

13 February 2023

ASX Release

MAIDEN JORC RESOURCE AT CALARIE PROJECT

HIGHLIGHTS

- An Inferred Mineral Resource Estimate (JORC 2012) has been completed for the Calarie deposit of 0.87 million tonnes at 1.83 g/t gold, containing 50,796 ounces of gold.
- Resource estimate is reported at a 0.3g/t gold cutoff.
- Mineralisation remains open along strike and at depth.
- Exploration now focussing northeast along strike of the defined Resource at Calarie targeting the sheared (Parkes Fault) contact between the Cotton Formation sediments and the North Parkes Volcanic Group.

Calarie

Orange Minerals NL (ASX: OMX) ("Orange" or "the Company") is pleased to announce a maiden JORC 2012 Inferred Mineral Resource Estimate (MRE) for the Calarie Project in NSW.

Following recent drill programmes completed by Orange at Calarie, a maiden MRE has been estimated and reported in accordance with the JORC Code (2012). Orange Minerals (Orange or "the Client") commissioned Geowiz Consulting (Geowiz) to prepare the MRE for the Calarie Gold Deposit, located near Forbes in central NSW. The Calarie MRE was estimated using ordinary kriging for Au. The MRE is reported above a cut-off grade of 0.3 g/t Au within an optimised open pit shell. The MRE has been classified as Inferred only in accordance with the JORC Code¹ and is therefore suitable for public release.

Table 1 - Calarie MRE by JORC classification – January 2023

(Au 0.3 ppm cut-off)

Classification	Tonnes (Mt)	Au (ppm)	Au (Ozs)
Inferred	0.87	1.83	50,796

A total of 154 Reverse Circulation (RC) drillholes (11,926m) and 32 Diamond (DDH) drillholes (4,764) were used to define the Calarie deposit for a total of 16,690m of drilling.

A pit optimisation was run using a Au price of AUD\$2,700 per ounce. The block model was reported inside the pit shell to determine that blocks >0.3 ppm Au have reasonable prospects of future economic extraction by surface mining. The MRE has been classified as Inferred based on the guidelines specified in the JORC Code. The deposit appears to be of sufficient grade, quantity, and coherence to have reasonable prospects for eventual economic extraction. Ground exploration activities are currently focussing to the northeast along strike of the ML at Calarie targeting the sheared (Parkes Fault) contact between the Late Ordovician to Early Silurian Cotton Formation sediments and the North Parkes Volcanic Group.

¹ Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).



Background

The Calarie is a mining lease (ML739) and two exploration licences (EL8555, EL8580) that form a 70% earn-in joint venture with Godolphin Resources Limited (see Figure 1). The project area is located immediately north of Forbes in Central NSW. The Calarie area was an underground gold mine that produced approximately 39,000oz at 22g/t gold from 1896 to 1908. In addition to historical exploration work including drilling, two drill programmes have been completed by Orange since listing in December 2021. An RC drill programme of ten holes totalling 1,044 metres was completed in December 2021, and a diamond drill programme consisting of five holes totalling 1,170 metres was completed in September 2022.

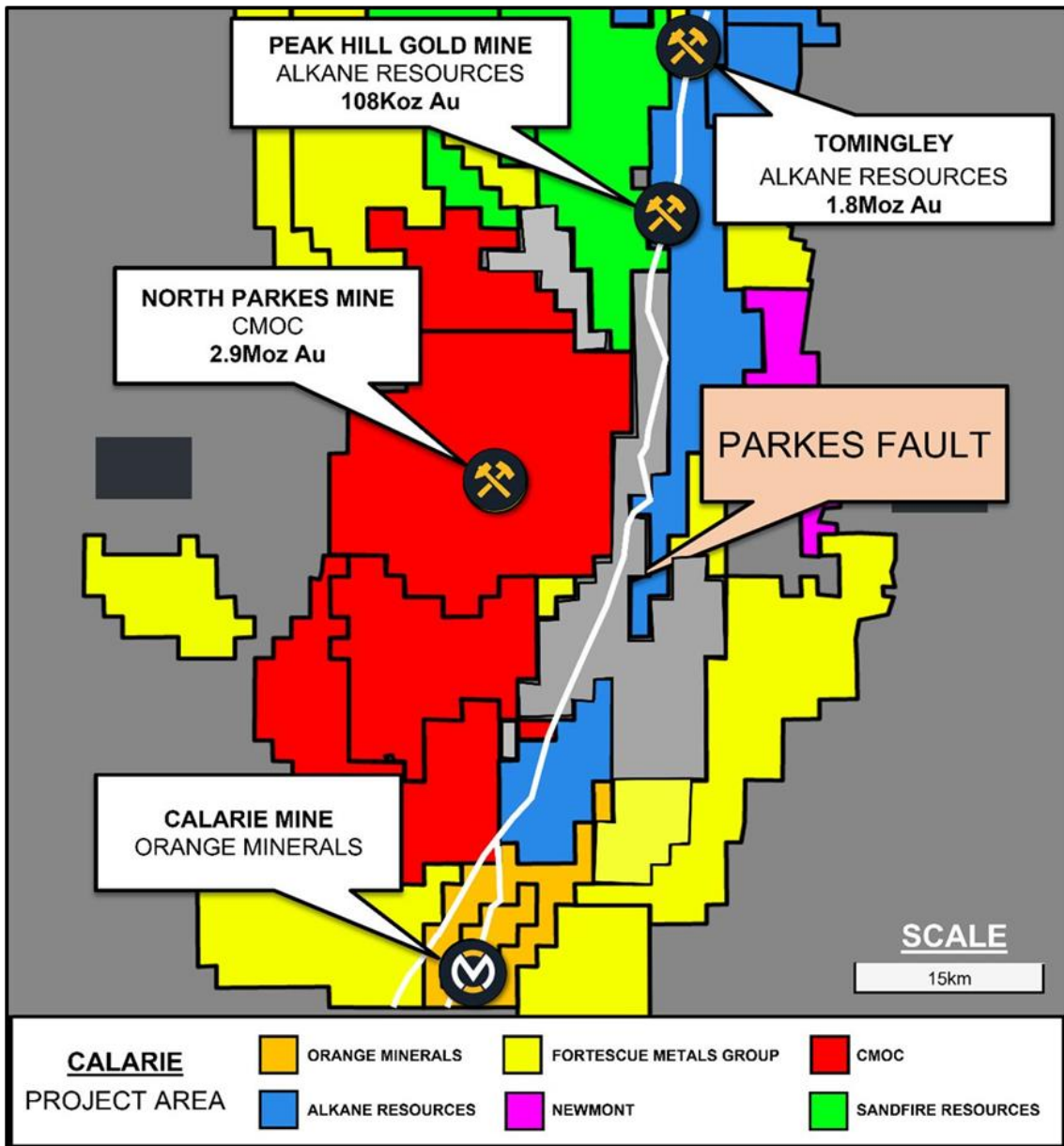


Figure 1 – Map of Calarie- Project Region.



