ASX RELEASE 23 February 2023

ASX: MGV

New high-grade lode identified along Break of Day corridor

- **RC drilling has identified a potential new high-grade lode ~50m north of Break of Day. A single RC drill hole testing a new target zone intersected:**
  - **4m @ 8.2g/t Au from 50m (22MORC413) within:**
    - **14m @ 2.8g/t Au from 50m**
  - **This potential new lode is only 50m north of Break of Day. It has a potential strike of up to 100m and is hosted within the high-titanium basalt, a known favourable stratigraphic host at Break of Day**
- **Extensional RC results have also been received for other prospects in the Break of Day system including:**

  White Heat-Mosaic
  - **4m @ 5.2g/t Au from 29m (22MORC332), extending the Mosaic Lode up-plunge beyond the Mineral Resource boundary**

  White Light Lode (Break of Day)
  - **2m @ 34.7g/t Au from 84m (22MORC406), including:**
    - **1m @ 64.3g/t Au from 84m extending the White Light Lode ~20m southeast from the Mineral Resource boundary and;**
  - **2m @ 14.7g/t Au from 100m (22MORC406), interpreted as a possible new splay lode off White Light**
- **Results from RC drilling at Waratah returned:**
  - **3m @ 8.4g/t Au from 43m (22MORC348)**
  - **1m @ 10.2g/t Au from 56m (22MORC334)**
  - **2m @ 4.0g/t Au from 22m (22MORC339)**

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Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report further assay results from reverse circulation ("RC") drilling across multiple prospects, on its 100% owned ground at its flagship Cue Gold Project in Western Australia's Murchison district (*Figure 1*). These are the final assay results from the RC phase of drilling completed in December 2022.

Musgrave Managing Director Rob Waugh said: *"The intersection north of Break of Day may represent a new, untested high-grade lode and demonstrates the ongoing discovery opportunity within this system. This is a positive result as it bodes well for further discovery upside within the favourable Break of Day stratigraphic package. More drill testing is required to confirm the strike and dip extent of this new lode."*

"In addition, further results from White Heat-Mosaic, White Light and the new Waratah zone all have the potential to add to our resource base as we continue to advance the Cue Gold Project."

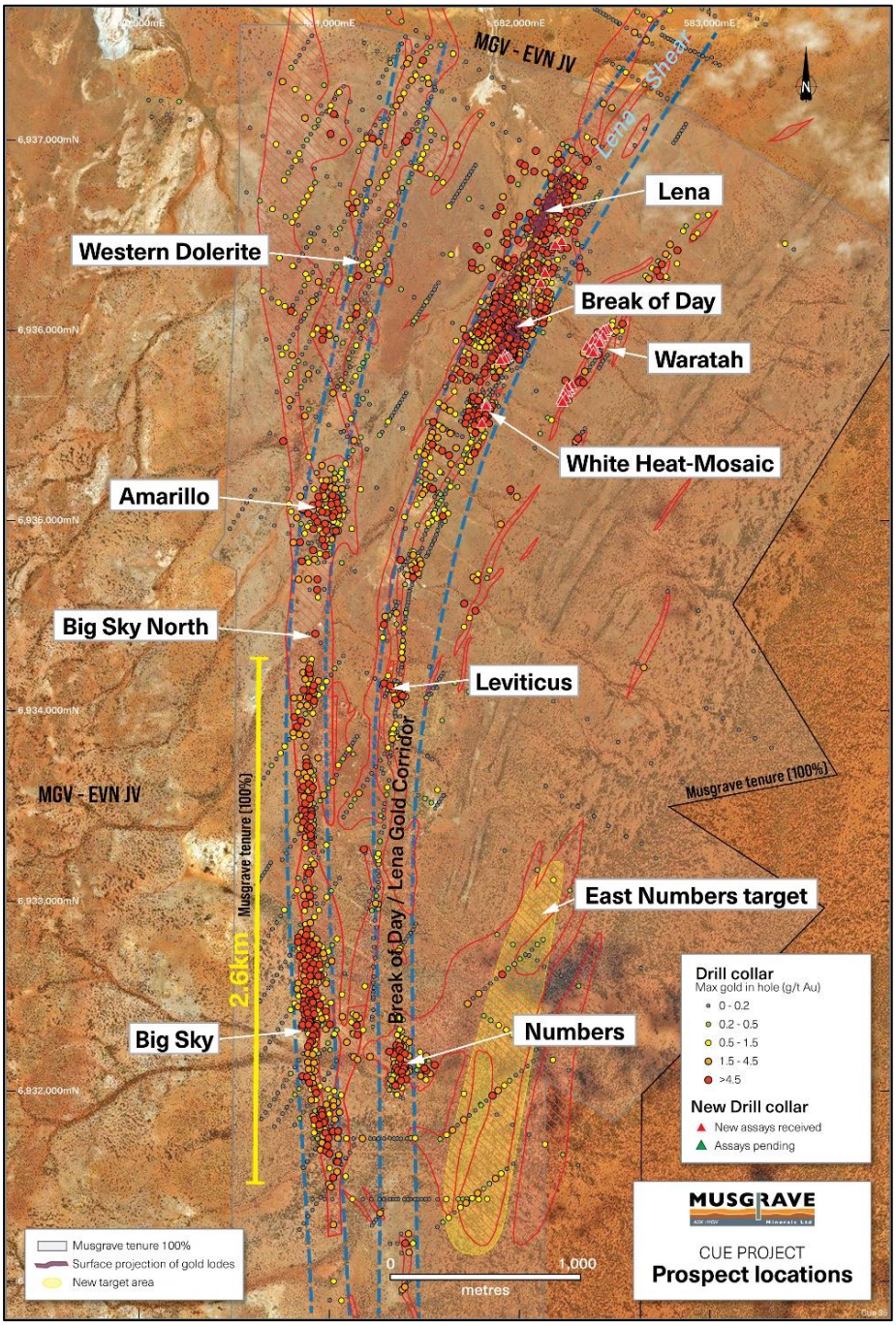

Figure 1: Regional plan showing new drill hole collars and significant prospect locations.

Break of Day High-grade Mineralised Trend

Break of Day North Target

The Break of Day high-grade mineralised trend has a total Mineral Resource Estimate ("MRE") of **982kt @ 10.4g/t Au for 327koz gold** with 70% of this in the higher confidence Indicated Resource category (*see MGV ASX announcement dated 31 May 2022, "Cue Mineral Resource Increases to 927,000oz*).

