



ASX RELEASE

13 January 2020

ASX: MGV

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## More high-grade gold intersected at Cue

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- RC drilling continues to define the high-grade gold shoots at Lena new intercepts include;
  - 5m @ 12.1g/t Au from 82m (19MORC039) including:
    - 2m @ 28.3g/t Au from 82m, within a broader interval of:
    - 46m @ 1.5g/t Au from 82m to EOH
  - 9m @ 6.4g/t Au from 116m down hole (19MORC041) including:
    - 2m @ 22.3g/t Au from 121m
  - 3m @ 5.4g/t Au from 113m down hole (19MORC042)
- The Lena mineralisation remains open down plunge with a resource update scheduled for Q1, 2020
- In addition to the above, one metre re-samples have returned:
  - Mainland-Consols
    - 3m @ 38.2g/t Au from 113m down hole (19MORC018) including:
      - 1m @ 102.5g/t Au from 114m
  - Break of Day
    - 3m @ 7.2g/t Au from 128m down hole (19MORC031)
- Diamond drilling of basement targets on Lake Austin is continuing under the Evolution Joint Venture
- Follow-up drilling of the new 'link-lode' at Break of Day is scheduled to commence in late January

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report high-grade gold results from reverse circulation ("RC") drilling at Lena and individual one metre re-samples from drilling at Break of Day and Mainland on the Company's flagship Cue Gold Project in Western Australia's Murchison district (*Figure 1*). Lena, Break of Day and Mainland are not part of the Evolution Joint Venture.

Musgrave Managing Director Rob Waugh said *"These are further strong results at Lena, Break of Day and Mainland and continue to highlight the resource growth potential of all three prospects. With drilling already commenced for the 2020 year we are looking forward to more exciting results as the programs progress. The strong results from drilling at Lena to date confirm the geological interpretation which is showing good continuity of the high-grade shoots at depth and will further enhance the resource update expected later in Q1 2020."*

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The RC drill programs at Lena, Break of Day and Mainland consisted of a combined 29 holes for 3,568m. The final assays for this drilling have now been received (*Table 1a*) with high-grade results across all three prospect areas.

## Lena

Drill hole 19MORC039 was drilled at the northern end of Lena as an infill hole to confirm the high-grade shoot within the current resource and intersected two zones of mineralisation. The hole intersected gold near surface with **5m @ 2.7g/t Au** from 2m within a broader interval of 12m @ 1.5g/t Au from 2m down hole. Further downhole assays returned **5m @ 12.1g/t Au** from 82m within an interval of **46m @ 1.5g/t Au from 82m** to end of hole where it remains open. This zone is also open down plunge (*Figures 2 and 3*).

Drill holes 19MORC041 and 19MORC042, drilled as infill holes at the southern end of Lena, confirmed the high-grade zone and intersected **9m @ 6.4g/t Au** from 116m down hole (19MORC041) including **2m @ 22.3g/t Au** from 121m. Drill hole 19MORC042 intersected **3m @ 5.4g/t Au** from 113m down hole. The zone is open down plunge. All assays are shown in Table 1a.

A resource update for Lena is scheduled for February 2020.

