

20 March 2024 **ASX Release**

ASSAY RESULTS RECEIVED FROM PHASE 1 DRILL PROGRAMME AT EASTERN **GOLDFIELDS PROJECT**

HIGHLIGHTS

- Orange Minerals NL has received assay results from six reverse circulation (RC) drill holes (totalling 1,024 metres) completed in a Phase 1 reconnaissance drilling programme on four tenements at the Eastern Goldfields Project, WA.
- Gold was intersected in all RC drill holes.
- Significant gold assay results received include:
 - o 1m @ 0.56 g/t Au from 60m in OKRCD001
 - 2m @ 1.04 g/t Au from 162m in OKRCD002

and 1m @ 0.56 g/t Au from 179m

- 1m @ 0.84 g/t Au from 157m in OBRCD001
- 1m @ 0.99 g/t Au from 4m in OBRCD002
- 1m @ 0.71 g/t Au from 47m in OBRCD003
- Drill hole OHRC001 intersected a significant previously unknown felsic intrusive/mafic contact horizon below historic drilling, containing anomalous low-grade gold.
 - 42m @ 0.10 g/t Au from 73m in OHRCD001

Orange Minerals NL (ASX: OMX) ("Orange" or "the Company") is pleased to announce that it has received assay results from the Phase 1 RC drill programme (six drill holes totalling 1,024 metres) at the Eastern Gold Fields Project. Significant results are shown in Table 1 below.

Drilling programme background

The drill programme tested four key targets on OMX Majestic/Kurnalpi tenements in the Eastern Goldfields (Figure 1). An RC program of 1,024m was completed on tenements E 28/2294 (2 drill holes OKRC001 & OKRC002)), P 25/2268 (1 drill hole OHRC001), P 26/4415 (2 drill holes OBRC001 & OBRC002) & E 25/591 (1 drill hole OBRC003).





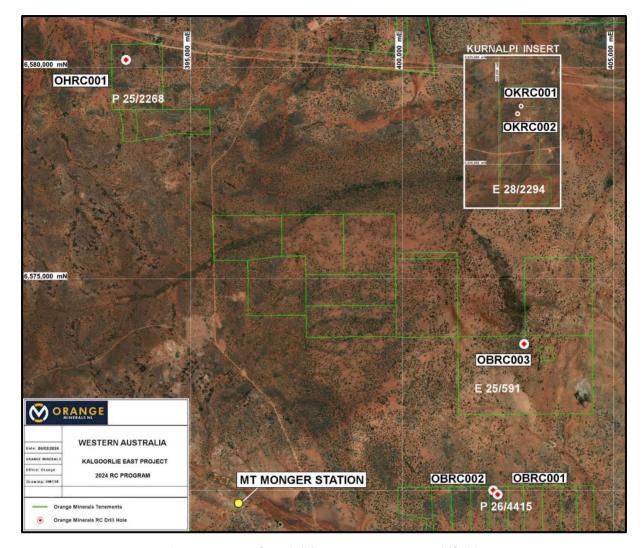


Figure 1: Map of RC drill locations - Eastern Goldfields

E28/2294: (Kurnalpi):

E 28/2294 is structurally dominated by a number of north-west and north trending fault / shear systems and folds. The project area is transected by the NW trending Avoca Shear that dips to the SW, with basalt, ultramafic, gabbro and sedimentary rocks on the western side. On the east, a NW trending sequence of komatiite and variolitic basalts dominate.

A total field magnetometric resistivity survey was conducted by North Limited in 2000 over the Success North area, covered by E 28/2294. A strong conductive feature is associated with increased alteration and cleavage development along the Success North Shear Zone that runs north-south along the edge of the eastern tenement boundary (Figure 2).

Two RC holes (OKRC001 and 2) for 400m were drilled on the Kurnalpi tenement to test below old workings on the Avoca Shear and target below historic drilling on the Success North Shear. OKRC002 tested the Success North Shear on drill line 6622400N and intersected the structure between 162 and 180m, containing 2m @ 1.04g/t Au from 162m (Figure 3).