Geology

The Calarie Project area is dominated by two groups of rocks (Ordivician Volcanics and Silurian Volcanics and sediments). The Ordivician group consists of the Junee – Narromine andesitic volcanic arc that includes the Parkes and Nash Hill volcanics. The Ordivician - Silurian sediment sequence east of the volcanic arc include linear belts of intermediate volcanics including the Daroobalgie Volcanics Cotton Formation and Calarie Sandstone. Gold mineralisation at the Calarie Mine is structurally controlled along the extensive NNE trending Parkes – Forbes belt or Parkes Thrust. The deposits are hosted in strongly deformed linear belts of Ordivician volcanics and predominantly occur close to the volcanic / sediment contact. Historical drilling has shown that the western contact of the Daroobalgie Volcanics dips at 70 degrees to the west, and is strongly altered and mineralised. Significant operating mines and past producers include the Tomingley Mine (Orogenic), London – Victoria Mine (Orogenic) and Peak Hill (High Sulphidation – Epithermal).

Drill sampling and assays

A total of 154 Reverse Circulation (RC) drillholes (11,926m) and 32 Diamond (DDH) drillholes (4,764) were used to define the Calarie deposit for a total of 16,690m of drilling. The deposit was sampled by drilling at nominal 20m spacing on 25m northwest-southeast oriented sections.

Prior to wireframing, all available data were transformed to a local grid to permit working in an orthogonal space. This allows for better block size selection to both maintain volume resolution on the defined mineralisation wireframes and allow for suitably robust estimates of grade.

Holes were generally angled at -60° towards the south-east (120°) with dip angles set to optimally intersect the mineralised horizons, which dip at approximately 65°-70° to the north-west (300°).

Table 2 – Drillhole Summary Statistics			
Company	Hole Type	No. Holes	Metres
Historical	DDH	27	3,582
Historical	RC	144	10,882
Orange	DDH	5	1,169
Orange	RC	10	1,044
Total		186	16,677

The final set of drill holes used in the 2022 MRE are shown in Figure 2. The data considered for use in the MRE was validated by both Orange and Geowiz and is considered suitably robust for use in Mineral Resource estimation.



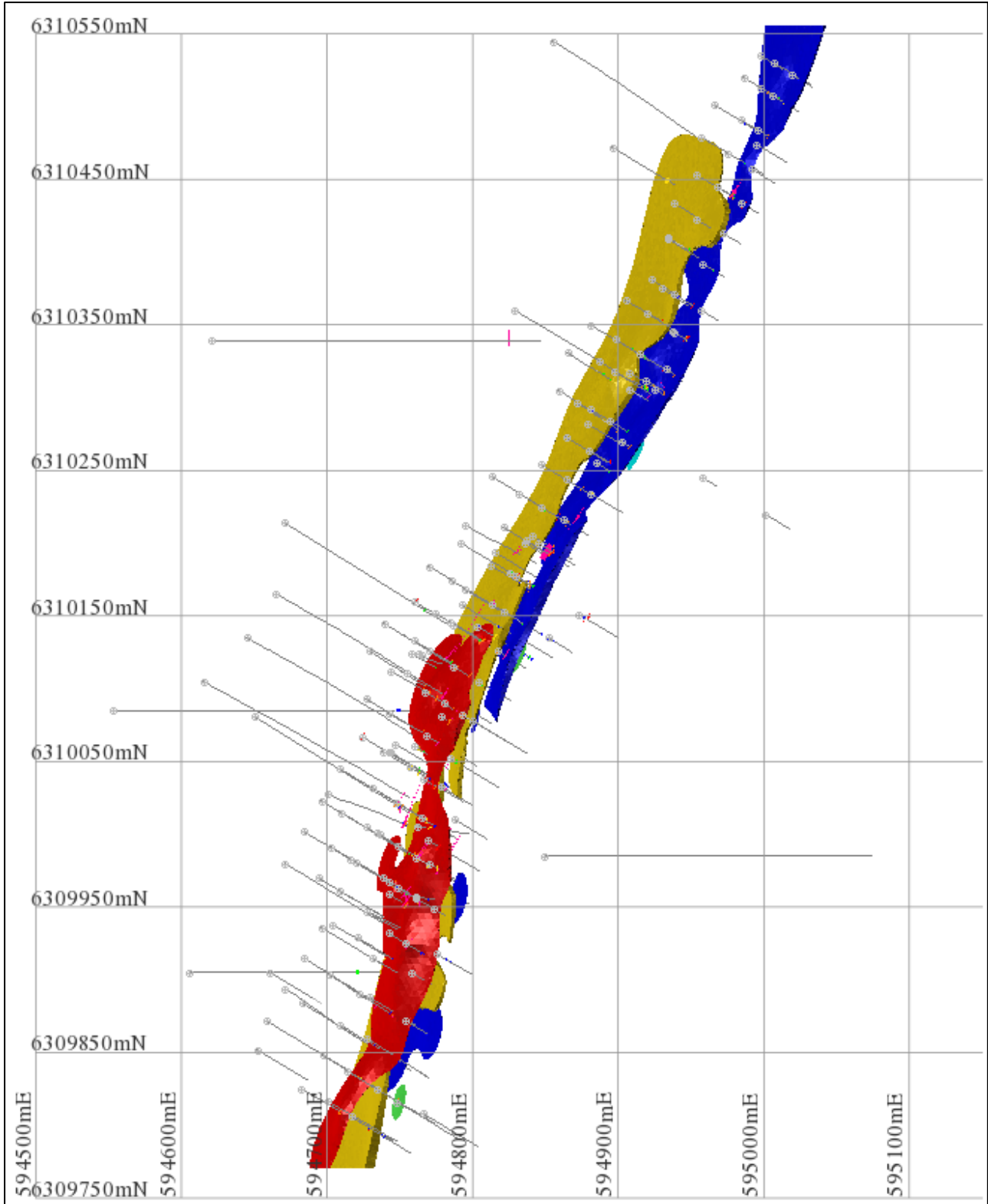


Figure 2 - Plan view showing drill holes with Au (ppm) histogram and mineralized zone wireframes



Resource Estimation

Mineralised intersections for the two main zones were manually coded in each drill hole using a nominal 0.3 ppm Au cut-off. The coded mineralised intersections were loaded into Leapfrog software and vein geological models were generated from the coded intervals for the two interpreted zones. Domain wireframes were extracted from the Leapfrog model and exported into Surpac™ V6.6 software where they were used to constrain the resource modelling.

