone were riffle split to obtain a representative sample for each 3m or 1m interval. RC samples weigh ~2 - 5kg. Diamond core samples: <ul style="list-style-type: none"> The core interval for sampling was marked by Emmerson geologist during logging, taking into account the contact of mineralisation and alteration, sampling interval varies from 0.5 – 1.5m. Diamond core was halved using an automatic core saw at Emmerson's Tennant Creek exploration yard. Samples were collected from the same side of drill core and dispatched for assay. The remaining half core is retained and stored at Emmerson's core yard located at Tennant Creek for future viewing and cross-checking of assay values against the actual geology. Half core samples are submitted for analysis, unless a field duplicate is required, in which case quarter core samples are submitted. Diamond core sample weighs ~4 – 5kg. The sample sizes are considered to be appropriate to correctly represent the mineralisation on the style of mineralisation. No sub-sampling is completed by Emmerson. All sub-sampling is completed by the laboratory.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> No exploration results are reported in this report. All RC and Diamond core samples were submitted to Intertek Laboratory in Alice Spring for crushing and sample preparation and to Intertek lab in Perth for analysis. RC and Diamond cores samples were analysed for ARU25/OM907 or AR25/OM (Au, Ag, Bi, Co, Cu, Fe, Mo, Pb, Sb, Se, and Zn). <ul style="list-style-type: none"> For AR25/MS: <ul style="list-style-type: none"> weigh in samples, dried at 105°C crush to 10mm Pulverize for 5 minutes sieve 85% passing at 75µm 200g pulp sent for analysis Intervals with anomalous gold and copper results (from the 3m composite) are collected and re-split every 1m and send for analysis by AR/ICP-MS and Fire Assay with Atomic absorption spectroscopy (AAS) finish. No downhole geophysical tools or handheld XRF instruments are used to determine grade.

Criteria	Commentary
	<ul style="list-style-type: none"> Emmerson field QC procedures involve the use of certified reference material (CRM's) as assay standards and include blanks. Certified reference material or blanks are inserted at least every 20 samples. Laboratory checks include CRM's and/or in-house controls, blanks, splits, and replicates that are analysed with each batch of samples submitted. These QC results are reported along with sample values in the final analytical report.
Verification of sampling and assaying	<ul style="list-style-type: none"> No exploration results are reported in this report. All data from the Mauretania Projects is kept in ERM database (Datashed). Geochemical data is managed by ERM using an external database administrator and secured through a relational database (Datashed). Laboratory data is received in digital format and uploaded directly to the database. The results are loaded by Database contractor into industry-standard database (Datashed). Sample data sheets were used to merge the assay results with the sample intervals for each hole. The Exploration Manager (Competent Person) of ERM has visually verified significant intersections reported. Assay data and intercepts are cross-checked internally by the Exploration Manager. No twin drillholes have been verified. No adjustments were made on original assay data for the purpose of reporting grade and mineralised intervals.
Location of data points	<ul style="list-style-type: none"> Mauretania Project drillhole collar locations are in Figure 2 in the main text. All RC and DDH drillhole collars are surveyed using a differential GPS and by a suitably qualified company contractor. Collar survey accuracy is ± 30 mm for easting, northing, and elevation coordinates. Downhole survey measurements are collected every 18 or 30m using True North seeking Gyro (Axis). All coordinates are based on Map Grid Australia Zone 53H Geodetic Datum of Australia 1994. Topographic measurements are collected from the final survey drill hole pick up. A LiDAR digital terrain model drone survey was recently completed at ML32214 (Mauretania). LiDAR DTM is a very accurate terrain model of the earth's surface with ground cover features, such as buildings and vegetation cover removed.
Data spacing and distribution	<ul style="list-style-type: none"> No exploration results are reported in this report. Geological modelling and a geostatistical analysis have been determined that drill spacing is sufficient to establish the degree of geological and grade continuity necessary to support the reported Mineral Resource as qualified through classification.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> The majority of the drilling is perpendicular to the interpreted strike of the Mauretania deposit. A 3D geological model was generated by ERM geologist in 2020 using validated lithology and mineralisation from drilling. Optiro (2022) note "During geological modelling and estimation it became apparent that high gold grades were related to a steep northeast structure. In hindsight, drilling was not best orientated to intersect this structure. The estimation uncertainty has been considered and represented in the Mineral Resource Classification"
Sample security	<ul style="list-style-type: none"> RC and DDH sampling protocols are employed by ERM. Samples are selected/collected, bagged in a pre-determined Sample Number. The samples are placed in polyweave bags and sealed. Polyweave bags are then placed in a larger bulka bags for transport to the sample preparation facility in Alice Springs (Intertek – Genalysis laboratory). The supervising Geologist fills a Submission Form with the sample numbers and send the SubForm digitally to the laboratory. The assay laboratory confirms that all samples have been received and that no damage has occurred during transport. Sample receipt is logged into Emmerson's sample ledger. While samples are being prepared in the laboratory they are considered to be secured. Tracking is available through the internet and designed by the laboratory to track the progress of batches of samples.
Audits or reviews	<ul style="list-style-type: none"> Steve Rose, of TCMG, conducted an internal QAQC review/analysis for Mauretania. These showed that the quality assurance process was adequate, and the quality control results supported the drillhole dataset as being suitable for use in a Mineral Resource estimate.

