ASX RELEASE 8 April 2021

ASX: MGV

New Big Sky target extends high-grade gold anomaly to >1.2km

- **Extensional aircore drilling extends regolith gold anomalism over more than 1.2km of strike at targets 5 and 20 (renamed Big Sky Prospect). New intersections include:**
  - **30m @ 5.8g/t Au from 30m (21MUAC049), including;**
    - **6m @ 27.7g/t Au from 30m; and**
  - **12m @ 4.1g/t Au from 42m (21MUAC041)**
- **These high-grade aircore results extend the previous high-grade regolith intersections in holes 20MUAC412 (5m @ 42.2g/t Au) and 20MUAC402 (24m @ 2.5g/t Au) and mineralisation remains open to the north and south and at depth**
- **Aircore drilling is continuing along the new gold corridor west of Lena and assay results for >100 aircore drill holes remain pending**
- **RC basement drilling to follow-up the extensive regolith gold mineralisation identified at Big Sky will commence next week**

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report further strong assay results from regional aircore drilling at the Big Sky prospect along the new gold corridor south-west of Lena on its 100% owned ground at its flagship Cue Gold Project in Western Australia's Murchison district (*Figure 1*). Aircore drilling has now linked Targets 5 and 20 to define a continuous regolith gold anomaly with a strike extent over 1.2km that has been named Big Sky. The gold mineralisation remains open to the north and south and down dip.

Musgrave Managing Director Rob Waugh said: *"The aircore drilling is continuing to define strong continuous regolith gold mineralisation along the new gold corridor south-west of Lena under thin transported cover. The high-grade, strong continuity and near surface nature of the mineralisation is extremely encouraging. The regolith gold dispersion is over a broad area with RC follow-up drilling, testing basement targets scheduled to commence next week. We currently have three exploration drill rigs on site and a significant drilling program planned for the remainder of 2021. RC drilling is also continuing at White Heat.*

5 Ord Street, West Perth WA 6005
Telephone: (61 8) 9324 1061 Fax: (61 8) 9324 1014
Web: www.musgraveminerals.com.au Email: info@musgraveminerals.com.au
ACN: 143 890 671

Big Sky Prospect

Further aircore drilling south-west of Lena within the new gold corridor has continued to intersect significant gold mineralisation below thin transported cover (1-5m) in areas not previously drilled. Drilling between and around Target 5 and Target 20 has now connected the regolith mineralisation from both targets to define a 1.2km long anomalous high-grade gold trend, renamed Big Sky (Figures 1 and 2). The Big Sky Prospect is approximately 3.5km south of Break of Day and the mineralisation remains open to the north and south where further drilling is ongoing (Figure 2).

These regolith intercepts define the southern end of a well mineralised gold corridor which has a potential strike of over 7km and remains largely undrilled in basement bedrock.

Aircore drilling to define the extent of this regolith gold mineralisation is continuing where the mineralisation remains open to the north and south. New intersections from 6m composite samples at Big Sky include:

- **30m @ 5.8g/t Au from 30m (21MUAC049) including:**
  - **6m @ 27.7g/t Au from 30m**
- **12m @ 4.1g/t Au from 42m (21MUAC041)**

Six-metre composite samples have been analysed from the aircore holes drilled in the current program with new details presented in Tables 1a and 1b. All intervals assaying above 0.2g/t have been reported in this release and are considered significant where they occur over significant widths as they present potential targets for basement follow-up drilling. One-metre samples from anomalous gold composites have been submitted for individual analysis with results expected in late May.

Aircore drill holes are spaced between 40-80m apart along 40m to 160m spaced traverse lines. The extensive nature and continuity of the gold mineralisation supports the view that the Big Sky Prospect has the potential to add to the Company's existing resource base. Follow-up RC drilling to define the extent of gold mineralisation in basement rock is planned to commence next week. If successful, this will be followed by resource definition drilling.

One-metre resamples from RC drilling

Individual one-metre resamples of 6m composite samples from RC drill holes at Big Sky have returned significant results with a number of holes terminating in mineralisation including:

Big Sky Prospect

- **75m @ 0.5g/t Au from 15m to EOH (21MORC025)**
- **24m @ 1.0g/t Au from 31m to EOH (21MORC029)**
- **26m @ 1.0g/t Au from 47m to EOH (21MORC030)**

Numbers Prospect

- **78m @ 0.63g/t Au from 2m (21MORC024) including:**
  - **9m @ 3.9g/t Au from 27m**

Further aircore drilling is currently underway and an additional RC drill rig is scheduled to commence next week to follow-up these results.

