ASX RELEASE 4 November 2020

ASX: MGV

Regional drilling hits more high-grade gold

- **The regional drilling program targeting Starlight analogues at Cue has intersected high-grade gold at Target 9 (Leviticus), 1.8km south of Break of Day**
- **A single north-south aircore/RC traverse across the Leviticus target intersected two separate zones of high-grade, near-surface gold mineralisation:**
  - **4m @ 13.1g/t Au from 1m (20MUAC058) including;**
    - **3m @ 17.3g/t Au from 1m**
  - **2m @ 10.3g/t Au from 33m (20MUAC058)**
- **Leviticus is ~1.4km south of Target 2 where the Company recently announced aircore/RC results including:**
  - **5m @ 13.4g/t Au from 28m (20MUAC008); and**
  - **8m @ 8.4g/t Au from 41m (20MUAC009)**
- **Aircore/RC traverses have been completed over 20 of the 25 planned targets and assays have been received for the first 12 traverses. Anomalous gold has been intersected at 10 of the targets including the high-grade results from Targets 2 and 9**
- **Follow-up drilling at Targets 2 and 9 is currently underway and drill testing of additional Starlight analogue targets within the belt is continuing**

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report assay results for a further 56 aircore/reverse circulation ("RC") drill holes from the current regional exploration program on its 100%-owned ground at its flagship Cue Gold Project in Western Australia's Murchison district (Figure 1).The program is testing new Starlight analogue targets on trend from the high-grade Starlight gold discovery at the Break of Day deposit.

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

Single traverses of aircore/RC drill holes are being completed as a first pass test over approximately 25 individual targets.

The Leviticus target (Target 9 in Figure 2), which returned the best results in the latest batch of assays, is located 1.8km south of Break of Day. To date 20 traverses have been completed with assays received for 12 traverses and anomalous gold intersected at 10 of the targets, including high grade, near surface intersections at Target 9 (Leviticus) and Target 2.

Musgrave Managing Director Rob Waugh said: *"Positive results from the regional drilling program continue to highlight the upside gold potential following a re-interpretation of the gold lode geometries within the Break of Day shear corridor. Regional target drilling is continuing to test targets, and follow-up of the high-grade results at Target 2 is underway with Leviticus follow-up to follow."*

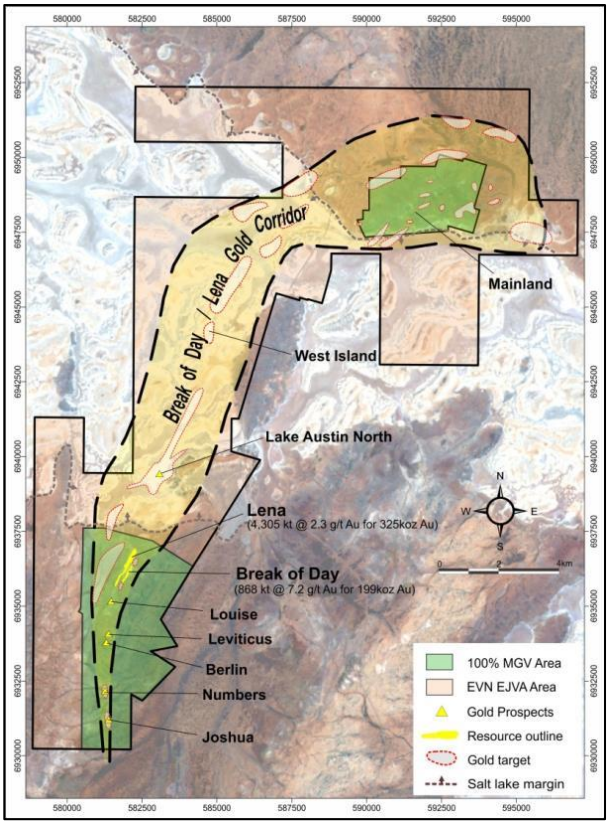

Figure 1: Prospect location plan

Historical east-west drilling at Leviticus intersected high-grade gold including:

- 10.5m @ 17.8g/t Au from 58m (09MODD009)
  - including 4.8m at 26.8m from 58m
- 5m @ 7.1g/t Au from 79m (11MORC020)
- 3m @ 15.8g/t Au from 11m (MGRC131)
- 6m @ 7.0g/t Au from 68m (11MORC022)

Leviticus hosts an existing inferred resource of 42,000t @ 6.0g/t Au for 8,000oz (*see MGV ASX announcement dated 16 October 2020, "Annual Report to Shareholders"*). Implementing the geological knowledge gleaned from the Starlight discovery and re-interpreting the new intercepts at Leviticus suggest a north-northwest strike is permissive for these gold lodes. Given the possibility of north-north-west striking lodes, it is likely that historical drilling did not adequately test the northern limit or depth extent of the gold mineralisation at Leviticus. Further drilling is currently being planned and will test this hypothesis in the next few weeks.

