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## **New White Heat discovery and further regional drilling success**

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- **Drilling program targeting Starlight analogues at Cue continues to deliver strong results with multiple targets intersecting anomalous near-surface gold mineralisation and further high-grade hits at Target 2 (now called White Heat)**
- **Follow-up drilling along strike at White Heat (Target 2), 400m to the south of Starlight intersected:**
  - **6m @ 11.6g/t Au from 24m (20MUAC236)**
  - **6m @ 8.3g/t Au from 36m (20MUAC233)**
- **High-grade, near-surface gold at White Heat has now been intersected over a 70m strike on three adjacent traverses where it remains open both to the east, west and down dip**
- **Two large regolith gold anomalies (Targets 14 & 15) covering more than 2km of strike, have been identified under thin transported cover, in an unexplored area west of the Lena and Break of Day deposits**
- **Aircore traverses have been completed over 23 of 25 regional targets and initial assays received for 21 targets, with anomalous gold intersected at 19 including high-grade results from targets 2, 9, 14, 15 & 20**

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report assay results for a further 143 aircore/reverse circulation ("RC") drill holes from the current regional exploration program 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 strong set of result from our regional drilling program which continues to highlight the upside gold potential of the belt. The White Heat target is showing significant potential and the identification of two new regional, parallel, gold bearing corridors with no basement drilling opens the opportunity for further discoveries. Regional drilling on targets is continuing and further follow-up of the high-grade gold results at White Heat and other targets is underway.”

The current drill program is testing new Starlight analogue targets on trend from the high-grade Starlight gold discovery at Break of Day with multiple targets returning very encouraging results. Follow-up drilling at **White Heat** (formerly referred to as **Target 2**) (Figures 2 and 3) has intersected further high-grade gold extending the strike of the mineralisation to at least 70m. The program has also identified two new parallel trends west of the Lena/Break of Day target corridor (Figure 4) with strong gold anomalism under thin transported cover.

Twenty-three of a planned 25 targets have now been tested by a single traverse of aircore drill holes. Assay results have been received for 23 targets with 19 showing anomalous gold results. Follow-up infill drilling has commenced on the highest priority targets, including targets 2, 5, 9 14, 15 and 20 after very promising early results (see Tables 1a and 1b for all new anomalous gold results).