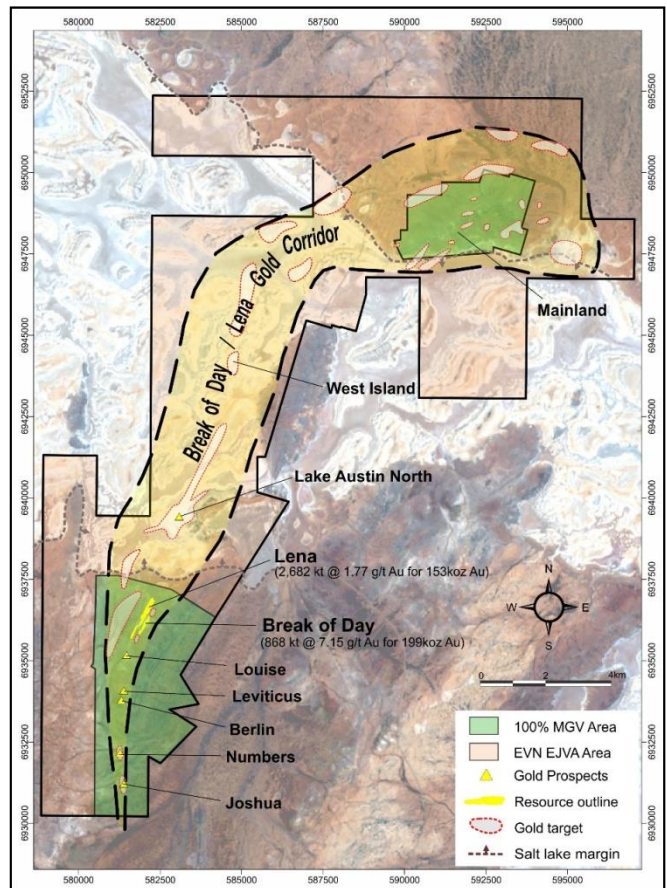


Figure 1: Prospect location plan

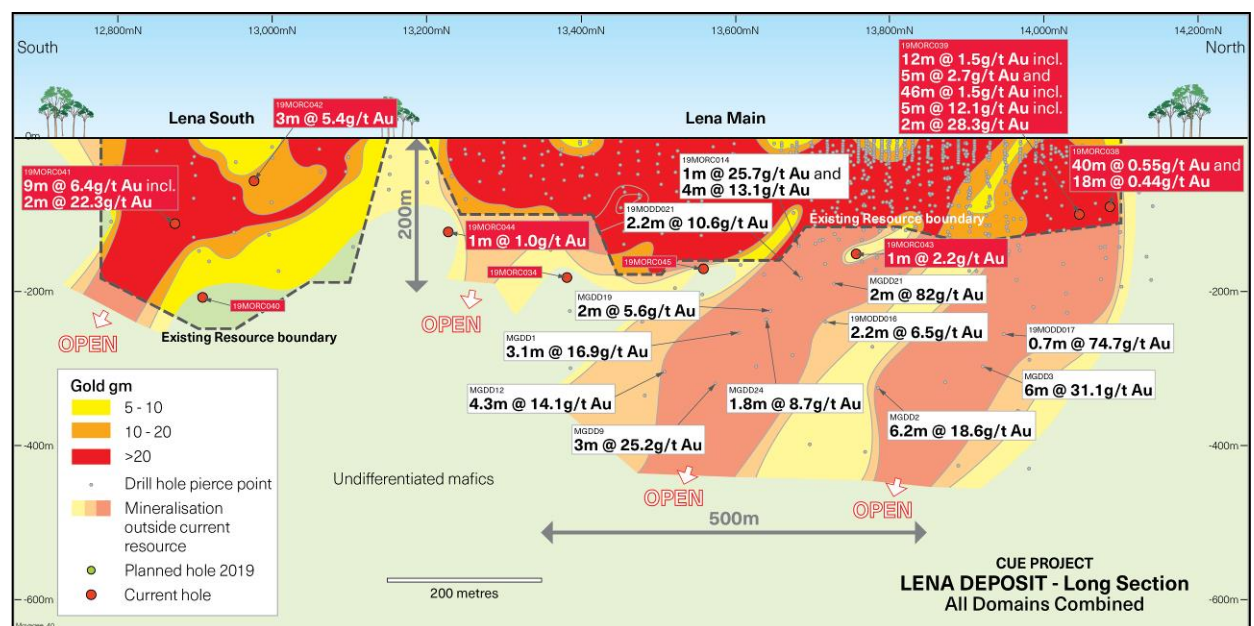


Figure 2: Long section of Lena deposit showing new drill hole pierce points and significant assay results



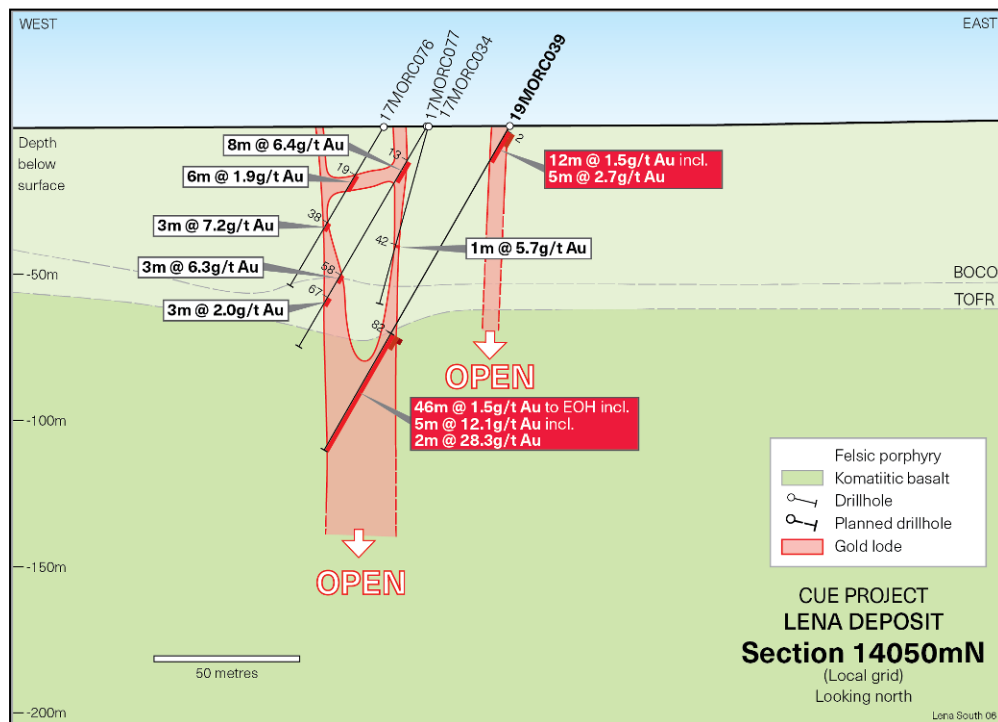


Figure 3: Cross-section 14050mN showing drill hole 19MORC039 at Lena

### Break of Day

Drill hole 19MORC037, previously reported on 3 December 2019 was the stand-out drill hole of the program and intersected an interpreted linking structure assaying **45m @ 11.8g/t Au** from 144m down hole, including **5m @ 29.2g/t Au** from 150m and **23m @ 16.2g/t Au** from 166m (See ASX release 3 December 2019, "New high-grade 'link-lode' intersected at Break of Day, Cue Project").

One metre individual re-samples have been received for drill hole 19MORC031, drilled to test the southern extension of Break of Day, and returned a high-grade result of **3m @ 7.2g/t Au** from 128m down hole including **1m @ 17.7g/t Au** from 128m (Figure 4) confirming the southerly plunge to the high-grade shoot where it remains open at depth. All assays are shown in Table 1a.

