

29 August 2022

ASX Release

**EXCELLENT GOLD ASSAY RESULTS FROM DRILLING AT WISEMANS CREEK****HIGHLIGHTS**

- Excellent gold assay results returned from Phase 1 diamond drilling at Wisemans Creek, NSW.
- Mineralised volcanic breccias were intersected in all drill holes with quartz veining, strong sericite/carbonate alteration and associated gold and base metal mineralisation.
- Significant gold assay results received include:
  - 24.6m @ 1.30 g/t Au from 34.4m in OWCD004
    - Including 7m@ 2.28 g/t Au from 39m
    - Including 5m@ 1.59 g/t Au from 54m
  - 0.60m @ 1.04 g/t Au from 69m in OWCD002
  - 1.00m @ 0.52g/t Au from 31m in OWCD003
- Base metals and silver also observed in drill holes including
  - 1m @ 0.12g/t Au, 19.8g/t Ag, 1.3% Pb from 98m in OWCD002
  - 7m @ 6.6 g/t Ag & 0.14% Pb from 84m in OWCD003
  - 9m @ 6.6g/t Ag, & 0.26% Pb from 76m in OWCD004
- Gold intersection in OWCD004 is open both laterally and at depth.
- Planning is underway for follow up exploration, including soil geochemical surveys, geophysics and Phase 2 drilling.

Orange Minerals NL (ASX: OMX) ("Orange" or "the Company") is pleased to announce that it has received assay results from the Phase 1 drill programme at Wisemans Creek.

**Excellent gold assay results include:**

24.6m @ 1.30 g/t Au from 34.4m in OWCD004 including 7m @ 2.28g/t from 39m.

**Commenting on the drill results from Wisemans, Managing Director David Greenwood stated:**

"These results from the Phase 1 drilling at Wisemans Creek are very exciting, especially OWCD004. The number of volcanic breccias intersected is extremely encouraging indicating a substantial hydrothermal system at Wisemans, which we have now confirmed contains significant gold."



### Wisemans Creek Phase 1 Drill Programme and Results

Four diamond drill holes totalling 618 metres were completed at the Wisemans Creek Project in NSW in May 2022 (Figure 1). One hole was sited at the Black Bullock Workings and three holes at the nearby Central West Prospect. The drilling tested significant historical drill results to validate previous intercepts and test for further extensions of mineralisation. The holes intersected the Silurian Campbells Formation, a sequence of siltstones, cherts, feldspathic volcanoclastics and lesser sandstone units.

Assay results from these 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)
OWCD001	No Significant Assays.			
OWCD002	69.0	69.6	0.60	1.04
OWCD003	31.0	32.0	1.0	0.52
OWCD004	21.0	22.0	1.0	0.84
	<b>34.4</b>	<b>59.0</b>	<b>24.6</b>	<b>1.30</b>
	145.0	146.0	1.0	0.61

