

ASX RELEASE 20 October 2022

**ASX: MGV** 

# Gold intersections continue at West Island, Cue JV

- Diamond drilling at the West Island prospect on the Musgrave -Evolution Cue Joint Venture (Evolution Mining earning 75%) continues to intersect high-grade gold. Significant recent results include:
  - 1.0m @ 74.2g/t Au from 410.0m (22CUDD016), and
  - o 12.4m @ 3.8g/t Au from 373.6m (22CUDD016), and
  - o 3.0m @ 5.7g/t Au from 186.4m (22CUDD016)
  - o 1.9m @ 34.3g/t Au from 461.0m (22CUDD011), and
  - 8.1m @ 3.7g/t Au from 653.9m (22CUDD011)
  - 6.0m @ 6.4g/t Au from 385.5m (22CUDD012)
- Regional scale aircore drilling is continuing to identify new basement targets in areas of no previous drilling
- Drilling is continuing on the JV with two diamond rigs and one aircore rig currently on site. Evolution is operator of the JV and is managing the ongoing drilling programs

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report further assay results (*Tables 1a and 2a*) from diamond and aircore drilling programs on the Cue Joint Venture with Evolution Mining Ltd ("Evolution") in Western Australia's Murchison district.

Diamond drilling (completed by Evolution) at the West Island prospect, approximately 6km north of Break of Day, continues to intersect potential ore grade intersections within a basement dolerite host unit. The West Island prospect is approximately 1.6km long and part of a broad regional 7km-long anomalous gold corridor within the joint venture (*Figure 1*). Regional scale aircore drilling is continuing to identify new regolith gold anomalies in areas of no previous drilling.

Musgrave Managing Director Rob Waugh said: "These results are another positive step in defining the scope of the basement gold mineralisation at the West Island prospect. Together with the diamond drilling results, aircore drilling is identifying new gold anomalies within the regolith outlining new untested basement gold targets. Assay results are pending for multiple drill holes."

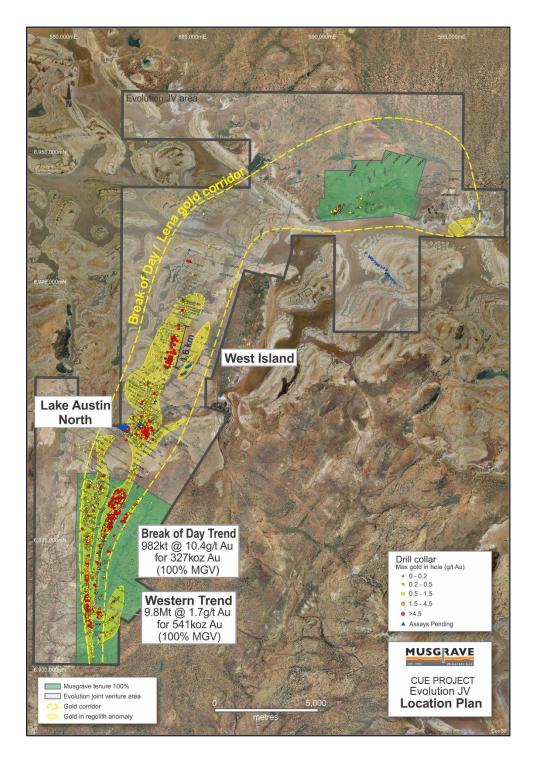


Figure 1: Location plan showing Musgrave's wholly owned tenure (in green) and Evolution JV tenure with drill hole locations. Maximum gold in hole is presented as a gradational colour scheme at the hole collar.

# **Lake Austin Diamond Drilling Program**

Evolution drilled a total of 9 diamond holes for 4,699m are reported in this release from the West Island prospect. The drilling program is targeting the key mineralised gold lodes to determine the scale of the mineral system at West Island (*Figures 2 and 3*). The mineralised lodes are interpreted as a series of stacked shears and veins, with associated high-grade splays. The drilling program currently underway will further investigate the potential for these stacked lodes.

Significant new diamond drill core intercepts at West Island include:

- 1.9m @ 34.3g/t Au from 461.0m (22CUDD011), and
- o 8.1m @ 3.7g/t Au from 563.9m (22CUDD011)
- o 6.0m @ 6.4g/t Au from 385.5m (22CUDD012)
- o 1.0m @ 74.2g/t Au from 410.0m (22CUDD016), and
- $\circ\quad$  12.4m @ 3.8g/t Au from 373.6m (22CUDD016), and
- o 3.0m @ 5.7g/t Au from 186.4m (22CUDD016), and
- 1.3m @ 9.0g/t Au from 467m (22CUDD016)

All significant new diamond drill assay results are presented in full in Table 1a with hole collar information in Table 1b.

