

17 August 2023

ASX Release

ASSAY RESULTS RECEIVED PHASE 2 DRILL PROGRAMME AT WISEMANS CREEK**HIGHLIGHTS**

- Orange Minerals NL has received assay results from four diamond drill holes (OWCD005-OWCD008) completed in a Phase 2 diamond drilling programme at Wisemans Creek, NSW.
- Silicified Siltstones / Chert intersected in all drill holes with quartz veining, sericite/carbonate alteration and associated gold and base metal mineralisation.
- Significant gold assay results received include:
 - 1m @ 0.76 g/t Au & 17.9g/t Ag from 106m in OWCD006
 - 11m @ 0.53 g/t Au & 18.8 g/t Ag from 95m in OWCD007
 - 2m @ 0.94g/t Au & 1.6 g/t Ag from 106 m in OWCD007
- Low tenor gold, silver & base metals was observed in all drill holes.

Orange Minerals NL (ASX: OMX) ("Orange" or "the Company") is pleased to announce that it has received assay results from the Phase 2 drill programme at Wisemans Creek.

About the Wisemans Creek Project

The Wisemans Creek project is located in the south-east of the Company's NSW Project area. The project is comprised of four granted exploration licences including (EL8554) see Figure 1.

The project area is the largest zone of gold anomalism in EL8554 and contains several historical workings. Numerous historical exploration activities have taken place across six main gold bearing areas with associated base metal mineralisation, being Northwest Ridge, Trig Zone, Central West, Central North, Black Bullock and Mount Gossan.

In 2022, Orange completed an initial diamond drill programme at Wisemans Creek (EL8554) drilling four diamond holes for a total of 618 metres. The best assay result was in drill hole OWCD004 which returned 24.6m @ 1.3 g/t Au from 34.4m. Low tenor silver, lead and zinc mineralisation was observed in all drill holes. The significant gold intersection in OWCD004 is associated with an extensive quartz breccia zone containing quartz veining and strong sericite/ carbonate alteration. Higher gold values coincide with stronger quartz veining and sericite alteration intensity.

Following the successful Phase 1 drill programme completed at Wisemans Creek in 2022, planning was undertaken in early 2023 for a Phase 2 diamond programme.



