

ASX RELEASE 15 December 2021

ASX: MGV

High grades continue at Big Sky

- Infill RC drilling at Big Sky continues to intersect significant near-surface gold mineralisation with many holes intersecting high grades across multiple gold zones. New intercepts include:
 - 4m @ 20.4g/t Au from 37m (21MORC340) and
 - o 25m @ 1.0g/t Au from 65m to EOH
 - 3m @ 11.5g/t Au from 26m (21MORC282) and
 - o 2m @ 12.3g/t Au from 39m
 - 3m @ 9.5g/t Au from 9m (21MORC336) and
 - o 4m @ 4.2g/t Au from 59m
 - 3m @ 10.9g/t Au from 21m (21MORC337) and
 - 10m @ 2.4g/t Au from 45m and
 - o 2m @ 9.6g/t from 69m
 - 2m @ 13.5g/t Au from 38m (21MORC338) and
 - o 17m @ 1.5g/t Au from 68m
 - 10m @ 5.2g/t Au from 20m (21MORC341), including;
 - o 1m @ 42.8g/t Au from 27m and
 - 6m @ 3.4g/t Au from 63m
 - 6m @ 5.2g/t Au from 42m (21MORC339)
 - o 2m @ 17.6g/t Au from 105m (21MORC285)
 - 2m @ 9.6g/t Au from 0m (21MORC342) and
 - 5m @ 8.3g/t Au from 62m and
 - o 10m @ 2.4g/t from 73m
 - - o 10m @ 2.0g/t Au from 80m
 - o 17m @ 1.6g/t Au from 99m (21MORC287)
- Assay results are pending for ~36 RC drill holes at Big Sky
- Diamond drilling has commenced at Big Sky with the focus on a maiden mineral resource estimate in Q2 2022

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report further strong assay results from reverse circulation ("RC") drilling at the Big Sky Prospect along the new gold corridor south-west of Lena and Break of Day 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: "These are excellent results and confirms the potential for high-grade zones at Big Sky. Resource RC drilling will recommence in the new year at Big Sky. The RC rig has moved to White Heat to follow-up the very high-grade result (15m @ 111.6g/t Au) announced on 1 December in a new lode position. The Company currently has four drill rigs on site and is working towards a maiden mineral resource estimate at Big Sky focussing on the top 120m from surface, in late Q2 2022."

The latest assay results from infill resource drilling at Big Sky confirms the potential of the system to host higher grade zones with continuity of individual sub-vertical lodes defined. This gold mineralisation at Big Sky remains open down dip which will be tested in subsequent programs.

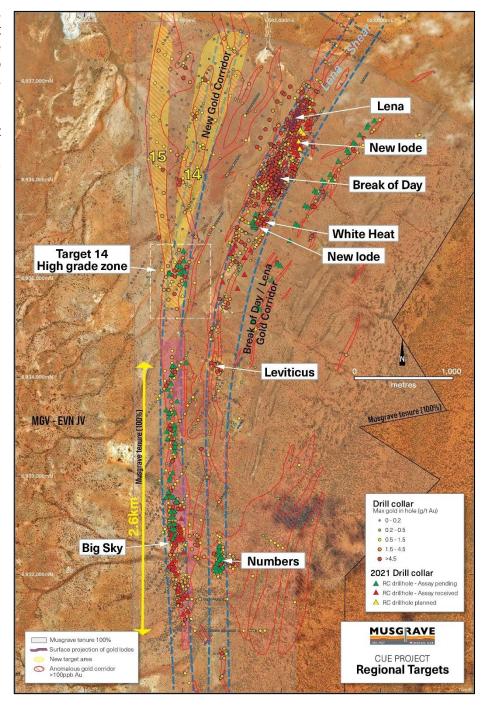


Figure 1: Regional plan showing drill hole collars and significant prospect locations

Big Sky Prospect

RC drilling south-west of Lena within the new 7km-long gold corridor (*Figure 1*) on MGV's 100% ground continues to intersect significant gold mineralisation below thin transported hardpan cover (~1-6m thick) at Big Sky. The Big Sky gold target (*Figures 1 and 2*) extends for over 2.6km of strike.

Infill resource definition RC drilling is continuing to test the continuity, grade and down dip extent of the Big Sky mineralisation in weathered and fresh basement rock (*Figures 2 to 5*). The Big Sky Prospect is approximately 2km south-west of Break of Day.