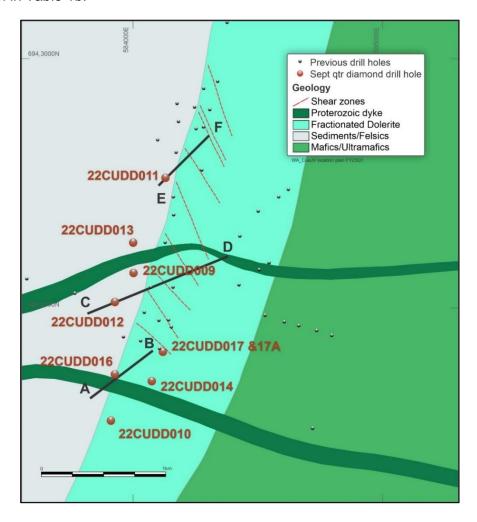


Figure 2: West Island drill hole location plan showing new diamond drill hole locations together with potential host shear zones within fractionated dolerite host unit. Note: Cross section A-B is shown in Figure 3 below. Cross sections C-D and E-F are shown in JORC Table 1 of this report.

# **Lake Austin Aircore Drilling Program**

Evolution drilled a total of 117 aircore drill holes for approximately 14,191m are reported in this release. The drilling intersected the favourable host dolerite unit along strike from the West Island prospect with anomalous gold results in a number of new areas to the north (*Figure 1*). All significant new aircore drill assay results are presented in full in Table 2a with hole collar information in Table 2b.

The most significant new aircore results include:

- 2m @ 1.66g/t Au from 178m to end of hole (22CUAC0226) in weathered dolerite
- 4m @ 5.12g/t Au from 172m (22CUAC0245) in coarse gravels (quartz and altered dolerite pebbles) at the base of transported cover

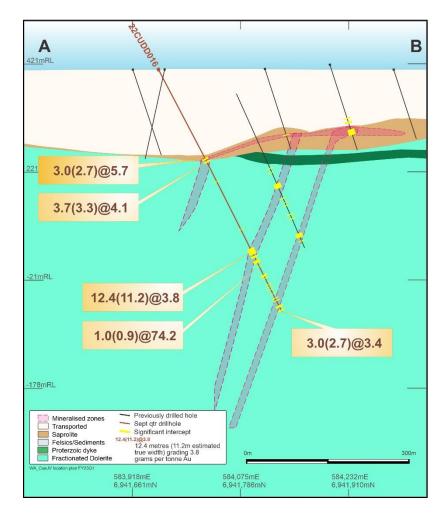


Figure 3: Schematic cross section at West Island Prospect showing gold mineralisation in new diamond drill holes 22CUDD016 in fresh rock and regolith gold halo in overlying saprolite. 1.0(0.9) @74.2 is defined as Interval of 1.0 metres (0.9m estimated true width) @ 74.2g/t Au.

### **Cue Joint Venture - Background**

In October 2019, Musgrave entered an Earn-In and Joint Venture Exploration Agreement with Evolution Mining Limited over a large area of Lake Austin and surrounds on the Cue Project in the Murchison District of Western Australia.

The Cue JV with Evolution lies to the north of and excludes all the current Mineral Resources at Cue (Lena, Break of Day, White Heat-Mosaic and Big Sky deposits, and the Mainland option area).

Evolution can earn a 75% interest in the JV Area by sole funding A\$18M on exploration over a five-year term. Evolution has currently spent approximately A\$16M on the joint venture with drilling continuing in the December quarter. Evolution is the operator of the JV and is managing the ongoing drilling programs.

# Musgrave – Evolution Cue Joint Venture - Ongoing Exploration

- Diamond drilling to test the basement beneath regolith gold mineralisation on Lake Austin is continuing with ongoing focus on the West Island prospect.
- The current phase of regional aircore drilling to identify new basement targets is continuing.
- Assay results are pending for multiple drill holes (diamond and aircore).