Section 2: Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> The Mauretania Project is located within Mineral Lease 32214 that covers an area of 72.05 ha. Application for a Mineral Lease has been granted by the Northern Territory Government on 7th April 2021 for a period of 20 years. ML32214 is 100% held by Emmerson Resources Limited. The Mauretania Project is located on Tennant Station Perpetual Pastoral Lease. Land Access is secured through Emmerson's Land Access Agreement (LAA) signed by the owners of the Tennant Creek station. Land Access is secured through Emmerson's Indigenous Land Use Agreement (ILUA) with the CLC which is in good standing. Heritage surveying (assisted by the Central Land Council) was conducted prior to any exploration being conducted within the Mauretania Project Area. Sacred Site Certificate Number 2021-034 (C2021-034) was issued on 30 April 2021 (valid for two years) Two exclusion zones were identified during the field inspections however do not impact on the current exploration drilling. Emmerson do not believe that the two identified exclusion zones will impact of future exploration of the Mauretania Project Area. The tenement is in good standing and no known impediments exist.
Exploration done by other parties	<ul style="list-style-type: none"> Regional mapping and rock chipping was undertaken by previous explorers. Most of this work was completed in the 1970's by Australian Development Pty Ltd and in the 1980's by Normandy Tennant Creek. Adelaide Petroleum NL (Sabminco NL JV) drilled 11 RC holes at the Black Cat Prospect (1988) however did not discover significant results and no further work was done. Metana Minerals NL also mapped the general area in 1989. Emmerson Resources commenced exploration at the Mauretania Project in 2015 and discovered the Mauretania deposit in October 2015. From 2015 to 2021, Emmerson Resources has drilled in the Mauretania Project to test the extent of the ironstone and define the Mauretania orebody: <ul style="list-style-type: none"> RAB drilling = 50 holes for 2,075m RC drilling = 44 holes for 7,159m RCDDH drilling = 7 holes for 1,431m DDH drilling = 4 holes for 704.7m In February 2022, Optiro has prepared a maiden MRE for the Mauretania deposit.
Geology	<ul style="list-style-type: none"> Tennant Creek Mineral Field (TCMF) is a well-endowed metallogenic province that has produced approximately 157t of gold, 345,000t of copper, 14,000t of bismuth, 220t of selenium and 56t of silver between 1932 and 2005. The geology of the TCMF comprises the Warramunga Formation which host the Au-Bi-Cu mineralisation; the Tennant Creek Supersuite (TCS) granitoids and related high-level porphyries and coeval intermediate mafic intrusions; and the younger Ooradidgee Group and felsic extrusions. The rocks of the Warramunga Formation underlie the Exploration License ML32114 Mauretania Project. Mauretania is a recent green fields discovery, identified from recognising that high-grade gold (and copper), like Emmerson's recent discoveries at Edna Beryl and Goanna are associated with very oxidised, hematite fluids. These styles of deposits are characterised by very high grades of gold strongly controlled by structure and thus represent difficult targets to intersect from surface drilling. By virtue of their association with hematite, they present as weak magnetic anomalies and associated gravity anomaly. The mineralisation at Mauretania is hosted in structurally controlled northwest trending ironstones. Mineralisation in the oxide zone (above 190mRL) is hosted in brecciated hematite-rich ironstone, locally vuggy, and associated with jasper – quartz ± magnetite. The mineralisation in the primary zone (below 190mRL) is hosted in brecciated magnetite – hematite - quartz ironstone and in the chlorite-hematite-magnetite alteration occurring on the footwall, gold is associated with hematite. The extent of mineralisation in the primary zone remains the subject of further drilling. The weathering profile over the Mauretania mineralisation is extensive to depths of over 120m from surface. Mineralisation is considered to be Proterozoic Iron Oxide Copper Gold (IOCG) mineralisation of similar style and nature to other mineralisation / deposits in the Tennant Creek Mineral Field.
Drillhole information	<ul style="list-style-type: none"> The Mauretania Project located in Figure 1 and drillhole location map is included in Figure 2. All drill hole information, including tabulations of drillholes positions and lengths is stored in ERM Datashed.