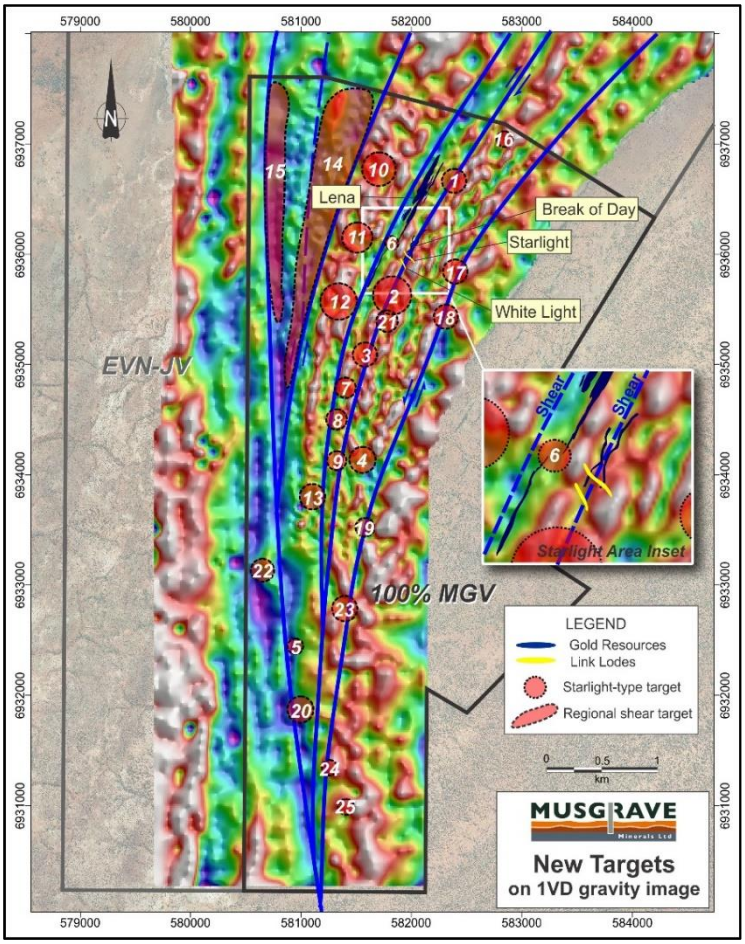

Figure 2: Plan showing regional targets on 1VD gravity image

To date a total of 273 aircore/RC holes have been completed in the regional program with assays received for 105 holes across 12 targets. All new anomalous assay results and drill collars are shown in Tables 1a and 1b and significant historical intercepts at Leviticus are shown in Table 1c.

This regional aircore/RC drill program to test for Starlight analogues in the belt is progressing well and has been extended to >18,000m. To date, an estimated 16,000m of drilling over 20 of a planned 25 targets (*Figure 2*) has been completed. Further assays are expected in coming weeks.

The program is testing targets derived from geophysical, geochemical and geological data and is focused on the potential for high-grade gold mineralisation on structures cross-cutting stratigraphy like that seen at Starlight.

