

## High-grade, near-surface gold extended at Target 5, Cue

- Follow-up aircore drilling at Target 5, 4km to the south of Break of Day has returned strong high-grade, near surface gold results, including:
  - 6m @ 10.62g/t Au from 30m (20MUAC397)
  - 6m @ 5.23g/t Au from 24m (20MUAC412) within a broader interval of:
    - 18m @ 1.97g/t Au from 24m to EOH
  - 6m @ 4.56g/t Au from 36m to EOH (20MUAC407)
  - 6m @ 3.24g/t Au from 36m to EOH (20MUAC396)
  - 30m @ 1.10g/t Au from 12m to EOH (20MUAC402)
  - 18m @ 1.15g/t Au from surface (20MUAC403)
- Mineralisation at Target 5 is interpreted as two sub-parallel zones, over a strike extent of more than 120m and remains open
- Further near-surface gold intersections also recorded at Target 14 and Target 20 including:
  - 2m @ 7.30g/t Au from 73m (Target 14, 20MUAC335)
  - 7m @ 1.39g/t Au from 51m (Target 14, 20MUAC336)
  - 12m @ 1.36g/t Au from 18m (Target 20, 20MUAC387)
  - 6m @ 1.02g/t Au from 36m to EOH (Target 20, 20MUAC391)
- Follow-up RC drilling at the White Heat prospect has commenced with first assays expected in February
- Further drilling planned to commence in February on a number of regional targets including Targets 5, 9, 14, 15, 17, 20, 21 and 25

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report further strong assay results from regional aircore drilling across numerous targets on its 100% owned ground at its flagship Cue Gold Project in Western Australia's Murchison district (*Figure 1*).

Musgrave Managing Director Rob Waugh said: "This is another excellent set of results from our regional drilling program where we continue to have success with our gold exploration. Further strong, early stage, near surface, gold hits were received across a number of targets with Target 5 being the highlight. Target 5 is open along strike, both to the north and south, with significant potential to extend the mineralisation. We are back drilling again at the White Heat Prospect and will have a second drill rig on site in the first week of February.

In late 2020, a total of 445 aircore holes (25,298m) were completed over 25 targets with composite assays now received for all holes (Figures 3 and 5). All new anomalous assay results and corresponding drill collars are shown in Tables 1a and 1b. A Phase 2 aircore drilling program will commence in early February to define the extent of the new anomalies following these exceptional early results.