Table 1- Significant gold results Wisemans Creek Drill Programme

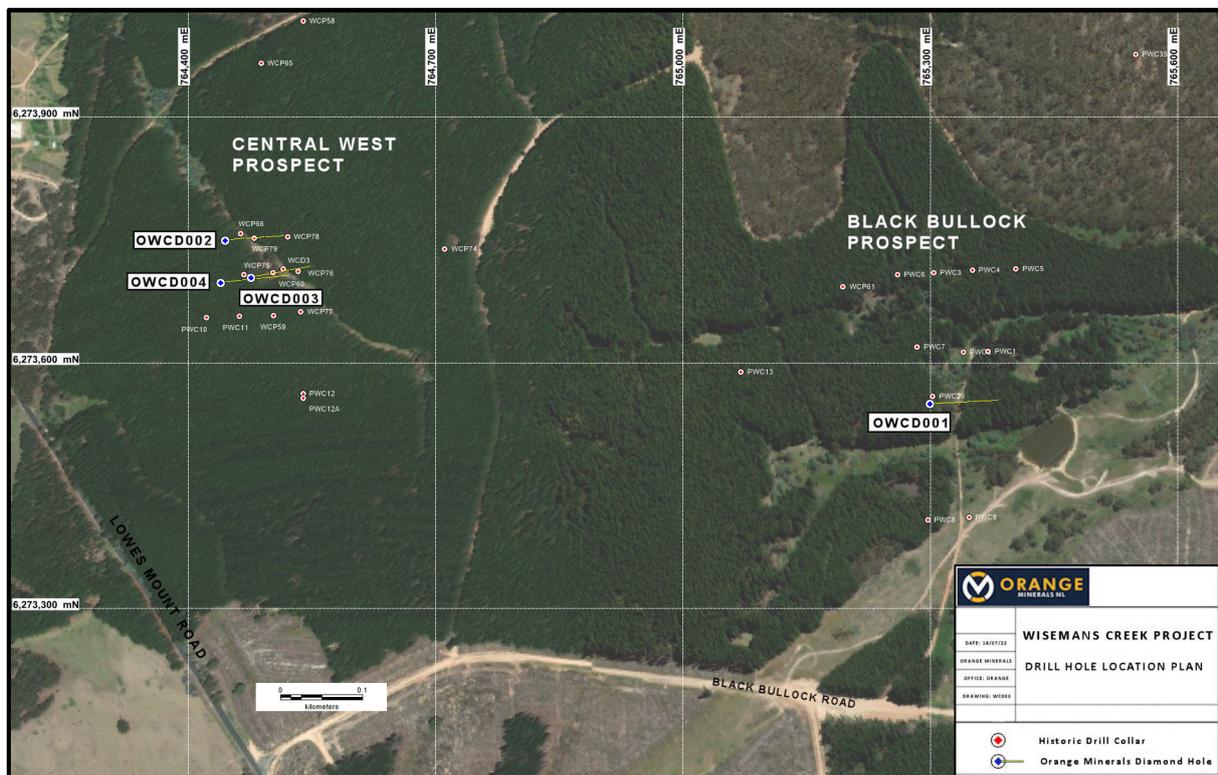
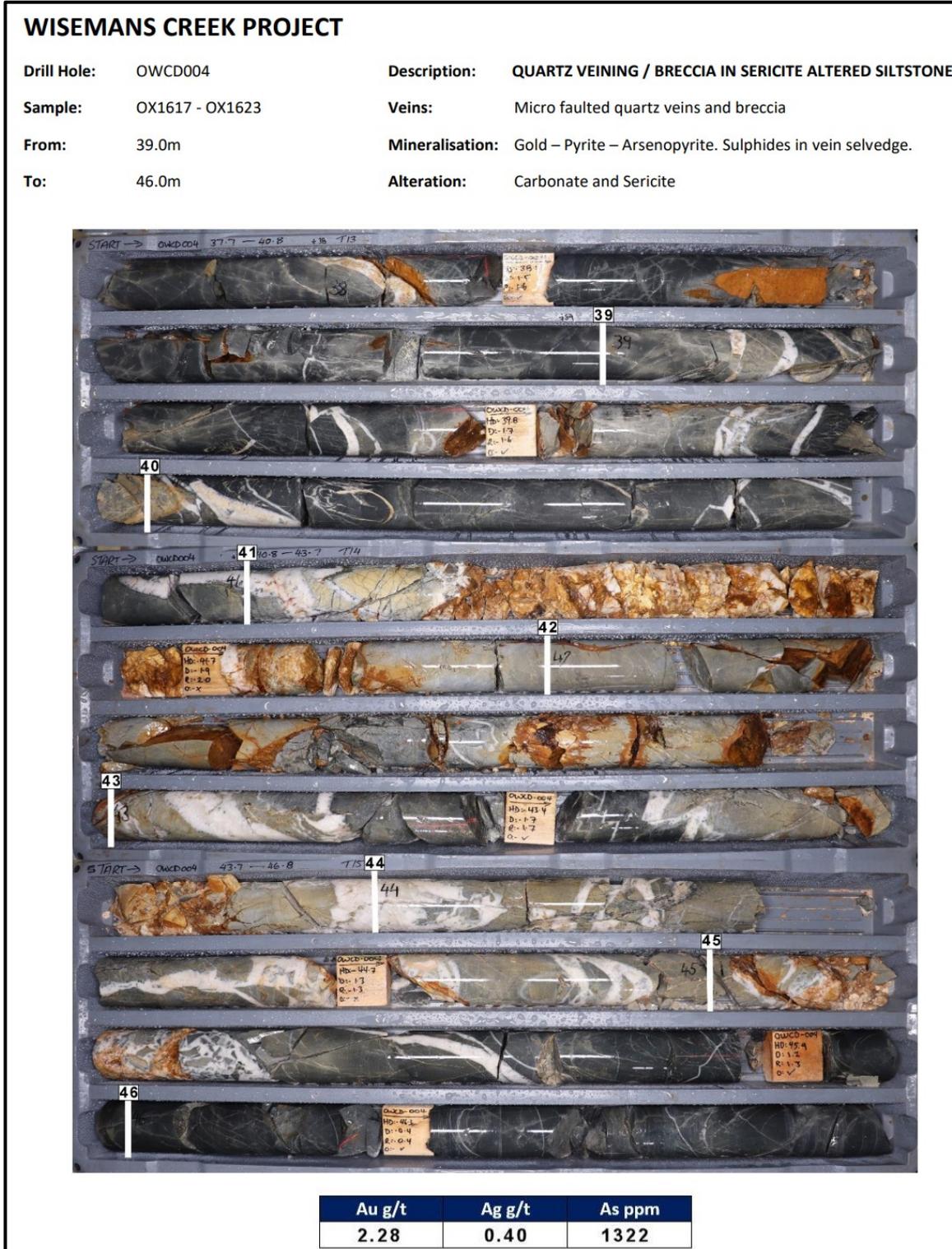