There is extensive drilling within the top 100m around Break of Day, however with multiple lode orientations there remain gaps in this drilling. The team identified three untested targets for follow-up, with one located on an interpreted structure sitting within a 30m wide drilling gap subparallel to existing drill holes, and only 50m north of the current Break of Day Mineral Resource Estimate boundary.

A single short 66m RC hole (*Figure 2*) was drilled to test this position and intersected high-grade gold mineralisation that may represent a new, untested gold lode. The mineralised interval is hosted within the favourable Break of Day, high-titanium basalt stratigraphic unit and is open along strike for 50-100m and also open down plunge. This recent drilling confirms the continued high-grade prospectivity along this trend. Follow-up drilling is currently being planned with full assay results and drill hole details shown in Tables 1a and 1b.

The new RC drill intersection is:

- 14m @ 2.8g/t Au from 50m (22MORC413), including:
  - 4m @ 8.2g/t Au from 50m (22MORC413)

The true width of the intersection is currently unknown and will be confirmed with follow-up drilling.

White Light Lode (Break of Day)

The White Light Lode is part of the Break of Day MRE. The mineralisation at Break of Day is defined within a number of individual gold lodes and includes the White Light Lode. Recent extensional drilling has intersected a southeast extension of the lode approximately 20m beyond the Mineral Resource boundary.

New RC drill intersection outside the Mineral Resource boundary extend the mineralisation to the southeast and include:

- 2m @ 34.7g/t Au from 84m (22MORC406), including:
  - 1m @ 64.3g/t Au from 84m, extending the White Heat lode 20m southeast beyond the current Mineral Resource boundary
- 2m @ 4.5g/t Au from 24m (22MORC407), up dip of 22MORC406
- 2m @ 14.7g/t Au from 100m (22MORC406), identified as a possible new mineralised splay structure off White Light

Full assay results and drill hole details are shown in Tables 1a and 1b.

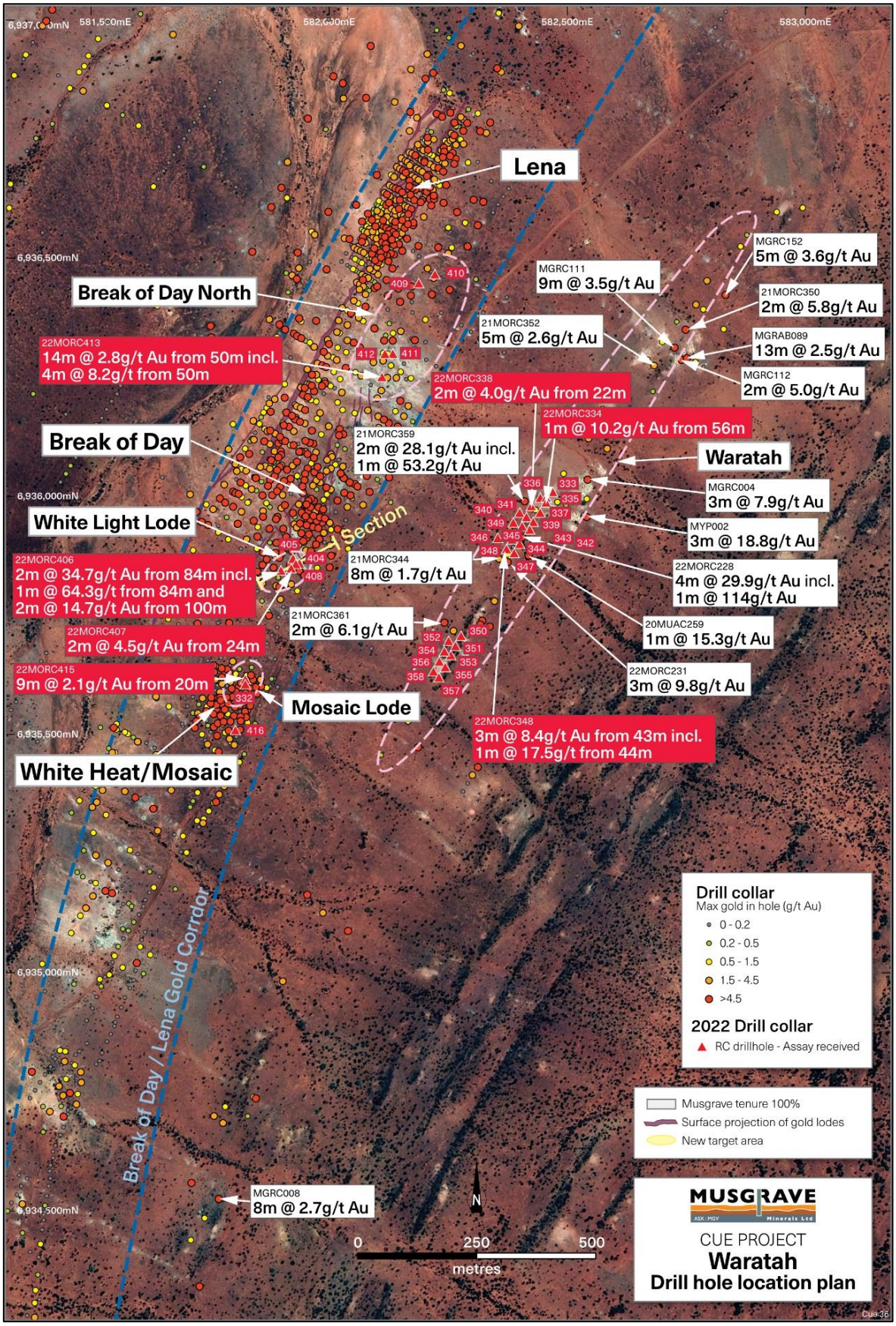

Figure 2: Plan showing recent Break of Day North, White Light, Waratah and White Heat-Mosaic drilling