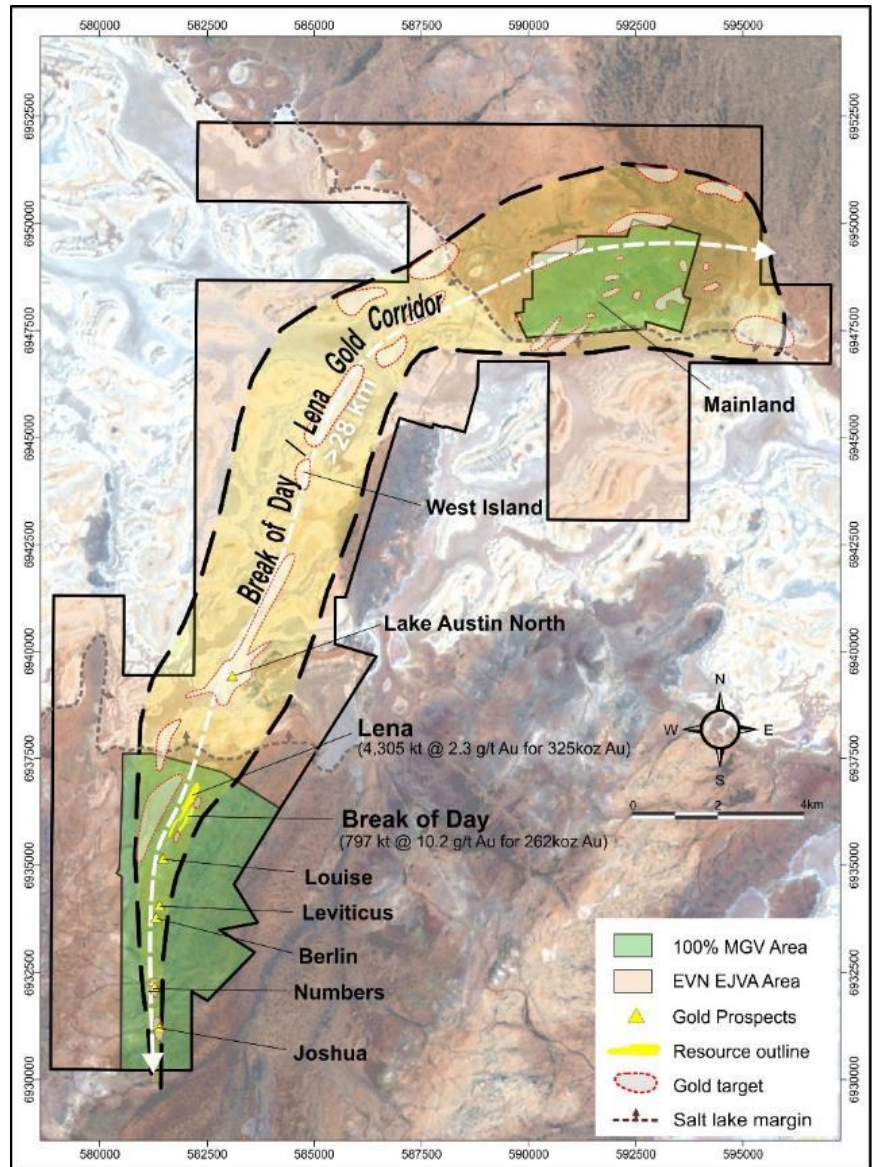


Figure 1: Prospect location plan

### Target 5

Follow-up drilling at **Target 5** confirmed and extended the gold anomalism along strike to over 120m (Figures 2 and 3). Two parallel zones of gold mineralisation are interpreted from early drilling (Figures 4 and 5) with both zones open along strike to the north and south. New intercepts from 6m composite samples include:

- 6m @ 10.62g/t Au from 30m (20MUAC397)
- 6m @ 5.23g/t Au from 24m (20MUAC412) within a broader interval of:
  - 18m @ 1.97g/t Au from 24m to EOH
- 6m @ 4.56g/t Au from 36m to EOH (20MUAC407)
- 6m @ 3.24g/t Au from 36m to EOH (20MUAC396)
- 30m @ 1.10g/t Au from 12m to EOH (20MUAC402)
- 18m @ 1.15g/t Au from surface (20MUAC403)



Many of the drillholes ended in mineralisation (*Figures 4 and 5*) so the extent of the gold intersections are not fully defined and further drilling will be completed as a priority. The mineralisation is hosted within a combination of felsic schists, porphyry and basalts. The level of anomalism and the multiple end-of-hole intercepts is extremely encouraging. There is also no drilling for 500m to the south of Target 5 towards Target 20 (*Figure 3*) and no drilling to the north for >2.5km to Target 14 (*Figure 2*). Further extensional follow-up aircore drilling is planned for February with reverse circulation (RC) follow-up basement drilling beneath the current intercepts scheduled for late January.

#### Target 14

Follow-up drilling at **Target 14** has confirmed the regolith gold anomalism over a strike length of approximately 2.8km where it remains open to the south. New intercepts (*Figure 2*) from 6m composite samples include:

- 12m @ 1.36g/t Au from 18m (20MUAC387)
- 6m @ 1.02g/t Au from 36m to EOH (20MUAC391)

#### Target 20

Follow-up drilling at **Target 20** has extended the near surface gold anomalism along strike for 140m where it remains open both north (for 500m) and south (for 1.5km).

New intercepts from 6m composite samples include:

- 12m @ 1.36g/t Au from 18m (20MUAC387)
- 6m @ 1.02g/t Au from 36m to EOH (20MUAC391)
- 24m @ 0.66g/t Au from 12m (20MUAC395) – end of drill traverse, open to south-west

Additional anomalous gold results have been identified at targets 25, 21, 18, 17 and 4 (*Table 1a*). Further aircore drilling to define the extents of the gold anomalism will commence in February.

No significant gold anomalism was identified in the aircore drilling on the new targets at Mainland.