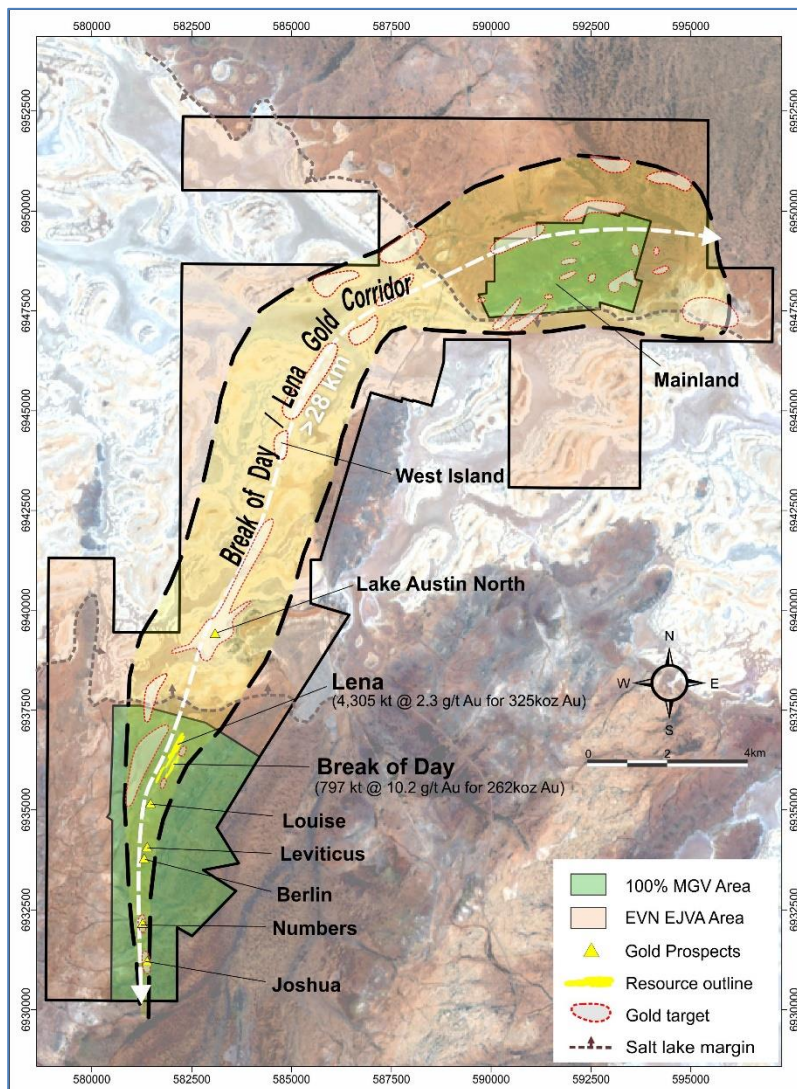


Figure 1: Prospect location plan

Follow-up aircore drilling at the **White Heat Target (Target 2)** (Figures 2 and 4) has intersected high-grade, near-surface regolith gold mineralisation (Figure 3) in 6m composite samples on traverses either side of the initial intersections (5m @ 14.4g/t Au and 8m @ 8.4g/t Au) (see MGVA ASX announcement dated 8 October 2020, “Drilling hits high-grade gold at new target, 400m south of Starlight”). Drilling intersected:

- 6m @ 11.6g/t Au from 24m (20MUAC236) 30m east and
- 6m @ 8.3g/t Au from 36m (20MUAC233) 40m west of the initial gold intersections.

These new intersections are within the Archaean regolith and confirm a 290-degree strike to the new gold mineralisation at White Heat, similar to that seen at Starlight. This high-grade regolith mineralisation has now been defined over a strike length of more than 70m and remains open along



strike and down dip. Assay results from additional drill traverses are awaited and basement reverse circulation (“RC”) drilling is currently being planned to test the depth extent of the mineralisation.

At **Target 5** (Figures 2 and 4) the anomalous gold mineralisation is on the southern-most hole of the drill traverse where it remains open to the south and along strike. Drilling intersected:

- 4m @ 3.47g/t Au (20MUAC210) from 43m to end of hole within Archaean regolith including;
  - 1m @ 12.85g/t Au from 43m.

Follow-up drilling to extend the traverse is being scheduled.

At **Target 20** the anomalous gold mineralisation is also on the southern-most hole of the traverse where it remains open to the south and along strike. Drilling intersected:

- 11m @ 2.05g/t Au (20MUAC217) from 28m; and
- 1m @ 4.37g/t Au (20MUAC219) from 46m to end of hole where it terminated in mineralisation.

Follow-up drilling to extend the traverse is planned for mid-December.