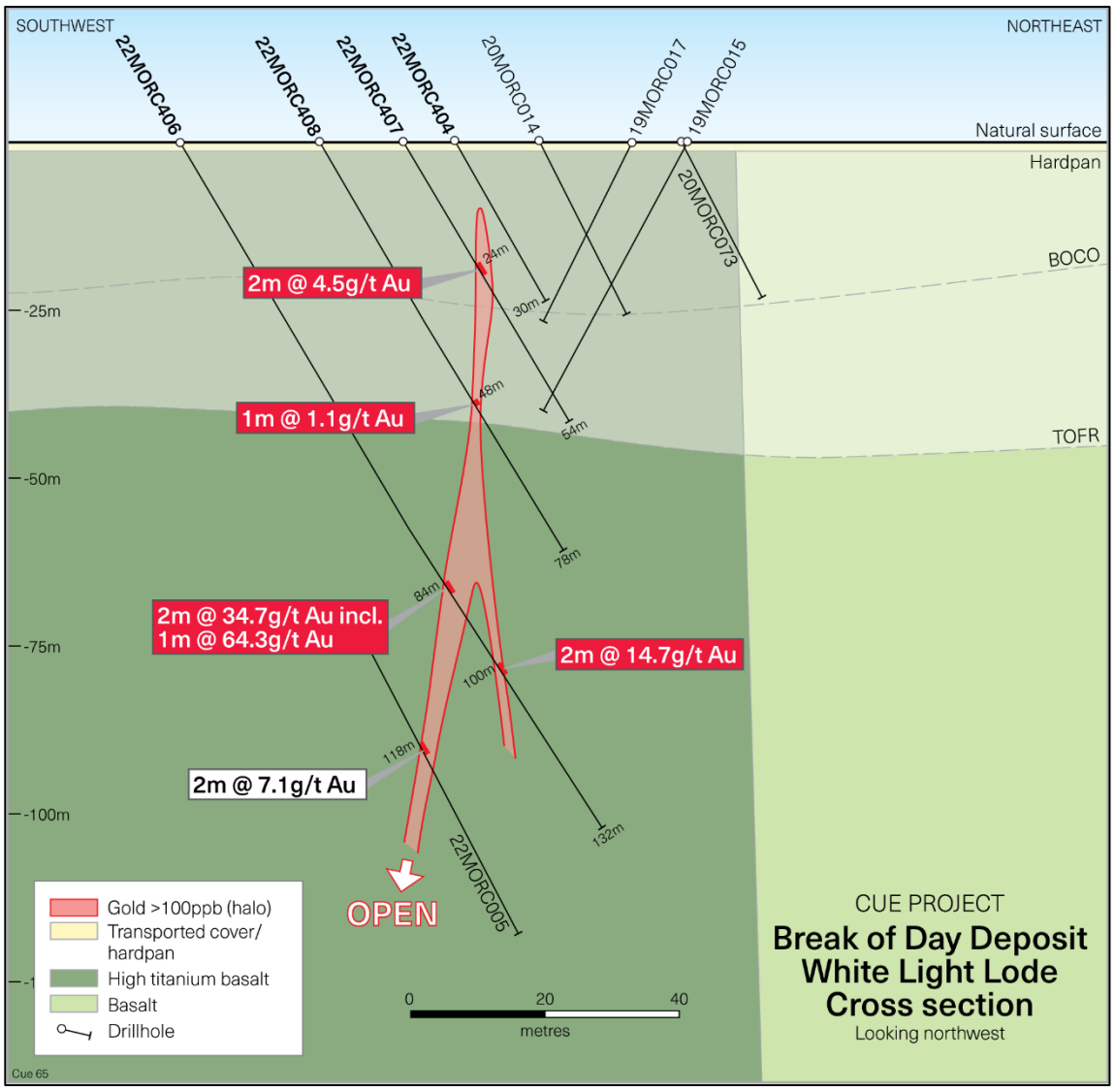

Figure 3: Cross-section at White Light showing the new mineralisation intersected in drill holes 22MORC404, 22MORC406-408

White Heat-Mosaic Deposit

The White Heat-Mosaic deposit (**185kt @ 11.0g/t Au for 65koz gold**) is located 300m south of Break of Day and is a subset of the Break of Day MRE. It is currently modelled to a maximum depth of 160m.

This recent drilling (not yet incorporated into the resource estimate) (*Figure 2*) confirms the near-surface and high-grade endowment along this trend, which is characterised by quartz lodes within a high-titanium basalt stratigraphic unit. Full results are shown in Tables 1a and 1b.

Two new RC drill intersections (*Figure 4*) outside the current Mineral Resource boundary extended the known gold mineralisation up-plunge include:

- 4m @ 5.2g/t Au from 29m (22MORC332) approximately 12m up-plunge of the Mineral Resource boundary
- 9m @ 2.1g/t Au from 20m (22MORC415) extending the Mosaic mineralisation >20m up-plunge beyond the Mineral Resource boundary

A single drill hole was extended with a diamond tail to intersect the White Heat mineralisation at depth 50m below the current mineral resource but did not intersect any significant mineralisation.