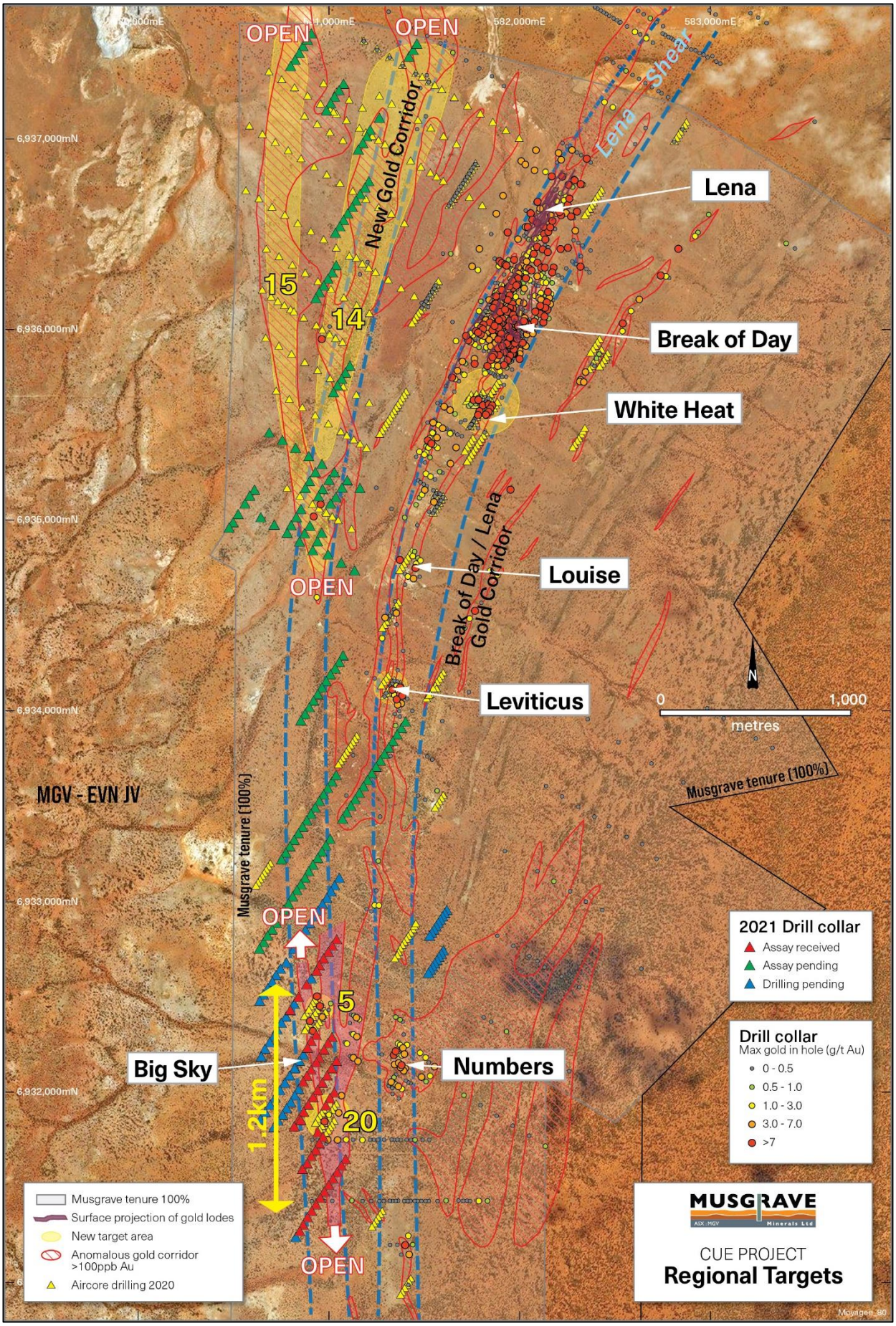

Figure 1: Regional plan showing drill hole collars and new assay results at Big Sky Prospect with respect to the newly identified gold corridor south-west of Lena