Significantly, RC drilling is continuing to intersect multiple, parallel, high-grade mineralised zones. Assay results for a further 39 RC drill holes have been received with new intercepts including:

- 3m @ 11.5g/t Au from 26m (21MORC282) and
 - o 2m @ 12.3g/t Au from 39m
- o 2m @ 17.6g/t Au from 105m (21MORC285)
- o 17m @ 1.6g/t Au from 99m (21MORC287)
- o 3m @ 9.5g/t Au from 9m (21MORC336) and
 - o 4m @ 4.2g/t Au from 59m
- o 3m @ 10.9g/t Au from 21m (21MORC337) and
 - o 10m @ 2.4g/t Au from 45m and
 - o 2m @ 9.6g/t from 69m
- o 2m @ 13.5g/t Au from 38m (21MORC338) and
 - o 17m @ 1.5g/t Au from 68m
- o 6m @ 5.2g/t Au from 42m (21MORC339)
- 4m @ 20.4g/t Au from 37m (21MORC340) and
 - o 25m @ 1.0g/t Au from 65m to EOH
- 10m @ 5.2g/t Au from 20m (21MORC341), including;
 - o 1m @ 42.8g/t Au from 27m, and
 - o 6m @ 3.4g/t Au from 63m
- 2m @ 9.6g/t Au from 0m (21MORC342) and
 - o 5m @ 8.3g/t Au from 62m and
 - o 10m @ 2.4g/t from 73m
- 4m @ 5.4g/t Au from 50m (21MORC343) and
 - o 10m @ 2.0g/t Au from 80m

Drill hole and assay details are presented in Tables 1a,1b. All new samples assaying above 1g/t have been reported in this release.

The ongoing focus of drilling is on the higher grade and thicker intervals of gold mineralisation intersected to date. The extensive nature and continuity of the gold mineralisation supports the view that the Big Sky prospect has strong potential to add to the Company's existing resource base at Cue. Diamond drilling has commenced with the focus on delivering a maiden Resource Estimate in Q2 2022.

Big Sky and Target 14 One-metre re-samples

Assay results have also been received for one-metre re-samples of previously reported six-metre composites from six RC drill holes in the current program at Big Sky, confirming results from the six-metre composite sampling. Mineralised intersections from one-metre re-samples include:

Big Sky

- o 11m @ 1.2g/t Au from 36m (21MORC182)
- o 5m @ 1.0g/t Au from 64m (21MORC183)
- o 6m @ 5.5g/t Au from 114m (21MORC184)

Target 14

23m @ 4.2g/t Au from 26m (21MORC185)

All drill hole and re-sample assay details are presented in Tables 2a and 2b. All intervals re-assaying above 1g/t have been reported in this release and are considered significant where they occur over broad widths.

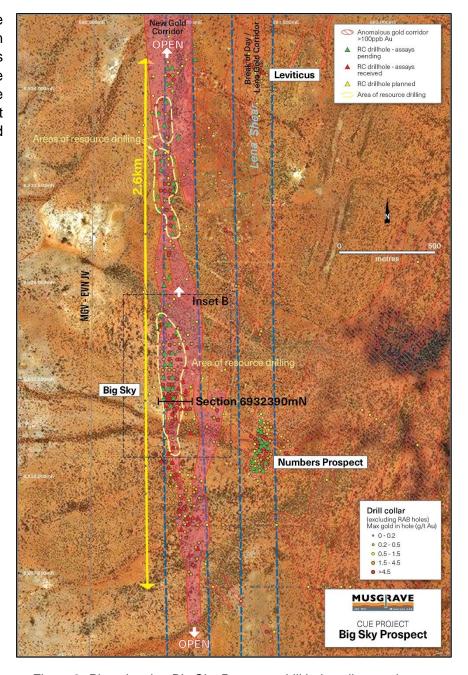


Figure 2: Plan showing Big Sky Prospect, drill hole collars and new areas of resource drilling follow-up. See inset plan B for assay results and more detail