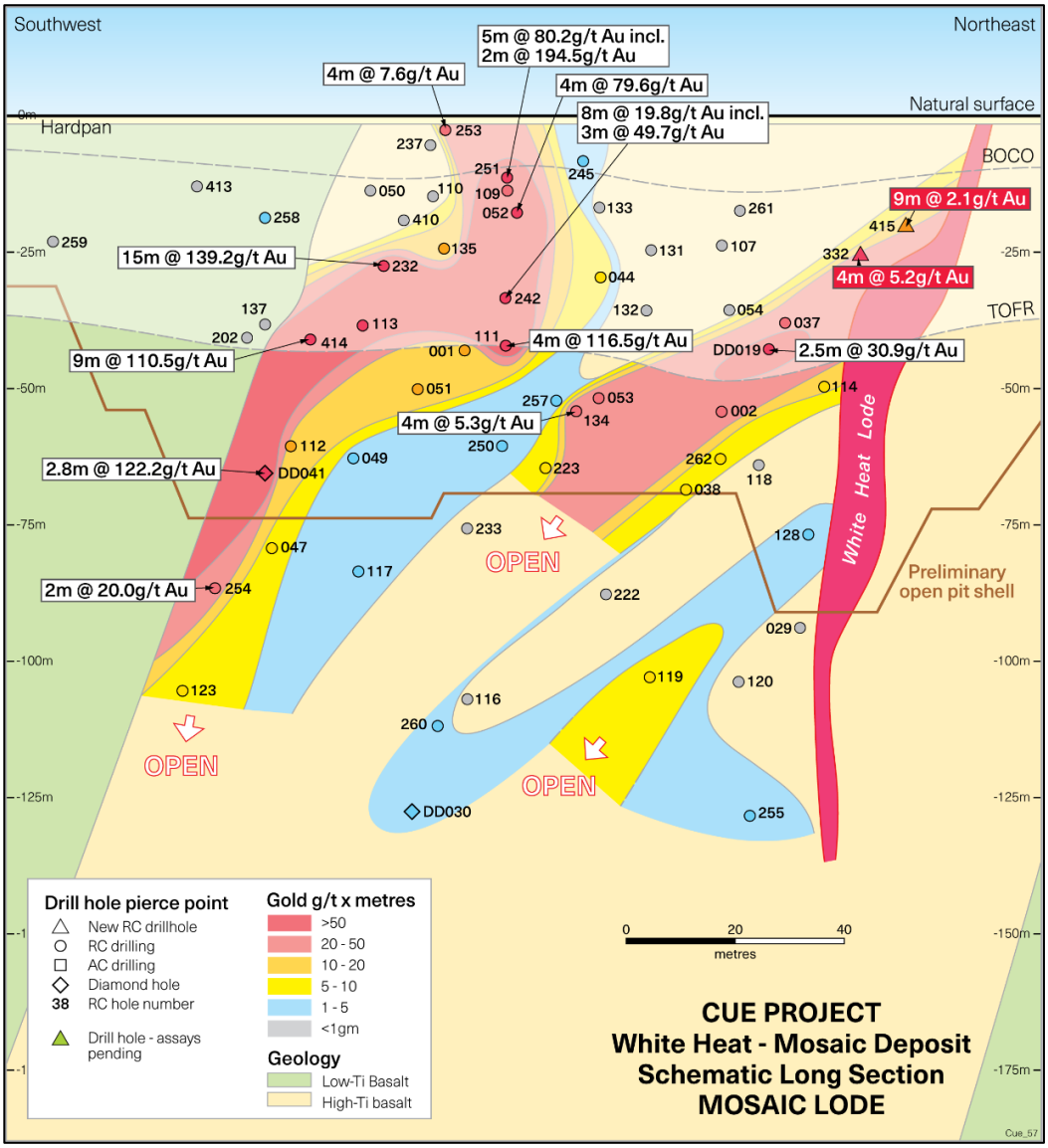

Figure 4: Mosaic Lode long section at the White Heat-Mosaic deposit showing new drill hole locations on the Mosaic lode

Waratah Prospect

The Waratah trend is approximately 400m east of Break of Day and runs parallel to the Lena-Break of Day corridor (*Figures 1 and 2*). The mineralised trend is interpreted to extend for over 4km of strike with gold mineralisation identified in at least two separate zones of approximately 250m in individual strike. The mineralisation is dipping steeply west and hosted within a sequence of chert-rich sediments, ultramafics and dolerites and remains open down plunge. The new drilling has constrained the strike of the mineralisation.

RC drilling returned intersections of:

- 3m @ 8.4g/t Au from 43m (22MORC348), including;
  - 1m @ 17.3g/t Au from 44m
- 1m @ 10.2g/t Au from 56m (22MORC334)
- 2m @ 4.0g/t Au from 22m (22MORC339)

Full assay results and drill hole details are shown in Tables 1a and 1b.

Cue Gold Project

The Cue Gold Project is located approximately 30km south of the township of Cue in the Murchison district of Western Australia. The southern area gold deposits are only 5km from the Great Northern Highway, approximately 600km north of Perth on tenure wholly owned by Musgrave.

The current Mineral Resource Estimate for the Cue Gold Project totals **12.3Mt @ 2.3g/t Au for 927koz gold** including the Break of Day High-Grade Trend (982kt @ 10.4g/t Au for 327koz contained gold) and the Moyagee Western Trend (9.8Mt @ 1.7g/t Au for 541koz contained gold) both in the southern area of the project (*see MGV ASX announcement dated 31 May 2022, "Cue Mineral Resource Increases to 927,000oz"*). The new gold discoveries at Amarillo and along the Waratah trend are all outside the existing resource areas.

Ongoing Activities

- The Company is working towards delivery of a Stage 1 Pre-feasibility Study (PFS) in late March 2023 with the focus on the technical and financial viability of the early years of the Cue Gold Project. The study will focus on the Project's current Indicated Mineral Resources whilst exploration and resource conversion drilling will continue, aiming to extend the mine life beyond Stage 1.

Other activities on Musgrave's 100% held tenements include:

- Diamond drilling assay results for geotechnical holes at Big Sky, Lena, White Heat and Break of Day expected mid-March.
- RC drill hole assays for Leviticus expected April.
- RC drilling of new targets has commenced with the aim of growing the current resource base through discovery.
- RC follow-up drilling of the new Break of Day North mineralisation will commence in three weeks.
- A new regional aircore drilling program will commence in late February on new target areas at Cue.

Authorised for release by the Board of Musgrave Minerals Limited.

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About Musgrave Minerals

Musgrave Minerals Limited is an active Australian gold explorer and developer. Musgrave's mission is to safely and responsibly deliver exploration success and advance development opportunities to build a profitable gold mining business at Cue for the benefit of our shareholders and the communities within which we operate

The Cue Project in the Murchison region of Western Australia is an advanced gold project. Musgrave has had significant exploration success at Cue with the ongoing focus on increasing the gold resources through discovery and extensional drilling to underpin studies that will demonstrate a viable path to near-term development. Musgrave also holds a large exploration tenement packages near Mt Magnet in Western Australia and in the Ni-Cu-Co prospective Musgrave Province of South Australia.

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Competent Person's Statement
Mineral Resources

The information in this report that relates to Mineral Resources for the Break of Day, Lena, White Heat-Mosaic, Big Sky, Numbers, Leviticus, Jasper Queen, Gilt Edge, Rapier South and the Hollandaire Gold Cap deposits is based on information compiled by Mr Paul Payne, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Payne is a full-time employee of Payne Geological Services. Mr Payne 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 Payne 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 report that relates to Mineral Resources for the Hollandaire Copper-Gold deposit is an accurate representation of the available data and is based on information compiled by external consultants and Mr Peter van Luyt a competent person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" who is a member of the Australian Institute of Geoscientists (2582). Mr van Luyt is the Chief Geologist of Cyprium Metals Limited. Mr van Luyt has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity which he is undertaking to qualify as a Competent Person (CP). Mr van Luyt consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person's Statement
Exploration Results

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled and/or thoroughly reviewed by Mr Robert Waugh, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Member of the Australian Institute of Geoscientists (AIG). Mr Waugh is Managing Director and a full-time employee of Musgrave Minerals Ltd. Mr Waugh 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 Waugh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This document may contain certain forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Musgrave Minerals Limited's (Musgrave's) current expectations, estimates and projections about the industry in which Musgrave operates, and beliefs and assumptions regarding Musgrave's future performance. When used in this document, words such as "anticipate", "could", "plan", "estimate", "expects", "seeks", "intends", "may", "potential", "should", and similar expressions are forward-looking statements. Although Musgrave believes that its expectations reflected in these forward-looking statements are reasonable, such statements are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Musgrave and no assurance can be given that actual results will be consistent with these forward-looking statements.