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 explorer and developer. Musgrave's mission is to safely and responsibly deliver exploration success and advance development opportunities to build a profitable gold mining business at Cue for the benefit of our shareholders and the communities within which we operate

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 packages near Mt Magnet in Western Australia and in the Ni-Cu-Co prospective Musgrave Province of 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

- 21 July 2022, "Further high-grade gold intersected at West Island Cue JV"
- 21 April 2022, "Thick basement gold intersections at West Island Cue JV"
- 10 March 2022, "Half yearly report and accounts"
- 17 February 2022, "Company Presentation RIU Explorers Conference"
- 28 January 2022, "Quarterly Activities and Cashflow Report" 27 January 2022, "High-grade gold intersected at West Island (Cue JV)"
- 15 October 2021, "Annual report to Shareholders"
- 12 October 2021, "Thick aircore intercepts enhance West Island Prospect"
- 30 June 2021, "High-grade gold at West Island target EVN JV, Cue"
- 4 February 2021, "Appointment of Non-executive Director"
  27 January 2021, "New basement gold targets defined on Evolution JV"
  18 January 2021, "Results of SPP Offer"
  12 January 2021, "Share Purchase Plan closes early"

- 18 December 2020, "Share Purchase Plan Offer Document"
- 14 December 2020, "\$18M raising to fund resource growth and commence PFS"
- 3 December 2020, "Scout drilling intersects high-grade gold and defines large gold zones under Lake Austin, Evolution JV"
- 5 June 2020, "Scout drilling defines large gold targets at Cue, Evolution JV"
- 17 February 2020, "Lena Resource Update"
- 17 September 2019, "Musgrave and Evolution sign an \$18 million Earn-In JV and \$1.5M placement to accelerate exploration at
- 28 May 2019, "Scout Drilling Extends Gold Zone to >3km at Lake Austin North"

#### 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 and the type of activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Waugh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Forward Looking Statements

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

Table 1a: Summary of new diamond drill hole assay intersections from Cue JV

Drill Hole ID	Drill Type	Prospect	Sample Type	EOH (m)	From (m)	Interval (m)	ETW (m)	Au (g/t)	Comment
			Geological		233.4	0.55	0.50	1.12	
			and		261.62	1.13	1.02	1.33	
			and		293	2	1.80	1.17	
			and		318	2	1.80	1.11	
0001100000	Diamand	M4 I-I4	and	500	400	1	0.90	1.01	Gold mineralisation in fresh
22CUDD009	Diamond	West Island	and	589	475.57	0.43	0.39	1.8	rock
			and		502	1.46	1.31	2.26	
			and		508.68	0.92	0.83	1.06	
			and		523	2	1.80	1.33	
			and		536	1	0.90	1.14	
			Geological		191.6	0.9	0.81	1.32	Gold mineralisation in regolith
			and		394	1	0.90	1.32	· · · · · · · · · · · · · · · · · · ·
22CUDD010	Diamond	West Island	and	462	428	0.3	0.27	1.84	Gold mineralisation in fresh rock
			and		454.8	0.4	0.36	2.94	
			Geological		281	0.5	0.45	2.33	
			and		461	1.9	1.71	34.27	
			including		461	0.7	0.63	90.1	
		amond West Island	and		468.5	0.7	0.63	1.33	Gold mineralisation in fresh rock
22CUDD011	Diamond		and	631	495.6	0.4	0.36	1.41	
			and		508.3	2	1.80	3.69	
			and		563.9	8.1	7.29	3.72	
			including		568	1	0.9	10.45	
			Geological	451	430.3	0.7	0.63	1.59	Gold mineralisation in fresh rock
		West Island	and		402	6	5.40	1.07	
22CUDD012	Diamond		and		385.5	6	5.40	6.45	
			including		389.42	1.4	1.26	20.3	
			Geological		413	1	0.90	1.93	
			and		419	1	0.90	1.32	Gold mineralisation in fresh rock
			and		456.9	0.4	0.36	2.57	
			and		459.1	4.2	3.78	1.62	
22CUDD013	Diamond	West Island	and	598	504.4	0.3	0.27	3.51	
			and		536.6	0.4	0.36	3.61	
			and		563	1	0.90	1.11	-
			and		578	1	0.90	6.05	
			Geological		156	1	0.90	7.16	
			and	1	172.4	1	0.90	3.08	Gold mineralisation in
			and	1	189.2	0.4	0.36	1.97	regolith
			and		229	1	0.90	1	
			and	†	295.2	0.3	0.27	2.4	1
22CUDD014	Diamond	West Island	and	642	304.78	1.22	1.10	1.84	-
32230			and	1	309.4	2.1	1.89	1.07	
			and	†	336.8	0.6	0.54	11.25	Gold mineralisation in fresh rock
			and		346.6	0.4	0.36	1.44	-
			and	1	381.38	1.01	0.91	1.1	1
			and	-	554.6	2.12	1.91	1.07	-
2201100046	Diamond	West Island		50F					Gold mineralisation in
22CUDD016	Diamond	West Island	Geological	505	186.4	3	2.70	5.7	regolith