Additional drilling is currently being planned at Break of Day to follow-up the new interpretation of link structures at several positions along the deposit. This drilling will commence in late January 2020.





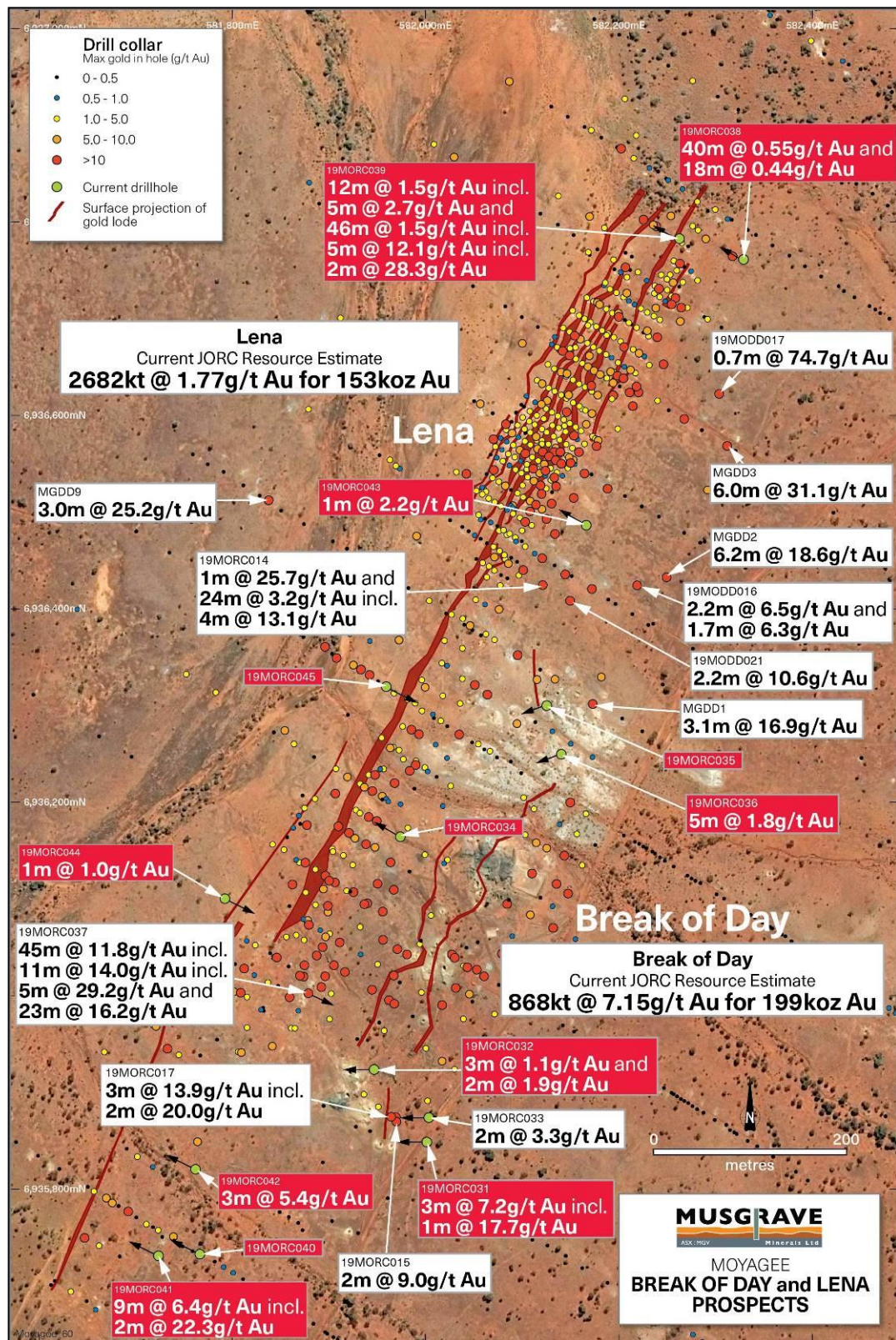


Figure 4: Break of Day and Lena surface plan showing drill hole collars and new RC drill results





## Mainland

Assay results for the final drill hole from the Mainland RC drilling program at Consols have been received, with hole 19MORC046 terminating before intersecting the mineralised zone. The mineralised high-grade gold lode is interpreted to plunge beneath drill hole 19MORC046 to the south-west and therefore remains open down plunge in this direction.

One-metre individual samples have been received for drill hole 19MORC018, and returned a high-grade result of **3m @ 38.2g/t Au** from 113m down hole (*Figure 5*), including **1m @ 102.5g/t Au** from 114m (previous reported 6m composites returned 12m @ 8.1g/t Au), confirming the southerly plunge to the high-grade shoot where it remains open at depth below hole 19MORC046.

Low-grade oxide mineralisation has been identified in drill holes 19MORC029 and 19MORC030 at Mainland (*Figure 5*). These areas have seen no historical drilling and further basement drill testing of the fresh rock beneath this zone of near surface weathered material is planned. All assays are shown in Table 1a.

Additional follow-up drilling is currently being planned at Consols and will commence in February 2020.