Figure 1- Location drill holes Wisemans Creek Project



**Drillhole OWCD004**

The significant gold intersection in **OWCD004 (24.6m @ 1.30 g/t Au)** 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 (see Figure 2).



**Figure 2- Significant gold intercept OWCD004 – 7m @ 2.28g/t Au from 39m**



Mineralisation in OWCD004 is open along strike and at depth (see drill section in Figure 3).

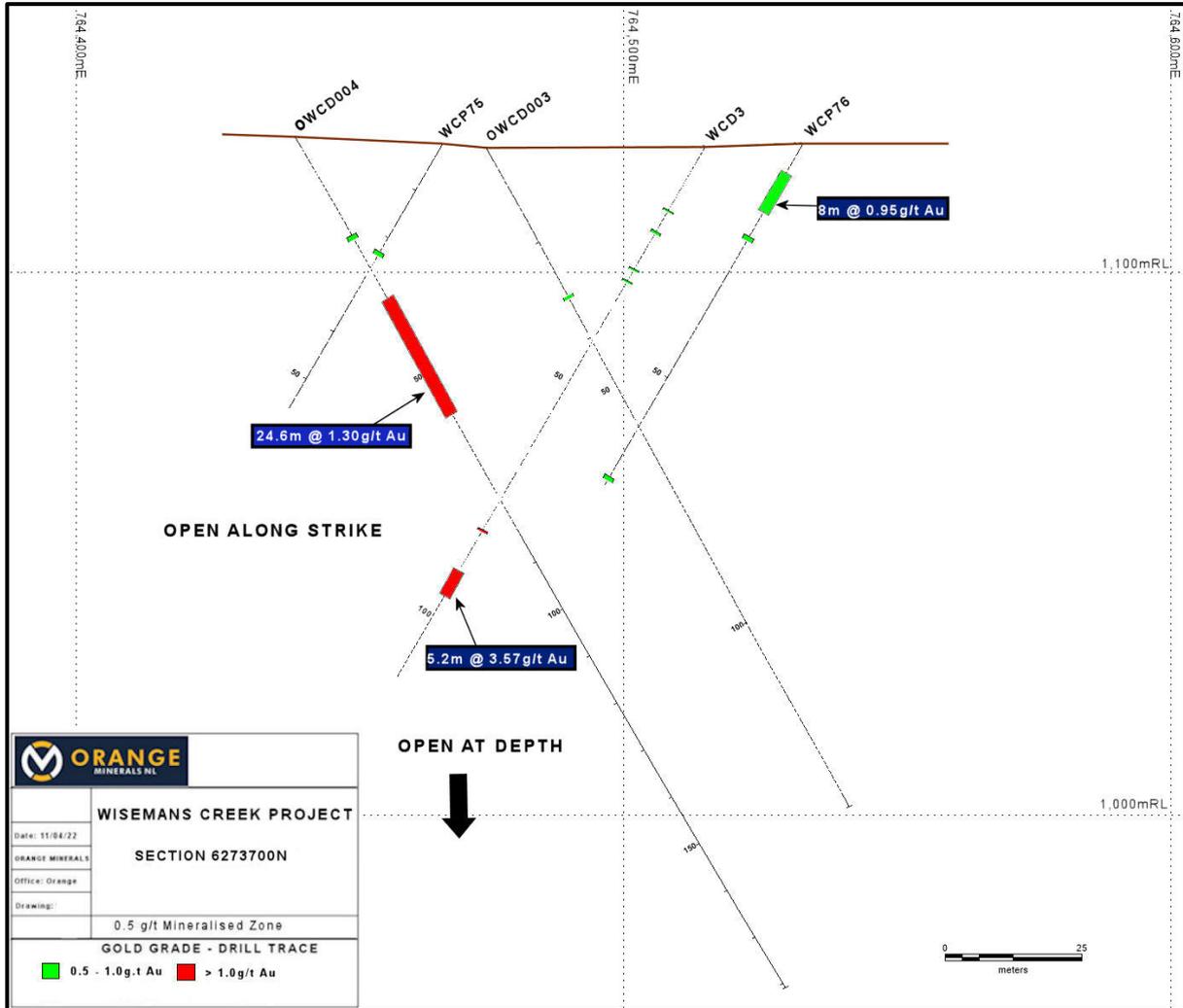


Figure 3 – Drill Section 6273700N

**Future Work**

Following the significant intersection in OWCD004, the Company is now planning the next phase of exploration at the Wisemans Creek Project.

This work will include surface mapping, soil geochemical work, geophysics and a Phase 2 drill programme which will target strike and depth extensions to the mineralisation in OWCD004. A number of drill core samples have been sent for petrographic analysis.



**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 4.

Numerous historical exploration activities have taken place across EL8554, by various companies. Activities include stream sampling, rock chip sampling, outcrop mapping, geophysical surveys and drilling.

The Black Bullock area is a significant zone of anomalism in EL8554 and contains several historical workings. Historic production from the Black Bullock mine was 2098oz gold and 40000oz of silver from 4700t of ore (Maniw 1995). The Black Bullock mining area corresponds with a distinct geophysical anomaly. Paralleling the observed trends of mineralisation and historic workings, a distinct northwest/southeast trend is evident in regional geophysical datasets, extending for up to 6.5km. Several cross-structures appear to correspond to some of the workings.