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			including		187.3	1	0.90	13.3	
			and		192.3	3.7	3.33	4.1	
			including		195	1	0.90	8.06	
			and		213	3	2.70	0.73	
			and		234	1	0.90	1.03	
			and		333	1	0.90	1.45	
			and		373.6	12.4	11.16	3.79	
			including		375	2	1.80	13.85	
			and		389	4	3.60	3.37	
			including		389	1	0.90	9.88	
			and		398	5	4.50	1.27	
			and		410	1	0.90	74.2	
			and		428	4	3.60	1.37	Gold mineralisation in fresh rock
			and		435	1	0.90	3.59	
			and		448	1	0.90	4.55	
			and		453	1	0.90	5.26	
			and		458	1	0.90	3.99	
			and		467	1.3	1.17	9.02	
			including		467	0.45	0.41	16.9	
			and		476.5	1.5	1.35	1.59	
			and		481	1.7	1.53	1.68	
			and		492	4	3.60	1.96	
			and		501	3	2.70	3.35	
			including		503.5	0.5	0.45	8.38	
			Geological		131	5	4.50	1.27	Gold mineralisation in the
2201100047	Diagrand	\\/aat  -	and	470	171.4	0.6	0.54	1.97	regolith
22CUDD017	Diamond	West Island	and	176	418	1	0.90	4.13	Gold mineralisation in fresh
			and		430	0.5	0.45	1.79	rock

Table 1b: Summary of drill collars from current diamond drill programs 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
22CUDD009	Diamond	West Island	6942141	583999	69	-65	409	589	Assays results in table above
22CUDD010	Diamond	West Island	6941548	583905	60	-61	410	462	Assays results in table above
22CUDD011	Diamond	West Island	6942520	584129	45	-65	411	631	Assays results in table above
22CUDD012	Diamond	West Island	6942022	583920	69	-61	409	451	Assays results in table above
22CUDD013	Diamond	West Island	6942262	584000	60	-61	414	598	Assays results in table above
22CUDD014	Diamond	West Island	6941706	584073	60	-61	412	642	Assays results in table above
22CUDD016	Diamond	West Island	6941732	583924	65	-61	411	505	Assays results in table above
22CUDD017	Diamond	West Island	6941824	584108	45	-55	411	176	Assays results in table above Hole failed - redrilled
22CUDD017A	Diamond	West Island	6941824	584108	51	-61	411	645	Assays results in table above

Table 2a: Summary of new aircore assay intersections >1m@0.5ppm Au

Drill Hole ID	Drill Type	Prospect	Sample Type	EOH (m)	From (m)	Interval (m)	Au (g/t)	Comment
22CUAC0097	AC	West Island	1m individual	122	120	1	0.68	Gold mineralisation in regolith
22CUAC0198	AC	LAD North	Composite	91	86	2	0.76	Gold mineralisation in regolith
22CUAC0226	AC	LAD North	Composite	180	178	2	1.66	Gold mineralisation in regolith
22CUAC0230	AC	LAD North	1m individual	176	175	1	0.51	Gold mineralisation in regolith
22CUAC0245	AC	LAD North	Composite	176	172	4	5.12	Gold mineralisation in regolith
22CUAC0246	AC	LAD North	1m individual	163	161	1	5.5	Gold mineralisation in regolith
22CUAC0257	AC	LAD North	Composite	167	157	4	0.82	Gold mineralisation in regolith
22CUAC0303	AC	West Island	Composite	149	101	2	0.57	Gold mineralisation in regolith
22CUAC0300	AC	West Island	Composite	126	95	8	0.7	Gold mineralisation in regolith
22CUAC0311	AC	West Island	Composite	173	165	7	2.23	Gold mineralisation in regolith

# Table 2b: Summary of drill collars from current AC program 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
22CUAC0097	AC	West Island	6944420	584740	105	-60	413	122	Assays results in table above
22CUAC0198	AC	LAD North	6947602	585397	0	-90	412	91	Assays results in table above
22CUAC0226	AC	LAD North	6946516	585227	0	-90	413	180	Assays results in table above
22CUAC0230	AC	LAD North	6946381	585606	0	-90	413	176	Assays results in table above
22CUAC0245	AC	LAD North	6945766	584869	0	-90	414	176	Assays results in table above
22CUAC0246	AC	LAD North	6945799	584773	0	-90	412	163	Assays results in table above
22CUAC0257	AC	LAD North	6945280	584977	0	-90	415	167	Assays results in table above
22CUAC0303	AC	West Island	6941988	584636	60	-60	414	149	Assays results in table above
22CUAC0300	AC	West Island	6942058	584760	60	-60	415	126	Assays results in table above
22CUAC0311	AC	West Island	6941405	584548	60	-60	412	173	Assays results in table above