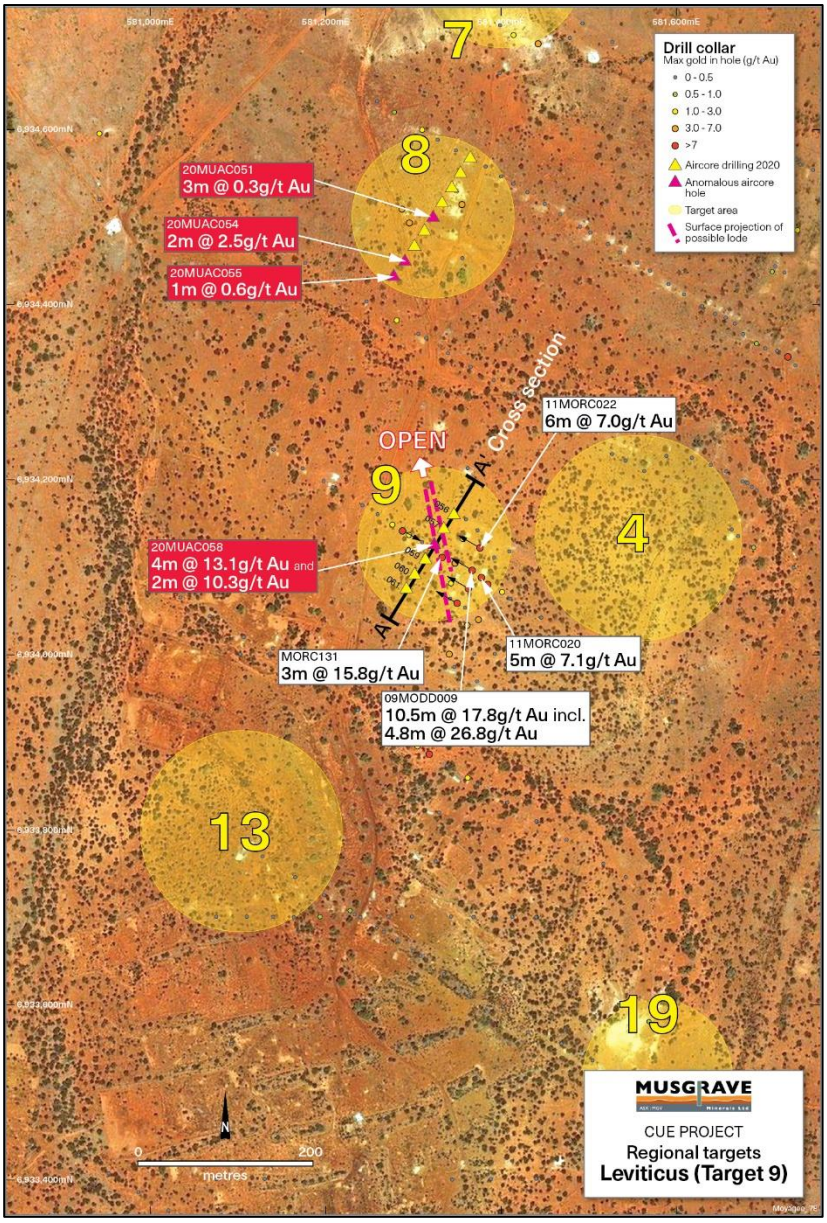

Figure 3: Plan showing drill hole collars from regional drill program and new significant assay results

Discussion of Results

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

Anomalous gold has been intersected at 10 of the targets including the high-grade intercepts at Leviticus (Target 9), (*Figures 3 and 4*). Recent results from Leviticus include:

- 4m @ 13.1g/t Au from 1m (20MUAC058) including:
  - 3m @ 17.3g/t Au from 1m and
- 2m @ 10.3g/t Au from 33m (20MUAC058)

These aircore drill holes are collared 20m apart and were terminated close to the regolith-fresh rock interface. This initial drilling suggests the possibility of two sub-parallel gold lodes striking north-

northwest. Additional follow-up drilling will be required to define the strike and depth extent of this mineralised position.

Drilling at targets 8, 10, 11 and 23 also returned anomalous gold results (Tables 1a and 1b) in the regolith (weathered zone) with further assessment underway prior to follow-up drilling.

Drilling of target 6 at Lena intersected low-moderate grade gold mineralisation consistent with the current Lena geological model.

