



ASX RELEASE

18 May 2018

ASX: MGV

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## **New Drill Results Highlight Regional Discovery Potential at Cue Gold Project, WA**

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- **First batch of assays from current aircore/RC drilling program at Cue returned strong results from two new targets**

### **Break of Day North**

- **Results highlight possible northern extension to the Break of Day mineralisation, with hole 18MORC010 intersecting 1m @ 8.3g/t Au from only 4m depth, 200m north of the current resource**
  - **Intersection brings focus to 300m of previously untested strike potential for the Break of Day high-grade gold system**
  - **Follow-up drilling is planned in the current program**

### **Lake Austin North**

- **Results from the first drill holes at the Lake Austin North identify a large regolith hosted gold halo**
  - **21m @ 0.78g/t Au from 118m (18MOAC030) to end of hole including;**
    - **6m @ 2.2g/t Au from 118m;**
  - **24m @ 0.54g/t Au (18MOAC035) from 98m including**
    - **6m @ 1.9g/t Au from 98m;**
  - **54m @ 0.22g/t Au (18MOAC033) from 70m; and**
  - **18m @ 0.20g/t Au (18MOAC032) from 94m**
  - **These wide zones of near-surface gold mineralisation extend over 1km in length and may be indicative of a higher-grade gold source in fresh rock**
  - **Mineralisation is still open and drilling is continuing at Lake Austin North to target the source of the gold halos**
- **Aircore/RC drill program testing 10 new high priority gold targets at Cue (including Break of Day North and Lake Austin North) approximately 50% complete with these initial assays reflecting 30% of the program**

Musgrave Minerals Ltd (ASX: **MGV**) ("Musgrave" or "the Company") is pleased to report drilling results for the first 35 drill holes of the current 110 drill hole program to test 10 new high priority gold targets at the Company's flagship Cue Project in Western Australia's Murchison district (Figure 5).

The drilling program consists of a combination of aircore drilling with reverse circulation (RC) 'tails' to extend drill holes into fresh rock to identify new gold mineralisation. The 12,000m program is approximately 50 per cent complete and is expected to continue for another four weeks. Next assays are expected in early June, and will follow every few weeks until mid-July.

The 10 high priority targets occur along a 20km-long prospective gold corridor (*Figure 5*) that hosts the Break of Day and Lena gold resources (Break of Day 868kT @ 7.15g/t Au for 199koz Au and Lena 2,682kT @ 1.77g/t Au for 153koz Au (see *MGV ASX announcement 24 October 2017, "Annual report 2017"*)).

The targets have been identified from the integration of the recently completed regional gravity survey with existing aeromagnetic data, historical broad spaced aircore drilling and surface geochemistry.

Musgrave Managing Director Rob Waugh said *"These initial results are extremely encouraging and have identified a potential extension to the high-grade gold mineralisation at Break of Day and a large regolith gold halo at Lake Austin North. Both areas are potentially significant with the Break of Day north intersection only 200m from the northern edge of the current high-grade gold resource and the Lake Austin North target confirming significant thicknesses of regolith gold mineralisation over a large area in a structurally favourable position and on a favourable lithological contact"*.

*"The Project hosts a very prospective greenstone belt in a well-endowed region with good infrastructure and numerous operating gold plants. The focus of this drilling is to discover another high-grade Great Fingal-style gold deposit. We look forward to completing the remainder of the drill program and reporting further results that will follow."*

## **Break of Day North**

Aircore drilling to the north of Break of Day in an area not previously drill tested has intersected 1m @ 8.3g/t Au from only 4m down hole (18MOAC010). The intersection is 200m north of the high-grade Break of Day gold resource; 868kt @ 7.15g/t Au for 199koz Au (see *MGV ASX announcements 14 July 2017, "Resource Estimate Exceeds 350koz Gold"* and *24 October 2017, "Annual report 2017"*) and could be a possible extension to the gold mineralisation at Break of Day.