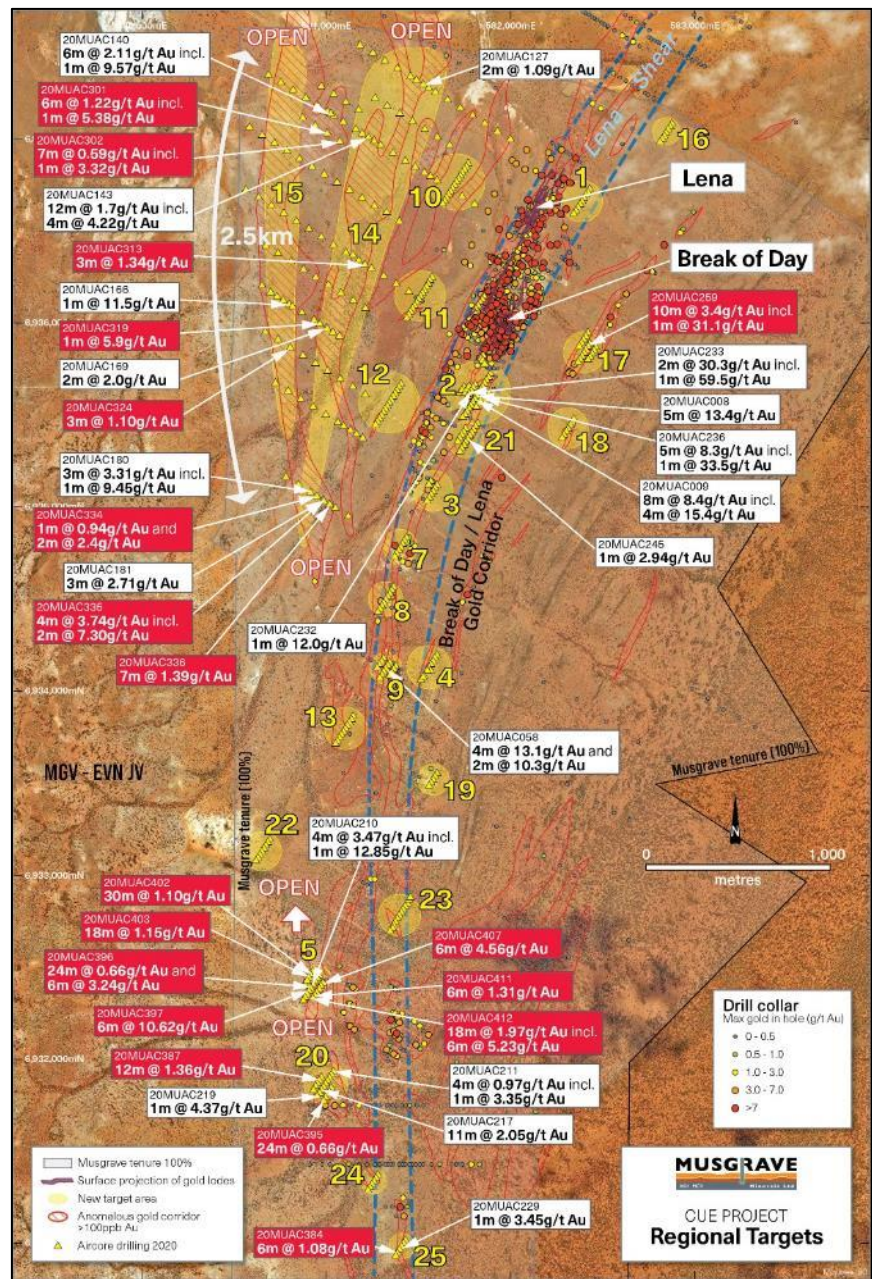


Figure 2: Plan showing drill hole collars from regional drill program and new significant assay results

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The regional drilling program has been very effective in testing targets derived from geophysical, geochemical and geological data and is focused on the potential for near-surface, high-grade gold mineralisation on structures cross-cutting stratigraphy like that seen at Starlight and potential new structural gold corridors parallel to the Lena/Break of Day corridor (regional Targets 14 and 15).

A combination of 6m composites and 1m individual samples have been analysed from aircore/RC holes (the drill rig has the capacity to switch between aircore and RC hammer depending on ground conditions) drilled in the current program with details presented in Tables 1a and 1b. All intervals assaying 6m above 0.1g/t Au (or gram x metre equivalents) have been reported in this release and are of potential significance.