A block model was set up with a parent cell size 5m (E) x 10m (N) x 5m (RL) with standard sub-celling to 1.25m (E) x 2.5m (N) x 1.25m (RL) to maintain the resolution of the mineralised domains. The 5m Easting dimension was used to reflect the geometry and orientation of the domain wireframes. Samples composited to 1m length were used to interpolate Au into the block model using a dynamic anisotropy ordinary kriging interpolation method. All block modelling was completed using Surpac™ v6.6 software.

A Lerchs-Grossman pit optimisation was run using a Au price of AUD\$2,700 per ounce. The block model was reported inside the pit shell to determine that blocks >0.3 ppm Au have reasonable prospects of future economic extraction by surface mining.

Although there has been a considerable amount of drilling done to define the Calarie deposit, some of the historical RC drillholes appear to have been affected by smearing down the hole and there are a few cases where diamond twinning of the RC drill holes has not returned the same grades. For these reasons, the MRE has been classified as Inferred only based on the guidelines specified in the JORC Code.

The deposit appears to be of sufficient grade, quantity, and coherence to have reasonable prospects for eventual economic extraction.

Results

The calculated inferred Resource is shown in Table 3 below, and the grade Resource curves in Figure 3.

Table 3 - Calarie MRE by JORC classification – January 2022			
(Au 0.3 ppm cut-off)			
Classification	Tonnes (Mt)	Au (ppm)	Au (Ozs)
Inferred	0.87	1.83	50,796



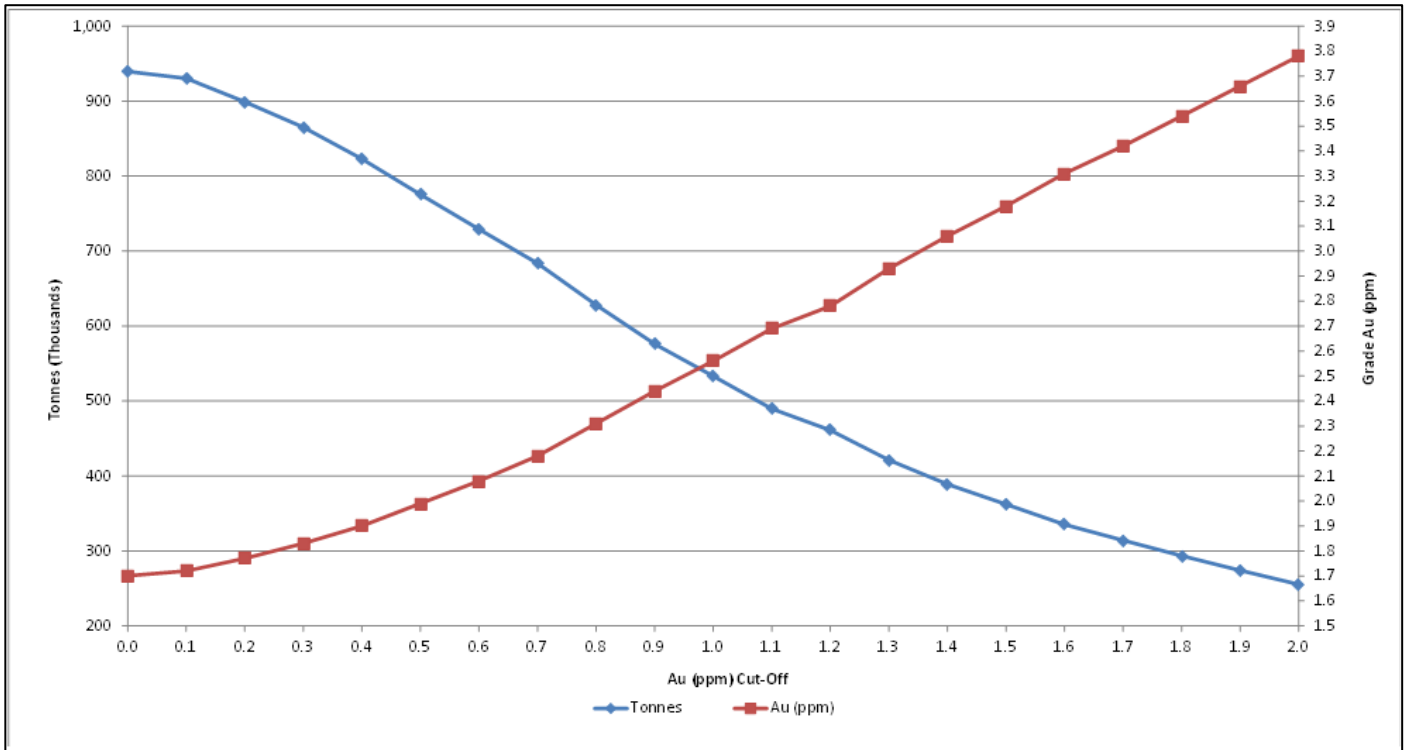


Figure 3 - Calarie - Indicative Grade Resource Curve

A long section grade-thickness plot for domain 1 showing Au (ppm) * Thickness (m) and the optimized pit outline is shown in Figure and a plan view in Figure