Criteria	Commentary
	<ul style="list-style-type: none"> This information is not included herein as the Mineral Resource estimate incorporates this information.
Data aggregation methods	<ul style="list-style-type: none"> No data aggregation in the original assay database were done prior to estimation. Metal equivalents are not reported.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> Exploration results are not reported as part of this announcement.
Diagrams	<ul style="list-style-type: none"> Relevant maps and sections are included with this announcement.
Balanced reporting	<ul style="list-style-type: none"> Exploration results are not reported as part of this announcement.
Other substantive exploration data	<ul style="list-style-type: none"> Geotechnical diamond drillholes were drilled and logged to provide data to determine the mineability of this material via open pit methods. Mauretania has reasonable prospects of eventual economic extraction (RPEEE). Downhole density probe surveys were conducted in December 2021 on eight drillholes to give a suite of measurements through mineralisation and non-mineralised zones. Measurements were taken downhole at 1m intervals, with data collected for gamma, calliper, and formation density.
Further work	<ul style="list-style-type: none"> The next steps at Mauretania include finalising the mining options and studies, permitting, and assessing the potential for resource additions, particularly from extensions to the known resource which currently remains open at depth.

2. JORC Code Table 1 – Mauretania

a. Section 3: Estimation and Reporting of Mineral Resources

The following table provides a summary of important assessment and reporting criteria used for the reporting of the Mauretania Deposit Mineral Resource in accordance with the Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (The JORC Code, 2012 Edition) on an 'if not, why not' basis.