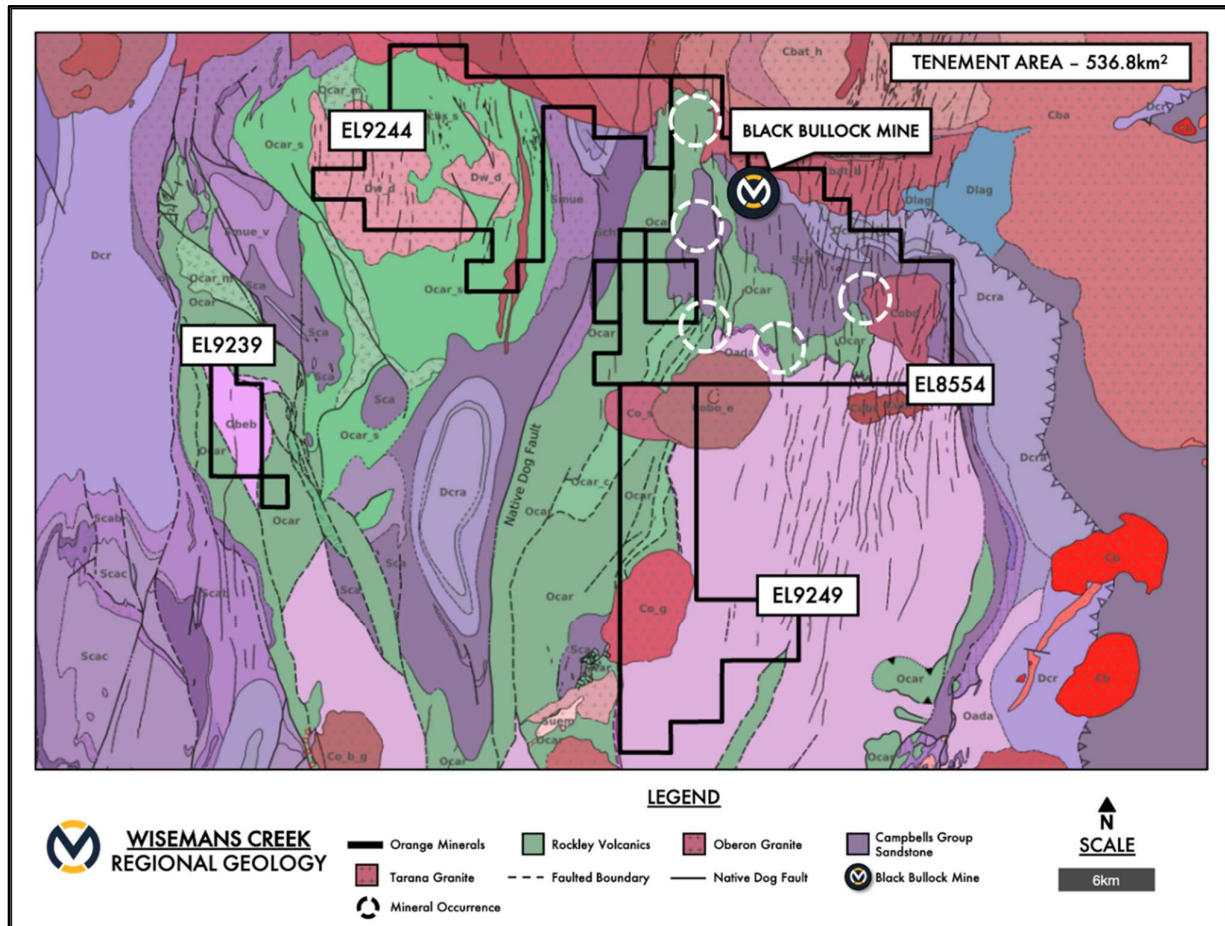


Figure 1: Map of Wisemans Creek Project

Drill Programme and Results

The phase 2 diamond drill programme at Wisemans Creek was completed in early May 2023, with four holes drilled for 607.5m (see Figure 2). The drilling tested two target areas, namely:

- Target Area A - The Northwest Ridge:

Three diamond holes (OWCD006 – 8) were drilled at the Northwest Ridge prospect (see Figure 2 & 3), where drilling followed up on several excellent intersections in historical holes, including:

- **WDC004:** 19m @ 4.04 g/t Au, 15.0 g/t Ag, 0.14% Cu, 0.38% Pb, 0.09% Zn from 81m Includes 5m @ 12.78 g/t Au, 23.2 g/t Ag, 0.20% Cu, 0.27% Pb, 0.15% Zn from 95m.
- **NRP001:** 17m @ 2.13 g/t Au, 65.0 g/t Ag, 0.28% Cu, 0.70% Pb, 0.88% Zn from 102m Includes 3m @ 8.01 g/t Au, 194.0 g/t Ag, 0.76% Cu, 1.89% Pb, 2.57% Zn from 111m.
- **PWC25:** 6m @ 0.87 g/t Au, 168 g/t Ag, 0.80% Cu, 1.73% Pb and 2.02% Zn from 60.0m.

The Phase 2 drill holes intersected grey, strongly silicified siltstones and black chert of the Silurian Campbells Group. Low level sulphides were identified in the holes associated with shearing and strong siliceous alteration below surface pits and scratchings.



- Target Area B - Central West:

One diamond drillhole (OWCD005) was drilled west of hole OWCD004, which in the Phase 1 drilling programme returned 24.6m @ 1.30 g/t Au from 34.4m, including 7m @ 2.28g/t from 39m. The hole intersected arenites and siltstones of the Silurian Campbells Group.

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

SIGNIFICANT GOLD ASSAYS – WISEMANS CREEK DIAMOND DRILL PROGRAM					
0.5g/t Au Cut-off (max 3m internal dilution)					
Hole Id	From (m)	To (m)	Interval (m)	Au (g/t)	Ag (g/t)
OWCD005	No	Significant	Assays		
OWCD006	50.0	51.0	1.0	0.76	12.5
	55.0	56.0	1.0	0.53	17.6
	106.0	107.0	1.0	0.76	17.9
OWCD007	95.0	106.0	11.0	0.53	18.8
	114.0	116.0	2.0	0.94	1.6
OWCD008	No	Significant	Assays		

Table 1: Wisemans Creek Phase 2 Diamond Drilling - Significant Assays

In the Northwest Ridge area, the mineralisation intersected in OWCD007 demonstrates that the broad mineralised zone continues both along strike and at depth (see Figure 3).