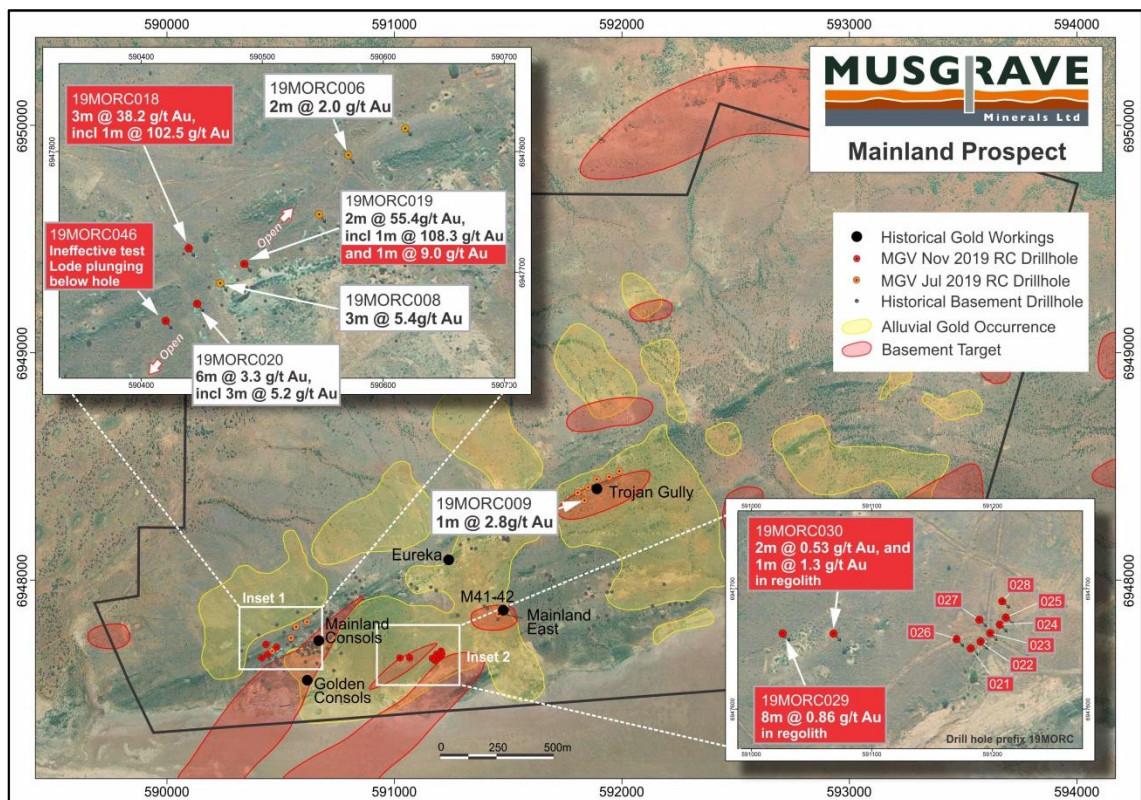


Figure 5: Mainland surface plan showing drill hole collars and RC drill results

The Break of Day, Lena and Mainland areas are excluded from the Earn-in and Exploration Joint Venture with Evolution Mining Ltd ("Evolution") (see *MGV ASX release 17 September 2019 "Musgrave and Evolution sign \$18 million Earn-in JV and \$1.5 million placement to accelerate exploration at Cue"*).



## Discussion

The positive results at Lena confirm the geological interpretation which is showing good continuity of the high-grade shoots at depth and will further enhance the resource update expected later in Q1 2020.

At Break of Day the identification of the potential high-grade 'link-lode' structure could be significant with further drilling planned for late January 2020. This is a critical step in determining the upside potential of this linking structure. If successful, this new drilling at Break of Day could lead to a Break of Day resource update in Q2, 2020.

At Mainland, the positive high-grade gold results at the Consols prospect remain open to the north-east, south-west and down plunge where further drilling is planned to commence in February 2020. These early positive results at Mainland highlight the upside potential of the area to host new high-grade gold mineralisation.

## Ongoing Exploration

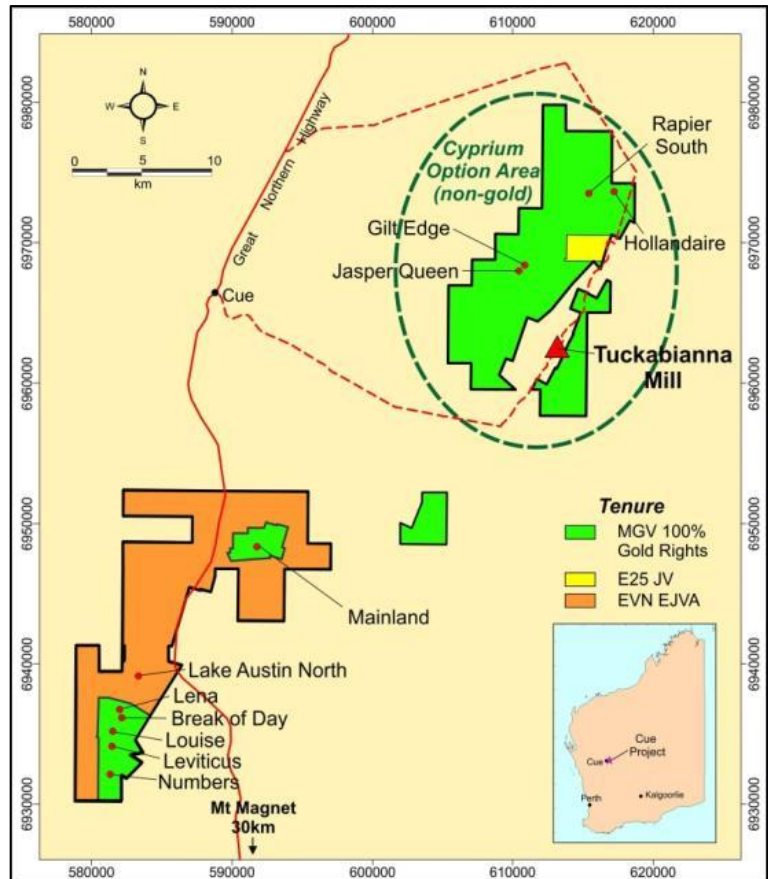
- The Company is progressing towards delivering a Lena resource update later in Q1 2020.
- Diamond drilling on the Evolution JV at Lake Austin North is progressing well. Drilling temporarily halting for the Christmas break but it has now re-commenced and will continue through to late January. Assay results are expected in March 2020.
- On the broader JV area over Lake Austin at Cue, Evolution and Musgrave are planning a large aircore drilling program to further define gold targets for basement drill testing. This drilling is scheduled to commence in early February 2020.
- Follow-up drilling of the possible 'link-lode' at Break of Day is scheduled to commence in late January 2020 and if successful, will enable a possible resource update in Q2 2020.
- Further follow-up RC drilling at Mainland on the Consols target is scheduled to commence in February 2020.