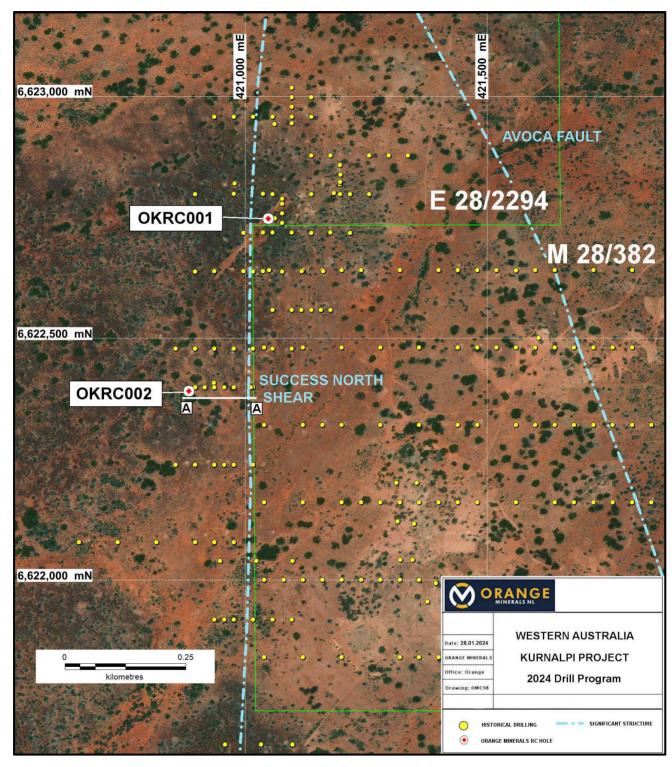


Figure 2: Kurnalpi E 28/2294 - RC hole locations.

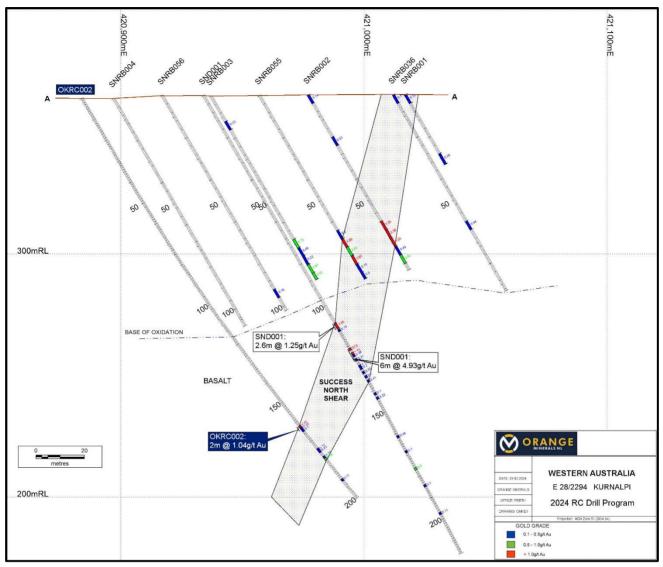


Figure 3: Kurnalpi drill section A (6622400N) - OKRC002.

P26/4415 (Burton Dam): The Burton Dam tenement is characterised by intermittent outcrop of felsic to intermediate volcanic rocks, particularly as low hills along the northern margin of the target area. The principal conceptual target is the intersection of NW and NE striking faults, interpreted from aeromagnetic imagery.

In an area previously untested by drilling, two RC holes (324m total) were drilled below multiple quartz veins associated with a NW-SE fault, and in an area where rock chip sampling in 2023 returned several significant gold results (see ASX announcement 23 April 2023). A repeating package of felsic intrusives and basalts were intersected in both holes. Best intersection was 1m @ 0.99g/t from 4m in OBRC002.

E25/591. Gold mineralisation in E 25/591 is related to quartz carbonate veins and disseminated pyrite in sheared basalt. Mineralisation is associated with a NW-SE trending fault, interpreted from aeromagnetic imagery. One drill hole was completed totalling 150 metres and intersected 1m @ 0.71g/t from 47m in OBRC003.