Additional JORC Information

Further details relating to the information provided in this release can be found in the following Musgrave Minerals' ASX announcements:

- *14 February 2023, "Company Presentation – RIU Explorers Conference"*
- *14 February 2023, "Amarillo and Big Sky drilling results, Cue Gold Project"*
- *31 January 2023, "Quarterly Activities and Cashflow Report"*
- *24 January 2023, "Further gold intersections, West Island, Cue JV"*
- *12 January 2023, "Evolution satisfies earn-in milestone Cue JV"*
- *25 November 2022, "$10 Million Capital Raising to Progress Cue Project"*
- *7 November 2022, "High-grade drilling results continue at White Heat-Mosaic"*
- *20 October 2022, "Gold intersections continue at West Island, Cue JV"*
- *7 October 2022, "Annual Report to Shareholders"*
- *23 September 2022, "Full Year Statutory Accounts"*
- *19 September 2022, "High-grade gold at Waratah and new regional targets at Cue"*
- *30 August 2022, "Further High Grade Gold Intersected at Big Sky"*
- *2 August 2022, "Bonanza Grades from Further Drilling at White Heat-Mosaic"*
- *21 July 2022, "Further high-grade gold at West Island, Cue JV"*
- *29 June 2022, "High grade gold at Amarillo and new regional targets"*
- *31 March 2022, "Musgrave consolidates its position in the Murchison"*
- *31 May 2022, "Cue Mineral Resource increases to 927,000 ounces"*
- *21 April 2022, "Thick basement gold intersections at West Island, Cue JV"*
- *5 April 2022, "High grades confirm Big Sky's upside potential"*
- *31 March 2022, "Musgrave consolidates its position in the Murchison"*
- *25 March 2022, "Strong drill results at Amarillo"*
- *27 January 2022, "High-grade gold intersected at West Island, Cue JV"*
- *6 January 2022, "New high-grade gold trend identified in regional RC program"*
- *15 December 2021, "High grades continue at Big Sky"*
- *27 January 2021, "New basement gold targets defined on Evolution JV"*
- *11 November 2020, "Break of Day High-Grade Mineral Resource Estimate"*
- *2 November 2020, "Exceptional metallurgical gold recoveries at Starlight"*
- *17 February 2020, "Lena Resource Update"*
- *27 November 2019, "High-grade gold intersected in drilling at Mainland, Cue Project"*
- *17 September 2019, "Musgrave and Evolution sign an $18 million Earn-In JV and $1.5M placement to accelerate exploration at Cue"*
- *16 August 2017, "Further Strong Gold Recoveries at Lena"*

Table 1a: ***Summary of new MGV drill hole assay intersections***

Drill Hole ID	Drill Type	Prospect	Sample Type	EOH (m)	From (m)	Interval (m)	Au (g/t)	Comment
22MORC332	RC	White Heat-Mosaic	1m Individual	48	29	4	5.2	Mosaic lode extended up plunge beyond current MRE boundary
22MORC333	RC	Waratah	1m Individual	60	47	1	4.0	Gold mineralization at base of regolith
22MORC334	RC	Waratah	1m Individual	60	46	1	1.2	Weak gold mineralization in regolith
			and		49	1	2.6	
			and		56	1	10.2	Gold mineralization in fresh rock
22MORC335	RC	Waratah	1m Individual	53	NSI			No intercept above 1g/t Au
22MORC336	RC	Waratah	1m Individual	60	NSI			No intercept above 1g/t Au
22MORC337	RC	Waratah	1m Individual	30	14	4	1.0	Gold mineralization in regolith
22MORC338	RC	Waratah	1m Individual	78	NSI			No intercept above 1g/t Au
22MORC339	RC	Waratah	1m Individual	36	22	2	4.0	Gold mineralization in regolith
22MORC340	RC	Waratah	1m Individual	68	39	1	1.0	Weak gold mineralization in regolith
22MORC341	RC	Waratah	1m Individual	96	NSI			No intercept above 1g/t Au Mineralisation not extended
22MORC342	RC	Waratah	1m Individual	36	NSI			No intercept above 1g/t Au Mineralisation not extended
22MORC343	RC	Waratah	1m Individual	60	33	1	1.4	Weak gold mineralization in regolith
			and		39	1	2.1	Gold mineralization in regolith
22MORC344	RC	Waratah	1m Individual	48	NSI			No intercept above 1g/t Au
22MORC345	RC	Waratah	1m Individual	66	42	3	1.6	Gold mineralization in regolith
22MORC346	RC	Waratah	1m Individual	108	NSI			No intercept above 1g/t Au Mineralisation not extended
22MORC347	RC	Waratah	1m Individual	36	NSI			No intercept above 1g/t Au Mineralisation not extended
22MORC348	RC	Waratah	1m Individual	66	28	4	1.2	Weak gold mineralization in regolith
			and		43	3	8.4	Gold mineralization at base of regolith

			including		44	1	17.3	
22MORC349	RC	Waratah	1m Individual	90	84	2	1.2	Weak gold mineralization
22MORC350	RC	Waratah	1m Individual	35	23	1	1.3	Weak gold mineralization in regolith
22MORC351	RC	Waratah	1m Individual	42	24	1	1.3	Gold mineralization in regolith
22MORC340	RC	Waratah	1m Individual	68	39	1	1.0	Weak gold mineralization in regolith
22MORC352	RC	Waratah	1m Individual	66	NSI			No intercept above 1g/t Au Mineralisation not extended south
22MORC353	RC	Waratah	1m Individual	42	NSI			No intercept above 1g/t Au Mineralisation not extended south
22MORC354	RC	Waratah	1m Individual	72	54	1	1.6	Weak gold mineralization
22MORC355	RC	Waratah	1m Individual	40	NSI			No intercept above 1g/t Au Mineralisation not extended south
22MORC356	RC	Waratah	1m Individual	72	54	3	1.3	Weak gold mineralization
22MORC357	RC	Waratah	1m Individual	48	NSI			No intercept above 1g/t Au Mineralisation not extended south
22MORC358	RC	Waratah	1m Individual	78	NSI			No intercept above 1g/t Au Mineralisation not extended south
22MORC404	RC	Break of Day White Light Lode	1m Individual	30	NSI			White Light Lode not extended
22MORC405	RC	Break of Day White Light Lode	1m Individual	54	27	5	1.6	White Light Lode low grade extension
22MORC406	RC	Break of Day White Light Lode	1m Individual	132	84	2	34.7	Gold mineralization extending lode 20m outside current MRE
			including		84	1	64.3	
			and		100	2	14.7	Possible new splay lode
22MORC407	RC	Break of Day White Light Lode	1m Individual	54	24	2	4.5	Gold mineralization extending lode outside MRE
22MORC408	RC	Break of Day White Light Lode	1m Individual	78	48	1	1.1	Weak gold mineralisation on White Light extension
22MORC409	RC	Break of Day North	1m Individual	84	NSI			No intercept above 1g/t Au
22MORC410	RC	Break of Day North	1m Individual	54	NSI			No intercept above 1g/t Au
22MORC411	RC	Break of Day North	1m Individual	60	NSI			No intercept above 1g/t Au
22MORC412	RC	Break of Day North	1m Individual	66	NSI			No intercept above 1g/t Au
22MORC413	RC	Break of Day North	1m Individual	66	50	14	2.8	Potential new high-grade lode
			including		50	4	8.2	
22MORC414	RC	Break of Day North	1m Individual	66	18	2	1.5	Weak gold mineralisation in regolith
22MORC415	RC	White Heat-Mosaic	1m Individual	54	20	9	2.1	Mosaic lode extended up plunge beyond current MRE boundary
21MODD041	Diamond	White Heat-Mosaic	Geological	253.4	NSI			Extension of 2021 RC hole – NSI 20m below current Mineral Resource boundary. Structure identified but low grade intersected