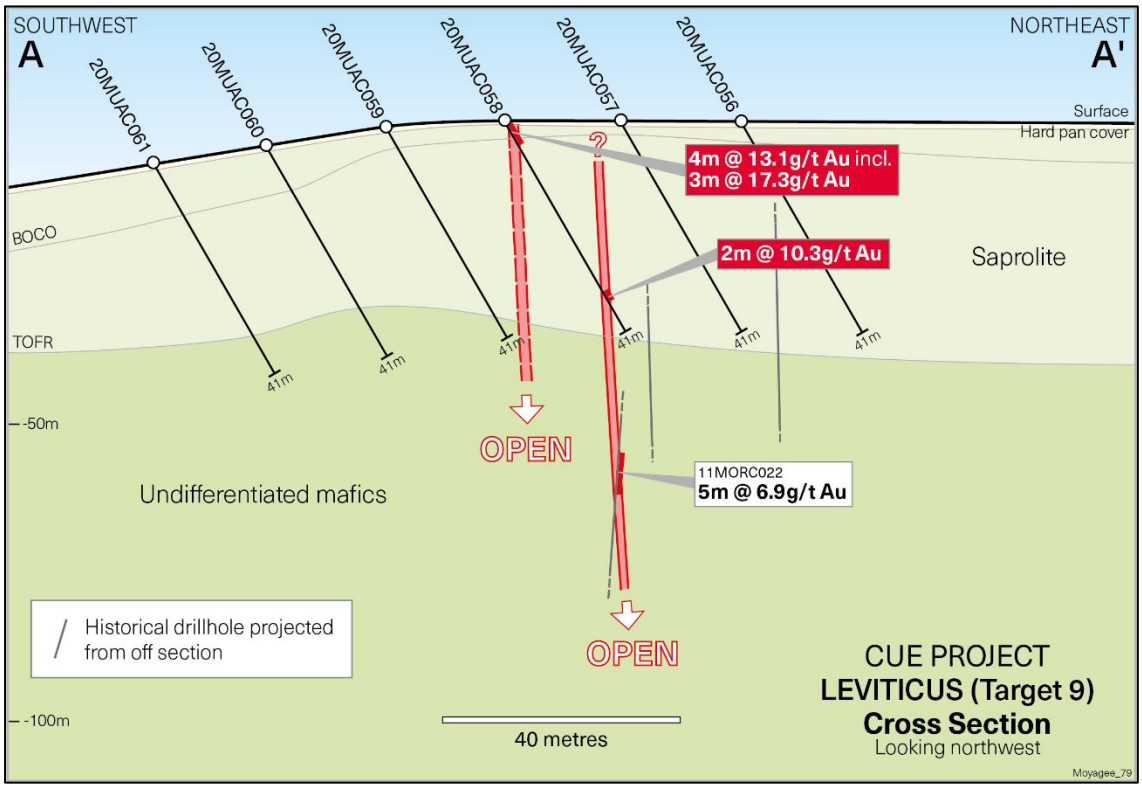

Figure 4: Cross section of Target 9 reconnaissance drill traverse line and significant assay results

Break of Day

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

An updated resource estimate is in the process of being finalised and will include results from the new Starlight and White Light gold lodes.

The current resource estimate for the Cue Gold Project totals 6.45Mt @ 3.0g/t Au for 613koz including the Break of Day deposit (868Kt @ 7.2g/t Au for 199koz 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 14 July 2017 and 17 February 2020*).

Ongoing Exploration

Musgrave 100% tenements

- Initial follow-up drilling along strike of the new high-grade gold intersections at Target 2 and Target 9 (Leviticus) is scheduled for November.
- Further drilling to test the possible new lodes 100m to the south of White Light (4m @ 3.3g/t Au and 3m @ 3.4g/t Au) identified in hole 20MORC105 (*See MGV ASX announcement 28 September 2020*) is scheduled for late November.
- An updated geological interpretation and Break of Day resource estimate which will include the Starlight and White Light lodes, is currently underway and will be released on completion in November.
- Regional aircore/RC drilling program testing 25 regional and Starlight analogue targets is continuing.

Evolution JV

- The Phase 2 aircore drilling program testing high-priority gold targets on Lake Austin is continuing with 12,363m of a planned 21,900m program completed at the end of the quarter.

THE CUE PROJECT

The Cue Project ("the Project") is located in the Murchison district of Western Australia (*Figure 5*) and hosts Mineral Resources (Indicated and Inferred) totalling 6.45Mt @ 3.0g/t gold for 613,000oz contained gold (*MGV ASX announcement dated 17 February 2020, "Lena Resource Update"*). The Company has defined a +28km-long prospective gold corridor that includes the Break of Day-Starlight, Lake Austin North and Mainland-Consols gold discoveries.

With significant upside potential Musgrave's intent is to grow the resource base and investigate options to best develop a low-cost operation, capable of delivering strong financial returns for its shareholders.

The Company also has two active joint ventures in the region, with Evolution Mining Ltd over Lake Austin and with Cyprium Australia Pty Ltd over the Hollandaire copper deposit and surrounding tenure (*Figure 5*).

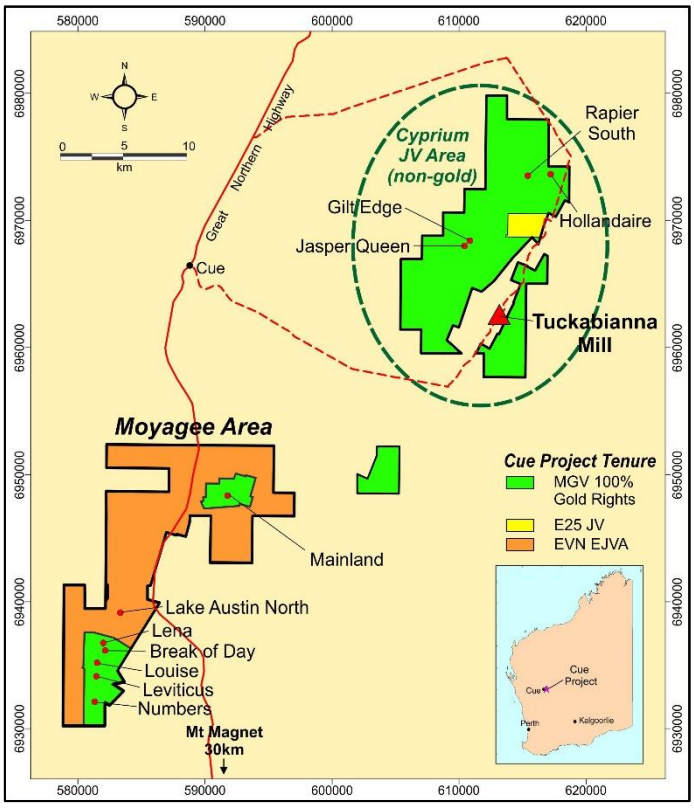

Figure 5: Cue Project location plan and tenure

For and on behalf of Musgrave Minerals Limited.
Rob Waugh
Managing Director

For further details please contact:

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

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

About Musgrave Minerals

Musgrave Minerals Limited is an active Australian gold and base metals explorer. The Cue Project in the Murchison region of Western Australia is an advanced gold 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.