Notes to Tables 1a and 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 estimates only, although all drill holes are planned to intersect lodes perpendicular to interpreted targets.
- 2. In diamond drilling individual samples are collected at geological intervals and analysed for gold.
- In aircore drilling individual samples are collected at 1m individual samples or 2m composites and analysed for gold.
- 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 ALS Wangara, (0.01ppm detection limit), WA, Western Australia
  5. g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (no significant intercept), ETW (estimated true
- 6. Higher grade aircore intersections reported here are generally calculated over intervals >0.5 gram metres gold and diamond core intervals > 1.0 gram metres gold.
- 7. All diamond drill holes referenced in this announcement are reported in Tables 1a and 1b and all significant aircore results are reported in tables 2a and 2b.
- Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond.
- 9. Coordinates are in GDA94, MGA Z50.

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# JORC TABLE 1 Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling	Nature and quality of sampling (e.g. cut channels, random	The drill hole sampling in this release has been carried out on Lake
techniques	chips, or specific specialised industry standard measurement tools appropriate to the minerals under	Austin as part of the Cue Joint Venture with Evolution Mining Ltd.
	investigation, such as down hole gamma sondes, or	Sampling of Au mineralisation at the Cue JV was undertaken using
	handheld XRF instruments, etc). These examples should	diamond core and aircore (AC) chips (surface).
	not be taken as limiting the broad meaning of sampling.	All drill samples were logged prior to sampling. Diamond drill core was sampled to lithological, alteration and mineralisation related contacts.
		AC sampling was conducted in 2m composite intervals downhole.
		Sampling was carried out according to Evolution protocols and QAQC procedures. All drill-hole collars were surveyed for initial drilling and
		picked up after drilling using a handheld GPS.
		The sampling and assaying methods are appropriate for the orogenic mineralised system and are representative for the mineralisation style.
		The sampling and assaying suitability was validated using Evolution's
		QAQC protocol and no instruments or tools requiring calibration were used as part of the sampling process.
		Diamond drill-core sample intervals were based on geology to ensure a
		representative sample, with lengths ranging from 0.3m to 1.2m. Surface diamond drilling was half core sampled.
	Include reference to measures taken to ensure sample	All co-ordinates are in UTM grid (GDA94 Z50) and drill hole collars have
	representivity and the appropriate calibration of any	been surveyed by handheld GPS to an accuracy of ~1.0m. The accuracy
	measurement tools or systems used.  Aspects of the determination of mineralisation that are	of historical drill collars pre-2009 is unknown.  One metre AC samples are laid out in rows of 20 on the ground and
	Material to the Public Report. In cases where 'industry	composite 2m samples were collected by scoop sampling the one
	standard' work has been done this would be relatively	metre piles to produce a 2-3kg composite sample which was sent to
	simple (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a	the ALS in Wangara, Perth for analysis. Sample condition data is recorded (wet, damp or dry) in the database. Generally, recovery is 80-
	30g charge for fire assay'). In other cases more	100% but occasionally down to 30% on rare occasions when ground
	explanation may be required, such as where there is	water pressure is very high.
	coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine	All diamond core and AC chip samples were dried, crushed and
	nodules) may warrant disclosure of detailed information.	pulverised (total preparation) to produce a 50g charge for fire assay of
		Au. A suite of additional multi elements are determined using four-
		acid digest with ICP/MS and/or an ICP/AES finish for some selected intervals for pathfinder and lithostratigraphic use. These intervals are
		selected at the geologist's discretion.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole	Diamond holes from surface were wireline PQ (85mm diameter), HQ
	hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth	(63.5mm diameter) and some NQ (45.1mm diameter) holes.  All diamond core from surface core was orientated using the Reflex
	of diamond tails, face-sampling bit or other type, whether	ACT III bottom of hole orientation tool.
	core is oriented and if so, by what method, etc).	The diamond drilling program reported here was undertaken by West Core Drilling Pty Ltd utilising a LF90D drill rig.
		The aircore drilling program was undertaken by Ausdrill Ltd with a 3-
		inch drill pipe and blade (76mm) or hammer (76mm) using a custom
Drill sample	Mothed of recording and accessing care and ship counts	built Lake Crawler drill rig and a KL150 track mounted aircore rig.
recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	All diamond core was orientated and measured during processing and the recovery of individual core runs recorded. The core was
,		reconstructed into continuous runs on a cradle for orientation marking.
		Hole depths were checked against driller's core blocks.
		Inconsistencies between the logging and the driller's depth measurement blocks are investigated.
		Diamond core samples are considered dry. The sample recovery and
		condition is recorded every metre. Generally, recovery is 98-100% but
		in weathered material occasionally down to 30% on rare occasions
		when ground is very broken. AC drill samples are dry until ground water is intersected. The sample size and condition (wet, damp, dry) is
		recorded every metre. Generally, recovery is 80-100% but occasionally
		down to 30% on rare occasions when ground water pressure is very
		high.  The cyclone and sample buckets are routinely cleaned to reduce the likelihood of cross sample contamination.
	Measures taken to maximise sample recovery and ensure	Drillers use industry appropriate methods to maximise sample recovery
	representative nature of the samples.	and minimise downhole contamination.
		Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	Whether a relationship exists between sample recovery	No significant sample loss or bias has been noted.
	and grade and whether sample bias may have occurred	
	due to preferential loss/gain of fine/coarse material.	