## THE CUE PROJECT

The Cue Project (“the Project”) is located in the Murchison district of Western Australia (*Figure 6*). The Company has defined a +28km-long prospective gold corridor that hosts the Break of Day and Lena gold resources (Break of Day hosts 868Kt @ 7.15g/t Au for 199Koz Au and Lena 2,682Kt @ 1.77g/t Au for 153Koz Au; see *MGV ASX release 15 October 2018, “Annual Report”*) and the Lake Austin North gold discovery.

The Company believes there is significant potential to extend existing mineralisation and discover new gold deposits within the Project area, as demonstrated by the recent drilling success at Break of Day, Lena and Lake Austin North. Musgrave’s intent is to investigate options to best develop a low-cost operation, capable of delivering strong financial returns for its shareholders.



*Figure 6: Cue Project location plan and tenure*

Musgrave has executed an \$18 million Earn-in and Exploration Joint venture with Evolution Mining Ltd over the Lake Austin portion of the Cue Project (*Figure 6*).

In May 2019 Cyprium Australia Pty Ltd (“Cyprium”) exercised an exclusive option to earn an 80% interest in the non-gold rights over the northern tenure at Cue including the Hollandaire deposit (*Figure 6*). Cyprium is required to spend \$2 million on exploration within two years to acquire the 80% interest. Musgrave will retain 100% of the gold rights and a 20% free-carried interest in the non-gold rights to the completion of a definitive feasibility study.

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:

- 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"
- 21 November 2019, "2019 AGM Presentation"
- 18 November 2019, "Drilling commences at Lake Austin North, Evolution JV, Cue"
- 30 October 2019, "Mainland drilling commences and more high-grade gold intersected at Lena, Cue Project"
- 24 October 2019, "September Quarterly Activities and Cashflow Report"
- 18 October 2019, "Annual Report"
- 18 October 2019, "Notice of Annual General Meeting / Proxy Form"
- 17 October 2019, "Company Presentation – Brisbane Resources Round-up"
- 9 October 2019, "High-grade gold intersected at Break of Day and ultra-high-grade rock-chip sample from Mainland, Cue Project"
- 24 September 2019, "Further High-grade gold intersected at Lena below the existing resource, Cue Project"
- 17 September 2019, "Musgrave and Evolution sign an \$18 million Earn-In JV and \$1.5M placement to accelerate exploration at Cue"
- 3 September 2019, "High-Grade Gold Extension at Break of Day, Cue Project"
- 20 August 2019, "High-Grade Gold Intersected at Lena and Mainland, Cue Project"
- 30 July 2019, "Quarterly Activities and Cashflow Report"
- 12 July 2019, "Opportunity to Extend Lena High-Grade Resource at Cue"
- 4 July 2019, "Drilling commences at newly acquired Mainland Prospect, Cue"
- 28 May 2019, "Scout Drilling Extends Gold Zone to >3km at Lake Austin North"
- 1 May 2019, "Drilling at A-Zone Continues to Deliver Thick, High-Grade Gold Intersections"
- 6 March 2019, "Musgrave Secures More Key Gold Tenure at Cue"
- 3 December 2018, "Diamond Drilling Confirms Significant Gold Discovery at Lake Austin North"
- 29 October 2018, "High-Grade Extended at Lake Austin North, Cue"
- 15 October 2018, "Annual Report"
- 31 August 2018, "First RC drill hole hits 42m @ 3.2g/t Au at Lake Austin North, Cue"
- 27 July 2018, "Lake Austin North target continues to deliver strong gold results, Cue Gold Project, WA"
- 15 June 2018, "High-Grade Gold Intersected at Lake Austin North, Cue Gold Project, WA"
- 18 May 2018, "New Drill Results Highlight Regional Discovery Potential at Cue Gold Project, WA"
- 16 August 2017, "Further Strong Gold Recoveries at Lena"
- 14 July 2017, "Resource Estimate Exceeds 350koz Au"
- 6 July 2017, "Excellent Gold Recoveries Achieved from Initial Metallurgical Test Work at Lena"
- 16 June 2017, "More Gold Intersected Near Surface at Lena"
- 6 June 2017, "High Grade Gold Intersected Near Surface at Lena"
- 24 May 2017, "High Gold Grades Continue at Break of Day and Lena"
- 20 April 2017, "Excellent High Grade Gold Hits at Break of Day and Lena"
- 18 April 2017, "More High Grade Gold Results at Lena"
- 3 April 2017, "Strong Gold Results Continue at Break of Day and Lena"
- 17 March 2017, "Drilling Extends High Grade Gold at Break of Day and Lena"
- 30 January 2017, "Diamond Drilling Confirms High Grade Gold at Break of Day and Extends High Grade Gold 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 forward-looking statements.