Follow us through our social media channels

Additional JORC Information

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

- *2 November 2020, "Exceptional metallurgical gold recoveries at Starlight"*
- *27 October 2020, "Quarterly Activities and Cashflow Report"*
- *16 October 2020, "Annual Report to Shareholders"*
- *13 October 2020, "Starlight Shines – Diggers and Dealers Company Presentation"*
- *8 October 2020, "Drilling hits high-grade gold at new target, 400m south of Starlight"*
- *24 September 2020, "Infill drilling at Break of Day confirms high grades"*
- *19 August 2020, "Starlight gold mineralisation extended"*
- *31 July 2020, "Quarterly Activities and Cashflow Report"*
- *28 July 2020, "Bonanza gold grades continue at Starlight with 3m @ 884.7g/t Au"*
- *6 July 2020, "85m@11.6g/t gold intersected near surface at Starlight"*
- *29 June 2020, "New gold lode discovered 75m south of Starlight"*
- *9 June 2020, "Bonanza near surface hit of 18m@179.4g/t gold at Starlight"*
- *5 June 2020, "Scout drilling defines large gold targets at Cue, Evolution JV"*
- *3 June 2020, "12m@112.9g/t Au intersected near surface at Starlight"*
- *21 April 2020, "High grades confirmed at Starlight"*
- *1 April 2020, "More High-grade gold at Starlight Link-Lode, Break of Day"*
- *16 March 2020, "Starlight Link-lode shines at Break of Day"*
- *28 February 2020, "High-grade gold intersected Link-lode, Break of Day"*
- *17 February 2020, "Lena Resource Update"*
- *3 December 2019, "New high-grade 'link-lode' intersected at Break of Day, Cue Project"*
- *27 November 2019, "High-grade gold intersected in drilling at Mainland, Cue Project"*
- *9 October 2019, "High-grade gold intersected at Break of Day and ultra-high-grade rock-chip sample from Mainland, Cue Project"*
- *17 September 2019, "Musgrave and Evolution sign an $18 million Earn-In JV and $1.5M placement to accelerate exploration at Cue"*
- *28 May 2019, "Scout Drilling Extends Gold Zone to >3km at Lake Austin North"*
- *16 August 2017, "Further Strong Gold Recoveries at Lena"*
- *14 July 2017, "Resource Estimate Exceeds 350koz Au"*

Competent Person's Statement
Exploration Results

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled and/or thoroughly reviewed by Mr Robert Waugh, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Member of the Australian Institute of Geoscientists (AIG). Mr Waugh is Managing Director and a full-time employee of Musgrave Minerals Ltd. Mr Waugh has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Waugh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This document may contain certain forward-looking statements. Forward-looking statements include, but are not limited to statements concerning Musgrave Minerals Limited's (Musgrave's) current expectations, estimates and projections about the industry in which Musgrave operates, and beliefs and assumptions regarding Musgrave's future performance. When used in this document, words such as "anticipate", "could", "plan", "estimate", "expects", "seeks", "intends", "may", "potential", "should", and similar expressions are forward-looking statements. Although Musgrave believes that its expectations reflected in these forward-looking statements are reasonable, such statements are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Musgrave and no assurance can be given that actual results will be consistent with these forward-looking statements.

Table 1a: ***Summary of recent Aircore/RC assay intervals from recent regional drilling program***