P25/2268: The geology of P 25/2268 is dominated by tholeiitic basaltic and gabbroic rocks of the Glandore mafic succession. The mafic package is restricted to the western limb of the Bulong Anticline and is cut by a Proterozoic dolerite dyke. Witt (2020a) and Isles and Wallace (2021) interpreted several N-S faults, based on interpretation of aeromagnetic data. NE trending faults have also been identified in the north of P 25/2268, based on pyroxenite and dolerite to the north and mainly basalt to the south. Previous RAB drilling on P 25/2268 indicated areas with low grade gold in the north of the tenement.

One RC hole (OHRC001) was completed (150m) on P25/2268 to test below a previous significant intercept in historical RAB drilling (06MJRB176 – 7m @ 5.34g/t Au from 42m to base of hole) - Figure 4. OHRC001 intersected alternating units of felsic intrusives and mafic basalts with strong shearing from 73m. The basalts were strongly chlorite altered and contained up to 5% disseminated pyrite. A broad low grade gold zone (42m @ 0.10g/t Au from 73m) was consistent with similar gold grades up dip in historic RAB holes (06MJRB115 – 26m @ 0.15g/t Au from 44m and 06MJRB – 18m @ 0.21g/t Au from 38m) see Figure 5.

Further work will include testing the mafic / felsic contacts for higher grade gold and exploring for shallow, high grade supergene gold around the lease, as indicated by the historic RAB hole 06MJRB176.

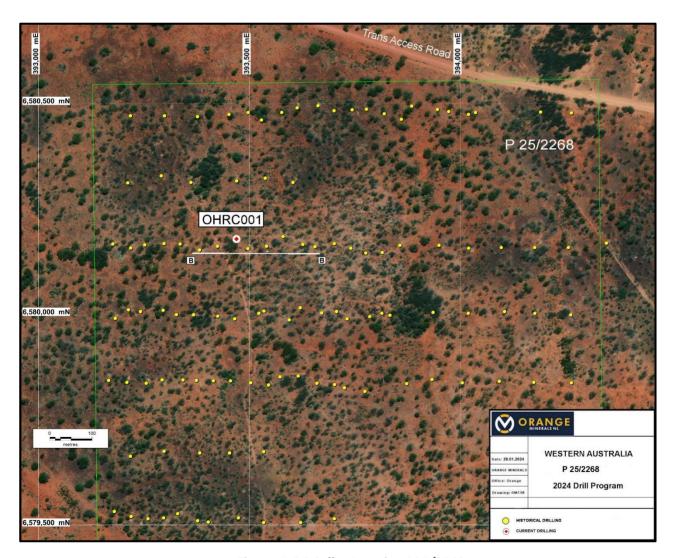


Figure 4: RC Collar Location P25/2268



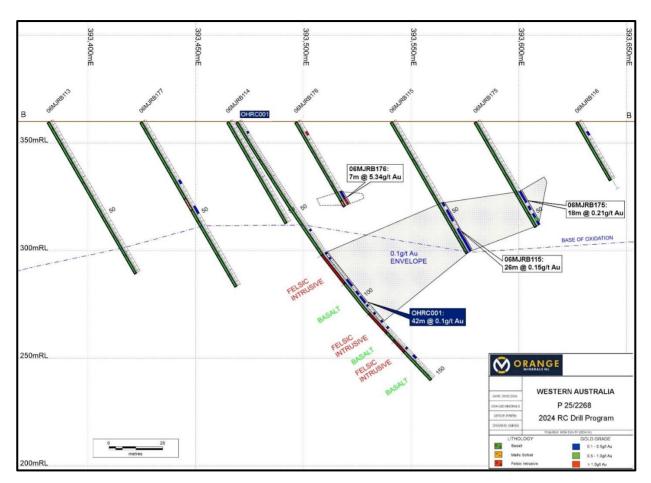


Figure 54: P 25/2268 drill section B 6580170N - OHRC001.

Assay Results

Assay results from these six RC drill holes have recently been received. Significant gold results are summarised in Table 1 below.