Table 1b: ***Summary of MGV drill collars from recent drill program***

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
22MORC332	RC	White Heat-Mosaic	581825	6935603	326	-60	422	48	Assays results in table above
22MORC333	RC	Waratah	582469	6936008	125	-60	424	60	Assays results in table above
22MORC334	RC	Waratah	582455	6935987	125	-60	424	60	Assays results in table above
22MORC335	RC	Waratah	582455	6935996	125	-60	424	53	Assays results in table above
22MORC336	RC	Waratah	582442	6935996	125	-60	424	60	Assays results in table above
22MORC337	RC	Waratah	582442	6935965	125	-60	424	30	Assays results in table above
22MORC338	RC	Waratah	582423	6935979	125	-60	424	78	Assays results in table above
22MORC339	RC	Waratah	582428	6935945	125	-60	424	36	Assays results in table above
22MORC340	RC	Waratah	582414	6935955	125	-60	424	68	Assays results in table above
22MORC341	RC	Waratah	582400	6935964	125	-60	424	96	Assays results in table above
22MORC342	RC	Waratah	582420	6935929	125	-60	424	36	Assays results in table above
22MORC343	RC	Waratah	582404	6935936	125	-60	424	60	Assays results in table above
22MORC344	RC	Waratah	582399	6935898	125	-60	424	48	Assays results in table above
22MORC345	RC	Waratah	582384	6935908	125	-60	424	66	Assays results in table above
22MORC346	RC	Waratah	582354	6935911	125	-60	423	108	Assays results in table above
22MORC347	RC	Waratah	582387	6935879	125	-60	425	36	Assays results in table above
22MORC348	RC	Waratah	582370	6935887	125	-60	424	66	Assays results in table above
22MORC349	RC	Waratah	582386	6935944	125	-60	423	90	Assays results in table above
22MORC350	RC	Waratah	582274	6935708	125	-53	428	35	Assays results in table above
22MORC351	RC	Waratah	582265	6935684	125	-60	428	42	Assays results in table above
22MORC352	RC	Waratah	582251	6935695	125	-60	428	66	Assays results in table above

22MORC353	RC	Waratah	582255	6935661	125	-60	428	42	Assays results in table above
22MORC354	RC	Waratah	582242	6935673	125	-60	428	72	Assays results in table above
22MORC355	RC	Waratah	582240	6935641	125	-53	428	40	Assays results in table above
22MORC356	RC	Waratah	582231	6935652	125	-60	427	72	Assays results in table above
22MORC357	RC	Waratah	582230	6935618	125	-60	428	48	Assays results in table above
22MORC358	RC	Waratah	582218	6935631	125	-60	427	78	Assays results in table above
22MORC404	RC	Break of Day	581938	6935859	60	-60	419	30	Assays results in table above
22MORC405	RC	Break of Day White Light Lode	581923	6935869	60	-60	418	54	Assays results in table above
22MORC406	RC	Break of Day White Light Lode	581897	6935841	60	-60	418	132	Assays results in table above
22MORC407	RC	Break of Day White Light Lode	581930	6935856	60	-60	419	54	Assays results in table above
22MORC408	RC	Break of Day White Light Lode	581919	6935848	60	-60	418	78	Assays results in table above
22MORC409	RC	Break of Day North	582188	6936447	355	-60	414	84	Assays results in table above
22MORC410	RC	Break of Day North	582222	6936465	355	-60	414	54	Assays results in table above
22MORC411	RC	Break of Day North	582134	6936297	10	-60	415	60	Assays results in table above
22MORC412	RC	Break of Day North	582117	6936297	20	-60	415	66	Assays results in table above
22MORC413	RC	Break of Day North	582111	6936249	10	-60	415	66	Assays results in table above
22MORC414	RC	Break of Day North	582116	6936299	320	-60	415	66	Assays results in table above
22MORC415	RC	White Heat-Mosaic	581825	6935614	326	-60	421	54	Assays results in table above
22MORC416	RC	White Heat-Mosaic	581801	6935506	27	-61	420	190	Assays results in table above
21MODD041	Diam	White Heat-Mosaic	581718	6935513	31	-60	421	253.4	Assays results in table above

Notes to Tables 1a and 1b

1. *An accurate dip and strike and the controls on mineralisation are only interpreted and the true width of the mineralisation are unconfirmed at this time although all drill holes are planned to intersect lodes perpendicular to interpreted targets.*
2. *In RC drilling one metre individual samples are collected and analysed for gold.*
3. *All samples are analysed using either a 50g fire assay with ICP-MS (inductively coupled plasma - mass spectrometry) finish gold analysis (0.005ppm detection limit) by Genalysis-Intertek in Maddington or Bureau Veritas in Canning Vale (0.01ppm detection limit), WA, Western Australia or a 500g sample by Photon Assay at Genalysis-Intertek in Maddington.*
4. *g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (no significant intercept)*
5. *Higher grade intersections reported here are generally calculated over intervals >1g/t gram metres where zones of internal dilution are generally not weaker than 3m < 0.5g/t Au.*
6. *All drill holes referenced in this announcement are reported in Tables 1a and 1b.*
7. *Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond, MRE = Mineral Resource Estimate.*
8. Co-*ordinates are in GDA94, MGA Z50.*