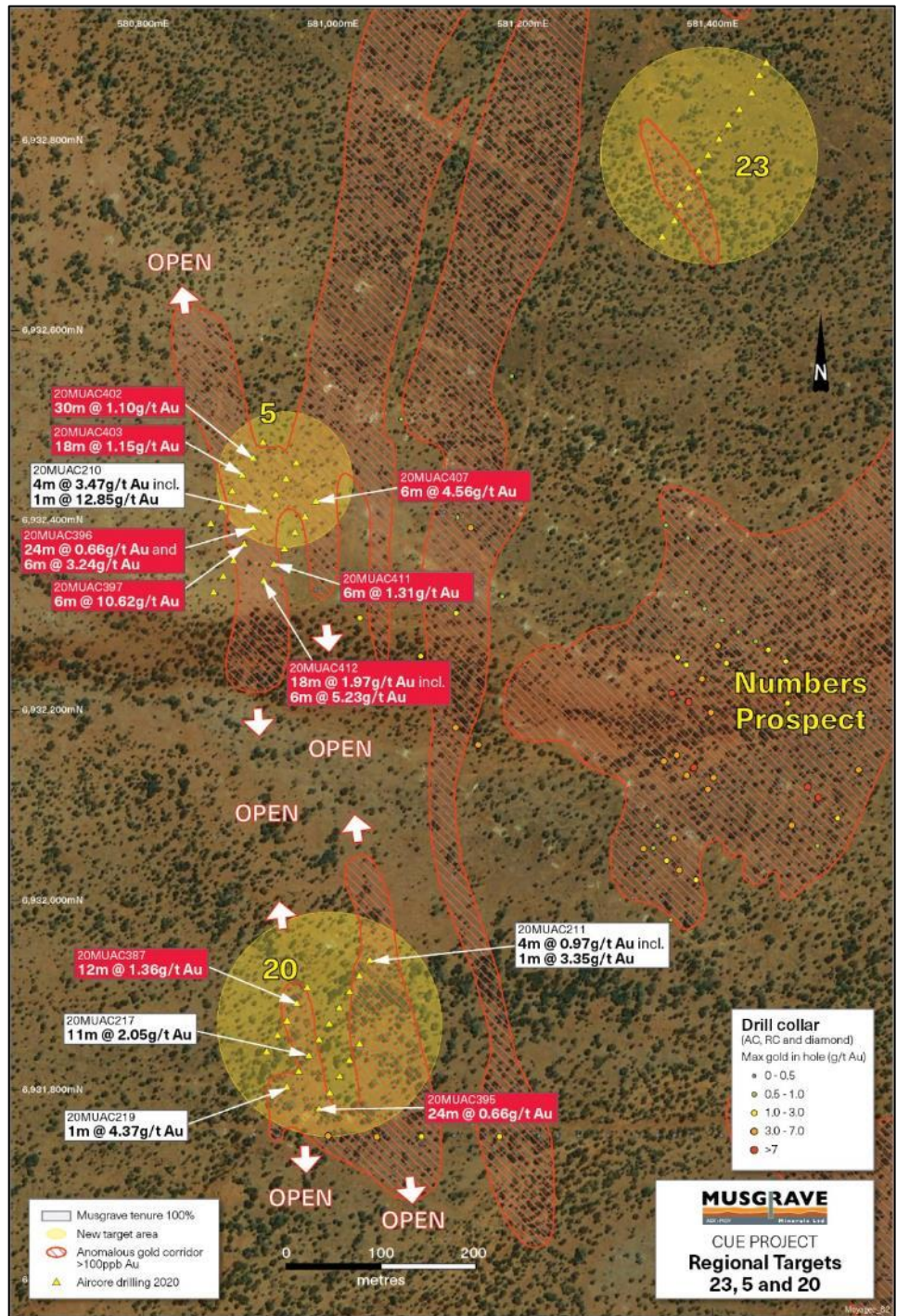


Figure 3: Plan showing drill hole collars over Target 5 and Target 20



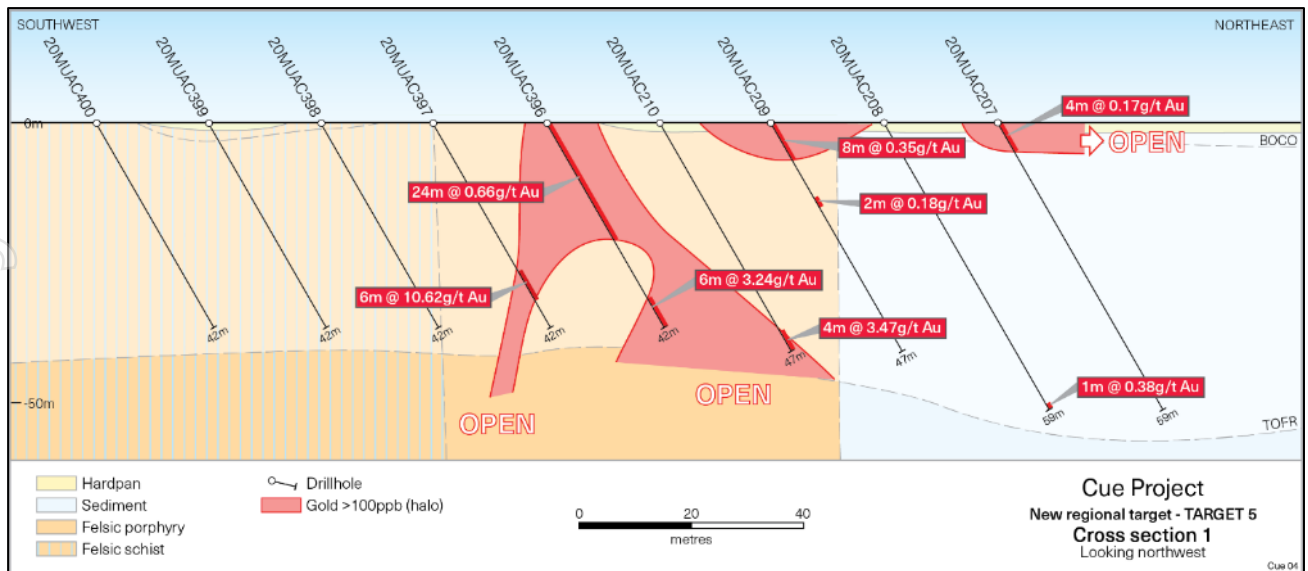


Figure 4: Cross-section showing drill hole collars from the regional drill program through Target 5