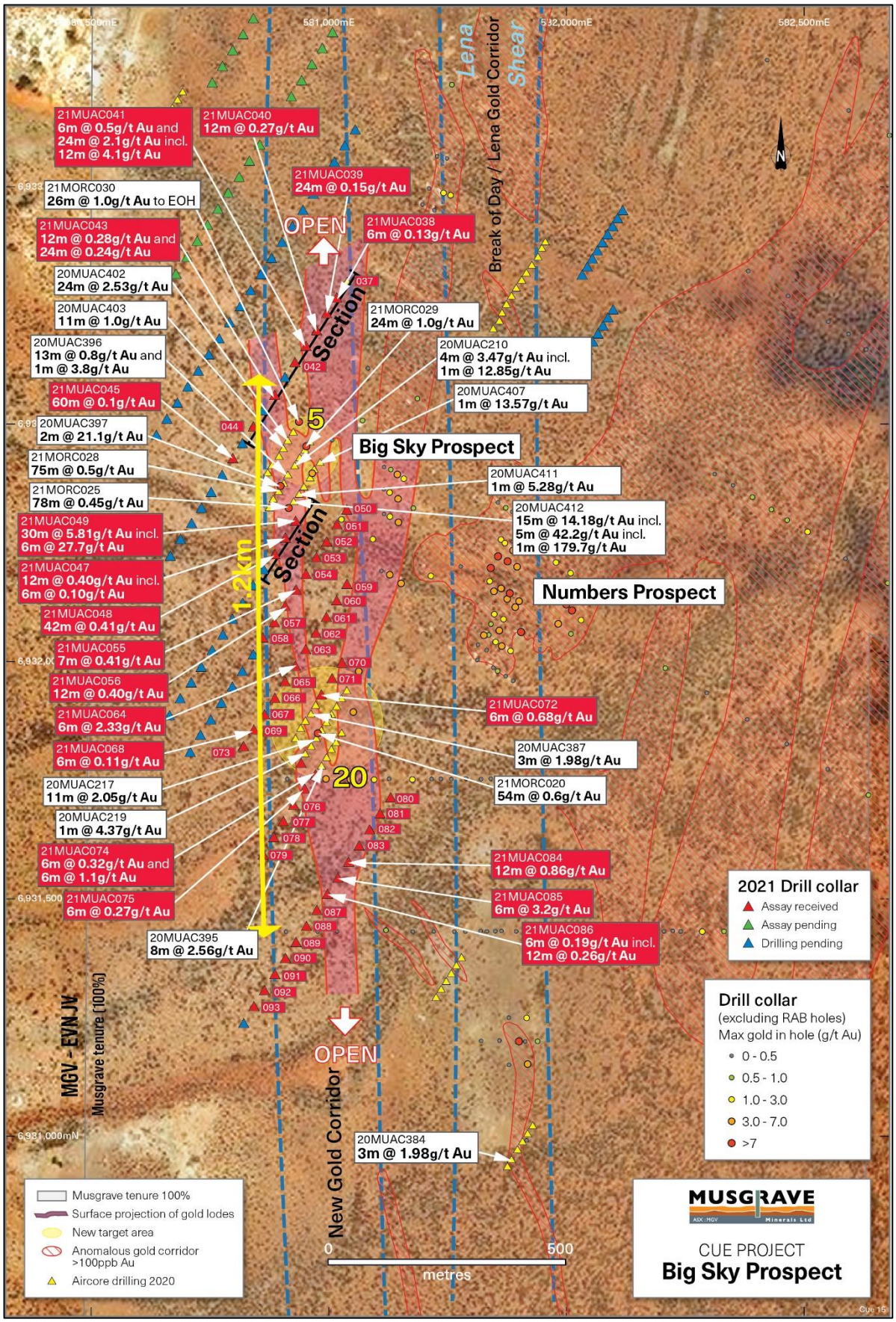

Figure 2: Plan showing Big Sky Prospect, drill hole collars and new assay results with respect to the newly identified gold corridor