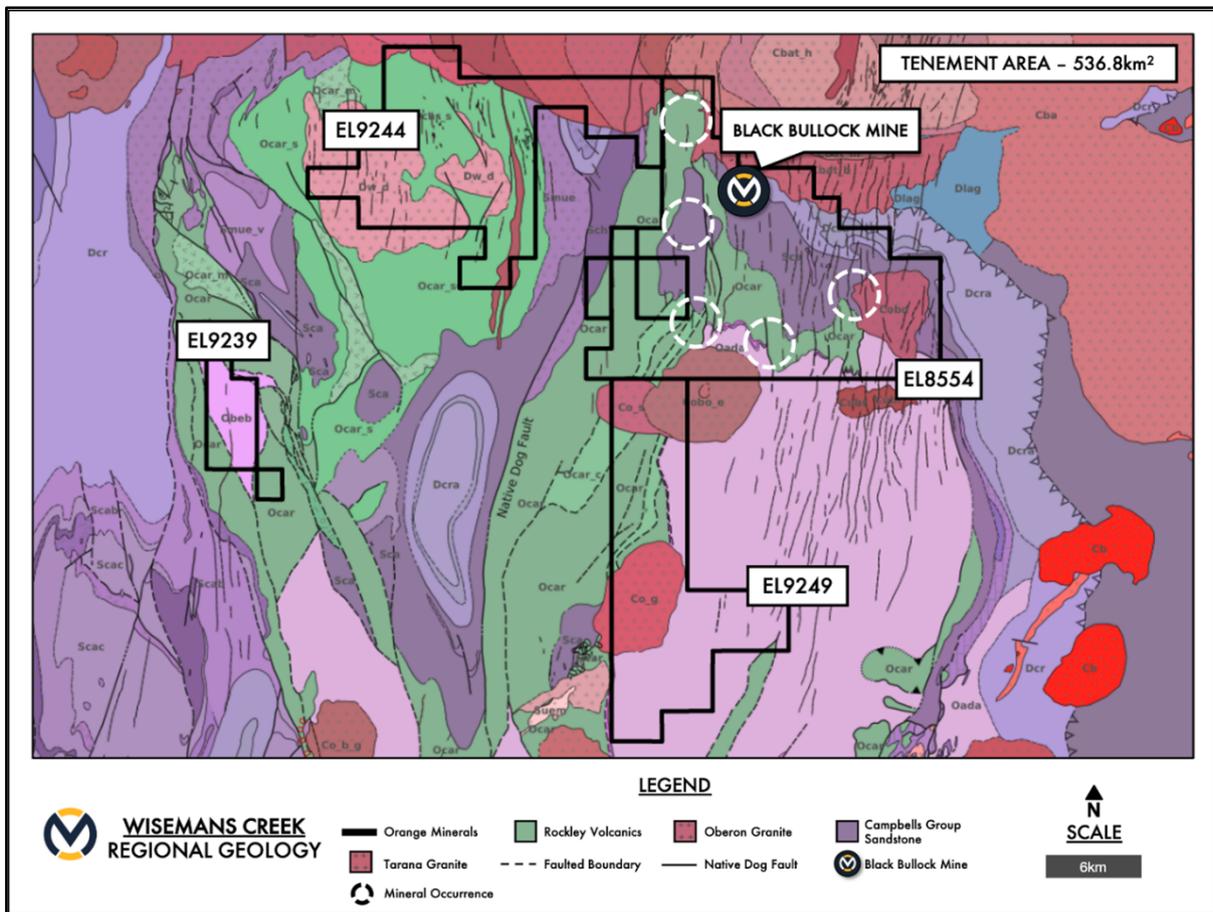


Figure 4 – Map of Wisemans Creek Project.

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.

### For further information, please contact: David Greenwood

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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**

Name	Prospect	Easting	Northing	RL	Azi. Grid	Dip	Depth (m)
OWCD001	Black Bullock	765300	6273550	1128	087	-60	177.8
OWCD002	Central West	764445	6273750	1152	084	-60	123.2
OWCD003	Central West	764475	6273705	1155	081	-60	135.8
OWCD004	Central West	764440	6273698	1157	082	-60	180.7



APPENDIX 2: Table 1.0

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><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.</i></li> </ul>	<p>A program of 4 diamond holes was completed at the Wisemans Creek project, with a total meterage of 617.5m. HQ core was drilled from surface.</p> <p>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.</p> <p>Industrial standard practices were conducted to ensure a representative sample was obtained. Samples were dispatched to Bureau Veritas accredited laboratory in Adelaide, SA, for analysis for Fire Assay gold and a suite of 12 elements (Ag, As, Ba, Bi, Co, Cu, Mo, Pb, Sb, Se, Te and Zn). The laboratory has applied a comprehensive QAQC protocol for sample preparation and routine instrument calibration.</p> <p>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 was reported.</p> <p>All intervals were geologically and geotechnically logged by an independent consultant geologist at MIME Field Services.</p> <p>Magnetic susceptibility was recorded for all holes.</p>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li><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></li> </ul>	<p>An Ophir Drilling Sandvik Track mounted diamond rig was used for the drill program. HQ core from surface was drilled with a 60° hole inclination. Depth of hole varied between 123.2 to 180.7m.</p>



Criteria	JORC Code Explanation	Commentary
<b>Drilling Sampling Recovery</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>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.</p> <p>There were no core recovery issues during the drilling, except a 1.2m loss in OWCD001 that was interpreted as old workings associated with the Black Bullock mine.</p>