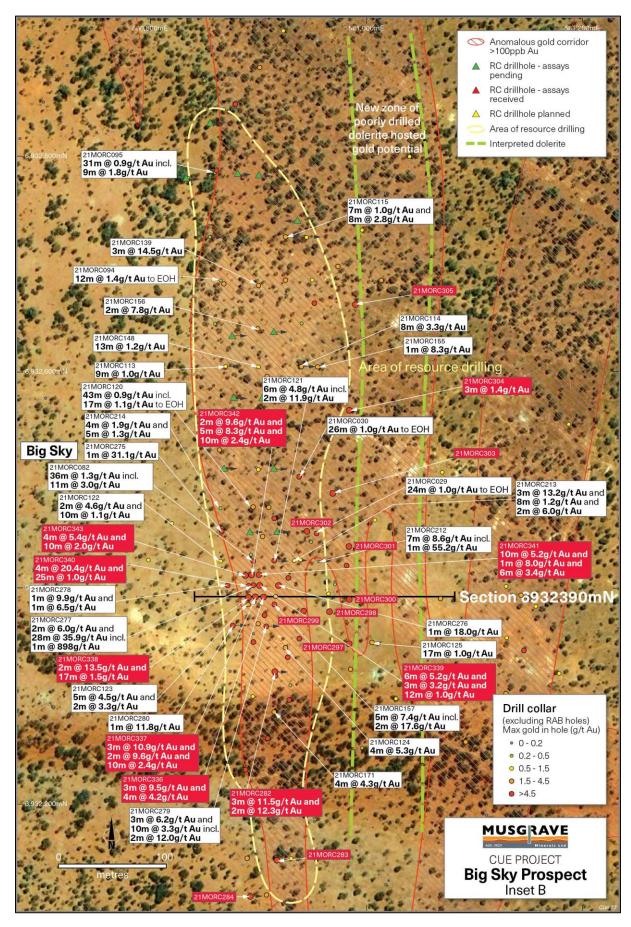


Figure 3: Inset plan B at Big Sky, southern section of Big Sky Prospect, showing drill hole collars and new assay results

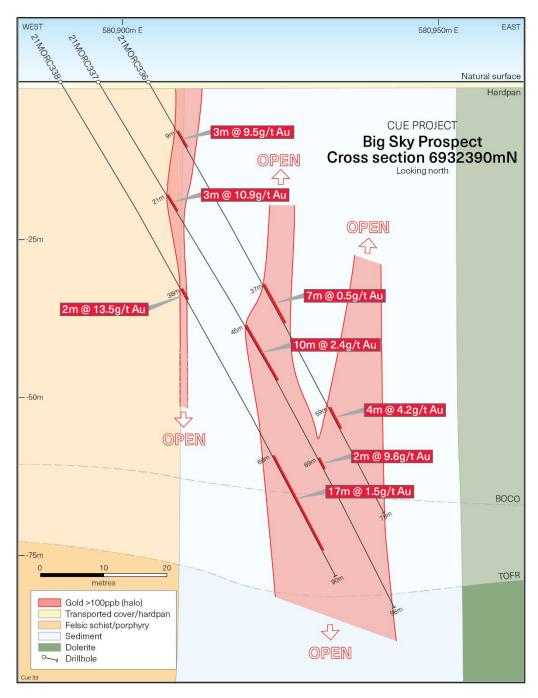


Figure 4: Cross-section 6932390mN showing RC drill traverse through Big Sky Prospect, southern zone.

Cue Project

The Cue Gold Project is located approximately 30km south of the township of Cue in the Murchison district of Western Australia. The Lena and Break of Day deposits are 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). The new gold discoveries at White Heat and Big Sky are both outside the existing resource areas.

Ongoing Activities

Musgrave 100% tenements

- o Follow-up drilling of the new high-grade gold lode identified south of White Heat has commenced.
- Infill resource definition RC drilling at the Big Sky prospect will continue in January. Further assay results from Big Sky are expected in early February. Diamond drilling has commenced at Big Sky with the aim of delivering a maiden Mineral Resource Estimate in Q2 2022.
- Assay results from RC drilling at Target 14 and first pass broad spaced RC drill testing of new regional targets east of Break of Day (Waratah Prospect) is now complete with assays expected in late-January.
- RC pre-collars for resource conversion diamond drilling at Break of Day and Lena have commenced with diamond tails to be completed in the new year.
- A regional aircore program has commenced to test the southern extension, into 100% MGV tenure, of the prospective West Island dolerite identified on the EVN JV to the north.
- Works to progress the prefeasibility level studies at Break of Day and Lena are ongoing with mining studies, environmental monitoring and assessments, metallurgical, processing, design and geotechnical test work continuing.

Evolution JV

- Assay results from follow-up diamond drilling on Lake Austin to test the basement beneath new regolith gold mineralisation are pending. Further diamond drilling will recommence in mid-January.
- Assay results from the recently completed aircore drilling program on Lake Austin are expected to define new basement targets for drill testing in the new year.

Authorised for release by the Board of Musgrave Minerals Limited.