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.	Diamond core has been geologically logged to the level of detail required for a Mineral Resource estimation. RQD measurements and geotechnical logging were taken from diamond core and recorded. All logging is both qualitative and quantitative in nature recording features such as structural data, sample recovery, lithology, mineralogy, alteration, mineralisation types, vein density/type, oxidation state, weathering, colour etc. All holes are photographed wet. Structural measurements are taken from core using a Kenometer instrument.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All diamond and AC holes were logged in entirety from collar to end of hole. Drill logs are loaded directly into the acQuire database by the geologist.  Drill core is cut on site by an automated Almonte core saw and half core is analysed.
	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.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Diamond core was drilled from surface and was half core sampled and the remaining half was retained.  Aircore samples were collected as 2m composites for all drill holes in the current program using a scoop methodology.
proposition.	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation of diamond and AC samples was undertaken by external laboratories according to the sample preparation and assaying protocol established to maximise the representation of orogenic style gold mineralisation. The laboratories performance was monitored as part of Evolution's QAQC procedure.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Laboratory inspections are routinely undertaken to monitor the laboratories compliance sampling and sample preparation protocol. The sample and size (1.5kg to 4kg) relative to the particle size (>90% passing 75um) of the material sampled is a commonly utilised practice for effective sample representation for orogenic gold deposits.
	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.	Quality control procedures adopted to maximise sample representation for all sub-sampling stages include the collection of duplicates (~1 in30) and the insertion of certified reference material (CRM) as assay standards (1 in 50) and the insertion of blank samples at appropriate intervals for early-stage exploration programs. High, medium and low grade gold CRM are used. Blank material is routinely submitted for assay and is inserted into each mineralised zone where possible. The quality control performance was monitored as part of Evolution's QAQC procedure.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	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 sampled. Samples for diamond drill holes were sent to the ALS laboratory in Wangara, Perth for preparation and transferred to the ALS laboratory in Malaga, Perth for analysis., Perth. Samples are pulverized to 85% passing -75um and two 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). Individual one metre gold samples are analysed using a 50g fire assay with ICP-MS finish for gold. The pulp and bulk residue are retained at the lab until further notice. Duplicate samples are inserted in visually mineralised zones. A comparison of the duplicate sample vs. the primary sample assay result was undertaken as part of Evolution's QAQC protocol. It is considered that all sub-sampling and lab preparations are consistent with other laboratories in Australia and are satisfactory for the intended purpose. The sample sizes are considered appropriate and in line with industry standards.
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.	The sampling preparation and assaying protocol used for this program was developed to ensure the quality and suitability of the assaying and laboratory procedures relative to the mineralisation types.  Fire assay is designed to measure the total gold within a sample. Fire assay has been confirmed as a suitable technique for orogenic type mineralisation. It has been widely used in early stage exploration programs of this nature in the Cue region.  In aircore drilling all samples through the cover-basement contact and into the Archaean regolith are analysed as 2m composites. Analysis is by 50g fire assay with ICP-MS finish for gold. Multi-element analysis is undertaken on all end of hole samples.  On all samples, analysis is undertaken by ALS (registered laboratory), with 50g fire assay with ICP-MS finish undertaken for gold to 0.005ppm gold detection limit.  In diamond drilling samples are analysed through potential gold mineralised zones.