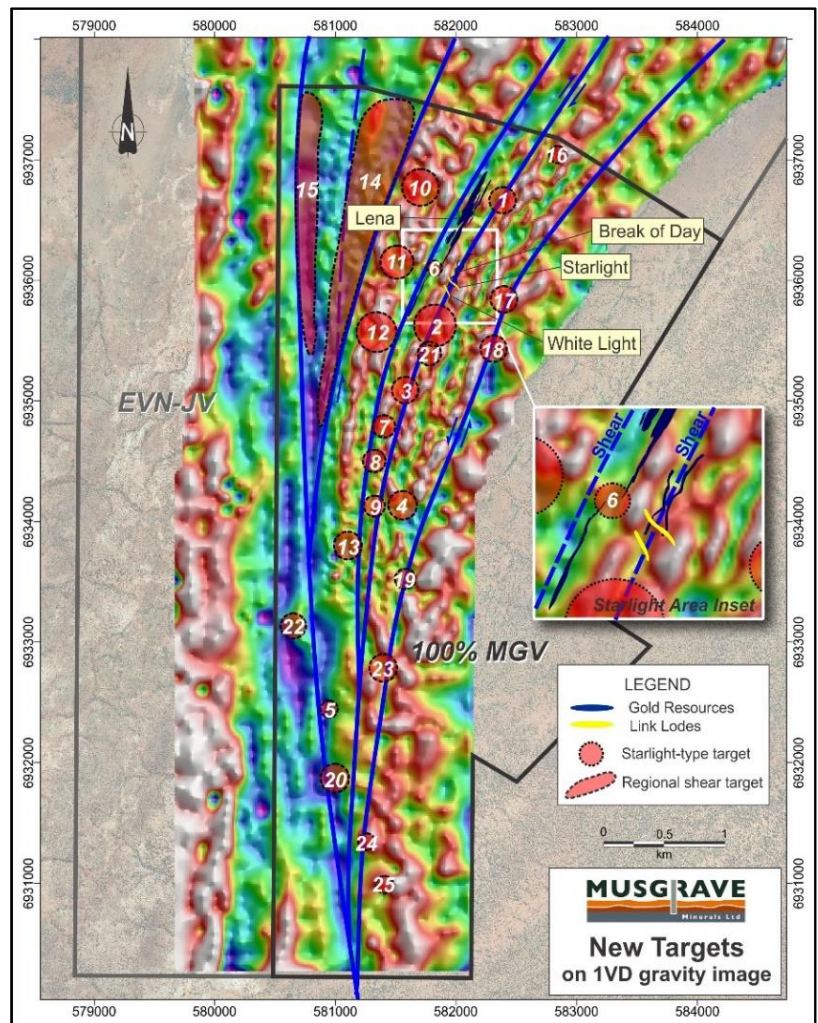


Figure 2: Plan showing regional targets on 1VD gravity image

At **Targets 14 and 15**, regional broad spaced traverses, 400m to 600m apart with holes spaced 60m to 80m along traverse lines, drilled west of Lena have identified two parallel corridors with continuous, anomalous gold mineralisation. Each has a strike length of more than 2km and both corridors remain open to the south. Follow-up infill drilling has already commenced to better define the anomalies and identify basement drill targets. Further assays are pending.

**Target 14**, is a regolith gold anomaly under approximately 8m of transported cover, 600m west of Lena, and has a strike length of over 2.5km, a width of approximately 150m and is defined by intersections including:

- 12m @ 1.7g/t Au (20MUAC143) from 65m, including;
  - 4m @ 4.22g/t Au from 69m
- 2m @ 2.0g/t Au (20MUAC169) from 50m
- 2m @ 2.05g/t Au (20MUAC177) from 40m

**Target 15**, 600m west of Target 14 on a previously unidentified parallel structure to Lena/Break of Day is defined as a regolith gold anomaly under approximately 20m of transported cover and has a strike length of over 2.5km, a width of approximately 200m and is defined by intersections including:

- 6m @ 2.11g/t Au (20MUAC140) from 54m, including:



- 1m @ 9.57g/t Au from 54m
- 3m @ 3.31g/t Au (20MUAC180) from 17m, including:
  - 1m @ 9.45g/t Au from 17m
- 1m @ 11.5g/t Au (20MUAC166) from 51m
- 3m @ 2.71g/t Au (20MUAC181) from 74m

To date a total of 353 aircore holes (21,900m) has been completed over 23 of a planned 25 targets with assays received for 249 holes (*Figures 3 and 4*). The drill program has been extended to more than 23,000m following the exceptional early results. All new anomalous assay results and drill collars are shown in Tables 1a and 1b.

The program is 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.

A combination of 6 metre composites and 1 metre 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.