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About Musgrave Minerals

Musgrave Minerals Limited is an active Australian gold 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:

- 1 December 2021, "New lodes identified. Stunning high-grade intercept at Cue"
- 18 November 2021, "AGM Presentation"
- 27 October 2021, "Bonanza hit highlights high-grade potential at Big Sky"
- 26 October 2021, "Quarterly Activities and Cashflow Report" 15 October 2021, "Change of Director's Interest Notice x 3"
- 15 October 2021, "Letter to Shareholders"

- 15 October 2021, "Annual report to Shareholders" 15 October 2021, "Annual report to Shareholders" 15 October 2021, "Notice of Annual General Meeting/Proxy Form" 12 October 2021, "Thick aircore intercepts enhance West Island Prospect"
- 13 September 2021, "More thick intervals of near-surface gold at target 14 and Big Sky"
- 16 August 2021, "Bonanza gold grades at White Heat"
- 12 August 2021, "Big Sky delivers more near-surface gold"
- 4 August 2021, "Company Presentation Diggers and Dealers Mining Forum"
- 19 July 2021, "Significant gold intersections enhance Big Sky"
- 30 June 2021, "High-grade gold at West Island target EVN JV, Cue" 18 June 2021, "Thick gold intersections in RC drilling at Big Sky"
- 25 May 2021, "Further RC drill results from White Heat and Numbers prospects"
- 17 May 2021, "Big Sky gold mineralisation strike length more than doubled" 21 April 2021, "New high-grade gold results at Target 14, Cue"
- 8 April 2021, "New Big Sky target extends high-grade gold anomaly to >1.2km"
- 19 March 2021, "High grades continue at White Heat, Cue" 8 March 2021, "New Gold Corridor Identified at Cue"
- 24 February 2021, "Outstanding high-grade gold at White Heat, Cue"
- 4 February 2021, "Appointment of Non-executive Director" 27 January 2021, "New basement gold targets defined on Evolution JV"
- 19 January 2021, "High-grade near-surface gold extended at target 5, Cue" 18 January 2021, "Results of SPP Offer"
- 18 December 2020. "Share Purchase Plan Offer Document"

- 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" 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"
- 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"
- 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"

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 forwardlooking statements.

Table 1a: Summary of new RC drill hole assay intersections from the Big Sky Prospect

Drill Hole ID	Drill Type	Prospect	Sample	EOH	From	Interval	Au (g/t)	Big Sky Prospect Comment
		Fiospeci	Туре	LOII	(m)	(m)	Au (g/t)	
21MORC2	39-274							Assays Pending High-grade gold mineralisation in
21MORC282	RC	Big Sky	1m Individual	80	26	3	11.5	regolith High-grade gold mineralisation in
			and		39	2	12.3	regolith
21MORC283	RC	Big Sky	1m Individual	92	21	1	1.6	Gold mineralisation in regolith
			and		37	1	1.9	Low-grade gold mineralisation
21MORC284	RC	Big Sky	1m Individual	122	45	6	0.7	Gold anomalism in regolith
			and		102	1	1.4	Gold anomalism in regolith
21MORC285	RC	Big Sky	1m Individual	174	105 165 to	2	17.6	Gold mineralisation in fresh rock Gold anomalism in fresh rock to
			and		EOH	9	0.8	EOH
			1m Individual		58	1	1.3	Gold anomalism in regolith
21MORC286	RC	Big Sky	and	98	69	3	1.3	Gold anomalism in regolith
			and		84	1	1.3	Gold anomalism in regolith
21MORC287	RC	Big Sky	1m Individual	122	99	17	1.6	Gold mineralisation
21MORC289	RC	Big Sky	1m Individual	122	48	4	2.7	Gold mineralisation in regolith
21MORC290	RC	Big Sky	1m Individual	122	22	2	1.4	Gold mineralisation in regolith
211110110200		Dig Oily	and		28	1	2.8	Gold mineralisation in regolith
			1m Individual		33	2	1.3	Gold anomalism in regolith
21MORC291	RC	Big Sky	and	140	39	1	1.9	
21WOR0231	i i i	big oky	and	140	58	2	1.6	Gold mineralisation in regolith
			and		107	2	3.5	
21MORC292	RC	Big Sky	1m Individual	116	50	1	1.0	Weak gold mineralisation in regolith
			1m Individual		33	1	1.7	Weak gold mineralisation in regolith
0414070000	D O	Dia Olas	and	404	39	1	3.1	Weak gold mineralisation in regolith
21MORC293	RC	Big Sky	and	164	62	8	1.0	Gold mineralisation in regolith
			and		86	2	1.6	Weak gold mineralisation in regolith
			1m Individual		56	1	4.9	Gold mineralisation in regolith
	50	Pia Clay	and	164	68	1	1.1	Weak gold mineralisation in regolith
21MORC294	RC	Big Sky	and	164	73	1	1.0	Weak gold mineralisation in regolith
			and	1	109	1	1.1	Weak gold mineralisation in regolith
21MORC295	RC	Big Sky	1m Individual	120	36	1	1.5	Weak gold mineralisation in regolith
21MORC304	RC	Big Sky	1m Individual	120	42	3	1.4	Weak gold mineralisation in regolith
			1m Individual		9	3	9.5	High-grade gold mineralisation in regolith
			and		37	7	0.5	Togonar
21MORC336	RC	Big Sky	including	78	37	1	2.2	Weak gold mineralisation in regolith
			and		59	4	4.2	Gold mineralisation in regolith
			and		70	2	1.8	Gold mineralisation in regolith
			1m Individual		21	3	10.9	High-grade gold mineralisation in regolith
			and		32	1	1.5	Weak gold mineralisation
21MORC337	RC	Big Sky	and	96	45	10	2.4	
		<u> </u>	and	-	69	2	9.6	Gold mineralisation in regolith
			including		94	1	1.0	
			1m Individual		38	2	13.5	High-grade gold mineralisation in
21MORC338	RC	Big Sky	and	90	68	17	1.5	regolith Gold mineralisation in regolith
			1m Individual		42	6	5.2	High-grade gold mineralisation in
21MORC339	RC	Big Sky	and	78	53	3	3.2	regolith Gold mineralisation in regolith
ZIMONOJOS	i.co	Dig Oky	and			12	1.0	Gold mineralisation in regolith
21MORC340	RC	Rig Sky		90	65	4		High-grade gold mineralisation in
Z HVIURU340	RU	Big Sky	1m Individual	90	37	4	20.4	regolith