In the Central West Area, drill hole OWCD005 drilled below OWCD004 failed to intersect the broad gold zone of mineralisation observed in OWCD004 and consequently it is believed that the mineralisation plunges more steeply than envisaged.





Figure 2: Location drill holes Wisemans Creek Project

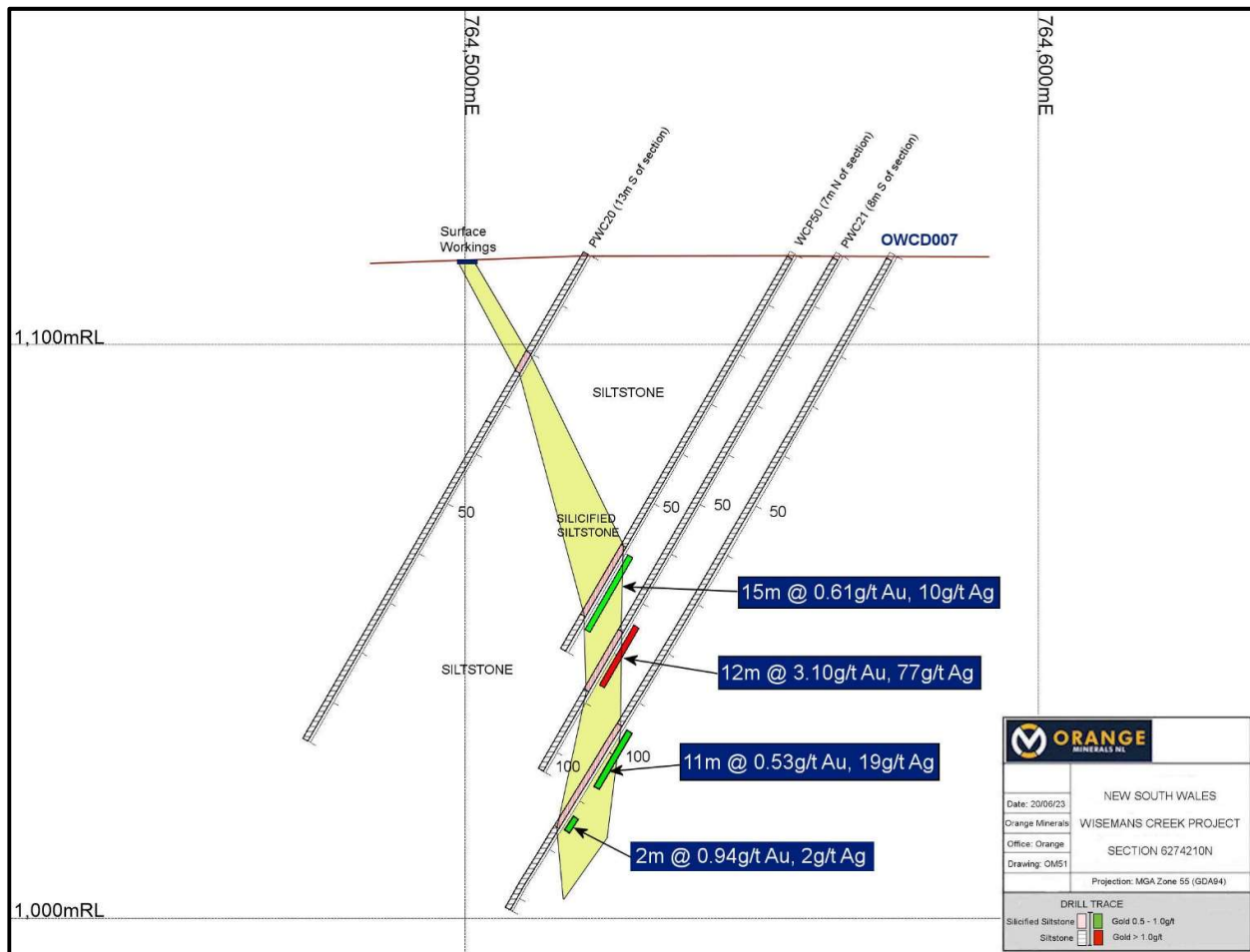


Figure 3: Wisemans Creek - Northwest Ridge Section 6274210N

Future Work

In the North-West Ridge area, the mineralisation intersected in OWCD007 demonstrates that the broad mineralised zone continues both along strike and at depth. Future work will test these areas.

In the Central West Area, drill hole OWCD005 drilled below OWCD004 failed to intersect the broad gold zone of mineralisation seen in OWCD004 and consequently it is believed that the mineralisation plunges more steeply than envisaged. Future work will test this hypothesis.