Drill Hole ID	Drill Type	Prospect	Sample Type	From (m)	Interval (m)	Au (g/t)	Lode	Comment
20MUAC051	AC	Regional Target 8	1m individual	30	3	0.3	Unknown	Dispersion halo in foliated basalt
20MUAC054	AC	Regional Target 8	1m individual	6	2	2.5	Unknown	Dispersion halo in saprolite
20MUAC055	AC	Regional Target 8	1m individual	19	1	0.63	Unknown	Dispersion halo in foliated basalt
20MUAC058	AC	Regional Target 9 (Leviticus)	1m individual	1	4	13.1	NW extension to Leviticus Lodes	Could indicated NW-SE extension to Leviticus lodes (historically interpreted as N-S)
			Including	1	3	17.3		
			1m individual	20	1	1.6		
			1m individual	33	2	10.3		
20MUAC070	AC	Regional Target 23	1m individual	54	3	0.5	Unknown	Quartz veining in foliated felsic intrusive
20MUAC071	AC	Regional Target 23	1m individual	49	3	1.0	Unknown	Laminated SIF
20MUAC077	AC	Regional Target 6 (Lena)	1m individual	22	2	0.5	South end of Lena Resource	Dispersion halo in schistose basalts
20MUAC078	AC	Regional Target 6 (Lena)	1m individual	12	14	1.1	South end of Lena Resource	Foliated basalts
			Including	23	2	5.1		
20MUAC079	AC	Regional Target 6 (Lena)	1m individual	18	8	1.6	South end of Lena Resource	Highly foliated basalts
			Including	23	3	2.9		
20MUAC093	AC	Regional Target 10	1m individual	10	1	1.0	Unknown	Dispersion halo in saprolite
20MUAC105	AC	Regional Target 11	1m individual	4	4	0.3	Unknown	Dispersion halo in saprolite

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

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Assays
20MUAC051	Aircore	Regional	581322	6934500	30	-60	418	41	Reported Above
20MUAC054	Aircore	Regional	581290	6934450	30	-60	418	41	Reported Above
20MUAC055	Aircore	Regional	581279	6934433	30	-60	418	41	Reported Above
20MUAC058	Aircore	Regional	581324	6934126	30	-60	418	41	Reported Above
20MUAC070	Aircore	Regional	581374	6932750	30	-60	418	77	Reported Above
20MUAC071	Aircore	Regional	581366	6932734	30	-60	418	53	Reported Above
20MUAC077	Aircore	Regional	581823	6936099	30	-60	418	41	Reported Above
20MUAC078	Aircore	Regional	581812	6936082	30	-60	418	41	Reported Above
20MUAC079	Aircore	Regional	581802	6936066	30	-60	418	41	Reported Above
20MUAC093	Aircore	Regional	581631	6936650	30	-60	418	48	Reported Above
20MUAC105	Aircore	Regional	581457	6936064	30	-60	418	53	Reported Above

Table 1c: ***Summary of historical drill collars with high-grade gold mineralisation from Leviticus (Target 9)***

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Drilled by	Assays
09MODD009	Diamond	Leviticus	581366	6934097	305	-60	418	120	Silver Lake Resources	10.5m @ 17.8g/t Au from 58m, including 4.8m @ 26.8g/t Au from 58m
MGRC131	RC	Leviticus	581333	6934111	307	-60	418	50	Molopo Australia Ltd	3m @ 15.8g/t Au from 11m
MGRC182	RC	Leviticus	581384	6934081	307	-60	418	160	Perilya Mines NL	3m @ 5.9g/t Au from 125m
11MORC020	RC	Leviticus	581377	6934088	300	-60	418	132	Silver Lake Resources	5m @ 7.1g/t Au from 79m
11MORC022	RC	Leviticus	581374	6934122	294	-60	418	92	Silver Lake Resources	6m @ 7.0g/t Au from 68m
16MORC057	RC	Leviticus	581288	6934142	112	-61	418	132	Musgrave Minerals	5m @ 3.35g/t Au from 103m

Notes to Tables

1. *An accurate dip and strike and the controls on mineralisation are only interpreted and the true width of the mineralisation are unconfirmed at this time.*
2. *In Aircore and RC drilling six metre composite samples are collected and analysed for gold together with selected 1m intervals on visual geology while individual one metre samples are collected and analysed pending composite results. Composite samples assaying >0.1g/t Au are re-analysed at one metre intervals.*
3. *All samples are analysed using either a 50g fire assay with ICP-MS (inductively coupled plasma - mass spectrometry) finish gold analysis (0.005ppm detection limit) by Genalysis-Intertek in Maddington, Western Australia or a 500g sample by Photon Assay at MinAnalytical in Canning Vale.*
4. *g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (no significant intercept)*
5. *Higher grade intersections reported here are generally calculated over intervals >0.1g/t Au across 6m or gram x metre equivalent over thinner intervals where zones of internal dilution are not weaker than 2m < 0.1g/t Au. Bulked thicker intercepts may have more internal dilution between high-grade zones.*
6. *All drill holes referenced in this announcement are reported in Tables 1a and 1b above.*
7. *Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond.*
8. *Coordinates are in GDA94, MGA Z50.*