			and		65 to EOH	25	1.0	Gold mineralisation in regolith to EOH			
			1m Individual		20	10	5.2	High-grade gold mineralisation in			
			including		27	1	42.8	regolith			
21MORC341	RC	Big Sky	and	78	36	1	1.0	Gold mineralisation in regolith			
			and					50	1	8.0	High-grade gold mineralisation in regolith
			and		63	6	3.4	Gold mineralisation in regolith			
			1m Individual		0	2	9.6	High-grade gold mineralisation in regolith from surface			
21MORC342	RC	Big Sky	and	84	62	5	8.3	Weak gold mineralisation in regolith			
			and		73	10	2.4	Gold mineralisation in regolith			
21MORC343			1m Individual	90	50	4	5.4	High-grade gold mineralisation in regolith			
Z HVIORU343	RC	Big Sky	and	90	80	10	2.0	Gold mineralisation in regolith			

Table 1b: Summary of MGV drill collars from current RC drill program at Big Sky with assay results in the table above

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
21MORC239	RC	Big Sky	581033	6934148	270	-60	425	134	Assays pending
21MORC240	RC	Big Sky	580914	6934106	090	-60	425	80	Assays pending
21MORC241	RC	Big Sky	580890	6934106	090	-60	425	134	Assays pending
21MORC242	RC	Big Sky	580886	6934027	090	-60	425	128	Assays pending
21MORC243	RC	Big Sky	580882	6933933	090	-60	425	122	Assays pending
21MORC244	RC	Big Sky	580845	6933874	090	-60	425	152	Assays pending
21MORC245	RC	Big Sky	580872	6933808	090	-60	425	150	Assays pending
21MORC246	RC	Big Sky	580944	6933750	270	-60	428	152	Assays pending
21MORC247	RC	Big Sky	580833	6933666	090	-60	428	206	Assays pending
21MORC248	RC	Big Sky	580862	6933629	090	-60	428	152	Assays pending
21MORC249	RC	Big Sky	580917	6933635	090	-60	428	62	Assays pending
21MORC250	RC	Big Sky	580854	6933580	090	-60	428	152	Assays pending
21MORC251	RC	Big Sky	580919	6933511	090	-60	428	62	Assays pending
21MORC251	RC	Big Sky	580919	6933473	090	-60	428	86	Assays pending Assays pending
21MORC252 21MORC253	RC	Big Sky	580919	6933422	090	-60	429	62	Assays pending Assays pending
21MORC254	RC		580839	6933444	090	-60	429	170	, , ,
21MORC254 21MORC255	RC	Big Sky	580846	6933374	090	-60	430	158	Assays pending
	RC	Big Sky							Assays pending
21MORC256		Big Sky	580925	6933331	090	-60	430	50	Assays pending
21MORC257	RC	Big Sky	580921	6933289	090	-60	430	56	Assays pending
21MORC258	RC	Big Sky	580916	6933251	090	-60	430	86	Assays pending
21MORC259	RC	Big Sky	580898	6933024	090	-60	430	104	Assays pending
21MORC260	RC	Big Sky	580871	6932983	090	-60	430	122	Assays pending
21MORC261	RC	Big Sky	580866	6932947	090	-60	430	122	Assays pending
21MORC262	RC	Big Sky	580855	6932830	090	-60	430	140	Assays pending
21MORC263	RC	Big Sky	580900	6932782	090	-60	430	74	Assays pending
21MORC264	RC	Big Sky	580881	6932783	090	-60	430	104	Assays pending
21MORC265	RC	Big Sky	580833	6932779	090	-60	430	152	Assays pending
21MORC266	RC	Big Sky	580936	6932740	270	-60	430	128	Assays pending
21MORC267	RC	Big Sky	580876	6932633	090	-60	430	134	Assays pending
21MORC268	RC	Big Sky	580914	6932637	090	-60	430	56	Assays pending
21MORC269	RC	Big Sky	580903	6932576	090	-60	430	104	Assays pending
21MORC270	RC	Big Sky	580877	6932576	090	-60	430	105	Assays pending
21MORC271	RC	Big Sky	580914	6932510	090	-60	430	56	Assays pending
21MORC272	RC	Big Sky	580868	6932511	090	-60	430	140	Assays pending
21MORC273	RC	Big Sky	580917	6932452	090	-60	430	134	Assays pending