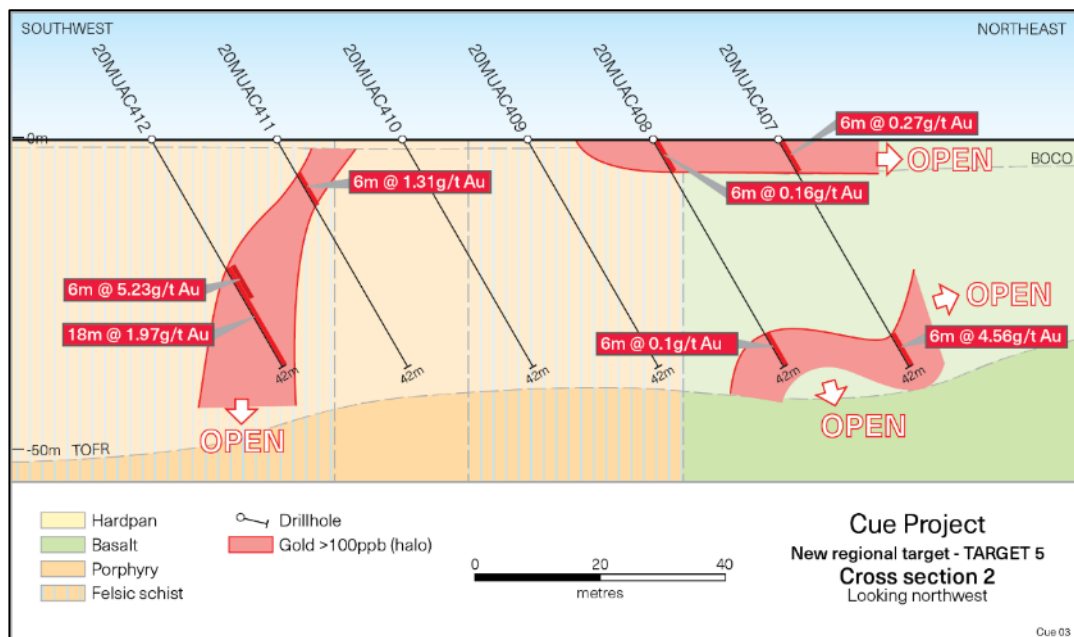


Figure 5: Cross-section showing drill hole collars from the regional drill program through Target 5

### 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**

- Initial aircore follow-up drilling at high priority targets including White Heat, and targets 5, 9, 14, 15, 17, 20 and 21 is now complete. All composite assays have been received with approximately 20% of one-metre assays still pending.
- Further aircore/RC drilling on high-priority targets 5, 9, 14, 15, 17, 20 and 21 is scheduled to commence in February 2021.
- RC drilling at the White Heat target has commenced to follow-up previous high-grade aircore results.
- Regional aircore drilling of new structural and geological targets at Cue is currently being planned and will commence late in Q1.
- PFS studies at Break of Day and Lena are being planned and quotes assessed for commencement of development studies in February.

### **Evolution JV**

- The Phase 2 aircore drilling program testing high-priority gold targets on Lake Austin is complete with assays expected through to February 2021.
- Compilation of full results is underway to rank and prioritise targets in what is developing as a large mineral system.
- Diamond drilling to follow-up these extensive regolith gold anomalies is scheduled to commence in February 2021.

Approved by the Board of Musgrave Minerals Limited.

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### **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.*

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## Additional JORC Information

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

- 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.

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Table 1a: Summary of new Aircore drill hole assay intervals from current regional program

Drill Hole ID	Drill Type	Prospect	Sample Type	EOH	From (m)	Interval (m)	Au (g/t)	Comment
20MUAC259	AC	Target 17	1m Individual	44	20	10	3.4	High grade gold in weathered, sheared dolerite with quartz veining
			including		22	1	31.1	
20MUAC273	AC	Target 14	1m Individual	132	0	6	0.34	Transported?
			1m Individual		119	4	0.58	Dispersion halo in saprolite
			1m Individual		131	1	0.57	EOH anomaly in dolerite
20MUAC274	AC	Target 14	1m Individual	130	0	6	0.13	Transported?
20MUAC275	AC	Target 14	1m Individual	85	1	2	2.4	Transported?
20MUAC276	AC	Target 15	1m Individual	94	30	6	0.15	Dispersion halo in saprolite
20MUAC277	AC	Target 15	1m Individual	90	87	2	0.20	EOH anomaly in basalt
20MUAC283	AC	Target 15	1m Individual	90	54	1	1.03	Dispersion halo in saprolite
			1m Individual		73	1	0.65	Weathered mafic
20MUAC289	AC	Target 15	1m Individual	99	30	1	0.54	Dispersion halo in saprolite
20MUAC290	AC	Target 15	1m Individual	90	57	2	0.60	Weathered sediments
20MUAC292	AC	Target 14	1m Individual	99	97	2	0.60	Weathered dolerite
20MUAC294	AC	Target 15	1m Individual	100	60	14	0.47	Dispersion halo in saprolite
			Including		60	3	1.41	
20MUAC295	AC	Target 14	1m Individual	101	5	1	2.48	Transported?
20MUAC296	AC	Target 14	1m Individual	106	14	2	0.14	Dispersion halo in saprolite
20MUAC297	AC	Target 14	1m Individual	99	72	6	0.14	Dispersion halo in saprolite
20MUAC299	AC	Target 15	1m Individual	74	57	1	1.57	Dispersion halo in saprolite
20MUAC301	AC	Target 15	1m Individual	91	60	6	1.22	Dispersion halo in saprolite
			Including		65	1	5.38	
			1m Individual		85 to EOH	6	0.16	EOH anomaly in weathered, sheared dolerite
20MUAC302	AC	Target 15	1m Individual	120	59	7	0.59	Dispersion halo in saprolite
			Including		59	1	3.32	
20MUAC305	AC	Target 15	1m Individual	108	72	3	0.40	Dispersion halo in saprolite
			and		89	2	0.15	
20MUAC306	AC	Target 15	1m Individual	129	111	10	0.26	Dispersion halo in saprolite
20MUAC307	AC	Target 15	1m Individual	90	14	4	0.27	Dispersion halo in saprolite
20MUAC308	AC	Target 14	1m Individual	84	12	4	0.80	Dispersion halo in saprolite
20MUAC309	AC	Target 14	1m Individual	87	12	2	0.2	Dispersion halo in saprolite
			and		68	10	0.31	Weathered basalt
20MUAC311	AC	Target 14	1m Individual	90	49	6	0.39	Dispersion halo in saprolite
20MUAC312	AC	Target 14	1m Individual	90	60	6	0.13	Dispersion halo in saprolite
20MUAC313	AC	Target 14	1m Individual	90	40	8	0.64	Dispersion halo in saprolite
			Including		81	3	1.34	Weathered, sheared dolerite
20MUAC315	AC	Target 15	1m Individual	87	61	4	0.32	Dispersion halo in saprolite
20MUAC317	AC	Target 15	1m Individual	126	84	2	0.59	Dispersion halo in saprolite
			1m Individual		99	3	0.32	Dispersion halo in saprolite
20MUAC318	AC	Target 15	1m Individual	114	52	2	0.38	Dispersion halo in saprolite
20MUAC319	AC	Target 14	1m Individual	86	56	1	5.9	Dispersion halo in saprolite
20MUAC321	AC	Target 14	1m Individual	82	42	4	0.19	Dispersion halo in saprolite
20MUAC324	AC	Target 15	1m Individual	90	9	1	0.82	Dispersion halo in saprolite
					73	3	1.10	Weathered, sheared dolerite
20MUAC328	AC	Target 14	6m composite	90	48	18	0.24	Weathered sediments
20MUAC334	AC	Target 14	1m Individual	111	19	1	0.94	Dispersion halo in saprolite