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	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 or other remote sensing instruments were utilised for reporting or interpretation of gold mineralisation.
	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.	Internal certified laboratory QAQC is undertaken including check samples, blanks and internal standards.  Quality control samples were routinely inserted into the sampling sequence. The intent of the procedure for reviewing the performance of certified standard reference material is to examine for any erroneous results (a result outside of the expected statistically derived tolerance limits) and to validate if required; the acceptable levels of accuracy and precision for all stages of the sampling and analytical process. Typically, batches which fail quality control checks are re-analysed.  This methodology is considered appropriate for gold mineralisation at the exploration phase.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Independent internal or external verification of significant intercepts is not routinely completed. The quality control / quality assurance (QAQC) process ensures the intercepts are representative for the orogenic gold systems. Half core and sample pulps are retained for when further verification is required.  Data which is inconsistent with the known geology undergoes further verification to ensure its quality using multi-element data.
	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.	All sample and assay information is stored utilising the acQuire database software system. Data undergoes QAQC validation prior to being accepted and loaded into the database. Assay results are merged when received electronically from the laboratory. The geologist reviews the database checking for the correct merging of results and that all data has been received and entered. Any adjustments to this data are recorded permanently in the database. Digital records of assay files are stored electronically.
	Discuss any adjustment to assay data.	No adjustments or calibrations have been made to the final assay data reported by the laboratory.
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.	No Mineral Resource Estimates have been calculated utilising data in this release.  All surface drill holes for this program have been surveyed for easting, northing and reduced level using handheld GPS with accuracy to 4m.  After a period of time, these are also picked up using a contract surveyor and a DGPS.  Downhole surveys were conducted at 30 m intervals downhole using a Reflex Ez-Gyro North Seeker.
	Specification of the grid system used.	Recent survey data at surface is collected and stored in MGA 94 Zone 50.
	Quality and adequacy of topographic control.	Topographic control was generated from lidar and GPS. with GPS accuracy of >±2 metre.  Pre 2009 drill hole collars noted in this report are historical and not reported in detail. As such these details are unknown.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Variable drill hole spacings are used to adequately test targets and are determined from geochemical, geophysical and geological data together with historical drilling information.  Regional aircore drill hole traverse spacing is variable from 100m to 400m between lines and 50m to 100m along lines. Diamond drill holes are spaced at variable intervals based on geological interpretation.  The drilling in this program has been designed to collect geological information from covered and undrilled areas. The holes are located to test for mineralisation, geology and structures based on interpretation of geophysics and mapping as well as below previous anomalous drilling results.
	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.  Whether sample compositing has been applied.	No mineral resources or ore reserves have been estimated based on the exploration data and information generated on the tenements that are subject to the Musgrave – Evolution joint venture agreement.  Aircore samples were collected as 2m composites for all drill holes in the current program, unless EOH occurred on an odd number depth, using a scoop methodology from one metre sample piles. One metre individual samples are submitted for analysis where anomalous composite assays above 100ppb gold exist using a scoop methodology
		from one metre sample piles.  Composite sampling is undertaken using a stainless-steel scoop (trowel) on one metre samples and combined in a calico bag for a combined weight of approximately 2-3kg.  No sample compositing was undertaken in diamond core sampling.

Orientation of	Whether the orientation of sampling achieves unbiased	Drilling is designed to cross the mineralisation as close to perpendicular
data in relation to	sampling of possible structures and the extent to which	as possible. Most drill holes are designed at a dip of approximately -55
geological	this is known, considering the deposit type.	to -60 degrees. The true width of drill intersections in fresh rock are not
structure		accurately known at this time but gold intersections in diamond core
		are interpreted to be approximately 90% of intersection widths.
		The true width of drill intersections in aircore drilling not accurately
		known at this time but gold dispersion mineralisation in the Archaean
		saprolite from aircore drilling is interpreted to be dominantly flat lying.
	If the relationship between the drilling orientation and the	There is no apparent bias in any of the drilling orientations used.
	orientation of key mineralised structures is considered to	The relationship between the drilling orientation and the orientation of
	have introduced a sampling bias, this should be assessed	key mineralised structures intersected in this early stage exploration is
	and reported if material.	not considered to have introduced a sampling bias and is not
		considered to be material.
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by internal staff. Drill samples are stored
		on site and transported by a licenced reputable transport company
		(Toll road haulage) to a registered laboratory in Perth (ALS at Wangara
		and Malaga). When at the laboratory samples are stored in a locked
		yard before being processed and tracked through preparation and
		analysis (Lab-Trak and Webtrieve systems).
		The laboratories are contained within a secured/fenced compound.
		Access into the laboratory is restricted and movements of personnel
		and the samples are tracked under supervision of the laboratory staff.
Audits or reviews	The results of any audits or reviews of sampling techniques	All Diamond and AC QAQC data is monitored, and assays are reviewed
	and data.	internally to ensure the robustness and integrity of sampling and
		analysis methods.
		Field sampling techniques are set out in a field procedure which is
		reviewed at least annually.