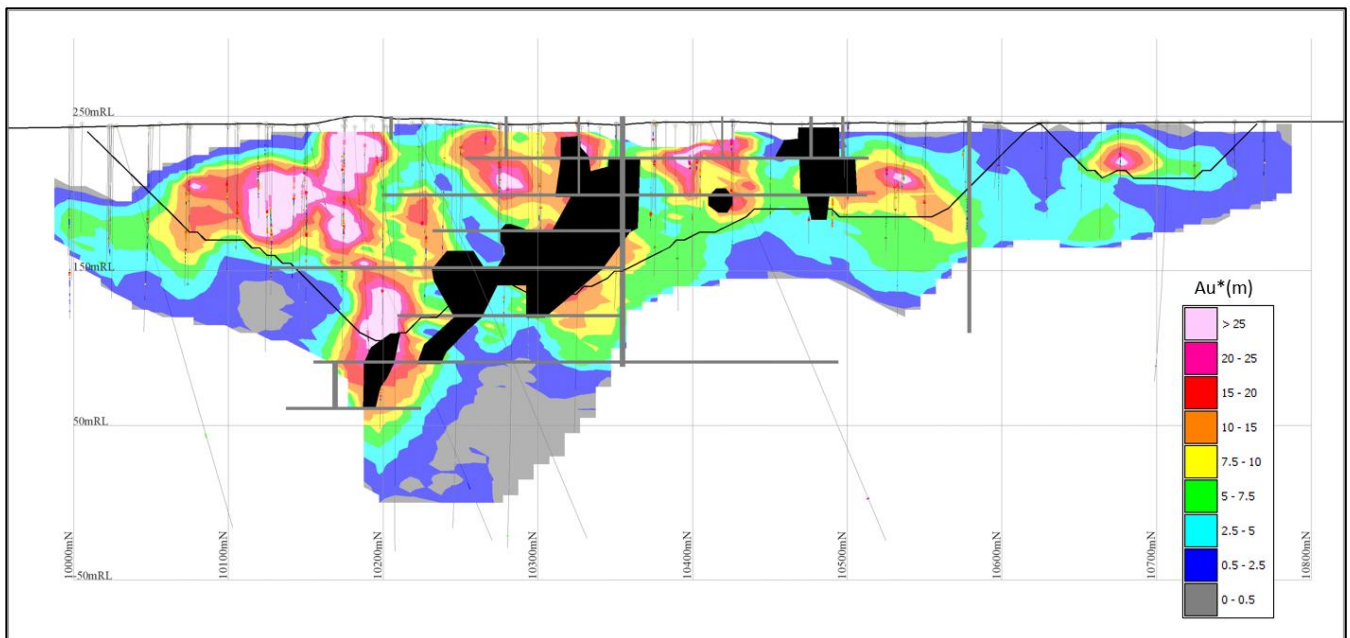


Figure 4 - Domain 300 long section grade-thickness plot



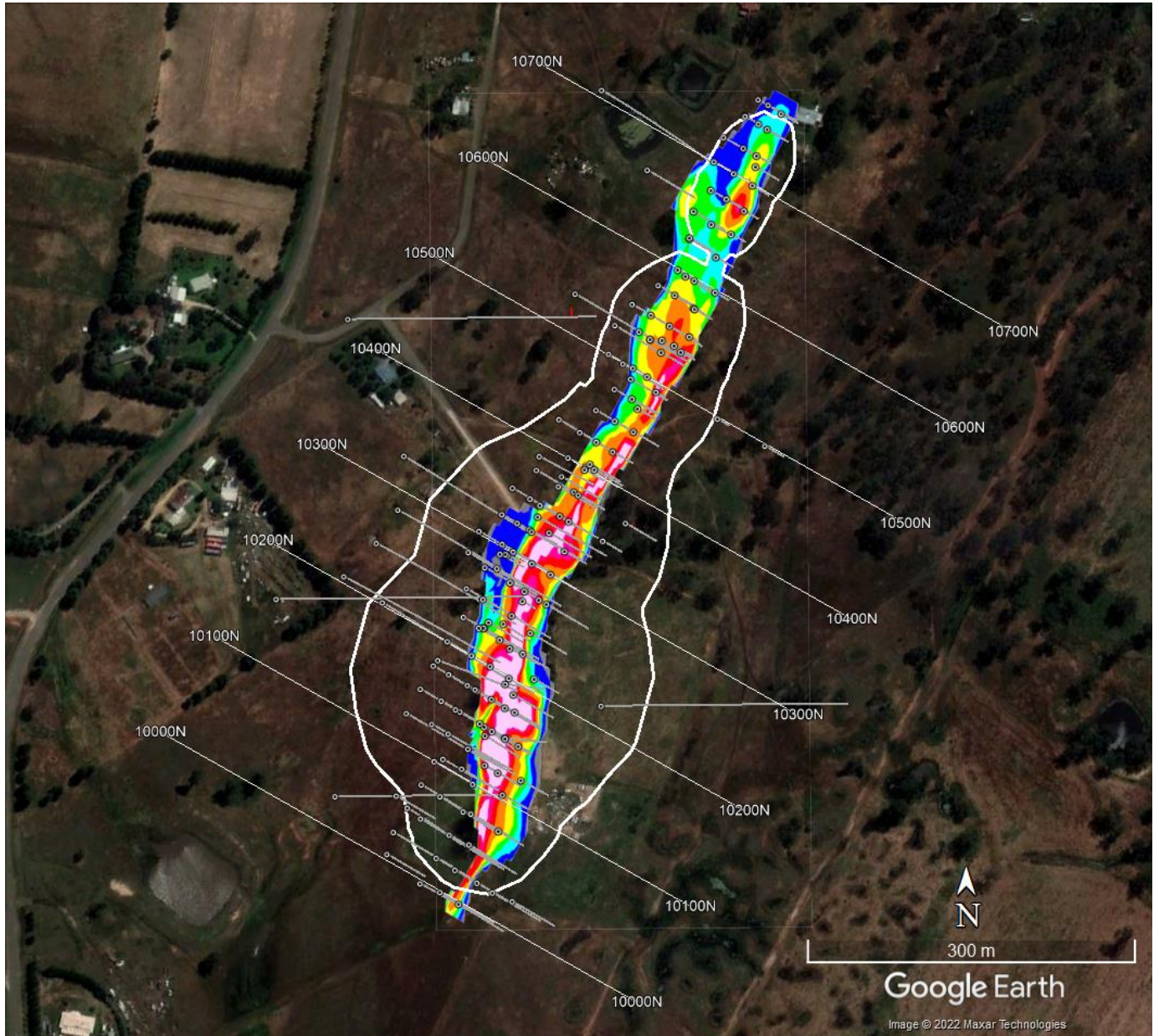


Figure 5 - Plan View Google Earth image - Domain 300 grade-thickness plot with Optimised Pit Outline



This ASX announcement has been authorised for release by the Board of Orange Minerals NL.

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About Orange Minerals NL

Orange Resources NL is an exploration company listed on the ASX (ASX: OMX) with Australian-based projects in the Lachlan Fold Belt (LFB) of NSW and Eastern Gold Fields of WA, both world-class mineral provinces. The LFB of NSW hosts major mines including Cadia/Ridgeway, North Parkes and Lake Cowal and the tenements in the Eastern Goldfields of WA are close to the Daisy Milano gold mine and Black Cat Resources Majestic Project. The Orange Minerals exploration team plan to rapidly explore its tenement packages with aggressive exploration programmes at its key properties. The company is currently focussing on the Calarie & Wisemans Creek Projects in NSW and the Majestic/Kurnalpi tenements in WA.