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					24	2	2.4	
					67	2	0.25	Dispersion halo in saprolite
20MUAC335	AC	Target 14	1m Individual	114	72	4	3.74	Dispersion halo in saprolite
			Including		73	2	7.30	
20MUAC336	AC	Target 14	1m Individual	113	21	6	0.20	Dispersion halo in saprolite
					51	7	1.39	Dispersion halo in saprolite
					108	2	0.39	Anomaly in weathered sediments
20MUAC339	AC	White Heat (Target 2)	1m Individual	54	30	2	0.19	Dispersion halo in saprolite
20MUAC341	AC	White Heat (Target 2)	1m Individual	46	16	3	0.53	Dispersion halo in saprolite
			1m Individual		23	2	0.77	
			1m Individual		28	7	0.4	
			1m Individual		34	2	0.4	
20MUAC344	AC	South of White Light	6m composite	43	30	6	0.13	Dispersion halo in saprolite
20MUAC346	AC	South of White Light	6m composite	51	12	6	0.33	Dispersion halo in saprolite
20MUAC268	AC	Target 15	1m Individual	85	65	1	1.01	Dispersion halo in saprolite
20MUAC384	AC	Target 25	6m composite	45	6	6	1.08	Dispersion halo in saprolite
20MUAC387	AC	Target 20	6m composite	42	18	12	1.36	Dispersion halo in saprolite
20MUAC388	AC	Target 20	6m composite	45	36	6	0.20	Dispersion halo in saprolite
20MUAC391	AC	Target 20	6m composite	42	36 to EOH	6	1.02	Gold anomalism to EOH in weathered mafic schist
20MUAC395	AC	Target 20	6m composite	42	12	24	0.66	Dispersion halo in saprolite
20MUAC396	AC	Target 5	6m composite	42	0	24	0.66	Dispersion halo in saprolite
					36 to EOH	6	3.24	Gold anomalism to EOH in weathered porphyry
20MUAC397	AC	Target 5	6m composite	42	30	6	10.62	Dispersion halo in saprolite
20MUAC402	AC	Target 5	6m composite	42	12 to EOH	30	1.10	Gold anomalism to EOH in weathered felsic schist
20MUAC403	AC	Target 5	6m composite	42	0	18	1.15	Dispersion halo in saprolite
20MUAC404	AC	Target 5	6m composite	42	0	18	0.10	Dispersion halo in saprolite
20MUAC407	AC	Target 5	6m composite	42	0	6	0.27	Dispersion halo in saprolite
					36 to EOH	6	4.56	Gold anomalism to EOH in weathered basalt
20MUAC408	AC	Target 5	6m composite	42	0	6	0.16	Dispersion halo in saprolite
					36 to EOH	6	0.1	Gold anomalism to EOH in weathered basalt
20MUAC411	AC	Target 5	6m composite	42	6	6	1.31	Dispersion halo in saprolite
20MUAC412	AC	Target 5	6m composite	42	24 to EOH	18	1.97	Gold anomalism to EOH in weathered felsic schist
			Including		24	6	5.23	
20MUAC413	AC	Target 21	6m composite	42	18	6	0.11	Dispersion halo in saprolite
20MUAC414	AC	Target 21	6m composite	42	0	6	0.12	Dispersion halo in saprolite
					36 to EOH	6	0.14	to EOH
20MUAC416	AC	Target 21	6m composite	42	24	6	0.13	Dispersion halo in saprolite
20MUAC417	AC	Target 21	6m composite	42	18	6	0.10	Dispersion halo in saprolite
20MUAC425	AC	Target 17	6m composite	43	24 to EOH	19	0.22	Anomalous gold to EOH
20MUAC431	AC	Target 18	6m composite	43	18	18	0.18	Anomalous gold in basalt
20MUAC432	AC	Target 18	6m composite	49	36	12	0.33	Anomalous gold in basalt
20MUAC441	AC	Target 4	6m composite	42	30	6	0.11	Anomalous gold