---ENDS---

JORC TABLE 1
Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	MGV sampling is undertaken using standard industry practices including the use of duplicates and standards at regular intervals. A Thermo Scientific Niton GoldD XL3+ 950 Analyser is available on site to aid geological interpretation. No XRF results are reported. Historical sampling criteria are unclear for pre 2009 drilling. <u>Current Aircore drill program</u> Air core samples are composited at 6m intervals using a stainless-steel scoop with all composite intervals over 0.1g/t Au resampled at 1m intervals using a stainless steel scoop. Individual 1m samples are submitted for initial assays where significant obvious mineralisation is intersected.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All co-ordinates are in UTM grid (GDA94 Z50) and drill hole collars have been surveyed by GPS to an accuracy of 0.5m.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	<u>Current Aircore drill program</u> Aircore samples are composited at 6m intervals using a stainless-steel scoop with all composite intervals over 0.1g/t Au resampled at 1m intervals by stainless steel scoop. One metre individual samples are immediately submitted for analysis where a high probability of mineralisation occurs (e.g. quartz vein lode or massive sulphide). The 3kg samples are pulverised to produce a 50g charge for fire assay with ICP-MS finish for gold. All 1m samples are sampled to 1-3kg in weight to ensure total preparation at the laboratory pulverization stage. The sample size is deemed appropriate for the grain size of the material being sampled. Some samples are sent to the Genalysis – Intertek laboratory in Maddington where they are pulverized to 85% passing -75um and analysed using a 50g fire assay with ICP-MS (inductively coupled plasma - mass spectrometry) finish gold analysis (0.005ppm detection limit). Some samples are sent to the NATA accredited MinAnalytical Laboratory in Canning Vale, Perth and analysed via PhotonAssay technique (method code PAAU2) along with quality control samples and duplicates. Individual samples are assayed for gold after drying and crushing to nominally 85% passing 2mm and a 500g linear split taken for PhotonAssay (method code PAP3512R). The PhotonAssay technique was developed by CSIRO and Chrysos Corporation and is a fast, chemical free non-destructive, alternative using high-energy X-rays to traditional fire assay and uses a significantly larger sample size (500g v's 50g for fire assay). This technique is accredited by the National Association of Testing Authorities (NATA).

Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Aircore/RC drilling was used for this MGV program. Strike Drilling Pty Ltd utilised an X350 tracked drill rig with an on-board compressor with 430psi/1000cfm. Aircore/RC holes were drilled with an 83mm diameter blade bit. The drill rig has the capacity to switch between aircore and RC pending ground conditions. A combination of historical RAB, aircore, RC and diamond drilling has been utilised by multiple companies over a thirty-year period across the broader project area.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Aircore 6m composite samples are collected and re-assayed at 1m intervals were comps are above 0.1g/t Au. Sample weights, dryness and recoveries are observed and noted in a field Toughbook computer by MGV field staff.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	MGV contracted drillers use industry appropriate methods to maximise sample recovery and minimise downhole contamination including using compressed air to maintain a dry sample in aircore drilling. Historical sampling recovery is unclear for pre 2009 drilling.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	No significant sample loss or bias has been noted in current drilling or in the historical reports or from other MGV drill campaigns.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	All geological, structural and alteration related observations are stored in the database. Air core holes would not be used in any resource estimation, mining or metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of lithology, structure, alteration, mineralisation, weathering, colour and other features of core or RC/aircore chips is undertaken on a routine 1m basis or on geological intervals for diamond core.
	The total length and percentage of the relevant intersections logged.	All drill holes are logged in full on completion.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	N/A
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Aircore samples are taken from 1m sample piles and composited at 6m intervals using a stainless-steel scoop, with all intervals over 0.1g/t Au resampled at 1m using a stainless steel scoop
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Drill sample preparation and precious metal analysis is undertaken by registered laboratories (Genalysis – Intertek and MinAnalytical). Sample preparation by dry pulverisation to 85% passing 75 micron.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	MGV field QC procedures involve the use of certified reference standards (1:50), duplicates (~1:30) and blanks at appropriate intervals for early stage exploration programs. High, medium and low gold standards are used. Where high grade gold is noted in logging, a blank quartz wash is inserted between individual samples at the laboratory before analysis. Historical QA/QC procedures are unclear for pre 2009 drilling.
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	Sampling is carried out using standard protocols and QAQC procedures as per industry practice. Duplicate samples are inserted (~1:30) and more frequently when in high-grade gold veins, and routinely checked against originals. Duplicate sampling criteria is unclear for historical pre 2009 drilling. Historical QA/QC procedures are unclear for pre 2009 drilling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for grain size of sample material to give an accurate indication of gold mineralisation. Samples are collected from full width of sample interval to ensure it is representative of sample complete interval.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	On composite and 1m Aircore samples, analysis is undertaken by Intertek-Genalysis (a registered laboratory), with 50g fire assay with ICP-MS finish undertaken for gold. Some samples are sent to the NATA accredited MinAnalytical Laboratory in Canning Vale, Perth and analysed via PhotonAssay technique. Individual samples are assayed for gold after drying and crushing to nominally 85% passing 2mm and a 500g linear split taken for PhotonAssay (method code PAP3512R). Internal certified laboratory QAQC is undertaken including check samples, blanks and internal standards. This methodology is considered appropriate for base metal mineralisation and gold at the exploration phase.