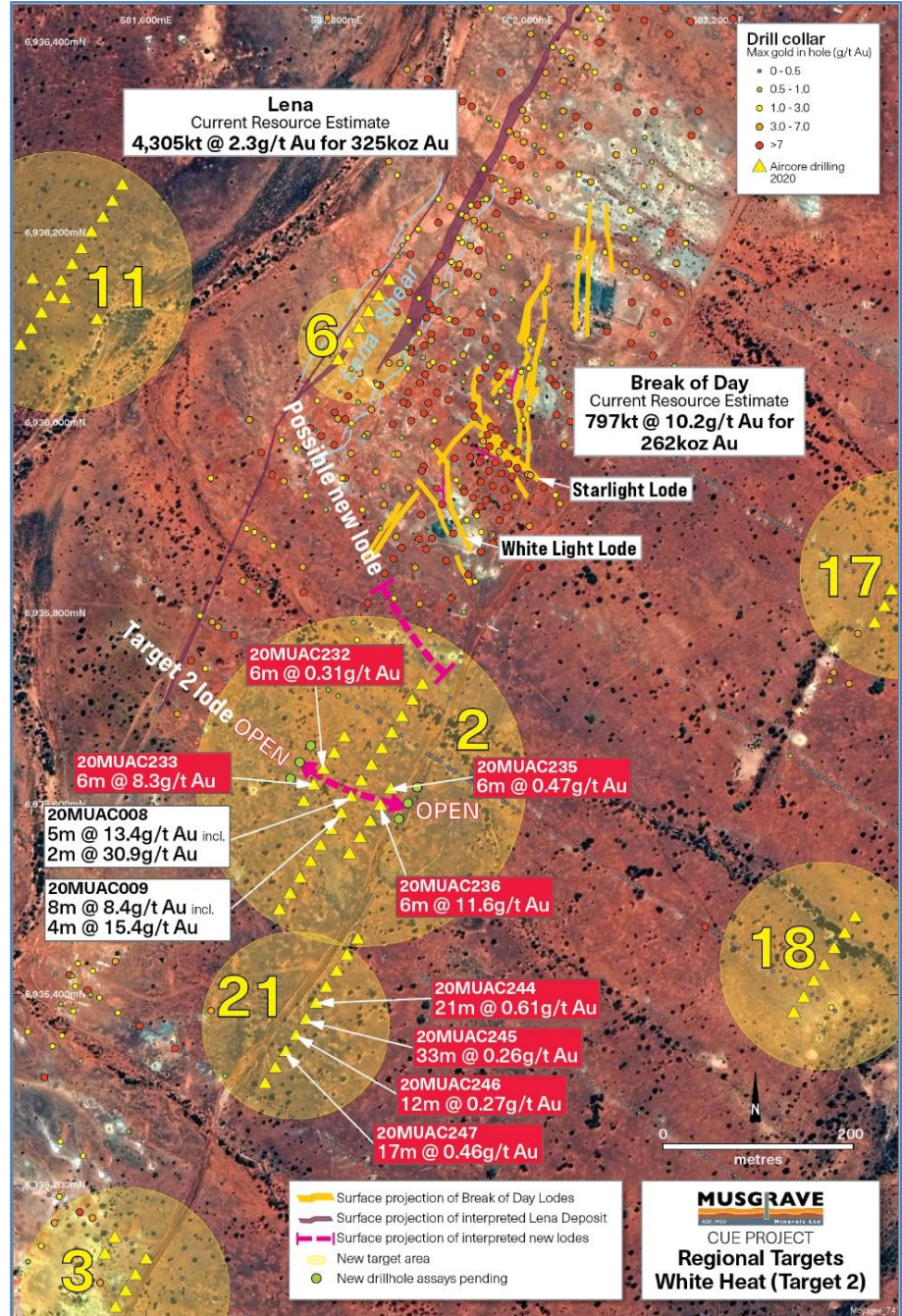


Figure 3: Plan showing drill hole collars from the regional drill program across the White Heat target (Target 2) and Target 21