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 	<ul style="list-style-type: none"> ERM data was logged in the field, and imported into Datashed, with assay files uploaded in digital format upon receipt from the laboratory. Routine database checks are conducted by ERM's consultant Database Manager. All data has been validated by ERM geologists prior to inclusion in the resource estimate. Personnel access to the Datashed database is restricted to preserve the security of the data.
	<ul style="list-style-type: none"> <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> All data was checked visually by ERM in 3D to ensure that hole locations and surveys were correct.
Site visits	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> 	<ul style="list-style-type: none"> A site visit was not undertaken by the Competent Person for the Estimate.
	<ul style="list-style-type: none"> <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> A site visit was not undertaken by the Competent Person as it was not deemed material to the MRE update, as there is no outcrop or mining to observe. Drill core photos were extensively viewed to verify geological logging. The Competent Person for the Mineral Resource is very familiar with the Tennant Creek Mineral Field and geology, having previously worked in the region as an exploration geologist for four years.
Geological interpretation	<ul style="list-style-type: none"> <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> 	<ul style="list-style-type: none"> The geological interpretation of the deposit is based on geological logging of the ironstone and alteration host units which have been interpreted into a 3D model using diamond, RC, and RAB drillholes. The host rocks are generally well defined and clearly logged in the lithology records.
	<ul style="list-style-type: none"> <i>Nature of the data used and of any assumptions made.</i> 	<ul style="list-style-type: none"> Data is stored in a master Datashed database. Exports were in CSV format for import to modelling software, with separate files for collar, survey, assay, lithology, geotech, density and magnetic susceptibility. No assumptions were made or applied to the data. The data is considered to be robust due to effective database management, and validation checks to verify the quality. Original data and survey records are utilised to validate any noted issues.
	<ul style="list-style-type: none"> <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> 	<ul style="list-style-type: none"> This is the first interpretation and Mineral Resource Estimate for the deposit. No alternative interpretations have been undertaken at this stage of the project assessment. In the CP's opinion, the uncertainty associated with potential interpretational differences is adequately reflected in the classification applied to the Mineral Resource.
	<ul style="list-style-type: none"> <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> 	<ul style="list-style-type: none"> The gold grade estimate is wholly constrained within the alteration lithological unit. Geological observations from logged drill samples were used to guide the interpretation and further control the trends of the Mineral Resource estimate.
	<ul style="list-style-type: none"> <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> Gold mineralisation at Mauretania occurs as pods, typically (but not entirely) hosted by the northwest striking magnetite-haematite-rich ironstone unit. Some mineralisation is present within the chloritised halo

Criteria	JORC Code Explanation	Commentary
		<p>surrounding the ironstone. There are two ironstone pods with associated mineralisation.</p> <ul style="list-style-type: none"> A northeast trending fault has been identified, however it is not used to divide the lithology into fault blocks, as a fault offset is not evident at the current scale of drilling. Grade elevation is localised around the fault.
Dimensions	<ul style="list-style-type: none"> <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i> 	<ul style="list-style-type: none"> The Mauretania Mineral Resource has an approximate strike length of 140m and width of up to 45m and is defined 190m down dip within ironstone and alteration units. The mineralisation extends down to 140 mRL, which is 210m below surface.
Estimation and modelling techniques	<ul style="list-style-type: none"> <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> 	<p>Software used:</p> <ul style="list-style-type: none"> Leapfrog Geo – for wireframe modelling of geological units. Snowden Supervisor – for geostatistics, variography, kriging neighbourhood analysis (KNA) and block model validation. Datamine Studio RM – for drill hole validation, compositing, block modelling, estimation, classification, and reporting. <p>Estimation technique:</p> <ul style="list-style-type: none"> The alteration and ironstone lithology wireframes were modelled by implicit modelling using Leapfrog Software resulting in two ironstone pods within a northwest striking alteration halo. All wireframe solids were snapped to RC and diamond drillholes. An indicator approach was applied to the material within the alteration domain to separate out the low, medium, and high-grade sub-domains. The categorical indicator process is based on the inflection grade threshold exhibited by the data at 0.1 g/t gold for low to medium and a 5.0 g/t gold threshold for medium to high. Categorical variography returned a nugget of 28% and a maximum range of 90m by 70m by 30m. The categorical processing resulted in the blocks being divided into low and medium grade sub-domains using a 45% probability threshold; and a high-grade sub-domain using a 25% probability threshold. These blocks were then used to constrain grade estimation. Drillhole intercepts were composited downhole to 1m lengths and gold estimation was carried out using ordinary kriging with Dynamic Anisotropy (DA), with hard boundaries between the sub domains. DA allows the search ellipsoid to follow the vein reference plane to improve local estimation efficiency. Grade caps (top-cuts) were applied to the composites prior to estimation to reduce the influence of outliers: 140 g/t gold for the high-grade domain, 7 g/t gold for the medium-grade domain and 0.3 g/t gold for the low-grade domain. Gold variography was undertaken on each subdomain and gave a nugget effect representing between 26% and 32% of the total grade variability. A maximum range of 5 m by 46m by 29m was applied. Three search passes were used, with increasing search distances and decreasing minimum sample numbers. Bulk density was assigned to the block model based on weathering type and lithology. The applied density values were derived from downhole density test work that was undertaken in December 2021.