The mineralisation is open along strike (*Figure 1*) where there is more than 300m of untested potential, and at depth (*Figure 2*). Follow-up drilling is planned in the current drill program to test the strike extent of this potential new high-grade gold zone.



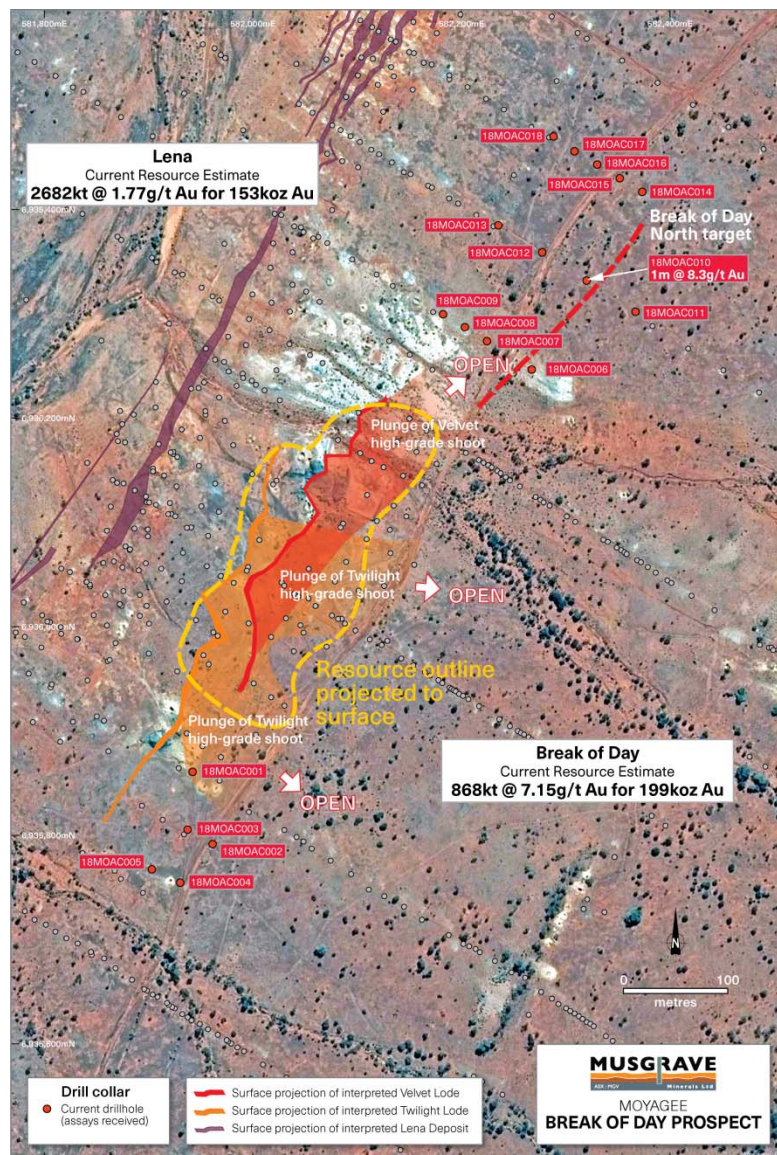


Figure 1: Location plan showing drill hole collars completed to date at Break of Day North target