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 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 2

Hole_Id	Easting (MGA94)	Northing (MGA94)	RL	Depth	Dip	Azim (grid)
OWCD005	764389.56	6273686.18	1127.49	198.6	-63	88
OWCD006	764451.8	6274236.68	1102.4	151.5	-60	94
OWCD007	764575.42	6274210.49	1115.35	132.6	-61	275
OWCD008	764721.18	6274197.31	1123.73	124.8	-60	196



Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	<i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of 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.</i>	A program of 4 diamond holes was completed at the Wisemans Creek project, with a total meterage of 607.5m. HQ sized core was drilled from surface. Sample intervals were based on geological interpretation and a standard 1m was used outside of areas of visible mineralisation. The entire holes were sampled. All holes were cut in half with an almonte automatic saw with half sent for assay and half retained in storage. Industrial standard practices were conducted to ensure a representative sample was obtained. Samples were dispatched to SGS accredited laboratory in Townsville, Qld, for analysis for Fire Assay gold (50g with AAS finish) and a suite of 12 elements (Ag, As, Ba, Bi, Co, Cu, Mo, Pb, Sb, Se, Zn and W) were analysed using a four-acid digest with ICP-MS finish. 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 the batch. Duplicates were inserted every 20 samples and blanks / standards were inserted every 50 samples. Laboratory comparison checks were also completed. No statistically significant lab errors or biasing were reported. All intervals were geologically and geotechnically logged by an independent consultant geologist at MIME Field Services. The geologist was familiar with the Wisemans Creek geology and mineralisation style. Magnetic susceptibility was recorded for all holes.
Drilling Techniques	<i>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.).</i>	An Ophir Drilling Sandvik Track mounted diamond rig was used for the drill program. HQ sized core from surface was drilled with a 60° hole inclination. Depth of hole varied between 124.8 to 198.6m. Core was orientated in all holes with a digital reflex Act 3 tool.



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.	Downhole depth was determined by counting the drill rods and run lengths. Core was reconstructed in the trays into continuous lengths and checked against core blocks. There were no significant core recovery issues during the drilling.
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.	Historical RC chip and diamond core was routinely logged to a suitable standard for defining the geological features including lithology, mineralisation, alteration etc. The four diamond holes were logged geologically and geotechnically by an independent consultant geologist from MIME Field Services. The geologist was familiar with the mineralisation style at Wisemans Creek. The core was photographed and structurally logged as referenced to the core orientation during drilling. 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.
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.	The HQ drill core was cut in half with an almonte automatic core saw, with half bagged for assay and the half archived for reference. Reference material in the form of blanks, duplicates and certified standards were inserted into the batch. Laboratory comparison checks were also completed. No statistically significant lab errors or biasing were reported. Two standards from Geostats Pty Ltd (G318-6 and G306-3 with gold values of 2.7 and 8.60 g/t) were used due to the predicted grade of the Wisemans Creek mineralisation.



Criteria	JORC Code Explanation	Commentary
Sub Sampling techniques and sample preparation	• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <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> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Monitoring of results indicated that the sample preparation was acceptable regarding accuracy, precision and minimization of sample cross contamination. The sample sizes are appropriate to the grain size of the material been sampled.
Quality of assay data and laboratory tests	• <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>	All samples were dispatched to SGS laboratory in Townsville for sample preparation and analyses. The samples were pulverized to a nominal 85% passing 75 microns. Samples were assayed for 30g Fire Assay (GO_FAA30V10) and Mixed Acid Digest, multiple element analysis with ICP-MS finish (GE_IMS40Q20) for Ag, As, Ba, Bi, Co, Cu, Mo, Pb, Sb, Se, Zn and W. Over range assays were re-read with ICP-OES (GE_ICP40Q20 and GO_ICP41Q100) methods. All samples were tested for Magnetic Susceptibility. 1:20 samples were analysed in duplicate. Blanks and standard reference material were inserted to gauge assaying accuracy.
Verification of sampling and assaying	• <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>	Logged drillholes are reviewed by a Senior geologist. No twinning of holes was undertaken. There was no 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 55 grid system was used. Drill hole collars have been surveyed by DGPS survey. The hole collars were picked up on completion of drilling by an independent contract qualified surveyor from Central West Surveying Pty Ltd. Set up collar azimuths and inclinations were originally established using a compass and clinometer. Downhole surveys were completed by the drill contractor. A Reflex multishot gyroscopic tool was used for downhole shots every 30m. On completion of the hole a gyroscopic survey was completed every 6m.
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.	Previous drilling at Wisemans Creek has been focused on four prospects within the Wisemans Creek project area. Holes vary in spacing but are generally 50m along strike and 50m on section. The infill drilling by Orange Minerals has endeavored to verify previous RC drill results. Further drilling is required before a resource estimate can be considered.
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 is suitable. The core was orientated in all holes.
Sample security	The measures taken to ensure sample security	Samples were stored in a secured location prior to dispatch and bags were securely sealed for transportation to the lab. Samples were delivered to the SGS lab at Orange by a company employee for sample preparation before transport to Townsville for analysis. 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