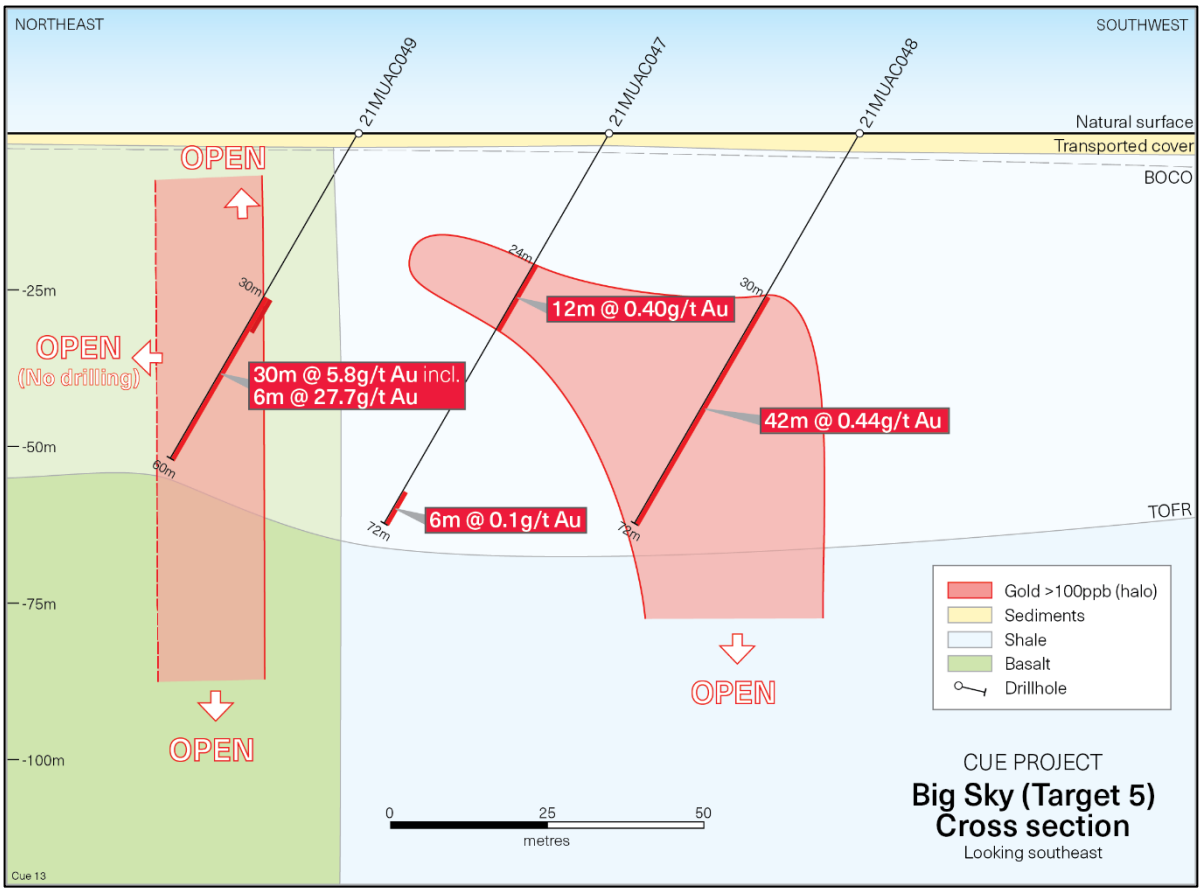

Figure 3: Cross-section showing new aircore drill traverse 350m north of figure 4 traverse through Big Sky Prospect

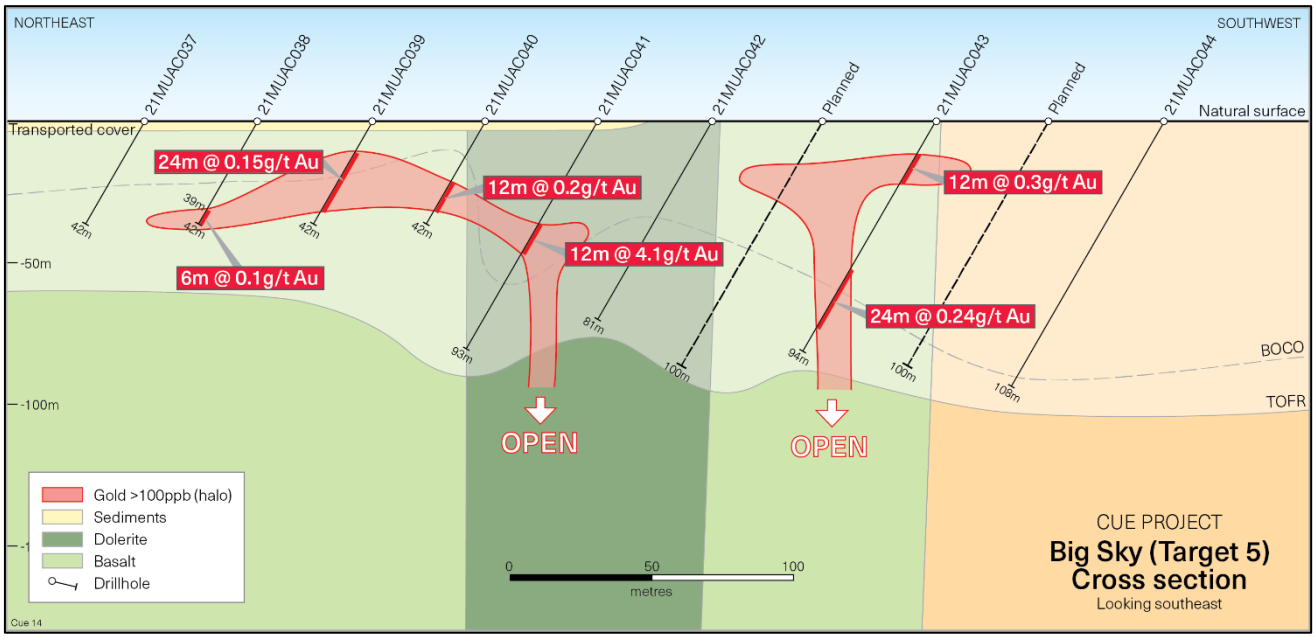

Figure 4: Cross-section showing new aircore drill traverse through Big Sky Prospect 350m south of figure 3 traverse

Cue Project - Break of Day

The Break of Day deposit is located approximately 30km south of Cue in the Murchison district of Western Australia. The deposit is only 5km from the Great Northern Highway, approximately 600km north of Perth.

The current resource estimate for the Cue Gold Project totals 6.4Mt @ 3.2g/t Au for 659koz including the Break of Day deposit (797Kt @ 10.2g/t Au for 262koz contained gold) and the Lena deposit (4.3Mt @ 2.3g/t Au for 325koz contained gold) located 130m to the west of Break of Day (*see MGV ASX announcements dated 17 February 2020 and 11 November 2020*).