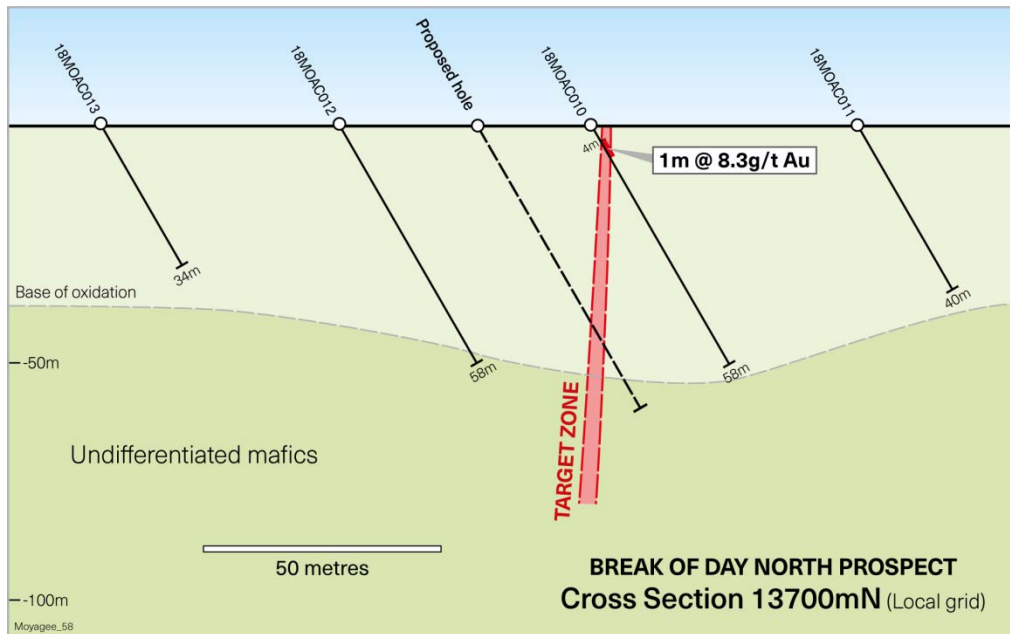


Figure 2: Cross section of Break of Day North target with current and planned drilling (a cross-section is a vertical section perpendicular to the line of mineralisation)

## Lake Austin North

The Lake Austin North target comprises two parallel zones approximately 200m apart covering a strike length of over 1km (Figure 3). The regolith gold mineralisation follows the contact of an intrusive felsic unit and mafic stratigraphy, a favourable position for gold mineralisation.

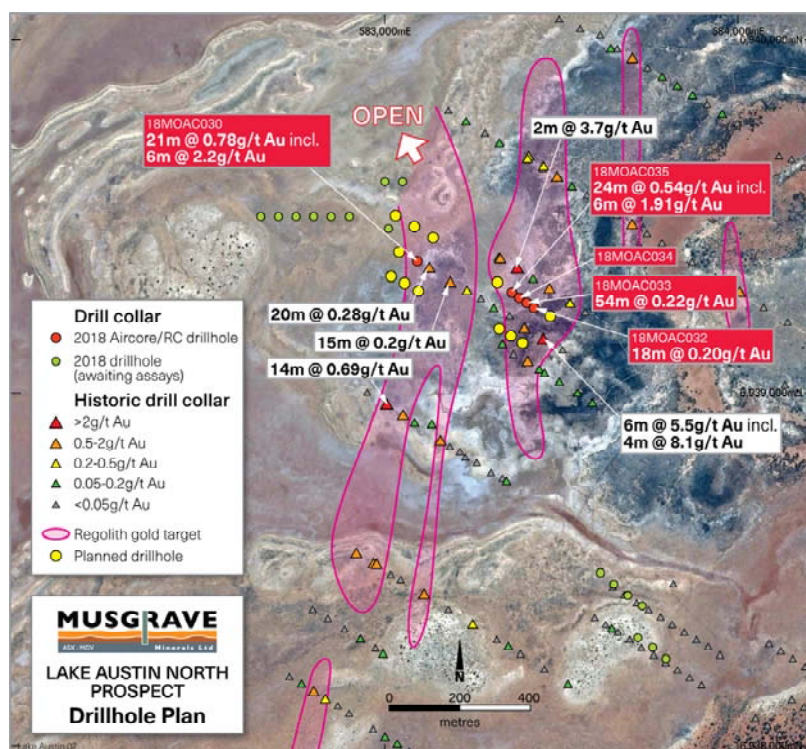


Figure 3: Location plan showing drill holes completed to date at Lake Austin North with planned holes