21MORC274	RC	Big Sky	580892	6932452	090	-60	430	104	Assays pending
21MORC275	RC	Big Sky	580866	6932452	090	-60	430	152	Assays results in table above
21MORC276	RC	Big Sky	580920	6932403	090	-60	430	140	Assays results in table above
21MORC277	RC	Big Sky	580895	6932403	090	-60	430	116	Assays results in table above
21MORC278	RC	Big Sky	580872	6932403	090	-60	430	152	Assays results in table above
21MORC279	RC	Big Sky	580907	6932365	090	-60	430	144	Assays results in table above
21MORC280	RC	Big Sky	580876	6932366	90	-60	430	116	Assays results in table above
21MORC281	RC	Big Sky	580963	6932346	90	-60	430	50	Assays results in table above

0414070000		Dir. Oliv	500045	0000000	00	00	400	- 00	Assessment to take a
21MORC282	RC	Big Sky	580915	6932323	90	-60	430	80	Assays results in table above
21MORC283	RC	Big Sky	580917	6932148	90	-60	430	92	Assays results in table above
21MORC284	RC	Big Sky	580892	6932115	90	-60	430	122	Assays results in table above
21MORC285	RC	Big Sky	580858	6932078	90	-60	430	174	Assays results in table above
21MORC286	RC	Big Sky	580913	6932073	90	-60	430	98	Assays results in table above
21MORC287	RC	Big Sky	580896	6932046	90	-60	430	122	Assays results in table above
21MORC288	RC	Big Sky	580938	6932009	90	-60	430	62	Assays results in table above
21MORC289	RC	Big Sky	580950	6931824	90	-60	430	122	Assays results in table above
21MORC290	RC	Big Sky	581047	6931787	270	-60	430	140	Assays results in table above
21MORC291	RC	Big Sky	580998	6931787	270	-60	430	74	Assays results in table above
21MORC292	RC	Big Sky	580999	6931758	90	-60	430	116	Assays results in table above
21MORC293	RC	Big Sky	580959	6931727	90	-60	430	164	Assays results in table above
21MORC294	RC	Big Sky	581046	6931626	270	-60	430	122	Assays results in table above
21MORC295	RC	Big Sky	581001	6931593	90	-60	430	122	Assays results in table above
21MORC296	RC	Big Sky	581008	6932226	30	-60	430	132	Assays results in table above
21MORC297	RC	Big Sky	580984	6932349	30	-60	430	119	Assays results in table above
21MORC298	RC	Big Sky	580966	6932379	90	-60	430	66	Assays results in table above
21MORC299	RC	Big Sky	580942	6932379	90	-60	430	120	Assays results in table above
21MORC300	RC	Big Sky	580984	6932390	30	-60	430	114	Assays results in table above
21MORC301	RC	Big Sky	580984	6932439	30	-60	430	114	Assays results in table above
21MORC302	RC	Big Sky	580945	6932453	90	-60	430	102	Assays results in table above
21MORC303	RC	Big Sky	580969	6932488	90	-60	430	72	Assays results in table above
21MORC304	RC	Big Sky	580984	6932565	30	-60	430	120	Assays results in table above
21MORC305	RC	Big Sky	580990	6932663	30	-60	430	84	Assays results in table above
21MORC30	16-335								Assays previously reported
21MORC336	RC	Big Sky	580905	6932392	30	-60	430	78	Assays results in table above
21MORC337	RC	Big Sky	580898	6932392	30	-60	430	96	Assays results in table above
21MORC338	RC	Big Sky	580891	6932392	30	-60	430	90	Assays results in table above
21MORC339	RC	Big Sky	580901	6932403	30	-60	430	78	Assays results in table above
21MORC340	RC	Big Sky	580891	6932402	30	-60	430	90	Assays results in table above
21MORC341	RC	Big Sky	580900	6932413	30	-60	430	78	Assays results in table above
21MORC342	RC	Big Sky	580894	6932412	30	-60	430	84	Assays results in table above
21MORC343	RC	Big Sky	580888	6932412	30	-60	430	90	Assays results in table above
			·	•	•	•	•	•	