For further information, please contact: David Greenwood

A: Level 2, 7 Havelock Street West Perth, WA 6005
W: www.orangeminerals.com.au
E: contact@orangeminerals.com.au
T: +61 (08) 6102 2039

Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Phil Shields, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Shields is an employee of Orange Minerals NL and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Shields consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to the Calarie Mineral Resource Estimate has been compiled by Mr. Ross Corben who is an independent consultant commissioned by Orange Minerals. Mr. Corben is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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). Mr. Corben has reviewed the contents of this news release and consents to the inclusion in this announcement of exploration results in the form and context in which they appear.

Forward Statement

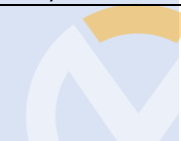
This release includes forward – looking statements which involve a number of risks and uncertainties. These forward looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and are based on current assumptions. Should one or more of the uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs or opinions should change.



APPENDIX A: JORC Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary																											
Sampling Techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g., cut channels, random chips or specific specialized 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 this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverized to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. 	<p>A total of 186 holes (16,690m) have been used for the Calarie Resource estimation as follows.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #e0e0e0;">Company</th> <th style="background-color: #e0e0e0;">Hole Type</th> <th style="background-color: #e0e0e0;">No. of Holes</th> <th style="background-color: #e0e0e0;">Metres</th> </tr> </thead> <tbody> <tr> <td>Historical</td> <td>Diamond</td> <td>27</td> <td>3,582</td> </tr> <tr> <td>Historical</td> <td>Percussion / RC</td> <td>144</td> <td>10,882</td> </tr> <tr> <td>Orange Minerals</td> <td>Diamond</td> <td>5</td> <td>1,169</td> </tr> <tr> <td>Orange Minerals</td> <td>RC</td> <td>10</td> <td>1,044</td> </tr> <tr> <td>Total</td> <td></td> <td>186</td> <td>16,677</td> </tr> </tbody> </table> <p>The resource is based on down hole samples obtained from the above holes. Earliest drilling on grid sections was successful in testing the geochemical anomalism above the old workings. Recent drilling has tested the mineralised zone around and below the old workings. Reverse Circulation chips were collected through a cyclone and bagged in 1m intervals weighing approximately 20 – 30kg. Individual samples were collected from the riffle splitter (2 – 3kg) in calico bags for analysis. Sampling of diamond holes was based on geological interpretation and a standard 1m was used outside areas of mineralisation. Core was cut in half and one half was sent for assaying and the other half stored for reference. Industrial standard practices were conducted to ensure a representative sample was obtained. The first drilling at Calarie was conducted by Lachlan Valley Minerals P/L in 1979 with 6 diamond holes. There is a good density of drilling within the resource area down to at least 100m below surface, with holes on a grid of 20m along section and 25 between sections. Drill spacing is considered adequate for the geological complexity of the deposit.</p>				Company	Hole Type	No. of Holes	Metres	Historical	Diamond	27	3,582	Historical	Percussion / RC	144	10,882	Orange Minerals	Diamond	5	1,169	Orange Minerals	RC	10	1,044	Total		186	16,677
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Drilling Techniques	<ul style="list-style-type: none"> Drill type (e.g., core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple 	<p>Prior to 2021, numerous drill programs have been conducted by various companies, including Percussion, Reverse Circulation and Diamond. Exploration has been historically conducted by BHP / Newcrest (1988 – 1992), Hargraves (1993 – 1997), Tri Origin NL (1997 – 2002), Golden Cross Resources (2003 – 2007),</p>																											



	<p>or standard tube, depth of diamond tails, face sampling bit or other type, whether core is orientated and if so, by what method, etc.).</p>	<p>Tri AusMin / Goodrich Resources (2008 – current). Tri AusMin is a fully owned subsidiary of Godolphin Resources Limited. Orange Minerals has a joint venture with Godolphin Resources. A Reflex Act 3 digital core orientation tool was used for core orientation in the 2022 diamond program. Previous diamond programs used a downhole spear for orientating core.</p>
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Criteria	JORC Code Explanation	Commentary
Drilling Sampling Recovery	<ul style="list-style-type: none"> Method of recording and accessing core and chip sample recoveries and results accessed. 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. 	<p>Core recoveries have not been recorded on a sample-by-sample basis for historic drill programs, however a good recovery database is provided by recoveries recorded in the geological logs. Significant core loss was not present in the majority of holes, particularly in the fresh, more competent rock. Some core loss was attributed to old workings and shears / faults and was recorded and allowed for in the resource. Recovery of drill core was measured by restoring the core intervals in the trays and matching it to the drill run length. RC chips were weighed, and the weight recorded. Low weight samples were assigned a recovery factor in the records.</p>
Logging	<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. 	<p>The geological logging of chip and core samples has been undertaken throughout all the historical drill programs. Downhole geology was generally logged onto paper proforma sheets in the early programs. Hand logs have been scanned and included with digital logs in the database. Lithology, alteration, and oxidation were used in the interpolation of the mineralised zone. Geotechnical logging has been conducted by Orange Minerals in the recent diamond program. Geological logs exist for at least 95% of the holes and are stored in digital format. The Competent Person considers the quality of the logging for both historical and recent drill programs to be appropriate for the style of mineralisation and sufficient for subsequent mineral resource estimates.</p>
Sub Sampling techniques and sample preparation	<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 	<p>RC sampling, generally dry, was completed on 1m intervals, collected directly into plastic bags from the rig cyclone. A 2 – 3kg sample was taken by a spear in the historical programs and riffle split in recent programs, bagged and sent for analysis. Wet samples (usually when workings were intersected) were mixed and quartered manually. The large volume of sample and the RC methodology was industry standard to achieve representivity. The hole was cleaned with air</p>