<b>Logging</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>Historical RC chip and diamond core was routinely logged to a suitable standard for defining the geological features including lithology, mineralisation, alteration etc.</p> <p>The four diamond holes were logged geologically and geotechnically.</p> <p>The core was photographed and structurally logged as referenced to the core orientation during drilling.</p> <p>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>
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li><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></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> </ul>	<p>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.</p> <p>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 was reported.</p> <p>Two standards from Geostats Pty Ltd (G318-6 and G910-10 with gold values of 2.7 and 0.99 g/t) were used due to the predicted grade of the Wisemans Creek mineralisation.</p>



Criteria	JORC Code Explanation	Commentary
<b>Sub Sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <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></li> <li>• <i>Quality control procedures adopted for all sub sampling stages to maximise representivity of samples.</i></li> <li>• <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></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>Monitoring of results indicated that the sample preparation was acceptable in regard to accuracy, precision and minimization of sample cross contamination.</p> <p>The sample sizes are appropriate to the grain size of the material been sampled.</p>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> </ul>	<p>All samples were dispatched to Bureau Veritas laboratory in Adelaide for sample preparation and analyses. The samples were pulverized to a nominal 95% passing 75 microns. Samples were assayed for 50g Fire Assay (FA50) and Mixed Acid Digest, multiple element analysis with ICP finish for Ag, As, Ba, Bi, Co, Cu, Mo, Pb, Sb, Se, Te and Zn. All samples were tested for Magnetic Susceptibility.</p> <p>1:20 samples were analysed in duplicate. Blanks and standard reference material were inserted to gauge assaying accuracy.</p>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> </ul>	<p>Logged drillholes are reviewed by a Senior geologist.</p> <p>No twinning of holes was undertaken.</p> <p>There was no adjustment to assay data.</p>