Assay results have been received for five drill holes at Lake Austin North and results are extremely encouraging with thick intersections of regolith gold identified in four of the holes including **21m @ 0.78g/t Au** from 118m to end of hole in 18MOAC030 including **6m @ 2.1g/t Au** from 118m within weathered mafic rock proximal to a felsic intrusive contact (a favourable lithological contact for gold mineralisation) in a favourable structural location. Samples were collected as 6m composites through to end of hole. Anomalous samples were resubmitted for assay at 1m intervals, with these results awaited. The gold is forming a dispersed regolith (weathered host rock) halo with further drilling underway to define the primary source of the gold mineralisation in the fresh rock below (Figure 4).

The second parallel zone 200m east (Figure 3) also shows strong regolith gold anomalism over 800m of strike and includes 24m @ 0.54g/t Au from 98m including 6m @ 1.91g/t Au from 98m (18MOAC035) and 54m @ 0.22g/t Au from 70m (18MOAC033). The gold mineralisation forms a dispersed regolith halo with further drilling ongoing to define the high-grade primary gold source in the fresh rock below.

These results in this new target area are extremely encouraging and are continuing to define a large scale target.

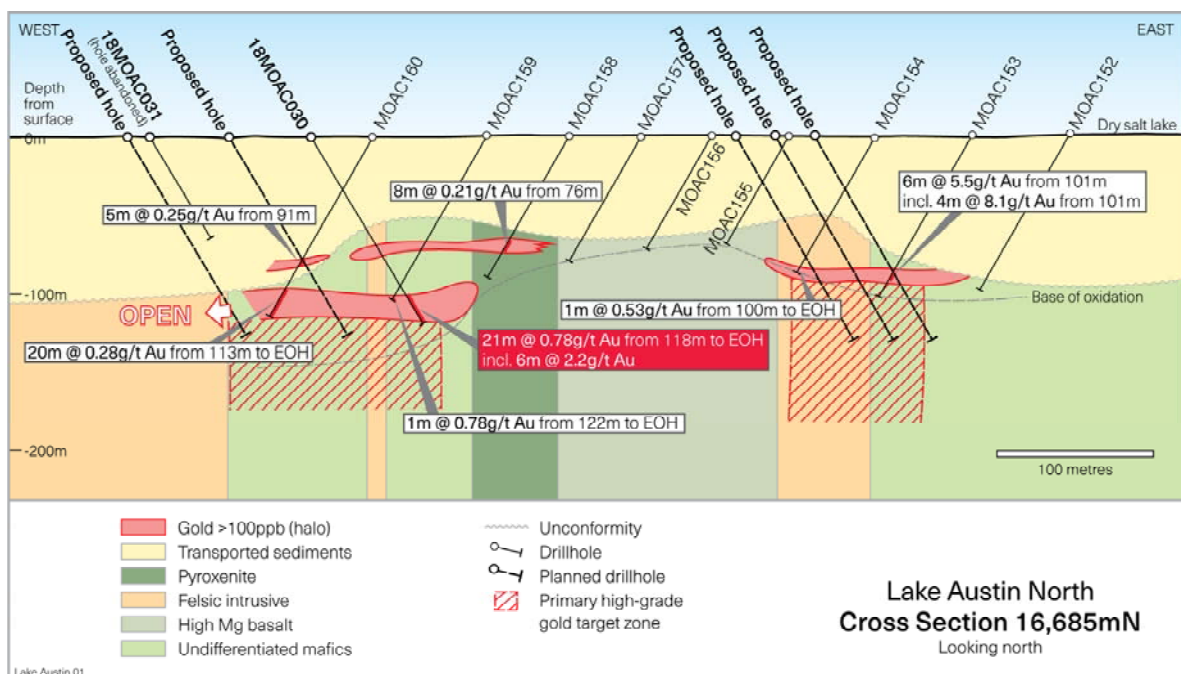


Figure 4: Cross-section for the Lake Austin North target showing historical drilling and new planned follow-up drill holes (a cross-section is a vertical section perpendicular to the line of mineralisation)