**Table 1b: Summary of new MGV drill collars from anomalous regional aircore drill holes reported above**

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
20MUAC259	Aircore	Regional	582418	6935874	300	-60	418	44	Reported Above
20MUAC268	Aircore	Regional	581008	6937150	300	-60	418	85	Reported Above
20MUAC273	Aircore	Regional	581535	6937055	300	-60	418	132	Reported Above
20MUAC274	Aircore	Regional	581604	6937012	300	-60	418	130	Reported Above
20MUAC275	Aircore	Regional	581671	6936969	300	-60	418	85	Reported Above
20MUAC276	Aircore	Regional	580973	6937288	300	-60	418	94	Reported Above
20MUAC277	Aircore	Regional	581041	6937245	300	-60	418	90	Reported Above
20MUAC283	Aircore	Regional	580720	6936980	300	-60	418	90	Reported Above
20MUAC289	Aircore	Regional	581127	6936724	300	-60	418	99	Reported Above
20MUAC290	Aircore	Regional	581194	6936682	300	-60	418	90	Reported Above
20MUAC292	Aircore	Regional	581328	6936605	300	-60	418	99	Reported Above
20MUAC294	Aircore	Regional	581261	6936990	300	-60	418	100	Reported Above
20MUAC295	Aircore	Regional	581483	6936851	300	-60	418	101	Reported Above
20MUAC296	Aircore	Regional	581566	6936799	300	-60	418	106	Reported Above
20MUAC297	Aircore	Regional	581490	6937322	300	-60	418	99	Reported Above
20MUAC299	Aircore	Regional	580872	6937118	300	-60	418	74	Reported Above
20MUAC301	Aircore	Regional	581007	6937033	300	-60	418	91	Reported Above
20MUAC302	Aircore	Regional	581075	6936990	300	-60	418	120	Reported Above
20MUAC305	Aircore	Regional	580740	6936380	300	-60	418	108	Reported Above
20MUAC306	Aircore	Regional	580808	6936337	300	-60	418	129	Reported Above
20MUAC307	Aircore	Regional	580876	6936295	300	-60	418	90	Reported Above
20MUAC308	Aircore	Regional	580944	6936252	300	-60	418	84	Reported Above
20MUAC309	Aircore	Regional	581011	6936209	300	-60	418	87	Reported Above
20MUAC311	Aircore	Regional	581147	6936124	300	-60	418	90	Reported Above
20MUAC312	Aircore	Regional	581214	6936082	300	-60	418	90	Reported Above
20MUAC313	Aircore	Regional	581210	6936321	300	-60	418	90	Reported Above
20MUAC315	Aircore	Regional	580651	6936206	300	-60	418	87	Reported Above
20MUAC317	Aircore	Regional	580767	6936125	300	-60	418	126	Reported Above
20MUAC318	Aircore	Regional	580817	6936092	300	-60	418	114	Reported Above
20MUAC319	Aircore	Regional	580968	6935995	300	-60	418	86	Reported Above
20MUAC321	Aircore	Regional	581037	6935953	300	-60	418	82	Reported Above
20MUAC324	Aircore	Regional	580806	6935869	300	-60	418	90	Reported Above
20MUAC328	Aircore	Regional	581077	6935698	300	-60	418	90	Reported Above
20MUAC334	Aircore	Regional	580949	6935060	300	-60	418	111	Reported Above
20MUAC335	Aircore	Regional	580988	6935037	300	-60	418	114	Reported Above
20MUAC336	Aircore	Regional	581018	6935019	300	-60	418	113	Reported Above
20MUAC339	Aircore	Regional	581865	6935583	30	-60	418	54	Reported Above
20MUAC341	Aircore	Regional	581762	6935644	30	-60	418	46	Reported Above
20MUAC344	Aircore	Regional	581841	6935809	30	-60	418	43	Reported Above
20MUAC346	Aircore	Regional	581859	6935779	30	-60	418	51	Reported Above
20MUAC347	Aircore	Regional	590250	6947800	180	-60	418	42	Reported Above
20MUAC348	Aircore	Regional	590250	6947850	180	-60	418	46	Reported Above
20MUAC384	Aircore	Regional	581386	6930953	30	-60	418	45	Reported Above
20MUAC387	Aircore	Regional	580962	6931891	30	-60	418	42	Reported Above
20MUAC388	Aircore	Regional	580951	6931874	30	-60	418	45	Reported Above
20MUAC391	Aircore	Regional	581028	6931848	30	-60	418	42	Reported Above
20MUAC395	Aircore	Regional	580985	6931780	30	-60	418	42	Reported Above