Criteria	JORC Code Explanation	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used. Quality and accuracy of topographic control.</li> </ul>	<p>GDA94, Zone 55 grid system was used.</p> <p>Drill hole collars have been surveyed by DGPS survey.</p> <p>Set up collar azimuths and inclinations were originally established using a compass and clinometer.</p> <p>Downhole surveys were completed by the drill contractor. A Reflex multishot gyroscopic tool was used for downhole shots every 30m.</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>Previous drilling at Wisemans Creek has been focused on four prospects within the Wisemans Creek project area. Holes vary in spacing but are generally 25m along strike and 20m on section. The infill drilling by Orange Minerals has endeavored to verify previous drill results. Further drilling is required before a resource estimate could be considered.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<p>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 suitable. The core was orientated in all holes.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security</li> </ul>	<p>Samples were stored in a secured location prior to dispatch and bags were securely sealed for transportation to the lab. Pulps will be returned from the lab and securely stored.</p>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>No audits or reviews are understood to have been carried out for any of the previous sampling programs.</p>



## Section 2: Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p>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 225km<sup>2</sup> and the project area lies 6km north of Oberon. The tenement is in good standing.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>* <u>Newmont 1983</u>            Modern exploration began in 1983 with the granting of EL1989, covering the Black Bullock area. Mapping and minor rock chip sampling was undertaken. The EL was relinquished in the same year.</p> <p>* <u>Australian Occidental Pty Ltd 1983 - 1984</u>            Australian Occidental was granted EL2096 in October 1983 and entered a joint venture with BP. Work included gridding, mapping, soil sampling, rock chip sampling and ground geophysics.</p> <p>* <u>Bond Oil 1984</u>            Bond Oil took over Australian Occidental's tenements in 1984 and continued a joint venture with BP. RC drilling (35 holes for 3023m) commenced in 1985.</p> <p>* <u>Windsor Resources 1987 - 1989</u>            BP withdrew from the joint venture in 1987 and Windsor Resources took ownership. A further 44 RC holes and 5 diamond holes for a total of 4612m. The lease was relinquished in 1989.</p> <p>* <u>Renison Limited 1990 - 1993</u>            Renison Limited was granted EL3625 in 1990. Mapping, stream sediment and rock chip sampling and a fluid inclusion study was completed. Relinquished in 1993.</p> <p>* <u>Allstate Exploration NL 1993 -</u>            Allstate Exploration was granted EL4584 in September 1993 and entered a joint venture with Sipa Resources and Michelago Resources NL. Mapping, soil and rock geochemistry,</p>



		<p>interpretation of available government airborne geophysical data and drilling completed. One RC hole and one diamond hole were drilled at the Northwest Ridge prospect.</p> <p>* <u>Central West Gold NL 2002 - 2015</u>          EL6016 was granted in October 2002 and joint ventured with Commissioners Gold Limited from 2008. Data compilation, geological mapping, rock chip sampling and RC drilling (8 holes for 962m) was completed. Lease was relinquished in 2011. Replacement license EL7702 granted in 2011.</p> <p>* <u>Ardea Exploration 2017 – 2019</u></p> <p>* <u>Godolphin Tenements Pty Ltd 2019 – 2022</u></p> <p>* <u>Orange Minerals 2022 - current</u></p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<p>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.</p>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Easting and northing of the drill hole</i></li> <li>• <i>Elevation or RL of the drill hole collar</i></li> <li>• <i>Dip and azimuth of the hole</i></li> <li>• <i>Down hole length and interception depth</i></li> <li>• <i>Hole length</i></li> </ul>	<p>A summary of the drillhole information can be found in Appendix 1 of the attached document.</p>
<b>Data aggregation methods</b>	<p><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></p>	<p>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.</p>



Criteria	JORC Code Explanation	Commentary
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><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></li> </ul>	Appropriate diagrams displaying the location of drill holes and sections have been included in the release.
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	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.
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	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.
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	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 and geophysical, geochemical and mapping programs.