## 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*).

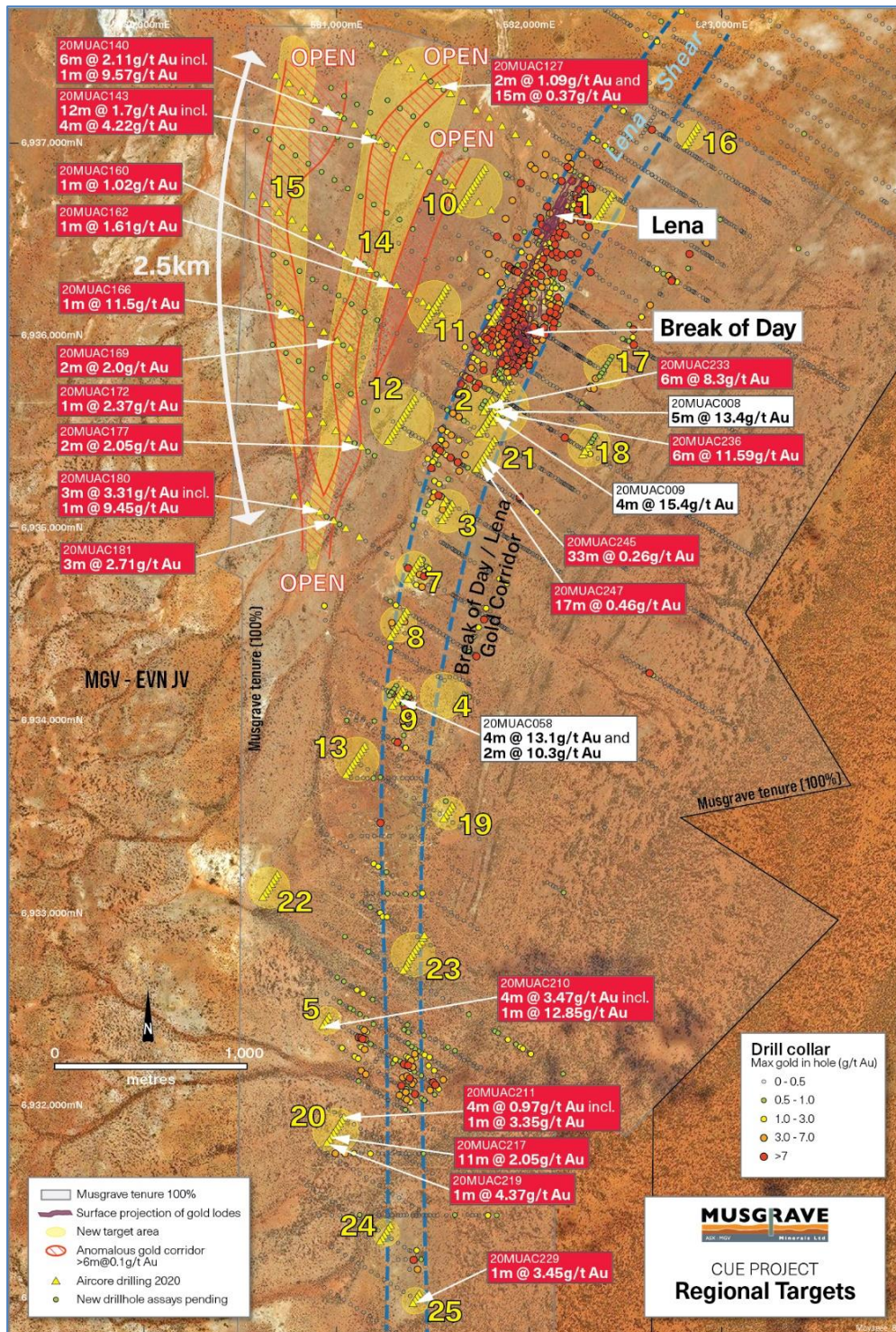


Figure 4: Plan showing drill hole collars from regional drill program and new significant assay results



## **Ongoing Exploration**

### **Musgrave 100% tenements**

- Aircore/RC drilling program testing 25 regional and Starlight analogue targets is continuing.
- Follow-up drilling at high priority targets including White Heat, and targets 5, 9, 14, 15 and 20 has commenced. Assays pending.
- Further drilling to test possible new lodes 100m to the south of White Light (4m @ 3.3g/t Au and 3m @ 3.4g/t Au) identified in hole 20MORC105 (See *MGV ASX announcement 28 September 2020*) has commenced. Assays pending.
- Regional aircore drilling of new structural and geochemical targets at Mainland has commenced.
- Baseline environmental and broader heritage surveys at Break of Day and Lena have commenced in preparation for further development studies.

### **Evolution JV**

- The Phase 2 aircore drilling program testing high-priority gold targets on Lake Austin is continuing with over 18,000m of a planned 21,900m program completed.

For and on behalf 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 and copper project. Musgrave has had significant exploration success at Cue with the ongoing focus on increasing the gold and copper resources through discovery and extensional drilling to underpin studies that will demonstrate a viable path to development in the near term. 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:

- 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 intervals from current regional program**