Hole_Id	From (m)	To (m)	Interval (m)	Au g/t
OKRC001	60	61	1	0.56
OKRC002	162	164	2	1.04
OKRC002	179	180	1	0.56
OBRC001	157	158	1	0.84
OBRC002	4	5	1	0.99
OBRC003	47	48	1	0.71

Table 1: Eastern Goldfields Phase 1 Drilling - Significant Intercepts (0.5g/t cut)

Future Work

At Kurnalpi, Orange Minerals plans to follow up on this first pass drill program to continue testing the Success North Shear along strike for near surface supergene gold mineralisation and higher grades down dip of the main structure. The 1.5km known strike of the shear has not been adequately tested. On P 26/2268, the broad low grade gold zone warrants further investigation given the mafic / felsic intrusive contacts identified in OHRC001. The potential for supergene gold is high given the intercept in 06MJRB176. At Burton Dam, the principal conceptual target is the intersection of NNW and NE





trending faults. Further drilling is planned along strike to the SE of current drilling and significant gold results from rock chip samples (see ASX announcement 23 April 2023).

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

-ENDS-

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 and Lennon's Find tenements in WA.

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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.

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 1: Orange Minerals Drillhole Coordinates-Phase 1

Hole	Easting	Northing	RI	Depth	Dip	Azimuth
OKRC001	421048	6622747	369	200	-60	090
OKRC002	420884	6622391	360	200	-60	090
OBRC001	402259	6569904	359	162	-60	045
OBRC002	402148	6570003	350	162	-60	045
OBRC003	402879	6573462	359	150	-60	225
OHRC001	393470	6580178	375	150	-60	090
			Total	1024		





APPENDIX 2:

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	 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. 	A program of 6 Reverse Circulation holes was completed in the Kalgoorlie East area, with a total meterage of 1,024m. The holes were drilled on tenements E 25/591, E 28/2294, P 25/2268 and P 26/4415. RC chips were collected through a cyclone attached to the drill rig and bagged in 1m intervals weighing approximately 20 – 30kg. Individual samples were collected from the cyclone riffle splitter (2 – 3kg) in calico bags for analysis. Industrial standard practices were conducted to ensure a representative sample was obtained. Samples were dispatched to SGS accredited laboratory in Kalgoorlie, WA, for analysis for Fire Assay gold and four acid digest, multi element analysis with ICP-MS finish, for 8 elements (Ag, As, Bi, Cu, Fe, Mo, Pb and Zn). The laboratory has applied a comprehensive QAQC protocol for sample preparation and routine instrument calibration. Reference material in the form of blanks, duplicates and certified standards were inserted into th batch. Laboratory comparison checks were also completed. No statistically significant lab errors of biasing were reported. All intervals were geologically logged by a consultant geologist (MEC) during drilling. The consultant geologist was experienced in West Australian Archean geology.
Drilling Techniques	 Drill type (e.g., core, reverse circulation, open hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face sampling bit or other type, whether core is orientated and if so, by what method, etc.). 	A DSS Schramm truck mounted RC rig was used for the drill program, with a Tatra 8 x 8 booster and auxiliary unit. A 5" hammer was utilised with hole inclinations at 60°. Depth of hoe varied between 150 to 200m.





Criteria	JORC Code Explanation	Commentary
Drilling Sampling Recovery	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.	One metre intervals were logged, and an assessment of the recovery was made during drilling and was determined via visual observations of sample return to the cyclone. During sampling <1% of the samples were wet. The cyclone was routinely cleaned, and no sample bias was observed.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged.	The RC drill samples were logged by a consultant geologist (MEC) to record lithology, alteration, and structure. Chip trays were photographed. The Competent Person considers the quality of the logging to be appropriate for the style of mineralisation.
Sampling Techniques	 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. 	All RC samples were cone split through the attached cyclone on the drill rig. Sufficient samples were collected in calico bags for analytical determination with the bulk of the sample reporting to large plastic bags for retention and possible later re-sampling if required.