## ONGOING EXPLORATION

- Gold focused aircore/RC drilling program now approximately 50% complete. Drilling is expected to continue for another four weeks
- Further drill assay results are expected within coming weeks
- A structural geology study to better define the controls on mineralisation at Break of Day and Lena has commenced and will be completed by late-May
- Development studies are progressing on the Break of Day and Lena deposits to evaluate options to optimise cash flow and maximise shareholder returns





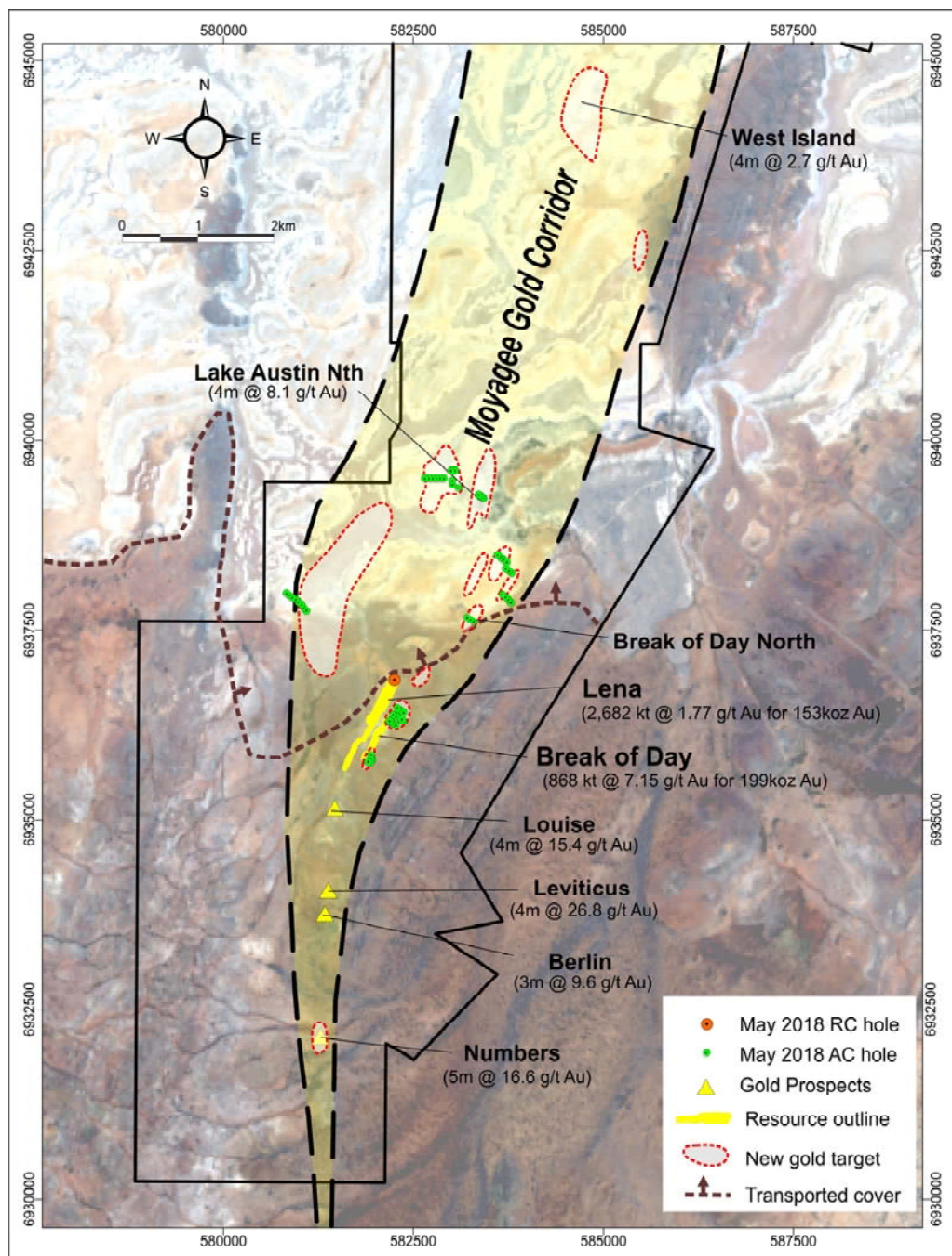


Figure 5: Location plan showing all drill holes completed to date in the current drill program



## THE CUE PROJECT

The Cue Project (“the Project”) is located in the Murchison district of Western Australia, with key tenure wholly owned by