**Section 2 Reporting of Exploration Results** 

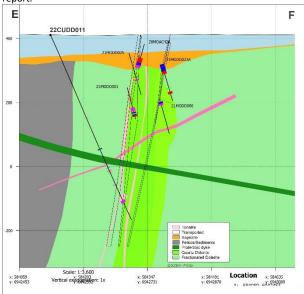
Criteria	Explanation	Commentary
	,	•
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Musgrave Minerals has secured 100% of the Moyagee Project area (see MGV ASX announcement 2 August 2017: "Musgrave Secures 100% of Key Cue Tenure").  In October 2019 the Evolution Joint Venture commenced covering Lake Austin and some surrounding tenure. Evolution have a right to earn 75% in the project by spending \$18M on exploration within 5 years. Joint venture tenements include; E21/129, E21/200, E21/194, E21/177, E21/204, E21/207, E21/208, P21/757, E58/507, M21/107 and the northern portion of M21/106. Musgrave acted as the Earn-in Manager up to 31st December 2021, with Evolution taking over as Earn-in Manager from 1st January 2022. The West Island and Lake Austin North prospects are on the EVN JV tenure. The Break of Day, Lena, White Heat and Amarillo Prospects are located on the southern portion of 100% MGV owned granted mining lease M21/106. The primary tenement holder is Musgrave Minerals Ltd. The Numbers and Big Sky Prospect are on E58/335 owned 100% by Musgrave Minerals Ltd.  The Mt Eelya Prospect is located on granted exploration licence E20/608 and the primary tenement holder is Musgrave Minerals Ltd. The Cue project tenements consist of 39 licences.  The tenements are subject to standard Native Title heritage agreements and state royalties. Third party royalties are present on
	The convits of the topy a held at the time of spection	some individual tenements.
	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.	All 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 and Lena historical exploration and drilling has been undertaken by a number of companies and most recently by Silver Lake Resources Ltd in 2010-11. Historical lake drilling from 1991-1999 was undertaken by Perilya Mines Ltd and from 2001-2006 by Mines and Resources Australia Pty Ltd. Prior to MGV, Silver Lake Resources Ltd also did historical drilling at Break of Day, Lena, Leviticus and Numbers between 2009 and 2011.
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 orogenic Yilgarn Archaean lode gold and volcanic massive sulphide (VMS) base metal and gold mineralisation within the Eelya Felsic Complex (northern tenure).

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 assay and collar information are tabulated in Appendix 1 of this report.  Diamond: Calculation: Cut-off grade of 0.5 g/t Au with a minimum ore composite length of 2m. The maximum consecutive waste (below 1 g/t) cannot exceed 1m however there is no limit to included waste. Significant intercepts are over 1 g/t Au average weighted grade and over 1 gram metre (length x weighted grade). Sub-set intercepts stating 'Including' use a Cut-off grade of 3 g/t Au. Aircore: Calculation: Cut-off grade of 0.5 g/t Au with a minimum ore composite length of 2m. The maximum consecutive waste (below 0.5 g/t) cannot exceed 2m however there is no limit to included waste. Significant intercepts are over 0.5 g/t Au average weighted grade and over 1 gram metre (length x weighted grade).
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.	All significant new drill hole assay data of a material nature are reported in this release. No cut-off has been applied to any sampling. All intervals have been length weighted.  All significant new drill hole assay data are reported in this release.
		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.	All significant new drill hole assay data are reported in this release.  No cut-off has been applied to any sampling.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used.
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').	This drill program consists of early-stage exploration targets with only an early stage understanding of structural orientations hosting mineralised intervals. Estimated True Widths are supplied wherever possible.

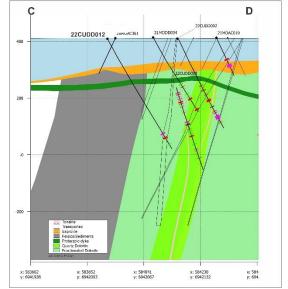
Diagrams

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.

Drill hole location diagrams and representative sections of reported exploration results are provided either below or in the body of this report.



Schematic section showing 22CUDD011 intercept at Cue



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		Control of Holes brilled in Fr22/23  Control of Holes brilled in Fr22/23  Location plan showing the aircore holes for both historic and September quarter holes at Cue
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.	Intersection lengths and grades are reported as down-hole, length weighted averages  Numbers of drill holes and metres are included in the body of the announcement.
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 new meaningful data is reported in this release. All material results from geochemical and geophysical surveys and drilling related to these prospects has been reported or disclosed previously. Other exploration data sets collected include multielement data for bedrock samples, field mapping data, outcrop rock chip gold and ME data and geophysical surveys which included passive seismic, magnetic and gravity data.
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).	Further Exploration work on the Cue JV tenements, may include follow-up drilling depending on assessment of current drill results or testing of new targets with aircore or other methods.
	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 and images above.