	<p><i>appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> • <i>Quality control procedures adopted for all sub sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate / second half sampling.</i> 	<p>between runs, the cyclone cleaned regularly, and PVC collar casing used to minimize contamination.</p> <p>For diamond drilling, sample intervals were based on geological interpretation and a standard 1m was used outside mineralised intervals. Generally, only the shear zone and the bottom of the hole was sampled. Core was cut in half with either a diamond saw or more recently with an Almonte automatic saw. Core recovery from the diamond holes was good with competent ground throughout (including the main shear). The main core loss was attributed to old workings. Half core was bagged and dispatched for assaying and the other half retained as reference.</p> <p>Field duplicates were collected during most of the drill programs. The sample sizes are appropriate to the grain size of the material being sampled.</p>
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Criteria	JORC Code Explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<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, calibration factors applied and their derivation, etc.</i> 	<p>All historical assay procedures were industry standard and only reputable accredited laboratories where used. Procedures followed are considered to have built a good quality database for Calarie. Gold was assayed by fire assay (30g aliquot) and Atomic absorption finish for all programs. Sub samples were also assayed for Ag, Cu, Pb and Zn using either aqua regia or mixed acid digest followed by AA. Recent RC drilling samples by Orange Minerals were sent to Nagrom (Perth) and diamond samples sent to Bureau Veritas (Adelaide). Field analyses have not been used by Orange Minerals. QC certificates of analysis are held from the laboratory in respect of regular internal check assays of standards, blanks and internal duplicates from pulps of the original samples. Random checks give evidence of satisfactory procedures. 1:20 samples were analysed in duplicate. Blanks and standard reference material were inserted to gauge assaying accuracy. Recent samples were tested for Magnetic Susceptibility.</p>
<p>Verification of sampling and assaying</p>	<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> 	<p>Logged drillholes are reviewed by either a Senior geologist or Exploration Manager.</p> <p>The verification of significant intersections has been reviewed by an independent consultant from Odessa Resources Pty Ltd.</p> <p>Orange Minerals uses Rock Solid as a consulting database management for all Calarie drilling data. Validation checks on the collar, survey and assay data tables has been conducted and any errors rectified.</p>



Criteria	JORC Code Explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 structure is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<p>The mineralisation is hosted in the Parkes Fault, which dips at 70° to the west. The orientation of the drill holes is generally orthogonal to the strike of mineralisation.</p> <p>The Competent Person considers the orientation of drillholes with respect to the attitude of the lithologies and/or structures hosting mineralisation is sufficient to support the reporting of a Mineral Resource estimate.</p> <p>No suspected bias is likely as a result of the pattern of intersecting angles.</p>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security 	<p>For all programs care has been taken to ensure standard procedures for sampling processing, and each past drilling program has recorded its procedures. These have been simple and industry standard to avoid sample bias.</p>
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<p>An independent geological report was conducted by SRK Consulting in October 2021 for the float of Orange Minerals Pty Ltd.</p>
Location of data points	<ul style="list-style-type: none"> 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 accuracy of topographic control. 	<p>Historical holes were sited relative to a pegged tape and compass grid and then picked up by survey. Recent holes have been located using a DGPS. Orange Minerals uses a registered surveyor to pick up drillhole collars. Downhole surveys have been regularly taken every 30m downhole with a single and multishot cameras. Orange Minerals uses a downhole gyroscope to take shots every 6m down the hole.</p> <p>All historical data has been converted to MGA Zone 55 (GDA94) grid.</p>
Data spacing and distribution	<ul style="list-style-type: none"> 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 classification applied. 	<p>The previous drillhole spacing at Calarie was approximately 25m along strike and 20m on section and is considered sufficient to understand the spatial distribution of mineralisation for conversion to a Mineral Resource.</p> <p>Historic sampling was selective and targeted the Parkes Fault and adjacent Daroobalgie Andesite. Sampling is complete through the mineralised zone outlined in the resource estimate.</p> <p>The infill drilling by Orange Minerals has endeavored to increase confidence in estimation work.</p>



Section 2: Reporting of Exploration Results

(Criteria listed in the previous section also apply to this section)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<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 license to operate in the area. 	<p>The Calarie project area is covered by three tenements (EL8555, EL8580 and ML739) with an overall area of 135km². The tenements are located directly to the north of the township of Forbes.</p> <p>Calarie is subject to a Farm In and Joint Venture with Godolphin Resources Ltd to earn up to a 70% interest in EL8555, EL8580 and ML739.</p> <p>All tenements are in good standing.</p> <p>The project area covers both Crown Land and Private properties. Access agreements are in place for the area covered by the resource.</p>



Criteria	JORC Code Explanation	Commentary
<p>Exploration done by other parties.</p>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<p>* <u>Lachlan Valley Minerals</u> ML739 was originally granted in 1979. In 1980, six diamond holes (468.6m) were drilled confirming shallow economic mineralisation. Sampling of the tailings dump returned 5.1g/t Au (slimes) and 2.8g/t Au (sands). Small scale 600t/wk roaster and CIP plant constructed.</p> <p>* <u>BHP – Newcrest 1988 – 1991</u> ML739 was acquired and 4 PLAs are replaced with EL3425. Further 55 RC holes drilled (3584m). In 1989, a costean (80 x 25 x 4m) was excavated through the old Lachlan Mine Shaft for bulk sampling. Low grade gold was returned from the samples.</p> <p>* <u>Hargraves Resources 1994 - 1995</u> Limited ground magnetic survey was undertaken in ML739 to determine whether the prospective contact zone between the sediments and Andesite could be identified. Two programs of RC completed (28 holes for a total of 2353m) to test the potential for open cut mineralisation (no hole deeper than 72m from surface). A diamond hole (CARCD001 – 99m) was drilled to confirm results in nearby RC holes with good correlation. A third RC program was completed in 1995 (46 holes – 4049m). Drilling encountered several paleochannels – gold bearing in the upper and lower parts. In 1995, a 2D undiluted resource estimate (non JORC compliant) was calculated (0.5Mt at a grade between 2.5 and 3.0g/t Au).</p> <p>* <u>Tri Origin Resources 1998 – 2002</u> Soil sampling (592 samples), ground magnetics (100-line km) and IP (78 line km) geophysical surveys conducted. Nine-hole drill program (7 diamond – 2039.4m and 2 RC – 456m) completed.</p> <p>* <u>Golden Cross Resources 2003 - 2007</u> Relogging of Tri Origins diamond drill hole CALD005.</p> <p>* <u>TriAusMin Ltd 2008</u> Rehabilitation works on ML739</p> <p>* <u>Goodrich Resources Ltd – Kimberley Diamonds</u> Drilled two diamond holes at the Calarie Resource to test whether high grade mineralisation extended below the old mine workings.</p>