Ongoing Activities

Musgrave 100% tenements

- A third drill rig has arrived on site and further RC drilling at the White Heat Prospect has commenced. Assays results are expected in May.
- Follow-up RC drilling to define the basement source of gold anomalism at the new Big Sky Prospect is scheduled to commence next week.
- The large regional aircore drilling program to define the extent of gold anomalism along the new 7km long gold corridor west of Lena is continuing.
- Works for the prefeasibility study at Break of Day and Lena are continuing.

Evolution JV

- Diamond drilling to follow-up the extensive regolith gold anomalies identified in the regional aircore drilling program on Lake Austin is continuing.

Approved by the Board of Musgrave Minerals Limited.

For further details please contact:

Rob Waugh
Managing Director
Musgrave Minerals Limited
+61 8 9324 1061

Luke Forrestal
Associate Director
Media and Capital Partners
+61 411 479 144

About Musgrave Minerals

Musgrave Minerals Limited is an active Australian gold and base metals explorer. 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 package in the Ni-Cu-Co prospective Musgrave Province in South Australia.

Follow us through our social media channels

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

- *19 March 2021, "High grades continue at White Heat, Cue"*
- *8 March 2021, "New Gold Corridor Identified at Cue"*
- *24 February 2021, "Outstanding high-grade gold at White Heat, Cue"*
- *16 February 2021, "RIU Explorers Conference - Company Presentation"*
- *4 February 2021, "Appointment of Non-executive Director"*
- *28 January 2021, "Quarterly Activities and Cashflow Report"*
- *27 January 2021, "New basement gold targets defined on Evolution JV"*
- *19 January 2021, "High-grade near-surface gold extended at target 5, Cue"*
- *18 January 2021, "Results of SPP Offer"*
- *12 January 2021, "Share Purchase Plan closes early"*
- *18 December 2020, "Share Purchase Plan Offer Document"*
- *14 December 2020, "Investor Update Presentation"*
- *14 December 2020, "$18M raising to fund resource growth and commence PFS"*
- *9 December 2020, "High-grade near surface gold at Target 17, Cue"*
- *3 December 2020, "Scout drilling intersects high-grade gold and defines large gold zones under Lake Austin, Evolution JV"*
- *23 November 2020, "New White Heat discovery and further regional drilling success"*
- *19 November 2020, "AGM Presentation"*
- *11 November 2020, "Break of Day High-Grade Mineral Resource Estimate"*
- *4 November 2020, "Regional drilling hits more high-grade gold"*
- *2 November 2020, "Exceptional metallurgical gold recoveries at Starlight"*
- *27 October 2020, "Quarterly Activities and Cashflow Report"*
- *16 October 2020, "Annual Report to Shareholders"*
- *13 October 2020, "Starlight Shines – Diggers and Dealers Company Presentation"*
- *8 October 2020, "Drilling hits high-grade gold at new target, 400m south of Starlight"*
- *24 September 2020, "Infill drilling at Break of Day confirms high grades"*
- *19 August 2020, "Starlight gold mineralisation extended"*
- *31 July 2020, "Quarterly Activities and Cashflow Report"*
- *28 July 2020, "Bonanza gold grades continue at Starlight with 3m @ 884.7g/t Au"*
- *6 July 2020, "85m@11.6g/t gold intersected near surface at Starlight"*
- *29 June 2020, "New gold lode discovered 75m south of Starlight"*
- *9 June 2020, "Bonanza near surface hit of 18m@179.4g/t gold at Starlight"*
- *5 June 2020, "Scout drilling defines large gold targets at Cue, Evolution JV"*
- *3 June 2020, "12m@112.9g/t Au intersected near surface at Starlight"*
- *21 April 2020, "High grades confirmed at Starlight"*
- *1 April 2020, "More High-grade gold at Starlight Link-Lode, Break of Day"*
- *16 March 2020, "Starlight Link-lode shines at Break of Day"*
- *28 February 2020, "High-grade gold intersected Link-lode, Break of Day"*
- *17 February 2020, "Lena Resource Update"*
- *3 December 2019, "New high-grade 'link-lode' intersected at Break of Day, Cue Project"*
- *27 November 2019, "High-grade gold intersected in drilling at Mainland, Cue Project"*
- *9 October 2019, "High-grade gold intersected at Break of Day and ultra-high-grade rock-chip sample from 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"*
- *28 May 2019, "Scout Drilling Extends Gold Zone to >3km at Lake Austin North"*
- *16 August 2017, "Further Strong Gold Recoveries at Lena"*
- *14 July 2017, "Resource Estimate Exceeds 350koz Au"*

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 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.