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JORC TABLE 1
Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised 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.*	MGV sampling is undertaken using standard industry practices including the use of duplicates and standards at regular intervals. A Thermo Scientific Niton GoldD XL3+ 950 Analyser is available on site to aid geological interpretation. No XRF results are reported. Historical sampling criteria are unclear for pre 2009 drilling. <u>Current RC and aircore drill programs</u> RC and aircore samples are composited at 6m intervals using a stainless-steel scoop with all composite intervals over 0.1g/t Au resampled at 1m intervals using a cyclone splitter. Individual 1m samples are submitted for initial gold assay where significant obvious mineralisation is intersected (e.g. quartz vein lode within altered and sheared host) and are split with a cyclone splitter. <u>Diamond drilling</u> Diamond samples were collected at geologically defined intervals (minimum sample length 0.25m, maximum sample length 1.5m) for all drill holes in the current program Samples are cut using an automated diamond saw and half core is submitted for analysis. Individual samples weigh less than 5kg to ensure total preparation at the laboratory pulverization stage. The sample size is deemed appropriate for the grain size of the material being sampled.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All co-ordinates are in UTM grid (GDA94 Z50) and drill hole collars have been surveyed by handheld GPS to an accuracy of ~1.0m. The accuracy of historical drill collars pre-2009 is unknown.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised 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 (eg submarine nodules) may warrant disclosure of detailed information.	<u>Current drill programs</u> Regional RC and aircore drill samples are composited at 6m intervals using a stainless-steel scoop with all composite intervals over 0.1g/t Au resampled at 1m intervals using a cyclone splitter. Individual 1m samples are submitted for initial gold assay where significant obvious mineralisation is intersected and are split with a cyclone splitter (e.g. quartz vein lode within altered and sheared host). The 3kg samples are pulverised to produce a 50g charge for fire assay with ICP-MS finish for gold. All 1m samples are sampled to 1-3kg in weight to ensure total preparation at the laboratory pulverization stage. In this RC drill program 1m samples were immediately submitted for laboratory analysis from the cyclone splitter on the rig. The sample size is deemed appropriate for the grain size of the material being sampled. Diamond samples were collected at geologically defined intervals (minimum sample length 0.25m, maximum sample length 1.5m) for all drill holes in the current program Samples are cut using an automated diamond saw and half core is submitted for analysis. Some samples are sent to the Genalysis -Intertek laboratory in Maddington or Bureau Veritas in Canning Vale, WA, where they are pulverized to 85% passing -75um and analysed using a 50g fire assay with ICP-MS (inductively coupled plasma - mass spectrometry) finish gold analysis (0.005ppm or 0.01ppm detection limit). Some samples are sent to the NATA accredited Genalysis - Intertek laboratory in Maddington, Perth and analysed via PhotonAssay technique along with quality control samples and duplicates. Individual samples are assayed for gold after drying and crushing to nominally 85% passing 2mm and a 500g linear split taken for PhotonAssay. The PhotonAssay technique was developed by CSIRO and Chrysos Corporation and is a fast, chemical free non-destructive, alternative using high-energy X-rays to traditional fire assay and uses a significantly larger sample size (500g v's 50g for fire assay). This technique is accredited by the National Association of Testing Authorities (NATA). Coarse gold is present in some samples and may affect sample accuracy. Repeat analysis and screen fire assay is regularly undertaken on samples with coarse gold.

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 oriented and if so, by what method, etc).*	RC drilling was undertaken by Challenge Drilling Pty Ltd utilising a KWL350 with an 350psi/1100 cfm on board compressor with a 1000cfm auxiliary. RC holes were drilled with a 5.75-inch hammer. A combination of historical RAB, aircore, RC and diamond drilling has been utilised by multiple companies over a thirty-year period across the broader project area. The diamond drilling program reported here was undertaken by West Core Drilling Pty Ltd utilising a LF90D drill rig. PQ, HQ and NQ core is obtained.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	In this RC drill program 1m samples were immediately submitted for laboratory analysis from the cyclone splitter on the rig. In regional RC drilling 6m composite samples are collected and re-assayed at 1m intervals where comps are above 0.1g/t Au. Sample weights, dryness and recoveries are observed and noted in a field Toughbook computer by MGV field staff. Diamond core samples are considered dry. The sample recovery and condition is recorded every metre. Generally, recovery is 98-100% but occasionally down to 70% on rare occasions when ground is very broken.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	MGV contracted drillers use industry appropriate methods to maximise sample recovery and minimise downhole contamination including using compressed air to maintain a dry sample in aircore drilling. Historical sampling recovery is unclear for pre 2009 drilling.
	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.	No significant sample loss or bias has been noted in current drilling or in the historical reports or from other MGV drill campaigns.
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.*	All geological, structural and alteration related observations are stored in the database. Air core holes would not be used in any resource estimation, mining or metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of lithology, structure, alteration, mineralisation, weathering, colour and other features of core or RC/aircore chips is undertaken on a routine 1m basis or on geological intervals for diamond core.
	The total length and percentage of the relevant intersections logged.	All drill holes are logged in full on completion.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	All diamond core samples are routinely kept dry. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples are taken from 1m sample piles and composited at 6m intervals using a stainless-steel scoop, with all intervals over 0.1g/t Au resampled at 1m using a stainless-steel scoop. Diamond samples were collected at geologically defined intervals (minimum sample length 0.25m, maximum sample length 1.5m) for all drill holes in the current program Samples are cut using an automated diamond saw and half core is submitted for analysis.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Drill sample preparation and precious metal analysis is undertaken by registered laboratories (Genalysis – Intertek, Bureau Veritas and MinAnalytical). Sample preparation by dry pulverisation to 85% passing 75 micron.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	MGV field QC procedures involve the use of certified reference standards (1:50), duplicates (~1:30) and blanks at appropriate intervals for early-stage exploration programs. High, medium and low gold standards are used. Where high grade gold is noted in logging, a blank quartz wash is inserted between individual samples at the laboratory before analysis. Historical QA/QC procedures are unclear for pre 2009 drilling.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Sampling is carried out using standard protocols and QAQC procedures as per industry practice. Duplicate samples are inserted (~1:30) and more frequently when in high-grade gold veins, and routinely checked against originals. Duplicate sampling criteria is unclear for historical pre 2009 drilling. Historical QA/QC procedures are unclear for pre 2009 drilling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for grain size of sample material to give an accurate indication of gold mineralisation. Samples are collected from full width of sample interval to ensure it is representative of sample complete interval.