	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used to estimate mineral or element percentages. Musgrave utilise a Thermo Scientific Niton GoldD XL3+ 950 Analyser to aid geological interpretation.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	MGV field QC procedures involve the use of certified reference standards (1:50), duplicates (~1:30) and blanks (1:50) at appropriate intervals for early stage exploration programs. Historical QA/QC procedures are unclear for pre 2009 drilling.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	MGV samples are verified by the geologist before importing into the main MGV database (Datashed).
	The use of twinned holes.	No twin holes have been drilled by Musgrave Minerals Ltd during this program.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is collected using a standard set of templates. Geological sample logging is undertaken on one metre intervals for all RC drilling with colour, structure, alteration and lithology recorded for each interval. Data is verified before loading to the database. Geological logging of all samples is undertaken.
	Discuss any adjustment to assay data.	No adjustments or calibrations are made to any assay data reported.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	All maps and locations are in UTM grid (GDA94 Z50) and have been surveyed or measured by hand-held GPS with an accuracy of >±2 metres.
	Specification of the grid system used.	Drill hole and sample site co-ordinates are in UTM grid (GDA94 Z50) and historical drill holes are converted from local grid references.
	Quality and adequacy of topographic control.	All current aircore drill hole collars are planned and set up using hand-held GPS (accuracy +-2m).
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Variable drill hole spacings are used to complete 1st pass testing of targets and are determined from geochemical, geophysical and geological data together with historical drilling information. For the reported drilling drill hole spacing was approximately 20m along traverse lines.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	No resources have been calculated on regional drilling targets as described in this release due to the early stage nature of the drilling
	Whether sample compositing has been applied.	6m composite samples are submitted for initial analysis in most cases. Composite sampling is undertaken using a stainless-steel scoop at one metre samples and combined in a calico bag. Where composite assays are above 0.1g/t Au, individual 1m samples are submitted for gold assay. One metre individual samples may be submitted without composites in certain intervals of visibly favourable gold geology.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Drilling is designed to cross the mineralisation as close to perpendicular as possible on current interpretation whilst allowing for some minor access restrictions and mitigating safety risks. Most drill holes are designed at a dip of approximately -60 degrees.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation-based sampling bias can be confirmed at this time and true widths are not yet known.
Sample security	*The measures taken to ensure sample security.*	Chain of custody is managed by MGV internal staff. Drill samples are stored on site and transported by a licenced reputable transport company to a registered laboratory in Perth (Genalysis-Intertek at Maddington or MinAnalytical in Canning Vale). When at the laboratory samples are stored in a locked yard before being processed and tracked through preparation and analysis (Lab-Trak system at Genalysis-Intertek).
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits have been completed on sampling techniques and data due to the early stage nature of the drilling

Section 2 Reporting of Exploration Results

Criteria	Explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	Musgrave Minerals secured 100% of the Moyagee Project area in August 2017 (see MGV ASX announcement 2 August 2017: "Musgrave Secures 100% of Key Cue Tenure") from Silver Lake Resources Ltd. The Break of Day, Starlight and Lena prospects are located on granted mining lease M21/106 and the primary tenement holder is Musgrave Minerals Ltd. The Cue project tenements consist of 38 licences. The tenements are subject to standard Native Title heritage agreements and state royalties. Third party royalties are present on some individual tenements. The Mainland prospects are on tenements P21/731, 732, 735, 736, 737, 739, 741 where MGV has an option to acquire 100% of the basement gold rights on the tenements (not part of the EVN JV). A new Earn-in and Exploration Joint Venture was executed with Evolution Mining Ltd on 16 September 2019 covering Lake Austin and some surrounding tenure but excludes all existing resources including Break of Day and Lena (*see MGV ASX release dated 17 September 2019, "Musgrave and Evolution sign 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* *hole length.*	All RC drill holes collars with assays received for the current drill program at Starlight are reported in this announcement. All relevant historical drill hole information has previously been reported by Perilya, Silver Lake Resources, MGV and various other companies over the years.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	Significant assay intervals are recorded above 1g/t Au with a minimum internal interval dilution of 2m @ 0.5g/t Au. No cut-off has been applied to any sampling.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	No cut-off has been applied to any sampling. Reported intervals are aggregated using individual assays above 1g/t Au with no more than 2m of internal dilution <0.5g/t Au for any interval. Short high-grade intervals are tabulated in Table 1a.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	True widths are not confirmed at this time although all drilling is planned close to perpendicular to interpreted strike of the target lodes at the time of drilling.

Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Diagrams referencing historical data can be found in the body of this report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid 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.