Table 1a: ***Summary of new aircore drill hole assay intersections from Big Sky***

Drill Hole ID	Drill Type	Prospect	Sample Type	EOH	From (m)	Interval (m)	Au (g/t)	Comment
21MUAC038	AC	Big Sky (Target 5)	6m Composite	42	**36 to EOH**	6	0.13	Anomalous regolith gold to EOH
21MUAC039	AC	Big Sky (Target 5)	6m Composite	42	12	24	0.15	Anomalous regolith gold halo
21MUAC040	AC	Big Sky (Target 5)	6m Composite	42	24	12	0.27	Anomalous regolith gold halo
21MUAC041	AC	Big Sky (Target 5)	6m Composite	93	0	6	0.50	Anomalous regolith gold halo
			and		36	24	2.1	High-grade gold
			Including		42	12	4.1	
21MUAC043	AC	Big Sky (Target 5)	6m Composite	94	12	12	0.28	Anomalous gold halo
			and		60	24	0.24	
21MUAC045	AC	Big Sky (Target 5)	6m Composite	102	36	60	0.1	Low-grade gold halo
21MUAC047	AC	Big Sky (Target 5)	6m Composite	72	24	12	0.40	Anomalous gold in regolith
			Including		66	6	0.10	
21MUAC048	AC	Big Sky (Target 5)	6m Composite	72	**30 to EOH**	42	0.41	Anomalous gold to EOH
21MUAC049	AC	Big Sky (Target 5)	6m Composite	60	**30 to EOH**	30	5.81	High-grade gold to EOH
			Including		30	6	27.7	High-grade gold
21MUAC055	AC	Big Sky (Target 5)	6m Composite	43	**36 to EOH**	7	0.41	Gold mineralisation to EOH
21MUAC056	AC	Big Sky (Target 5)	6m Composite	49	36	12	0.40	Anomalous gold in regolith
21MUAC064	AC	Big Sky (Target 5)	6m Composite	54	**48 to EOH**	6	2.33	Anomalous gold to EOH
21MUAC068	AC	Big Sky (Target 5)	6m Composite	42	**36 to EOH**	6	0.11	Anomalous gold to EOH
21MUAC072	AC	Big Sky (Target 20)	6m Composite	90	**84 to EOH**	6	0.68	Anomalous gold to EOH
21MUAC074	AC	Big Sky (Target 20)	6m Composite	48	18	6	0.32	Anomalous gold in regolith
			and		36	6	1.1	
21MUAC075	AC	Big Sky (Target 20)	6m Composite	42	18	6	0.27	Anomalous gold in regolith
21MUAC084	AC	Big Sky (Target 20)	6m Composite	66	30	12	0.86	Anomalous gold in regolith
21MUAC085	AC	Big Sky (Target 20)	6m Composite	60	48	6	3.2	High-grade gold in regolith
21MUAC086	AC	Big Sky (Target 20)	6m Composite	78	48	6	0.19	Anomalous gold in regolith
			Including		**66 to EOH**	12	0.26	Anomalous gold to EOH

Table 1b: ***Summary of new MGV drill collars from current aircore drill program***

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
21MUAC037	AC	Big Sky (Target 5)	581040	6932800	030	-60	418	148	Reported above
21MUAC038	AC	Big Sky (Target 5)	581018	6932766	030	-60	418	57	Reported above
21MUAC039	AC	Big Sky (Target 5)	580996	6932732	030	-60	418	58	Reported above
21MUAC040	AC	Big Sky (Target 5)	580974	6932698	030	-60	418	143	Reported above
21MUAC041	AC	Big Sky (Target 5)	580952	6932664	030	-60	418	65	Reported above
21MUAC042	AC	Big Sky (Target 5)	580930	6932630	030	-60	418	148	Reported above
21MUAC043	AC	Big Sky (Target 5)	580886	6932562	030	-60	418	154	Reported above
21MUAC044	AC	Big Sky (Target 5)	580842	6932494	030	-60	418	175	Reported above
21MUAC045	AC	Big Sky (Target 5)	580798	6932426	030	-60	418	158	Reported above
21MUAC047	AC	Big Sky (Target 5)	580908	6932261	030	-60	418	148	Reported above
21MUAC048	AC	Big Sky (Target 5)	580886	6932227	030	-60	418	150	Reported above
21MUAC049	AC	Big Sky (Target 5)	580930	6932295	030	-60	418	160	Reported above