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20MUAC396	Aircore	Regional	580916	6932392	30	-60	418	42	Reported Above
20MUAC397	Aircore	Regional	580906	6932375	30	-60	418	42	Reported Above
20MUAC402	Aircore	Regional	580915	6932465	30	-60	418	42	Reported Above
20MUAC403	Aircore	Regional	580904	6932448	30	-60	418	42	Reported Above
20MUAC404	Aircore	Regional	580893	6932431	30	-60	418	42	Reported Above
20MUAC407	Aircore	Regional	580982	6932421	30	-60	418	42	Reported Above
20MUAC408	Aircore	Regional	580971	6932404	30	-60	418	42	Reported Above
20MUAC411	Aircore	Regional	580938	6932353	30	-60	418	42	Reported Above
20MUAC412	Aircore	Regional	580927	6932336	30	-60	418	42	Reported Above
20MUAC413	Aircore	Regional	581754	6935429	30	-60	418	42	Reported Above
20MUAC414	Aircore	Regional	581744	6935412	30	-60	418	42	Reported Above
20MUAC416	Aircore	Regional	581724	6935378	30	-60	418	42	Reported Above
20MUAC417	Aircore	Regional	581714	6935361	30	-60	418	42	Reported Above
20MUAC425	Aircore	Regional	582374	6935878	30	-60	418	43	Reported Above
20MUAC431	Aircore	Regional	582312	6935431	30	-60	418	43	Reported Above
20MUAC432	Aircore	Regional	582301	6935414	30	-60	418	49	Reported Above
20MUAC441	Aircore	Regional	581514	6934065	30	-60	418	42	Reported 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.*
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 >0.1g/t Au across 6m or gram x metre equivalent over thinner intervals where zones of internal dilution are not weaker than 2m < 0.1g/t Au. Bulkier thicker intercepts may have more internal dilution between high-grade zones.*
6. *All drill holes referenced in this announcement are reported in Tables 1a and 1b above.*
7. *Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond.*
8. *Coordinates are in GDA94, MGA Z50.*

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## JORC TABLE 1

### Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	<i>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.</i>	<p>MGV sampling is undertaken using standard industry practices including the use of duplicates and standards at regular intervals.</p> <p>A Thermo Scientific Niton GoldD XL3+ 950 Analyser is available on site to aid geological interpretation. No XRF results are reported.</p> <p>Historical sampling criteria are unclear for pre 2009 drilling.</p> <p><u>Current Aircore drill program</u></p> <p>Air core 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 stainless-steel scoop. Individual 1m samples are submitted for initial assays where significant obvious mineralisation is intersected.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	All co-ordinates are in UTM grid (GDA94 Z50) and drill hole collars have been surveyed by GPS to an accuracy of 0.5m.
	<i>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.</i>	<p><u>Current Aircore drill program</u></p> <p>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 by stainless steel scoop. One metre individual samples are immediately submitted for analysis where a high probability of mineralisation occurs (e.g. quartz vein lode or massive sulphide). The 3kg samples are pulverised to produce a 50g charge for fire assay with ICP-MS finish for gold.</p> <p>All 1m samples are sampled to 1-3kg in weight to ensure total preparation at the laboratory pulverization stage.</p> <p>The sample size is deemed appropriate for the grain size of the material being sampled.</p> <p>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).</p> <p>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).</p> <p>The PhotonAssay technique was developed by CSIRO and Chrysol 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).</p>
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	<p>Aircore/RC drilling was used for this MGV program. Strike Drilling Pty Ltd utilised an X350 tracked drill rig with an on-board compressor with 430psi/1000cfm. Aircore/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.</p> <p>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.</p>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Aircore 6m composite samples are collected and re-assayed at 1m intervals were 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.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>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.</p> <p>Historical sampling recovery is unclear for pre 2009 drilling.</p>
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	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.	Aircore 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.

<i>Location of data points</i>	<i>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.</i>	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.
	<i>Specification of the grid system used.</i>	Drill hole and sample site co-ordinates are in UTM grid (GDA94 Z50) and historical drill holes are converted from local grid references.
	<i>Quality and adequacy of topographic control.</i>	All current aircore drill hole collars are planned and set up using hand-held GPS (accuracy +-2m).
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Variable drill hole spacings are used to complete 1 <sup>st</sup> 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.
	<i>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.</i>	No resources have been calculated on regional drilling targets as described in this release due to the early-stage nature of the drilling
	<i>Whether sample compositing has been applied.</i>	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.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	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.
	<i>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.</i>	No orientation-based sampling bias can be confirmed at this time and true widths are not yet known.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	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).
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	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

<b>Criteria</b>	<b>Explanation</b>	<b>Commentary</b>
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	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") from Silver Lake Resources Ltd. 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.

	<i>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.</i>	The tenements are in good standing and no known impediments exist.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	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 from 1991-2007. Musgrave Minerals has undertaken exploration since 2016.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	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.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 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 hole length.</i>	All aircore & RC drill holes collars with assays received for the current regional drill program at Cue are reported in 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.
<i>Data aggregation methods</i>	<i>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.</i>	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.
	<i>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.</i>	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.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values have been reported.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>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').</i>	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.
<i>Diagrams</i>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Diagrams referencing historical data can be found in the body of this report.
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.</i>	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.
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	All material results from geochemical and geophysical surveys and drilling, related to these prospects has been reported or disclosed previously.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	A range of exploration techniques will be considered to progress exploration including additional surface sampling and drilling.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to figures in the body of this announcement.