Drill Hole ID	Drill Type	Prospect	Sample Type	From (m)	Interval (m)	Au (g/t)	Comment
20MUAC106	AC	Regional Target 11	1m individual	4	3	0.21	Dispersion halo in saprolite
			1m individual	10	2	0.19	
20MUAC117	AC	Regional Target 12	1m individual	37	2	0.82	Dispersion halo in saprolite
20MUAC126	AC	Regional Target 14	1m individual	79	8	0.24	Dispersion halo in saprolite
20MUAC127	AC	Regional Target 14	1m individual	8	2	1.09	Dispersion halo in saprolite
			1m individual	72	6	0.16	
			1m individual	81	15	0.37	
20MUAC136	AC	Regional Target 15	1m individual	56	13	0.2	Mafic schist
			1m individual	79	8	0.42	
20MUAC137	AC	Regional Target 15	1m individual	54	1	0.96	Dispersion halo in saprolite
20MUAC138	AC	Regional Target 15	1m individual	50	3	0.22	Dispersion halo in saprolite
20MUAC140	AC	Regional Target 15	1m individual	54	6	2.11	Dispersion halo in saprolite
			Including	54	1	9.57	
			1m individual	80	1	0.8	Mafic schist
			1m individual	97	19	0.3	Mafic schist
20MUAC143	AC	Regional Target 15	1m individual	65	12	1.7	Dispersion halo in saprolite
			Including	69	4	4.22	
			1m individual	102	4	0.15	Sedimentary schist
20MUAC145	AC	Regional Target 15	1m individual	72	3	0.48	Dispersion halo in saprolite
20MUAC147	AC	Regional Target 14	1m individual	2	10	0.15	Transported?
			1m individual	104	6	0.26	EOH anomaly. Tonalite
20MUAC148	AC	Regional Target 10	1m individual	12	5	0.3	Transported?
			1m individual	51	2	0.34	Dispersion halo in saprolite
20MUAC149	AC	Regional Target 10	1m individual	42	6	0.13	Dispersion halo in saprolite
20MUAC152	AC	Regional Target 15	1m individual	37	2	0.34	Dispersion halo in saprolite
20MUAC153	AC	Regional Target 15	1m individual	64	1	0.51	Felsic schist
20MUAC160	AC	Regional Target 14	1m individual	50	1	1.02	Dispersion halo in saprolite
20MUAC162	AC	Regional Target 14	1m individual	50	1	1.61	Dispersion halo in saprolite
20MUAC163	AC	Regional Target 11	1m individual	13	4	0.20	Transported?
20MUAC165	AC	Regional Target 15	1m individual	85	3	0.35	Sedimentary schist
20MUAC166	AC	Regional Target 15	1m individual	51	1	11.5	Dispersion halo in saprolite
20MUAC169	AC	Regional Target 14	1m individual	50	2	2.0	Dispersion halo in saprolite
20MUAC170	AC	Regional Target 14	1m individual	37	11	0.20	Dispersion halo in saprolite
20MUAC172	AC	Regional Target 15	1m individual	66	1	2.37	Sedimentary schist
20MUAC177	AC	Regional Target 14	1m individual	40	2	2.05	Dispersion halo in saprolite
20MUAC179	AC	Regional Target 15	1m individual	60	3	0.73	Dispersion halo in saprolite
20MUAC180	AC	Regional Target 15	1m individual	17	3	3.31	Dispersion halo in saprolite
			including	17	1	9.45	
			1m individual	73	1	0.79	Dispersion halo in saprolite
20MUAC181	AC	Regional Target 15	1m individual	74	3	2.71	EOH anomaly. Sheared basalt
20MUAC193	AC	Regional Target 13	1m individual	31	6	0.37	Dispersion halo in saprolite
20MUAC194	AC	Regional Target 13	1m individual	14	2	0.16	Dispersion halo in saprolite
20MUAC195	AC	Regional Target 13	1m individual	8	4	0.15	Dispersion halo in saprolite
20MUAC196	AC	Regional Target 13	1m individual	52	1	0.33	EOH anomaly. Dispersion halo in saprolite
20MUAC198	AC	Regional Target 13	1m individual	6	5	0.31	Dispersion halo in saprolite
20MUAC207	AC	Regional Target 5	1m individual	1	4	0.13	Dispersion halo in saprolite
20MUAC208	AC	Regional Target 5	1m individual	58	1	0.39	EOH anomaly. Dispersion halo in saprolite