21MUAC050	AC	Big Sky (Target 5)	581040	6932320	030	-60	418	160	Reported above
21MUAC051	AC	Big Sky (Target 5)	581018	6932286	030	-60	418	150	Reported above
21MUAC052	AC	Big Sky (Target 5)	580996	6932252	030	-60	418	150	Reported above
21MUAC053	AC	Big Sky (Target 5)	580974	6932218	030	-60	418	76	Reported above
21MUAC054	AC	Big Sky (Target 5)	580952	6932184	210	-60	418	76	Reported above
21MUAC055	AC	Big Sky (Target 5)	580930	6932150	210	-60	418	76	Reported above
21MUAC056	AC	Big Sky (Target 5)	580908	6932116	210	-60	418	76	Reported above
21MUAC057	AC	Big Sky (Target 5)	580886	6932082	120	-60	418	124	Reported above
21MUAC058	AC	Big Sky (Target 5)	580864	6932048	030	-60	418	90	Reported above
21MUAC059	AC	Big Sky (Target 5)	580965	6932395	030	-60	418	94	Reported above
21MUAC060	AC	Big Sky (Target 5)	581008	6932463	210	-60	418	80	Reported above
21MUAC061	AC	Big Sky (Target 5)	580900	6932367	030	-60	418	100	Reported above
21MUAC062	AC	Big Sky (Target 5)	580954	6932451	210	-60	418	82	Reported above
21MUAC063	AC	Big Sky (Target 5)	580938	6932503	210	-60	418	76	Reported above
21MUAC064	AC	Big Sky (Target 5)	582417	6935872	030	-60	418	50	Reported above
21MUAC065	AC	Big Sky (Target 5)	582402	6935850	030	-60	418	100	Reported above
21MUAC066	AC	Big Sky (Target 5)	581859	6935602	030	-60	418	46	Reported above
21MUAC067	AC	Big Sky (Target 5)	581838	6935567	030	-60	418	100	Reported above
21MUAC068	AC	Big Sky (Target 5)	581840	6935609	030	-60	418	52	Reported above
21MUAC069	AC	Big Sky (Target 5)	581820	6935615	030	-60	418	40	Reported above
21MUAC070	AC	Big Sky (Target 5)	581799	6935582	030	-60	418	94	Reported above
21MUAC071	AC	Big Sky (Target 20)	582402	6935850	030	-60	418	178	Reported above
21MUAC072	AC	Big Sky (Target 20)	581822	6935579	030	-60	418	90	Reported above
21MUAC073	AC	Big Sky (Target 20)	581812	6935561	030	-60	418	120	Reported above
21MUAC074	AC	Big Sky (Target 20)	581791	6935528	030	-60	418	178	Reported above
21MUAC075	AC	Big Sky (Target 20)	581804	6935627	030	-60	418	40	Reported above
21MUAC076	AC	Big Sky (Target 20)	581782	6935593	030	-60	418	100	Reported above
21MUAC077	AC	Big Sky (Target 20)	581771	6935577	030	-60	418	147	Reported above
21MUAC078	AC	Big Sky (Target 20)	581791	6935645	030	-60	418	40	Reported above
21MUAC079	AC	Big Sky (Target 20)	581770	6935611	030	-60	418	100	Reported above
21MUAC080	AC	Big Sky (Target 20)	581747	6935615	030	-60	418	80	Reported above
21MUAC081	AC	Big Sky (Target 20)	581737	6935597	030	-60	418	124	Reported above
21MUAC082	AC	Big Sky (Target 20)	581087	6931645	030	-60	418	124	Reported above
21MUAC083	AC	Big Sky (Target 20)	581065	6931611	030	-60	418	124	Reported above
21MUAC084	AC	Big Sky (Target 20)	581043	6931577	030	-60	418	124	Reported above
21MUAC085	AC	Big Sky (Target 20)	581021	6931543	030	-60	418	124	Reported above
21MUAC086	AC	Big Sky (Target 20)	580999	6931509	030	-60	418	124	Reported above
21MUAC087	AC	Big Sky (Target 20)	580977	6931475	030	-60	418	124	Reported above
21MUAC088	AC	Big Sky (Target 20)	580955	6931441	030	-60	418	124	Reported above
21MUAC089	AC	Big Sky (Target 20)	580933	6931407	030	-60	418	124	Reported above
21MUAC090	AC	Big Sky (Target 20)	580911	6931373	030	-60	418	124	Reported above
21MUAC091	AC	Big Sky (Target 20)	580889	6931339	030	-60	418	124	Reported above
21MUAC092	AC	Big Sky (Target 20)	580867	6931305	030	-60	418	124	Reported above
21MUAC093	AC	Big Sky (Target 20)	580845	6931271	030	-60	418	124	Reported above

Table 2a: ***Summary of new RC drill hole assay intersections from Big Sky prospect***

Drill Hole ID	Drill Type	Prospect	Sample Type	EOH	From (m)	Interval (m)	Au (g/t)	Comment
21MORC020	RC	Big Sky (Target 20)	Im individual	76	14	54	0.6	Anomalous gold
			Including		14	1	4.8	