Criteria	JORC Code Explanation	Commentary
Sub Sampling techniques and	 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 	No diamond drilling was conducted. All RC holes were sampled and split every 1m using a cone splitter to produce a sample between
sample preparation	 dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub sampling stages to maximise representivity of samples. 	1.5 to 4kg sub sample for submission to SGS Laboratory in Kalgoorlie.
	 Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate / second half sampling. 	The sample sizes are appropriate to the grain size of the material been sampled.
	 Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, 	All samples were dispatched to SGS laboratory in Kalgoorlie for sample preparation. The samples were pulverized to a nominal 95% passing 75 microns. Samples were assayed for 50g Fire Assay (GO_FAA30V10) and Four Acid Digest (GE_DIG40Q20), multiple element analysis with ICP-MS (IMS40Q20) finish for 8 elements: Ag, As, Bi, Cu, Fe, Mo, Pb and Zn.
	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.	1:20 samples were analysed in duplicate. The duplicate was collected from a direct split from the cyclone on the rig. Blanks and standard reference material were inserted to gauge assaying accuracy. Two Geostats standards were used (G306-3 @ 8.66g/t Au and G318-6 @ 2.70 g/t Au).
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry 	Logged drillholes were reviewed by a Senior geologist. No twinning of holes was undertaken. All data is digitally verified and stored with Rock Solid database management consultants. There was no adjustment to assay data.
	 procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	



Criteria	JORC Code Explanation	Commentary
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down hole surveys), trenches, mine workings and other locations used in Mineral Resource Estimation. Specification of the grid system used. Quality and accuracy of topographic control. 	GDA94, Zone 51 grid system was used. Drill hole collars have been surveyed by DGPS survey. Set up collar azimuths and inclinations were originally established using a compass and clinometer. Downhole surveys were completed by the drill contractor. An Axis Champ multishot, north seeking gyroscopic tool was used for downhole shots every 30m. The gyro was calibrated prior to the drill program commencing.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure (s) and classification applied. Whether sample compositing has been applied. 	The previous drillhole spacing at E 28/2294 and P 25/2268 was approximately 150m between sections and 40m on section and is considered sufficient to understand the spatial distribution of mineralisation. No previous drilling was recorded in the areas of interest on E 25/591 and P 26/4415. The drilling conducted by Orange Minerals was a first pass reconnaissance program. No sample compositing was applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structure is considered to have introduced a sampling bias, this should be assessed and reported if material. 	The orientation of the drill holes is generally orthogonal to the strike of mineralisation. The Competent Person considers the orientation of drillholes with respect to the attitude of the lithologies and/or structures hosting mineralisation are sufficient to support the understanding of the geology.
Sample security	The measures taken to ensure sample security	Samples were collected and transported in sealed Polywoven bags directly to the lab in Kalgoorlie. Pulps will be returned from the lab and securely stored.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	No audits or reviews are understood to have been carried out for any of the previous sampling programs.



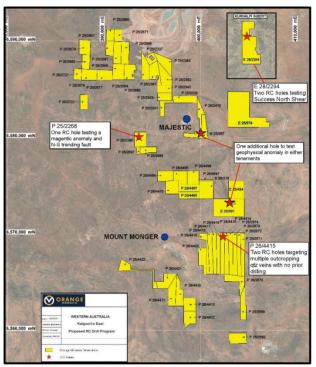
Section 2: Reporting of Exploration Results

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Criteria listed in the	previous section also apply to this section
Criteria	JORC Code Explanation
Mineral tenement and land tenure status	 Type, reference name / number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the tim of reporting along with any known impediments to obtaining a license to operate in the area.

Commentary

The Kalgoorlie East project consists of 59 tenements that extend from Kurnalpi in the North to Mt Monger in the south.



Orange Minerals tenements and drill locations

Drilling was conducted at Kurnalpi (E 28/2294), Majestic (P 25/2268), Horseshoe Dam (E 25/591) and Burton Dam (P 26/4415). The tenements are 100% held by Orange Minerals Pty Ltd under its subsidiary Majestic Mines Pty Ltd.