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.*	On composite sampling and 1m Aircore re-samples, analysis is undertaken by Intertek-Genalysis or Bureau Veritas (registered laboratory's), with 50g fire assay with ICP-MS finish undertaken for gold. Some RC samples are sent to Intertek, Bureau Veritas or the NATA accredited Genalysis -Intertek laboratory in Maddington, Perth and analysed via PhotonAssay technique. Individual samples are assayed for gold after drying and crushing to nominally 85% passing 2mm and a 500g linear split taken for PhotonAssay. Internal certified laboratory QAQC is undertaken including check samples, blanks and internal standards. This methodology is considered appropriate for base metal mineralisation and gold at the exploration phase. Coarse gold is present in some samples and may affect sample accuracy. Repeat analysis and screen fire assay is regularly undertaken on samples with coarse gold.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to estimate mineral or element percentages. Musgrave utilise a Thermo Scientific Niton GoldD XL3+ 950 Analyser to aid geological interpretation.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	MGV field QC procedures involve the use of certified reference standards (1:50), duplicates (~1:30) and blanks (1:50) at appropriate intervals for early-stage exploration programs. Historical QA/QC procedures are unclear for pre 2009 drilling.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	MGV samples are verified by the geologist before importing into the main MGV database (Datashed).
	The use of twinned holes.	No twin holes have been drilled by Musgrave Minerals Ltd during this program.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is collected using a standard set of templates. Geological sample logging is undertaken on one metre intervals for all RC drilling with colour, structure, alteration and lithology recorded for each interval. Data is verified before loading to the database. Geological logging of all samples is undertaken.
	Discuss any adjustment to assay data.	No adjustments or calibrations are made to any assay data reported.
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.*	All maps and locations are in UTM grid (GDA94 Z50) and have been surveyed or measured by hand-held GPS with an accuracy of >±2 metres.
	Specification of the grid system used.	Drill hole and sample site co-ordinates are in UTM grid (GDA94 Z50) and historical drill holes are converted from local grid references.
	Quality and adequacy of topographic control.	All current aircore drill hole collars are planned and set up using hand-held GPS (accuracy +-2m).
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Variable drill hole spacings are used to complete 1st pass testing of targets and are determined from geochemical, geophysical and geological data together with historical drilling information. For the reported drilling drill hole spacing was approximately 20m along traverse lines.
	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 classifications applied.	No resources have been calculated on regional drilling targets as described in this release due to the early-stage nature of the drilling
	Whether sample compositing has been applied.	6m composite samples are submitted for initial analysis in most cases. Composite sampling is undertaken using a stainless-steel scoop at one metre samples and combined in a calico bag. Where composite assays are above 0.1g/t Au, individual 1m samples are submitted for gold assay. One metre individual samples may be submitted without composites in certain intervals of visibly favourable gold geology.
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.*	Drilling is designed to cross the mineralisation as close to perpendicular as possible on current interpretation whilst allowing for some minor access restrictions and mitigating safety risks. Most drill holes are designed at a dip of approximately -60 degrees.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias can be confirmed at this time and true widths are not yet known.

Sample security	*The measures taken to ensure sample security.*	Chain of custody is managed by MGV internal staff. Drill samples are stored on site and transported by a licenced reputable transport company to a registered laboratory in Perth (Genalysis-Intertek at Maddington, Bureau Veritas in Canning Vale or MinAnalytical in Canning Vale). When at the laboratory samples are stored in a locked yard before being processed and tracked through preparation and analysis (e.g. Lab-Trak system at Genalysis-Intertek).
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits have been completed on sampling techniques and data due to the early-stage nature of the drilling

Section 2 Reporting of Exploration Results

Criteria	***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.*	Musgrave Minerals secured 100% of the Moyagee Project area in August 2017 (see MGV ASX announcement 2 August 2017: "Musgrave Secures 100% of Key Cue Tenure"). The Break of Day, Starlight, Lena and White Heat-Mosaic deposits are located on granted mining lease M21/106 and the primary tenement holder is Musgrave Minerals Ltd. Other deposits including Big Sky and Numbers are located on M21/106 and E58/335 in an area held 100% by MGV. The Cue project tenements consist of 38 licences. The tenements are subject to standard Native Title heritage agreements and state royalties. Third party royalties are present on some individual tenements. The Mainland prospects are on tenements P21/731, 732, 735, 736, 737, 739, 741 where MGV has an option to acquire 100% of the basement gold rights on the tenements (not part of the EVN JV). A new Earn-in and Exploration Joint Venture was executed with Evolution Mining Ltd on 16 September 2019 covering Lake Austin and some surrounding tenure but excludes all existing resources including Break of Day and Lena (*see MGV ASX release dated 17 September 2019, "Musgrave and Evolution sign an $18 million Earn-in JV and $1.5 million placement to accelerate exploration at Cue"*) and the new Mainland option area.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Historical drilling, soil sampling and geophysical surveys have been undertaken in different areas on the tenements intermittently by multiple third parties over a period of more than 30 years. At Break of Day, Lena and Mainland historical exploration and drilling has been undertaken by a number of companies and at Break of Day and Lena most recently by Silver Lake Resources Ltd in 2009-13 and prior to that by Perilya Mines Ltd form 1991-2007. Musgrave Minerals has undertaken exploration since 2016.
Geology	*Deposit type, geological setting and style of mineralisation.*	Geology comprises typical Archaean Yilgarn greenstone belt lithologies and granitic intrusives. Two main styles of mineralisation are present, typical Yilgarn Archaean lode gold and volcanic massive sulphide (VMS) base metal and gold mineralisation within the Eelya Felsic Complex.
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 collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth and hole length.*	All RC drill hole collars with assays received for the current regional drill program at Cue and reported in this announcement are in Tables 1a and 1b of this announcement. All relevant historical drill hole information has previously been reported by Musgrave, Perilya, Silver Lake Resources and various other companies over the years.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Significant assay intervals are recorded above 1g/t Au with a minimum internal interval dilution of 2m @ 0.5g/t Au. No cut-off has been applied to any sampling.

	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No cut-off has been applied to any sampling. Reported intervals are aggregated using individual assays above 1g/t Au with no more than 2m of internal dilution <0.5g/t Au for any interval. Short high-grade intervals are tabulated in Table 1a.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	*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.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	True widths are not confirmed at this time although all drilling is planned close to perpendicular to interpreted strike of the target lodes at the time of drilling.
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 drill hole collar locations and appropriate sectional views.*	Diagrams referencing historical data can be found in the body of this report.
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 avoiding misleading reporting of Exploration Results.*	All older MGV drilling data has previously been reported. Some higher-grade historical results may be reported selectively in this release to highlight the follow-up areas for priority drilling. All data pierce points and collars are shown in the diagrams within this release.
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.*	All material results from geochemical and geophysical surveys and drilling, related to these prospects has been reported or disclosed previously.
Further work	*The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	A range of exploration techniques will be considered to progress exploration including additional surface sampling and 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.	Refer to figures in the body of this announcement.