Musgrave Minerals (*Figure 6*). The Project consists of the Moyagee Gold and Hollandaire Copper Resources (see *MGV ASX announcements 14 July 2017, “Resource Estimate Exceeds 350koz Gold” and 24 October 2017, “Annual report 2017”*).

The Company believes there is significant potential to extend existing mineralisation and discover new mineralisation within the Project area, as demonstrated by the recent drilling success at Break of Day and Lena. Musgrave’s aim is to build the resource base and complete studies with a view to identifying a development option that creates the best value for shareholders.

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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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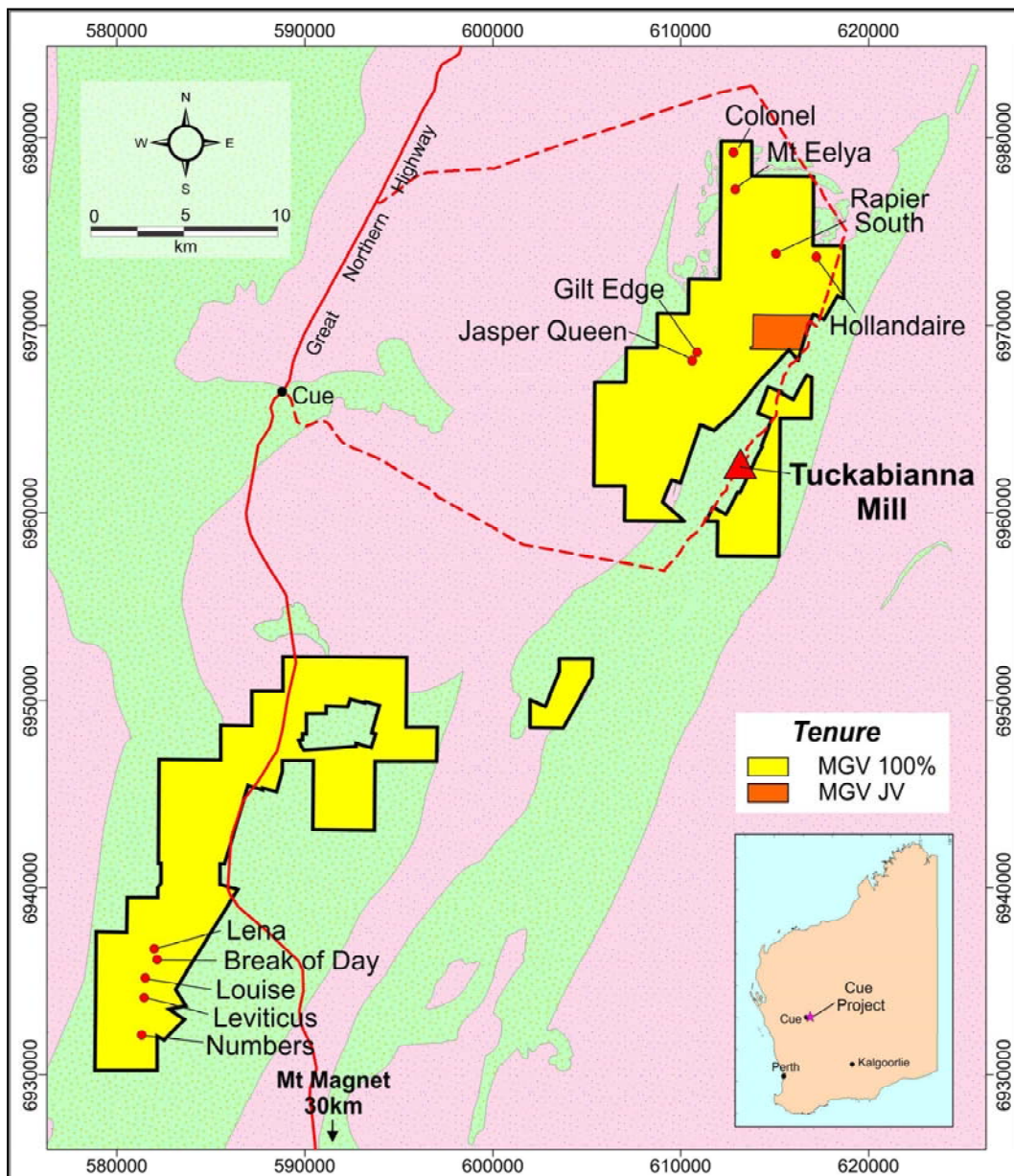