20MUAC209	AC	Regional Target 5	1m individual	1	8	0.35	Dispersion halo in saprolite
			1m individual	13	2	0.18	Dispersion halo in saprolite
20MUAC210	AC	Regional Target 5	1m individual	43	4	3.47	EOH anomaly. Sediment
			Including	43	1	12.85	
20MUAC211	AC	Regional Target 20	1m individual	37	4	0.97	Dispersion halo in saprolite
			Including	40	1	3.35	
20MUAC212	AC	Regional Target 20	1m individual	26	5	0.17	Dispersion halo in saprolite
			1m individual	37	8	0.6	
20MUAC217	AC	Regional Target 20	1m individual	28	11	2.05	Dispersion halo in saprolite
20MUAC218	AC	Regional Target 20	1m individual	40	1	0.14	Dispersion halo in saprolite
20MUAC219	AC	Regional Target 20	1m individual	46	1	4.37	EOH anomaly. Dispersion halo in saprolite
20MUAC221	AC	Regional Target 21	1m individual	26	4	0.9	Dispersion halo in saprolite
			1m individual	40	1	0.45	Basalt
20MUAC229	AC	Regional Target 25	1m individual	14	1	3.45	Dispersion halo in saprolite
20MUAC231	AC	Regional Target 2	6m composite	30	6	0.18	Dispersion halo in saprolite
20MUAC232	AC	Regional Target 2	6m composite	24	6	0.31	Dispersion halo in saprolite
20MUAC233	AC	Regional Target 2	6m composites	24	18	2.26	Quartz veining in basalt
			including	36	6	8.3	
20MUAC235	AC	Regional Target 2	6m composite	18	6	0.47	Dispersion halo in saprolite
20MUAC236	AC	Regional Target 2	6m composites	18	24	2.97	Quartz veining in basalt
			including	24	6	11.59	
20MUAC240	AC	Regional Target 21	6m composite	12	6	0.14	High Mg basalt
20MUAC241	AC	Regional Target 21	6m composite	12	18	0.25	High Mg basalt
20MUAC243	AC	Regional Target 21	6m composite	24	6	0.13	Quartz veining in basalt
20MUAC244	AC	Regional Target 21	6m composite	6	6	0.26	Basalt
			6m composite	24	21	0.6	Minor quartz veining in basalt. EOH anomaly
20MUAC245	AC	Regional Target 21	6m composite	12	33	0.26	Minor quartz veining in basalt. EOH anomaly
20MUAC246	AC	Regional Target 21	6m composite	30	12	0.27	Minor quartz veining in basalt
20MUAC247	AC	Regional Target 21	6m composite	36	17	0.46	EOH anomaly
20MUAC248	AC	Regional Target 21	6m composite	30	6	0.21	Basalt

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

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
20MUAC106	Aircore	Regional	581447	6936047	30	-60	418	53	Reported Above
20MUAC117	Aircore	Regional	581309	6935518	30	-60	418	41	Reported Above
20MUAC126	Aircore	Regional	581456	6937342	300	-60	418	106	Reported Above
20MUAC127	Aircore	Regional	581524	6937299	300	-60	418	112	Reported Above
20MUAC136	Aircore	Regional	580754	6937309	300	-60	418	90	Reported Above
20MUAC137	Aircore	Regional	580821	6937267	300	-60	418	83	Reported Above
20MUAC138	Aircore	Regional	580889	6937224	300	-60	418	76	Reported Above
20MUAC140	Aircore	Regional	581025	6937139	300	-60	418	116	Reported Above
20MUAC143	Aircore	Regional	581228	6937011	300	-60	418	113	Reported Above
20MUAC145	Aircore	Regional	581363	6936926	300	-60	418	106	Reported Above
20MUAC147	Aircore	Regional	581533	6936820	300	-60	418	110	Reported Above
20MUAC148	Aircore	Regional	581600	6936777	300	-60	418	80	Reported Above
20MUAC149	Aircore	Regional	581736	6936692	300	-60	418	60	Reported Above
20MUAC152	Aircore	Regional	580634	6936683	300	-60	418	90	Reported Above
20MUAC153	Aircore	Regional	580702	6936640	300	-60	418	77	Reported Above
20MUAC160	Aircore	Regional	581176	6936342	300	-60	418	80	Reported Above