Criteria	JORC Code Explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 KURNALPI – E28/2294: Exploration conducted since 1990 is as follows. Mt Kersey Mining Ltd (1990 - 1995) – Conducted an aeromagnetic survey, four air core holes and fourteen Rc holes for nickel and gold mineralisation. RC hole KC102 returned 4m @ 3.7g/t Au from 72m, south of known gold workings. Kurnalpi Gold NL (1996 – 1997) – Collected 770 soil samples, RAB and RC drilling, and a low-level aeromagnetic survey. The survey defined numerous late-stage cross cutting NE trending structures coincident with strong gold surface geochemistry. North Limited (1999 – 2000) – Targeted structurally hosted mineralisation in the hanging wall of the west dipping Avoca Shear. Conducted Total Field Magnetometric Resistivity survey. Drilled one diamond hole and 30 RC holes. The diamond hole tested the source of a 50m wide x 1000m long NS striking gold anomaly identified in the RAB drilling (Success North Shear). The hole returned 3m @ 10.35g/t Au with rare visible gold from 120m. Several RC holes completed at Success North returned gold intersections above 1g/t and up to 3.1g/t Au. Work conducted by Orange Minerals since acquisition include a tenement wide Ultrafine Soil sample survey on a 250m by 100m spacing (403 samples) and rock chip sampling – OMX announcement "Excellent Rock Chip results received from Eastern Goldfields project" – 26 April 2023. MAJESTIC – P 25/2268: Exploration conducted since 2005 includes a regional auger geochemical survey with follow up RAB drilling (131 holes for 5730m) on nine lines (160 – 400m spacing). Gold prospecting was carried out by a local prospector with numerous specimens of gold bearing quartz and free nuggets collected from dozer pushing. A second phase of RAB drilling was conducted in 2006, consisting of 74 holes for 3892m. BURTON DAM - P 26/4415: Previous exploration in the northern part of the tenement consisted of limited soil sampling conducted by Rubicon



Criteria	JORC Code Explanation					Con	nmenta	ry					
Geology	Deposit type, geological setting, and style of mineralisation.	Mineralisatio Archean gree structurally c and iron / ars	nstone belt ontrolled. G	s within go	granitoid –	greens	tone ter	ranes.	These o	rogenic	gold dep	osits are	usually
Drill hole information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes. Easting and northing of the drill hole Elevation or RL of the drill hole collar Dip and azimuth of the hole Down hole length and interception depth Hole length 	Historical dril Hole	E 28/2294 P 25/2268 P 25/2268 P 25/2268 P 25/2268 P 25/2268	Easting 421017 420977 420937 420897 420934 421012 420957 420917 393382 393466 393542 393581 393497 393425	on the dril Northing 6622398 6622398 6622398 6622398 6622398 6622398 6622398 6622398 6622398 6580151 6580179 6580160 6580183 6580154	RI 366 365 365 365 365 360 360 360 360 360	Depth 33 83 87 108 216 93 87 102 81 54 70 56 45 88	Dip -60 -60 -60 -60 -60 -60 -60 -60 -60 -60	90 90 90 90 90 90 90 90 90 90 90 90	From 28 60 68 108 120 135 161 176 60 64 44 38 6 38 46	110.6 126 136 162 177 64 87 No i	Interval 5* 20 19*	Aug/t 0.29 1.22 0.52 1.25 4.93 0.41 0.44 0.5 0.44 0.72 0.15 0.21 1.19 5.34 0.28
Data aggregation methods	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 some typical examples of such aggregations should be shown in detail.												



Criteria	JORC Code Explanation	Commentary
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of the drill hole collar locations and appropriate sectional views. 	Appropriate diagrams displaying the location of drill holes and sections have been included in the release.
Balanced reporting	Where comprehensive reporting of all Exploration results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration results.	All results received and compiled since previous work are reported in this release. All results reported on by Orange Minerals are accurate and reflective of the mineralisation system being drilled tested.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment, metallurgical test results, bulk density, groundwater, geotechnical and rock characteristics, potential deleterious or contaminating substances.	This report relates to drill data reported from the recently completed drill program. The results and data provided in this announcement add further meaning and understanding to the geological knowledge of the Kalgoorlie East project area.
Further work	The nature and scale of planned further work (e.g., tests for lateral or depth extensions or large – scale step out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	This drill program is the first conducted by Orange Minerals in the Kalgoorlie East area since listing. It was designed as a first pass reconnaissance program on four of the 59 leases held by the company. Further work will include geochemical and geophysical programs to generate targets for drilling.