			Including		46	1	14.6	
			Including		56	1	5.3	
21MORC021	RC	Big Sky (Target 20)	Im individual	76	52	1	1.5	Low-grade gold halo
21MORC022	RC	Big Sky (Target 20)	Im individual	76	24	45	0.16	Anomalous gold halo
21MORC023	RC	Big Sky (Target 20)	Im individual	100	84	9	0.4	Low-grade gold halo
21MORC024	RC	Numbers	Im individual	124	2	78	0.63	Anomalous gold from near surface in banded iron formation
			Including		27	9	3.9	
21MORC025	RC	Big Sky (Target 5)	Im individual	90	**15 to EOH**	75	0.50	Low-grade gold
			Including		15	7	1.9	Low-grade regolith gold
			and		74	5	2.7	Low-grade fresh rock gold
			Including		**85 to EOH**	5	1.1	
21MORC026	RC	Big Sky (Target 5)	Im individual	94	49	5	0.45	Low-grade gold halo
21MORC027	RC	Big Sky (Target 5)	Im individual	80	44	1	1.2	Basement source of regolith gold not identified
21MORC028	RC	Big Sky (Target 5)	Im individual	100	**36 to EOH**	64	0.25	Gold mineralisation in porphyry
			Including		83	5	1.1	
21MORC029	RC	Big Sky (Target 5)	Im individual	82	31	24	1.0	Gold mineralisation in porphyry
			Including		41	5	2.2	
			and		**75 to EOH**	7	0.42	
21MORC030	RC	Big Sky (Target 5)	Im individual	76	0	5	0.50	Near surface regolith dispersion
			Including		47	26	1.0	Gold mineralisation in porphyry

Table 2b: ***Summary of MGV drill collars from RC drill program with assays reported above***

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
21MORC020	RC	Big Sky (Target 20)	580979	6931844	030	-60	418	76	1m samples reported above
21MORC021	RC	Big Sky (Target 20)	581000	6931878	210	-60	418	76	1m samples reported above
21MORC022	RC	Big Sky (Target 20)	581054	6931890	210	-60	418	76	1m samples reported above
21MORC023	RC	Big Sky (Target 20)	581064	6931978	210	-60	418	76	1m samples reported above
21MORC024	RC	Numbers	581341	6932196	120	-60	418	124	1m samples reported above
21MORC025	RC	Big Sky (Target 5)	580916	6932319	030	-60	418	90	1m samples reported above
21MORC026	RC	Big Sky (Target 5)	580965	6932395	030	-60	418	94	1m samples reported above
21MORC027	RC	Big Sky (Target 5)	581008	6932463	210	-60	418	80	1m samples reported above
21MORC028	RC	Big Sky (Target 5)	580900	6932367	030	-60	418	100	1m samples reported above
21MORC029	RC	Big Sky (Target 5)	580954	6932451	210	-60	418	82	1m samples reported above
21MORC030	RC	Big Sky (Target 5)	580938	6932503	210	-60	418	76	1m samples reported above

Notes to Tables 1a, 1b, 2a and 2b

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.*
2. *In Aircore and RC drilling six metre composite samples are collected and analysed for gold together with selected 1m intervals on visual geology while individual one metre samples are collected and analysed pending composite results. Composite samples assaying >0.1g/t Au are re-analysed at one metre intervals.*
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, Western Australia or a 500g sample by Photon Assay at MinAnalytical in Canning Vale.*
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 Au where zones of internal dilution are not weaker than 2m < 0.1g/t Au. Bulked thicker intercepts may have more internal dilution between high-grade zones.*
6. *All drill holes referenced in this announcement are reported in Tables 1a, 1b, 2a and 2b above.*
7. *Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond.*
8. *Coordinates are in GDA94, MGA Z50.*

---ENDS---

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.
	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 GPS to an accuracy of 0.5m.
	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> 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. The sample size is deemed appropriate for the grain size of the material being sampled. Some samples are sent to the Genalysis – Intertek laboratory in Maddington 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 detection limit). Some samples are sent to the NATA accredited MinAnalytical Laboratory in Canning Vale, Perth and analysed via PhotonAssay technique (method code PAAU2) 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 (method code PAP3512R). 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).
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 and aircore drilling was undertaken by Strike Drilling Pty Ltd utilised an X350 tracked drill rig with an on-board compressor with 350psi/950cfm and an auxiliary booster with 350psi/1150 cfm. RC holes were drilled with an 83mm diameter blade bit. The drill rig has the capacity to switch between aircore and RC pending ground conditions. 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.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC 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.
	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.*	N/A
	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
	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 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 and 1m Aircore samples, analysis is undertaken by Intertek-Genalysis (a registered laboratory), with 50g fire assay with ICP-MS finish undertaken for gold. Some samples are sent to the NATA accredited MinAnalytical Laboratory in Canning Vale, 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 (method code PAP3512R). 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.
	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 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 (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 and Lena prospects are located on granted mining lease M21/106 and the primary tenement holder is Musgrave Minerals Ltd. Regional targets in this release are on M21/106 and E58/335. 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.