Table 1a: *Summary of recent drill assay intervals from Break of Day, Mainland and Lena*

Drill Hole ID	Drill Type	Prospect	Sample Type	From (m)	Interval (m)	Au (g/t)	Lode	Comment
19MORC018	RC	Mainland-Consols	Individual 1m	113	3	38.2	High-grade	Previously reported as 6m comps 12m @ 8.1g/t Au
			including	114	1	102.5	High-grade lode	
19MORC019	RC	Mainland-Consols	Individual 1m	52	2	55.4	High-grade	Previously reported
			including	52	1	108.1	High-grade lode	Previously reported
			Individual 1m	69	1	9.0	Possible footwall lode	Not previously reported
19MORC029	RC	Mainland	Individual 1m	23	8	0.86	Regolith halo - Potential untested lode in fresh rock beneath	Previously reported as 6m comps 18m @ 0.5g/t Au
			including	23	1	1.0		
			including	26	1	1.4		
			including	30	1	2.9		
19MORC030	RC	Mainland	Individual 1m	16	22	0.22	Regolith halo - Potential untested lode in fresh rock beneath	Previously reported as 6m comps 30m @ 0.24g/t Au
			including	37	1	1.3		
19MORC031	RC	Break of Day	Individual 1m	128	3	7.2	Southern plunge extension of Primary lode	Previously reported as 6m comps 6m @ 5.6g/t Au Southern plunge of lode
			Including	128	1	17.7		
19MORC032	RC	Break of Day	Individual 1m	20	3	1.1	Southern extension	Lode plunging to south towards hole 19MORC031
			Individual 1m	48	2	1.9	Low-grade	
19MORC034	RC	Lena	Individual 1m	96	1	0.89	Lena	Low-grade zone outside resource
			Individual 1m	145	1	0.54		
19MORC036	RC	Break of Day	Individual 1m	37	5	1.8	Northern extension Shallow oxide lode	Untested potential at depth in fresh rock below
19MORC037	RC	Break of Day	Individual 1m	114	2	0.51	Primary lode Twilight	Previously reported as 6m comps 6m @ 0.43g/t Au
			Individual 1m	144	45	11.8	Link-lode	Previously reported
			including	144	11	14.0	Link-lode	Previously reported
			including	144	2	2.7	Link-lode	Previously reported
			and	150	5	29.2	Link-lode	Previously reported
			including	166	23	16.2	Link-lode	Previously reported
			and	189	37	0.78	Alteration halo	Not previously reported
			including	196	1	1.7		Not previously reported
			and	202	2	2.8		Not previously reported
			and	213	2	2.1		Not previously reported
			and	223	1	1.1	Possible velvet lode	Not previously reported
19MORC038	RC	Lena	Individual 1m	139	40	0.55	Lena	Broad low-grade zone
			Individual 1m	289	18	0.44	Lena	Broad low-grade zone
19MORC039	RC	Lena	Individual 1m	2	12	1.5	Lena	Northern end
			including	2	5	2.7	Lena	Higher grade zone
			Individual 1m	82	46 to EOH	1.5	Lena	Broad low-grade zone to EoH
			Including	82	5	12.1	Lena	High-grade zone
			including	82	2	28.3	Lena	High-grade zone
19MORC040	RC	Lena	Individual 1m	NSI			Lena	Outside resource
19MORC041	RC	Lena	Individual 1m	116	9	6.4	Lena	High-grade zone
			Including	121	2	22.3	Lena	High-grade zone
19MORC042	RC	Lena	Individual 1m	113	3	5.4	Lena	High-grade zone
19MORC043	RC	Lena	Individual 1m	28	1	1.0	Lena	Low Grade
			Individual 1m	50	1	2.2	Lena	Low Grade
			Individual 1m	69	1	1.0	Lena	Low Grade
19MORC044	RC	Lena	Individual 1m	197	1	1.0	Lena	Low Grade
19MORC045	RC	Lena	Individual 1m	NSI			Lena	Outside resource
19MORC046	RC	Mainland	Individual 1m	NSI			Mainland-Consols	Mineralisation possibly plunging beneath hole

**Table 1b: Summary of New Recent MGV Drill Collars**

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)
19MORC018	RC	Mainland-Consols	590439	6947720	140	-60	432.4	198
19MORC019	RC	Mainland-Consols	590485	6947707	140	-60	431	84
19MORC029	RC	Mainland	591026	6947663	140	-60	420	78
19MORC030	RC	Mainland	591068	6947663	140	-60	421.5	72
19MORC031	RC	Break of Day	582001	6935850	270	-60	419.1	152
19MORC032	RC	Break of Day	581947	6935925	270	-60	417.8	104
19MORC033	RC	Break of Day	582003	6935875	270	-60	418.8	200
19MORC034	RC	Lena	581974	6936165	300	-60	414	152
19MORC035	RC	Break of Day	582125	6936300	270	-60	415.1	50
19MORC036	RC	Break of Day	582140	6936250	270	-60	415.7	50
19MORC037	RC	Break of Day	581879	6936003	115	-60	416.1	230
19MORC038	RC	Lena	582329	6936762	300	-60	412	308
19MORC039	RC	Lena	582263	6936783	300	-60	411.2	128
19MORC040	RC	Lena	581767	6935734	300	-60	417.9	248
19MORC041	RC	Lena	581723	6935732	300	-60	418.2	200
19MORC042	RC	Lena	581762	6935822	300	-60	416.7	200
19MORC043	RC	Lena	582166	6936487	300	-60	413.4	250
19MORC044	RC	Lena	581792	6936101	300	-60	414	175
19MORC045	RC	Lena	581959	6936321	300	-60	412.8	115
19MORC046	RC	Mainland	590420	6947660	300	-60	427.6	100