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> A parent block of 10m (Y) x 10m (X) x 5m (Z) with sub celling to 2.5m (Y) x 2.5m (X) x 1.25m (Z) was applied.
	<ul style="list-style-type: none"> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> 	<ul style="list-style-type: none"> There is no historical mining undertaken at the deposit to use in reconciliation. This is the first interpretation and Mineral Resource Estimate for the deposit and as such, there are no previous estimates and no alternative check estimates.
	<ul style="list-style-type: none"> <i>The assumptions made regarding recovery of by-products.</i> 	<ul style="list-style-type: none"> No by-product recovery has been assumed.
	<ul style="list-style-type: none"> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).</i> 	<ul style="list-style-type: none"> No other elements were estimated at this time, but it is known that copper is present.
	<ul style="list-style-type: none"> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> 	<ul style="list-style-type: none"> A parent block of 10 m (Y) x 10 m (X) x 5 m (Z) with sub celling to 2.5 m (Y) x 2.5 m (X) x 1.25 m (Z) was applied. This is based upon an average drillhole spacing of 20m x 20m.
	<ul style="list-style-type: none"> <i>Any assumptions behind modelling of selective mining units.</i> 	<ul style="list-style-type: none"> The selectivity implied by the model is considered to be commensurate with an open pit approach to mining.
	<ul style="list-style-type: none"> <i>Any assumptions about correlation between variables.</i> 	<ul style="list-style-type: none"> Only gold has been estimated.
	<ul style="list-style-type: none"> <i>Description of how the geological interpretation was used to control the resource estimates.</i> 	<ul style="list-style-type: none"> The geological interpretation of the alteration halo was used to control the estimation. It was used to guide the orientation and shape of the mineralised domains and subdomains. These were then used as boundaries for the grade estimation, using the trend of the mineralisation and geological units to control the search ellipse direction and the major controls on the distribution of grade.
	<ul style="list-style-type: none"> <i>Discussion of basis for using or not using grade cutting or capping.</i> 	<ul style="list-style-type: none"> Top cuts were used during grade estimation to control the influence of high-grade outliers. Top cuts, where appropriate, were applied on an individual sub-domain basis.
	<ul style="list-style-type: none"> <i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> Validation checks of the estimate occurred by way of global and local statistical comparison, comparison of domain wireframe volume versus the volume of the block model, comparison of the model average grade (and general statistics) and the input declustered sample grade average by domain, swath plots by northing, easting and elevation, visual checking of drill data versus model data and comparison of global statistics for check estimates. No prior mining has occurred; thus, no reconciliation data is available.
Moisture	<ul style="list-style-type: none"> <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> The tonnage was estimated on a dry basis.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> A nominal lower cut-off grade of 0.1 g/t gold, with a 45% probability threshold was utilised for discriminating the low and medium-grade sub domains within the alteration domain. A nominal lower cut-off grade of 5.0 g/t gold, with a 25% probability threshold, was utilised for discriminating the high grade from the medium-grade sub domains. For reporting of the Mineral Resource, a cut-off grade of 0.5 g/t was applied and only mineralisation above an elevation of 190 mRL was declared.
Mining factors or assumptions	<ul style="list-style-type: none"> <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable,</i> 	<ul style="list-style-type: none"> The Mineral Resource is constrained to a maximum vertical depth of 190m below surface to satisfy the