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

- 1. An accurate dip and strike and the controls on mineralisation are only interpreted and the true width of the mineralisation are unconfirmed at this time.
- 2. In Aircore and RC drilling six metre composite samples are collected and analysed for gold together with selected 1m intervals on visual geology while individual one metre samples are collected and analysed pending composite results. Composite samples assaying >0.1g/t Au are re-analysed at one metre intervals.
- 3. All samples are analysed using either a 50g fire assay with ICP-MS (inductively coupled plasma mass spectrometry) finish gold analysis (0.005ppm detection limit) by Genalysis-Intertek in Maddington or Bureau Veritas in Canning Vale (0.01ppm detection limit), WA, 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 >0.5g/t gram metres where zones of internal dilution are not weaker than 6m < 0.5g/t Au. Bulked thicker intercepts may have more internal dilution between higher grade zones.
- 6. All drill holes referenced in this announcement are reported in Tables 1a, 1b, 2a and 2b.
- 7. Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond.
- 8. Coordinates are in GDA94, MGA Z50.

Table 2a: Summary of new 1m resamples from RC drill hole gold intersections from the Big Sky and Target 14 Prospects

Drill Hole ID	Drill Type	Prospect	Sample Type	ЕОН	From (m)	Interval (m)	Au (g/t)	Comment
21MORC181	RC	Big Sky	1m Individual	78	44	3	2.3	Previously reported 6m composite assayed 6m @ 0.9g/t Au
21MORC182	RC	Big Sky	1m Individual	78	36	11	1.2	Previously reported 6m composite assayed 6m @ 1.9g/t Au
21MORC183	RC	Big Sky	1m Individual	78	64	5	1.0	Not previously reported
			1m Individual		46	1	2.0	Not previously reported
21MORC184	RC	Big Sky	and	120	60	6	1.0	Not previously reported
			and		114	6	5.5	Previously reported 6m composite assayed 6m @ 5.8g/t Au
21MORC185	RC	Target 14	1m Individual	114	26	23	4.2	Previously reported 6m composite assayed 24m @ 4.1g/t Au
21MORC188-195								Individual 1m assays pending
21MORC196	RC	Big Sky	1m Individual	120	42	58	1.1	Previously reported 6m composite assayed 60m @ 1.0g/t Au
21MORC19	97-200							Individual 1m assays pending

Table 2b: Summary of MGV drill collars from RC drill program at the Big Sky and Target 14
Prospects associated with assay results above in Table 2a

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Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
21MORC181	RC	Big Sky	580895	6933540	090	-60	418	78	Reported above
21MORC182	RC	Big Sky	580895	6933680	090	-60	418	78	Reported above
21MORC183	RC	Big Sky	580895	6933710	090	-60	418	78	Reported above
21MORC184	RC	Big Sky	580875	6933510	090	-60	418	120	Reported above
21MORC185	RC	Target 14	580960	6935081	210	-60	418	120	Reported above
21MORC186	RC	Target 14	580852	6935119	210	-60	418	120	Reported above
21MORC187	RC	Target 14	580855	6934985	090	-60	418	146	Reported above
21MORC196	RC	Big Sky	580875	6933425	090	-60	418	120	Reported above