Criteria	JORC Code Explanation	Commentary																								
Geology	<ul style="list-style-type: none"> Deposit type, geological setting, and style of mineralisation. 	<p>At the Calarie mine, gold mineralisation occurs in the sheared contact (Parkes Fault) between the Late Ordovician to Early Silurian Cotton Formation and the Ordovician North Parkes Volcanic Group. The Cotton Formation consists of black mudstone, siltstone, and sandstone with minor calcareous units. A prominent laminated limestone is associated with the shear. Soft sediment deformation is common with mud breccias of black mudstone in fine grained siltstones. Orogenic structurally controlled mineralisation at Calarie consists of gold, pyrite, arsenopyrite and magnetite, associated with quartz and carbonate veins, stockworks and breccias. Sericite and silica alteration intensity, pyrite content and degree of fracturing of the sediments all increase towards the shear contact. On the footwall of the shear, the andesite is strongly porphyritic in plagioclase and less porphyritic in pyroxene and FeOx, with chlorite pseudomorphs after olivine. The andesite is strongly chlorite – sericite altered, increasing towards the shear.</p>																								
Drill hole information	<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. Easting and northing of the drill hole Elevation or RL of the drill hole collar Dip and azimuth of the hole Down hole length and interception depth Hole length 	<p>Drilling used in the resource estimate is tabulated below.</p> <table border="1"> <thead> <tr> <th>Company</th> <th>Hole Type</th> <th>No. Holes</th> <th>Metres</th> </tr> </thead> <tbody> <tr> <td>Historical</td> <td>DDH</td> <td>27</td> <td>3,582</td> </tr> <tr> <td>Historical</td> <td>RC</td> <td>144</td> <td>10,882</td> </tr> <tr> <td>Orange Minerals</td> <td>DDH</td> <td>5</td> <td>1,169</td> </tr> <tr> <td>Orange Minerals</td> <td>RC</td> <td>10</td> <td>1,044</td> </tr> <tr> <td>Total</td> <td></td> <td>186</td> <td>16,677</td> </tr> </tbody> </table>	Company	Hole Type	No. Holes	Metres	Historical	DDH	27	3,582	Historical	RC	144	10,882	Orange Minerals	DDH	5	1,169	Orange Minerals	RC	10	1,044	Total		186	16,677
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Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration results, weighting averaging techniques, maximum and / or minimum grade truncations and cut off grades are usually material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths are reported, there should be stated, and 	<p>No exploration results are reported in the announcement.</p>																								



	<p>some typical examples of such aggregations should be shown in detail.</p>	
<p>Relationship between mineralisation and intercept lengths</p>	<ul style="list-style-type: none"> • 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. 	<p>The mineralised zone dips steeply to the west. Drilling has almost exclusively been conducted from the west resulting in acceptable intersection angles with the mineralised units. The drill angles vary, but is generally a 60° inclination was used, resulting in mineralised intersections slightly longer than the true width. Interpretation of the mineralised units honour the true width.</p>

Criteria	JORC Code Explanation	Commentary
<p>Diagrams</p>	<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 the drill hole collar locations and appropriate sectional views. 	<p>Diagrams can be found in the body of the announcement.</p>
<p>Balanced reporting</p>	<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 Exploration results. 	<p>No exploration results are reported in the announcement</p>
<p>Other substantive exploration data</p>	<p>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.</p>	<p>No other substantive exploration data is available.</p>
<p>Further work</p>	<ul style="list-style-type: none"> • The nature and scale of planned further work (e.g., tests for lateral or depth extensions or large – scale step out drilling). Diagrams clearly 	<p>This report focuses on the initial resource report for the Calarie deposit. Orange Minerals will now focus on shallow mineralised targets along strike to the Bald Hill area. Geophysics will be used to target favourable structures,</p>



	<p><i>highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>along strike to the north of the current resource. The eastern contact of the Daroobalgie Andesite is a high priority target. A review of the Wattlegrove deposit to target extensions to the interpreted mineralised zone will also be undertaken.</p>
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Section 3: Estimation and Reporting of Mineral Resources

(Criteria listed in the previous section also apply to this section)

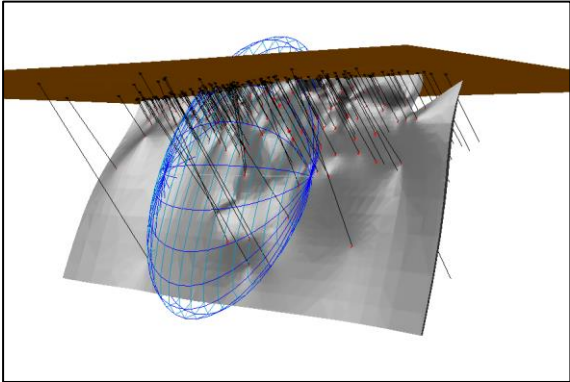
Criteria	JORC Code Explanation	Commentary
Database Integrity	<ul style="list-style-type: none"> Measures taken to ensure that the data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<p>A database verification exercise was carried in 2022. Collar, Survey and Assay files were checked against drill logs, assay certificates and sample submissions. A small number of errors were reported, and they were corrected. Orange Minerals uses Rock Solid Data Consultants to manage, store and validate data.</p> <p>Excel files were loaded into a Microsoft Access called "Calarie.accdb" which was then mapped as a Surpac drill hole database.</p> <p>Creation of a valid database in Surpac requires relational logic validation ensuring no from - to overlaps or data exceeding hole depth. Additionally, the drill hole database is validated for spurious survey deviations, missing survey / assay / lithology / collar data, before being finally validated visually before use in the mineral resource modelling.</p>
Site Visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits 	<p>The Competent Person has managed the recent Orange Minerals exploration on the Calarie leases and has visited the site on numerous occasions. The Competent Person has reviewed the sampling, analytical methods, QAQC, procedures, and the database.</p> <p>The Competent Person for the MRE has not visited the site.</p>



<p>Geological Interpretation</p>	<ul style="list-style-type: none"> Confidence in the geological interpretation of the mineral deposit Nature of the data used and of any assumptions made The effect of alternative interpretations The use of geology in guiding and controlling Mineral Resource estimate The factors affecting continuity (grade & geology) 	<p>The geological interpretation has a reasonable level of confidence. For areas where the level of confidence is uncertain due to lack of data or possible contamination from historical holes, this has been taken into consideration when assigning resource classification to the estimate.</p> <p>The gold mineralisation at Calarie is hosted within a regional fault structure on the contact between sediments and an Andesite unit. The zone is very distinctive (contains a laminated limestone with a strongly sheared HW and diffuse FW into the weathered Andesite). The host structure was intercepted in all holes. Gold is associated with thick quartz veins / breccias with higher grades within steep southerly plunging shoots. Historical underground workings (stopes and level development) defined the strike and depth limits of the mineralised zone. The workings were digitized in and modelled to deplete the resource.</p>
<p>Dimensions</p>	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length, plan width, and depth below surface to the upper and lower limits of the Mineral Resource 	<p>The Mineral Resource covers an 800m length of the Parkes Fault, which has been drilled on a 25m x 20m spacing. The model extends down to 225m below surface.</p>