20MUAC162	Aircore	Regional	581311	6936257	300	-60	418	83	Reported Above
20MUAC163	Aircore	Regional	581379	6936214	300	-60	418	53	Reported Above
20MUAC165	Aircore	Regional	580733	6936146	300	-60	418	95	Reported Above
20MUAC166	Aircore	Regional	580800	6936103	300	-60	418	107	Reported Above
20MUAC169	Aircore	Regional	581003	6935975	300	-60	418	53	Reported Above
20MUAC170	Aircore	Regional	581071	6935933	300	-60	418	59	Reported Above
20MUAC172	Aircore	Regional	580792	6935633	300	-60	418	77	Reported Above
20MUAC177	Aircore	Regional	581131	6935420	300	-60	418	59	Reported Above
20MUAC179	Aircore	Regional	580848	6935125	300	-60	418	89	Reported Above
20MUAC180	Aircore	Regional	580916	6935082	300	-60	418	77	Reported Above
20MUAC181	Aircore	Regional	580984	6935040	300	-60	418	77	Reported Above
20MUAC193	Aircore	Regional	581104	6933799	30	-60	418	51	Reported Above
20MUAC194	Aircore	Regional	581093	6933782	30	-60	418	53	Reported Above
20MUAC195	Aircore	Regional	581082	6933765	30	-60	418	59	Reported Above
20MUAC196	Aircore	Regional	581072	6933748	30	-60	418	53	Reported Above
20MUAC198	Aircore	Regional	581050	6933714	30	-60	418	59	Reported Above
20MUAC207	Aircore	Regional	580960	6932460	30	-60	418	59	Reported Above
20MUAC208	Aircore	Regional	580949	6932443	30	-60	418	59	Reported Above
20MUAC209	Aircore	Regional	580939	6932426	30	-60	418	47	Reported Above
20MUAC210	Aircore	Regional	580928	6932409	30	-60	418	47	Reported Above
20MUAC211	Aircore	Regional	581038	6931937	30	-60	418	47	Reported Above
20MUAC212	Aircore	Regional	581027	6931920	30	-60	418	47	Reported Above
20MUAC217	Aircore	Regional	580974	6931836	30	-60	418	47	Reported Above
20MUAC218	Aircore	Regional	580963	6931819	30	-60	418	47	Reported Above
20MUAC219	Aircore	Regional	580952	6931802	30	-60	418	47	Reported Above
20MUAC221	Aircore	Regional	581269	6931358	30	-60	418	47	Reported Above
20MUAC229	Aircore	Regional	581398	6930969	30	-60	418	30	Reported Above
20MUAC231	Aircore	Regional	581797	6935653	30	-60	418	47	Reported Above
20MUAC232	Aircore	Regional	581787	6935636	30	-60	418	43	Reported Above
20MUAC233	Aircore	Regional	581776	6935619	30	-60	418	47	Reported Above
20MUAC235	Aircore	Regional	581856	6935615	30	-60	418	45	Reported Above
20MUAC236	Aircore	Regional	581846	6935598	30	-60	418	45	Reported Above
20MUAC240	Aircore	Regional	581822	6935458	30	-60	418	44	Reported Above
20MUAC241	Aircore	Regional	581811	6935441	30	-60	418	45	Reported Above
20MUAC243	Aircore	Regional	581790	6935407	30	-60	418	45	Reported Above
20MUAC244	Aircore	Regional	581779	6935390	30	-60	418	45	Reported Above
20MUAC245	Aircore	Regional	581769	6935374	30	-60	418	45	Reported Above
20MUAC246	Aircore	Regional	581758	6935357	30	-60	418	45	Reported Above
20MUAC247	Aircore	Regional	581747	6935340	30	-60	418	53	Reported Above
20MUAC248	Aircore	Regional	581736	6935323	30	-60	418	42	Reported Above

**Notes to Tables**

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. 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 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	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 Aircore drill program</u> 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.
	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 Aircore drill program</u> 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. 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).	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. 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.	Aircore 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	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	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.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	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.
	<i>The total length and percentage of the relevant intersections logged.</i>	All drill holes are logged in full on completion.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	N/A
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	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
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	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.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	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.
	<i>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.</i>	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.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	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	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	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.
	<i>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.</i>	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.
	<i>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.</i>	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	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	MGV samples are verified by the geologist before importing into the main MGV database (Datashed).
	<i>The use of twinned holes.</i>	No twin holes have been drilled by Musgrave Minerals Ltd during this program.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	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.
	<i>Discuss any adjustment to assay data.</i>	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. 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 a \$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 RC drill holes collars with assays received for the current drill program at Starlight are reported in this announcement. All relevant historical drill hole information has previously been reported by Perilya, Silver Lake Resources, MGV 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 to avoid 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.