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. Current RC and aircore drill programs RC and aircore samples are composited at 6m intervals using a stainless-steel scoop with all composite intervals over 0.1g/t Au resampled at 1m intervals using a cyclone splitter. Individual 1m samples are submitted for initial gold assay where significant obvious mineralisation is intersected (e.g. quartz vein lode within altered and sheared host) and are split with a cyclone splitter. Diamond samples were collected at geologically defined intervals (minimum sample length 0.25m, maximum sample length 1.5m) for all drill holes in the current program Samples are cut using an automated diamond saw and half core is submitted for analysis. Individual samples weigh less than 5kg to ensure total preparation at the laboratory pulverization stage. The sample size is deemed appropriate for the grain size of the material being
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	sampled. 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.	Current drill programs RC and aircore drill samples are composited at 6m intervals using a stainless-steel scoop with all composite intervals over 0.1g/t Au resampled at 1m intervals using a cyclone splitter. Individual 1m samples are submitted for initial gold assay where significant obvious mineralisation is intersected and are split with a cyclone splitter (e.g. quartz vein lode within altered and sheared host). The 3kg samples are pulverised to produce a 50g charge for fire assay with ICP-MS finish for gold. All 1m samples are sampled to 1-3kg in weight to ensure total preparation at the laboratory pulverization stage. The sample size is deemed appropriate for the grain size of the material being sampled. Some samples are sent to the Genalysis – Intertek laboratory in Maddington or Bureau Veritas in Canning Vale, WA, where they are pulverized to 85% passing -75um and analysed using a 50g fire assay with ICP-MS (inductively coupled plasma - mass spectrometry) finish gold analysis (0.005ppm or 0.01ppm detection limit). Some samples are sent to the NATA accredited 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). This technique is accredited by the National Association of Testing Authorities (NATA). Coarse gold is present in some samples and may affect sample accuracy. Repeat analysis and screen fire assay is regularly undertaken on samples with coarse gold.

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

Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	On composite 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 RC samples are sent to Intertek, Bureau Veritas or 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. Coarse gold is present in some samples and may affect sample accuracy. Repeat analysis and screen fire assay is regularly undertaken on samples with coarse gold.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to estimate mineral or element percentages. Musgrave utilise a Thermo Scientific Niton GoldD XL3+ 950 Analyser to aid geological interpretation.
Verification of	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. The verification of significant intersections by either	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. MGV samples are verified by the geologist before importing into
sampling and assaying	independent or alternative company personnel. The use of twinned holes.	the main MGV database (Datashed). No twin holes have been drilled by Musgrave Minerals Ltd during
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	this program. Primary data is collected using a standard set of templates. Geological sample logging is undertaken on one metre intervals for all RC drilling with colour, structure, alteration and lithology recorded for each interval. Data is verified before loading to the database. Geological logging of all samples is undertaken.
	Discuss any adjustment to assay data.	No adjustments or calibrations are made to any assay data reported.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	All maps and locations are in UTM grid (GDA94 Z50) and have been surveyed or measured by hand-held GPS with an accuracy of >±2 metres.
	Specification of the grid system used.	Drill hole and sample site co-ordinates are in UTM grid (GDA94 Z50) and historical drill holes are converted from local grid references.
	Quality and adequacy of topographic control.	All current aircore drill hole collars are planned and set up using hand-held GPS (accuracy +-2m).
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Variable drill hole spacings are used to complete 1st pass testing of targets and are determined from geochemical, geophysical and geological data together with historical drilling information. For the reported drilling drill hole spacing was approximately 20m along traverse lines.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	No resources have been calculated on regional drilling targets as described in this release due to the early-stage nature of the drilling
	Whether sample compositing has been applied.	6m composite samples are submitted for initial analysis in most cases. Composite sampling is undertaken using a stainless-steel scoop at one metre samples and combined in a calico bag. Where composite assays are above 0.1g/t Au, individual 1m samples are submitted for gold assay. One metre individual samples may be submitted without composites in certain intervals of visibly favourable gold geology.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling is designed to cross the mineralisation as close to perpendicular as possible on current interpretation whilst allowing for some minor access restrictions and mitigating safety risks. Most drill holes are designed at a dip of approximately -60 degrees.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias can be confirmed at this time and true widths are not yet known.

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

Section 2 Reporting of Exploration Results

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

	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No cut-off has been applied to any sampling. Reported intervals are aggregated using individual assays above 1g/t Au with no more than 2m of internal dilution <0.5g/t Au for any interval. Short high-grade intervals are tabulated in Table 1a.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	True widths are not confirmed at this time although all drilling is planned close to perpendicular to interpreted strike of the target lodes at the time of drilling.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Diagrams referencing historical data can be found in the body of this report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	All older MGV drilling data has previously been reported. Some higher-grade historical results may be reported selectively in this release to highlight the follow-up areas for priority drilling. All data pierce points and collars are shown in the diagrams within this release.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All material results from geochemical and geophysical surveys and drilling, related to these prospects has been reported or disclosed previously.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	A range of exploration techniques will be considered to progress exploration including additional surface sampling and drilling.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to figures in the body of this announcement.