*Notes to Tables 1a & 1b*

1. An accurate dip and strike and the controls on mineralisation are only interpreted and the true width of the mineralisation are unconfirmed at this time
2. In RC drilling six metre composite samples are collected and analysed for gold while individual one metre samples are collected and analysed pending 6m composite results.
3. All samples are analysed using 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
4. g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (no significant intercept)
5. Higher grade intersections are generally calculated over intervals >1.0g/t Au where zones of internal dilution are not weaker than 2m < 0.5g/t Au. Composite samples assaying >0.1g/t Au are re-analysed at one metre intervals.
6. All Drill holes are reported in Tables 1a and 1b above.
7. Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond
8. Coordinates are in GDA94, MGA Z50

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# JORC TABLE 1

## Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	<p><u>Current RC drill program</u></p> <p>RC samples are composited at 6m intervals using a stainless steel scoop with all 6m intervals over 0.1g/t Au resampled at 1m intervals by cyclone splitter. Individual 1m samples are submitted for initial assays where significant obvious mineralisation is intersected.</p> <p>Historical sampling criteria are unclear for pre 2009 drilling. MGW sampling is undertaken using standard industry practices including the use of duplicates and standards at regular intervals. All Reverse circulation (RC) samples are split to 1-3kg in weight through a cyclone splitter on the drill rig for 1m drill intervals. A Thermo Scientific Niton GoldD XL3+ 950 Analyser is available on site to aid geological interpretation. No XRF results are reported. Diamond samples are marked at geological intervals with individual samples generally not larger than 1.5m and smaller than 0.25m.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	All co-ordinates are in UTM grid (GDA94 Z50) and drill hole collars have been surveyed by GPS to an accuracy of 0.5m.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i>	<p><u>Current RC drill program</u></p> <p>RC samples are composited at m intervals using a stainless steel scoop with all intervals over 0.1g/t Au resampled at 1m intervals by cyclone splitter. The 3kg samples are pulverised to produce a 50g charge for fire assay with ICP-MS finish for gold.</p> <p>Historical sampling criteria are unclear for pre 2009 drilling. MGW RC samples were collected as 6m composites for all drill holes in the current program. One metre individual samples are immediately submitted for analysis where a high probability of mineralisation occurs (e.g. quartz vein lode or massive sulphide). All one metre samples are split to 1-3kg in weight through a cyclone splitter which is air blasted clean at the end of each 6m rod. Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverization stage. The sample size is deemed appropriate for the grain size of the material being sampled. Samples are sent to the Genalysis – Intertek laboratory in Maddington. Samples are pulverized to 85% passing -75um and four metre composite samples are analysed using a 50g fire assay with ICP-MS (inductively coupled plasma - mass spectrometry) finish gold analysis (0.005ppm detection limit).</p>
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	<p><u>Current RC drill program</u></p> <p>RC drilling was used in this MGW program. Challenge drilling Pty Ltd utilised a KWL 350 drill rig with 1100/350 on-board compressor with an Atlas Copco 1,000 cfm auxiliary, Hurricane 2,400cfm, 1,000 psi booster. Four inch RC drill rods with a 5.75" face hammer were utilised. Down hole surveys were undertaken at a maximum of 30m intervals using a north seeking gyroscopic tool not subject to magnetic interference.</p> <p>Historical drilling was a combination of RAB, aircore, RC and diamond at Lena. MGW undertook this diamond drilling program utilising Central Kal drilling with a 5 5/8 inch hammer for RC pre-collars and NQ2 diamond core. The current program consisted of 7 diamond drill holes. A total of more than 178 RC holes and 14 diamond drill holes have been drilled by MGW at Break of Day &amp; Lena. Historically Silver Lake Resources Ltd (SLR) undertook RC drilling at Break of Day and Lena between 2010 and 2013 with a number of companies intermittently drilling prior to 2009 including Perilya Mines Ltd (1991-2007). A combination of historical RAB, aircore, RC and diamond drilling has been utilised by multiple companies over a thirty year period across the broader project area.</p>

Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<u>Current RC drill program</u> RC 6m composite samples are collected and re-assayed at 1m intervals were 6m 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 RC drilling. A cyclone splitter was utilised to split 1-3kg of sample by weight. The splitter is air blasted clean at the end of each 6m rod. Historical sampling recovery is unclear for pre 2009 drilling.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No significant sample loss or bias has been noted in current drilling or in the historical reports or from other MGV drill campaigns.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All geological, structural and alteration related observations are stored in the database.
	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.	No core drilling was part of this program
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples are composited at 6m intervals using a stainless steel scoop with all intervals over 0.1g/t Au resampled at 1m cyclone split intervals.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Drill sample preparation and base metal and precious metal analysis is undertaken by a registered laboratory (Genalysis – Intertek). 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 (1:50) at appropriate intervals for early stage exploration programs. High, medium and low gold standards are used. 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 samples lithology.
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 six metre composite RC samples and 1m cyclone split samples, analysis is undertaken by Intertek-Genalysis (a registered laboratory), with 50g fire assay with ICP-MS finish undertaken for gold. 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. In diamond core individual samples are analysed through potential gold mineralised zones. Analysis is by 50g fire assay with ICP-MS finish for 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 GoldDD XL3+ 950 Analyser to aid geological interpretation.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	MGV field QC procedures involve the use of certified reference standards (1:50), duplicates (~1:30) and blanks (1:50) at appropriate intervals for early stage exploration programs. Historical QA/QC procedures are unclear for pre 2009 drilling.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	MGV samples are verified by the geologist before importing into the main MGV database (Datashed).
	The use of twinned holes.	No twin holes have been drilled by Musgrave Minerals Ltd during this program.



	<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 $\pm 5$ metres. Down hole surveys are undertaken using the axis digital clinometer and gyroscope down hole tool in either continuous reading mode or at regular 30m intervals.
	<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>	Historical drill hole collars and RL's are surveyed by qualified surveyors in most instances in the resource areas post drilling. Differential GPS is used to survey drill hole collars with an accuracy of $\pm 0.01$ metre including RL's. Drill hole collars are planned and set up using standard GPS (accuracy $\pm 2$ m).
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Variable drill hole spacings are used to adequately test targets and are determined from geochemical, geophysical and geological data together with historical drilling information. At Mainland-Consols 25m drill hole spacings were undertaken but spacing is generally variable and dependent on geology, continuity, resource status and geological understanding and confidence. At Lena a general pattern of approximately 25-75m drill spacings on 25m spaced sections has been completed through multiple phases over many years. Historical drill hole spacings at Break of Day and Lena are variable although Perilya, SLR and MGX drilled a number of holes at approximately 12.5m, 25m or 50m sections from 1991-2019.
	<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>	There is a current JORC 2012 Mineral Resource at Break of Day and Lena defined by Musgrave Minerals Ltd. The Mineral Resources estimate at Break of Day and Lena was prepared and disclosed in accordance with the 2012 Edition of the Australian Code of Reporting of Mineral Resources and Ore Reserves (JORC 2012). For further details refer to MGX ASX announcement 14 July 2017: "Resource Estimate Exceeds 350koz Au".
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been undertaken in the diamond drilling. One metre individual RC samples routinely split by the drill rig cyclone are undertaken for all RC drill holes but only 6m composite samples are submitted for analysis. Where 6m composite assays are above 0.1g/t Au, individual 1m samples are submitted for gold assay. Six metre sample compositing has also been undertaken using a stainless steel scoop for all RC drill holes in the current program. Composite sampling is undertaken using a stainless steel spear (trowel) at one metre samples and combined in a calico bag. Historical QA/QC procedures are unclear for pre 2009 drilling.
<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. The mineralisation at Break of Day and Lena is interpreted to dip between 70-90 degrees to the west. An accurate dip and strike of mineralisation at Mainland is unknown at this time. Drill intersections at Break of Day and Lena are interpreted to be between 50-80% of the drill intersection width.
	<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 is known at this time.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by MGX 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). When at the laboratory samples are stored in a locked yard before being processed and tracked through preparation and analysis (Lab-Trak system).

<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	During the resource estimate an external review of the geological interpretation, data and modelling techniques was undertaken by CSA global.
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## Section 2 Reporting of Exploration Results

<i>Criteria</i>	<i>Explanation</i>	<i>Commentary</i>
<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>	The Mainland prospects are on tenements P21/731, 732, 735, 736, 737, 739, 741 where MGCV has an option to acquire 100% of the basement gold rights on the tenements (not part of the EVN JV). Musgrave Minerals secured 100% of the Moyagee Project area in August 2017 (see MGCV ASX announcement 2 August 2017: "Musgrave Secures 100% of Key Cue Tenure"). The Break of Day 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 (Lena and Break of Day is on M21/106 and Hollandaire E20/699). The tenements are subject to standard Native Title heritage agreements and state royalties. Third party royalties are present on some individual tenements. 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 MGCV ASX release dated 17 September 2019, "Musgrave and Evolution sign an \$18 million Earn-in JV and \$1.5 million placement to accelerate exploration at Cue") and the new Mainland option area.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The tenements are in good standing and no known impediments exist.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Historical drilling, soil sampling and geophysical surveys have been undertaken in different areas on the tenements intermittently by multiple third parties over a period of more than 30 years. At Break of Day, Lena and Mainland historical exploration and drilling has been undertaken by a number of companies and at Break of Day and Lena most recently by Silver Lake Resources Ltd in 2009-13 and prior to that by Perilya Mines Ltd from 1991-2007. Musgrave Minerals has undertaken exploration since 2016.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Geology comprises typical Archaean Yilgarn greenstone belt lithologies and granitic intrusives. Two main styles of mineralisation are present, typical Yilgarn Archaean lode gold and volcanic massive sulphide (VMS) base metal and gold mineralisation within the Eelya Felsic Complex.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length.</i>	All relevant drill hole information has previously been reported by Perilya, Silver Lake Resources, MGCV 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 but all drilling is planned close to perpendicular to interpreted targets.
<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 MGCV drilling data has previously been reported. Higher grade historical results are 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.