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	- Type, reference name / number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. - The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The Wisemans Creek project area is covered by EL8554 and consists of four prospects (Black Bullock, Central West, Northwest Ridge, and Trig Zone). The tenement is wholly owned by Orange Minerals, covers an area of 225km² and the project area lies 6km north of Oberon. The tenement is in good standing.
Exploration done by other parties.	Acknowledgment and appraisal of exploration by other parties.	* <u>Newmont 1983</u>: Modern exploration began in 1983 with gridding, mapping and soil sampling over the Black Bullock area. * <u>Australian Occidental Pty Ltd 1983 – 1984</u>: Entered a joint venture with BP. Work included gridding, mapping, soil sampling, rock chip sampling and ground geophysics. * <u>Bond Oil NL</u>: Continued the joint venture with BP. Exploration predominantly consisted of RC drilling (35 holes for 3023m) commenced in 1985. * <u>Windsor Resources 1987 – 1989</u>: BP withdrew from the JV in 1987 and Windsor Resources took ownership. A further 44 RC and 5 diamond holes were drilled for 4612m. * <u>Renison Limited 1990 – 1993</u>: Renison was granted the lease in 1990. Mapping, stream sediment and rock chip sampling was conducted. * <u>Allstate Exploration NL 1993</u>: Joint venture with Sipa Resources and Michelago Resources NL. Mapping, soil and rock geochemistry, interpretation of available government geophysical data and drilling completed. One RC hole and one diamond hole were drilled at the Northwest Ridge prospect. <u>Central West Gold NL – 2002 – 2015</u>: Joint venture with Commissioners Gold Limited from 2008. Data compilation, geological mapping, rock chip sampling and RC drilling (8 holes for 962m) was carried out. <u>Ardea Exploration 2017 – 2019</u>: Conducted a target and Landsat 8 data review. <u>Godolphin Tenements Pty Ltd 2019 – 2022</u>: Data and target review. <u>Orange Minerals 2022 – current</u>: Four previous diamond holes for 618m drilled at the Black Bullock and Central West prospects.

Criteria	JORC Code Explanation	Commentary
Geology	<i>Deposit type, geological setting, and style of mineralisation.</i>	The Wisemans Creek gold and base metal mineralisation is dominated by pyrite (with gold and silver), with associated arsenopyrite, pyrrhotite, stibnite, galena, sphalerite, and minor chalcopyrite. Sulphides are fine to medium grained disseminated, vein to semi massive. Gold is more commonly associated with sulphide – quartz (+/- carbonate / chlorite / sericite) veining and breccias. The deposit model is interpreted as low Sulphidation epithermal type due to the mineralisation in open space quartz veins, quartz veined breccias, chalcedonic silicification and colloform banding.
Drill hole information	<i>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.</i> <i>Easting and northing of the drill hole</i> <i>Elevation or RL of the drill hole collar</i> <i>Dip and azimuth of the hole</i> <i>Down hole length and interception depth</i> <i>Hole length</i>	A summary of the drillhole information can be found in Appendix 1 of the attached document.
Data aggregation methods	<i>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.</i>	All samples were collected on either 1m or geological intervals. No high-grade cutting was applied to the intercepts. No metal equivalence has been used. Appropriate rounding of results has been applied.
Diagrams	<i>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.</i>	Appropriate diagrams displaying the location of drillholes, and section have been included in the release.



Criteria	JORC Code Explanation	Commentary
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 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 Wisemans Creek deposit.
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 report focuses on a drill program that was primarily designed to evaluate historical drill results at Wisemans Creek. Further work by Orange Minerals will involve the follow up drilling of significant assay results.