Criteria	JORC Code Explanation	Commentary
<p>Estimation and Modelling Techniques</p>	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral 	<p>Geological modelling was completed using Leapfrog software and the wireframes were exported for use in Surpac 6.6.2 software.</p> <p>Drillholes were displayed on 25m spaced east – west cross sections in Surpac and a mineralised interval was selected using a nominal 0.3ppm Au cutoff. Mineralised zone wireframes were supplied by Orange Minerals (based on interpretation within the Parkes Fault) and used as a guide to the interpretation. Some contamination was identified in a few historical RC holes after drilling through stopes and these assays were excluded from the estimate.</p> <p>Two domains were identified – a main western hanging wall zone (300) that extends over 800m from section 10000N to section 10800N and a smaller footwall zone (200) that extends over 225m from 10000N to 10225N. Samples were composited to 1m within the interpreted domains.</p> <p>A top cut of 2.5 g/t Au was used for the Eastern footwall zone (200) and 20 g/t Au for the Western Hanging wall zone.</p> <p>The vein wireframes were then used to constrain the block model interpolation.</p>



	<p>Resource estimate takes appropriate account of such data</p> <ul style="list-style-type: none"> • The assumptions made regarding recovery of by-products • Estimation of deleterious elements or other non – grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation) • In the case of block model interpretation, the block size in relation to the average sample spacing and the search employed • Any assumptions behind modelling of selective mining units • Any assumptions about correlation between variables • Description of how the geological interpretation was used to control the resource estimates • Discussion of basis for using or not using grade cutting or capping • The process of validation, the checking process used, the comparison of model data to hole data and use of reconciliation data. 	<p>Block size of 5m (E) x 10m (N) x 5m (RI) with standard sub – celling to 1.25m (E) x 2.5m (N) x 1.25m (RI). The 5m Easting resolution was used to maintain the resolution of the majority of the domain wireframes.</p> <p>Due to the variation in strike and dip within the 2 mineralised zones, a dynamic anisotropy estimation (DAE) ordinary kriging was used to interpolate the Au grades. A default dip and dip azimuth of -70° dip towards 260° was applied to all blocks prior to assigning the local dip and dip direction angles to each block within the 2 domains to be estimated.</p> <p>Block model validation was completed by;</p> <ul style="list-style-type: none"> • Visual checks on screen in cross section and plan view to ensure block model grades honour the grade of sample composites. • Statistical comparison of sample and block grades • Swath plots to compare input and output grades in a semi local sense by northing  <p>Leapfrog generated domain 300 with search ellipse at -70° towards 260°</p>
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Criteria	JORC Code Explanation	Commentary
Moisture	<ul style="list-style-type: none"> • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content 	Tonnages are reported on a dry basis.
Cut-off Parameters	<ul style="list-style-type: none"> • The basis of the adopted cut off grade or quality parameters applied 	A Au cutoff of 0.3 ppm was used to report the MRE assuming that the deposit would be mined as an open pit.
Mining Factors or Assumptions	<ul style="list-style-type: none"> • Assumptions made regarding possible mining method, minimum mining dimensions and internal (or, if 	The resource was constrained within an optimised pit shell run using a AUD \$2,700 ounce gold price. Resources inside the pit shell were reported above a Au cutoff of 0.3ppm.



applicable, 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.

The optimised pit was run using a Lerch-Grossman optimiser with the following parameters.

- Au price of \$2,700 per oz - \$86.81 per gram
- 90% recoveries for Au
- Ore mining cost of \$2.80/t and waste mining cost of \$2.50/t
- Processing cost of \$25/t
- 45° pit slopes



Plan view - grade thickness plot with Optimised pit shell.

Criteria	JORC Code Explanation	Commentary
<p>Metallurgical Factors or Assumptions</p>	<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 	<p>Metallurgical work was conducted by Hargraves in 1997 on oxide and fresh drill core samples which reported recoveries from cyanide leaching of 94% for oxide ore and 89% for sulphide ore. Gravity separation showed 40% of Au reported to a concentrate.</p> <p>No metallurgical work has been carried out by Orange Minerals. A plan to auger drill the old tailings dam at the Lachlan Mine for future re-treatment is being considered.</p>



	<p><i>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.</i></p>	
<p>Environmental Factors or Assumptions</p>	<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. 	<p>There are no environmental impediments impact on the area. The Calarie project is not at a stage where infrastructure requirements can be finalized.</p>

Criteria	JORC Code Explanation	Commentary
Bulk Density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumption. If determined, the method used, 	Bulk density has been measured historically using the water displacement method.



	<p>whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</p> <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, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<p>Bulk density of 2.7 was used in the Mineral Resource estimate based on previous resource modelling completed by Hargraves in 1996.</p>
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resource into varying confidence categories. 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). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<p>Although the Calarie deposit has been drilled on 25m spaced cross sections with over 150 RC holes and 32 diamond holes, Orange Minerals has only drilled 10 RC holes and 5 diamond holes. Some of the RC holes appear to have been affected by smearing down the hole and there are a few cases where diamond holes close to RC holes have not returned the same grade of intersection. Due to this uncertainty and the limited drilling by Orange Minerals the Mineral Resource estimate has been classified as Inferred only.</p>
Audit or Reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates 	<p>No audit was completed. A review of the historical data was completed and deemed suitable for resource estimation work.</p>
Discussion of Relative Accuracy / Confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource using an approach or procedure deemed appropriate by the Competent Person. These statements of relative accuracy and confidence of the estimate should be compared with production data, where variable. 	<p>The Mineral Resource estimate has been classified in accordance with the JORC Code (2012 edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and 3 of this table.</p> <p>The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade.</p> <p>The deposit is not currently being mined.</p> <p>Previous resource estimates have been reported and are used as a reference. An unidentified independent consultant for Hargrave Resources estimated an in-pit inferred resource (Non JORC) of 531kt @ 3.0 g/t Au (Shaw Stockbroking Research, 1996).</p>



		Hellman & Schofield prepared a resource estimate (Non JORC) under the Tri Origin and Goodrich Resources joint project in 2012 of 500kt @ 2.2 g/t Au.
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