Criteria	JORC Code Explanation	Commentary
	<i>external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	reasonable prospect of eventual economic extraction criteria.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> An approximate metallurgical recovery of 90% has been assumed in determining Reasonable Prospects of Eventual Economic Extraction, based on historical production data at the nearby Chariot gold mine, which is a similar mineralisation style. The Chariot mine was in recent production and treated ore in a conventional CIP gold plant at Warrego. There is extensive data supporting gold extraction using conventional processes.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> The deposit lies within granted Mining Lease ML32214. The Mauretania Project is located in a mature gold mining district, with mining in the area occurring over the past 100 years. There are no major water courses in the project area, although ephemeral streams cut across the project. The current assumption of waste rock being of no environmental significance is based on local experience in numerous greenschist facies gold deposits which contain significant carbonate mineralogy as part of the mineralisation and waste rock. The mineralisation is a low sulphidation type with limited acid forming potential. It is assumed that surface waste dumps will be used to store waste material and conventional storage facilities will be used for the process plant tailings.
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size, and representativeness of the samples. 	<ul style="list-style-type: none"> Bulk density was assigned to the block model based on weathering type and lithology. Determinations of density were carried out on the diamond drill core using the water immersion method. Density probe surveys were conducted in December 2021 on eight drillholes to give a suite of measurements through mineralisation and non-mineralised zones. Measurements were taken downhole at 1m intervals, with data collected for gamma, calliper, and formation density. The results from the two methods were then compared, to choose the bulk density value to apply in the final model. Bulk density (SG) was assigned to the block model based on weathering type and lithology. The values assigned are similar to those used in other MREs in the Tennant Creek region.
	<ul style="list-style-type: none"> The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, 	<ul style="list-style-type: none"> Density has been assigned in both the ironstone and alteration zones and on both mineralised and barren zones.

Criteria	JORC Code Explanation	Commentary
	<p><i>etc), moisture and differences between rock and alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<ul style="list-style-type: none"> Samples taken were coded by lithology and weathering. Averages were derived within each weathering zone and this value then used to code the block model for the oxide and transition and fresh zones. Results of the downhole density test work correlated well with the samples tested by Archimedean determinations.
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> 	<ul style="list-style-type: none"> The Mineral Resource has been constrained to 190mRL which is a maximum vertical depth of 140m below surface. Blocks have been classified as Indicated and Inferred based on drill hole spacing, geological continuity and estimation quality parameters. The Indicated Mineral Resource is supported by drilling with nominal 20m x 8m spacing, and predominately informed by the first-grade estimation pass. Geological continuity is demonstrated by the geological interpretation from drilling. Geostatistical confidence is demonstrated by a slope of regression above 0.4. The Inferred Mineral Resource was defined where there was a low to moderate level of geological confidence in geometry, there was still continuity of grade, and drill spacing was greater than 20 m. Inferred blocks are informed by the first and second estimation pass. Geological support was defined to a lower level of confidence in terms of continuity and extent. Geostatistical confidence is demonstrated by a slope of regression less than 0.4. Unclassified mineralisation has not been included in this Mineral Resource. This is the material that has no estimated grades above 0.5 g/t gold, and which is poorly supported by geology and drilling.
	<ul style="list-style-type: none"> <i>Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity, and distribution of the data).</i> 	<ul style="list-style-type: none"> Grade reliability, volume uncertainty and assay uncertainty have all been considered in the assignment of Mineral Resource categories. Consideration has been given to all relevant factors in the classification of the Mineral Resource.
	<ul style="list-style-type: none"> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> The classification reflects the Competent Person's view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> No external audits have been conducted on the Mineral Resource estimate. Optiro undertakes rigorous internal peer reviews during the compilation of the Mineral Resource model and reporting.
	<ul style="list-style-type: none"> <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i> 	<ul style="list-style-type: none"> With further drilling, it is expected that there will be variances to the tonnage, grade, and metal of the deposit. The Competent Person expects that these variances will not impact on the economic extraction of the deposit. One of the main issues is continuity and thickness variations, and these will continue to be a key focus as the deposit is drilled and modelling is refined. Locally there will be variable outcomes as grade control progresses. The Competent Person considers the Mineral Resource categories to be appropriate with respect to these risks. It is the Competent Person's view that this Mineral Resource estimate is appropriate to the type of deposit

Criteria	JORC Code Explanation	Commentary
		and proposed mining style. The Tennant Creek ironstone-hosted style of mineralisation is well understood and has a substantial mining history to underpin the decisions made in preparing this Mineral Resource estimate.
	<ul style="list-style-type: none"> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> 	<ul style="list-style-type: none"> The Mineral Resource classification is appropriate at the global scale.
	<ul style="list-style-type: none"> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> There is no prior production at the deposit and, as such, there can be no reconciliation to verify the Mineral Resource.