Figure 6: Cue Project location plan and tenure

#### 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 Significant Aircore/RC Drill Assay Intervals**

Drill Hole ID	Drill Type	Prospect	Easting (m)	Northing (m)	Azimuth (deg)	Dip (deg)	RL (m)	Total Depth (m)	Sample Type	From (m)	Interval (m)	Au (g/t)
18MOAC010	AC/RC	Break of Day North	582320	6936332	120	-60	417	49	Scoop 1m individual	4	1	8.3
18MOAC030	AC/RC	Lake Austin North	583091	6939373	120	-60	408	141	Scoop 6m composite to end of hole with last sample a 3m composite	118	21	0.78
									including	118	6	2.2
18MOAC032	AC/RC	Lake Austin North	583422	6939240	120	-60	408	118	Scoop 6m composite	94	18	0.20
18MOAC033	AC/RC	Lake Austin North	583401	6939254	120	-60	408	133	Scoop 6m composite	70	54	0.22
									including	88	6	0.68
18MOAC035	AC/RC	Lake Austin North	583360	6939284	120	-60	408	137	Scoop 6m composite	98	24	0.54
									Scoop 6m composite	98	6	1.91

**Notes to Table 1**

1. An accurate dip and strike and the controls on mineralisation are only interpreted and the true width of mineralisation is unknown at this stage.
2. In Aircore (AC) and RC drilling, composite 6 metre samples were collected with smaller composites if end of hole reached. One metre individual samples within the vein lodes are submitted for priority analysis and where 6m composite assays were greater than 50ppb Au. 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
3. g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), X = below detection limit
4. NSI (No Significant intersection) – No gold assay above 0.1g/t
5. Velvet = Interpreted Velvet Gold Lode; Twilight = Interpreted Twilight Gold Lode; Lena = Interpreted Lena shear hosted lode
6. Intersections are generally calculated over intervals >0.1g/t where zones of internal dilution are not weaker than 2m < 0.1g/t Au.
7. Drill type; AC = Aircore, RC = Reverse Circulation, Diam = Diamond
8. Coordinates are in GDA94, MGA Z50

**Table 1b: Summary of all Aircore/RC Drill Hole Locations**

Hole	Drill Type	Easting	Northing	Survey Method	Total Depth	Dip	Azimuth
18MOAC001	AC	581942	6935861	GPS Averaged Position	73	-60	120
18MOAC002	AC	581961	6935792	GPS Averaged Position	49	-60	120
18MOAC003	AC	581937	6935806	GPS Averaged Position	49	-60	120
18MOAC004	AC	581930	6935755	GPS Averaged Position	49	-60	120
18MOAC005	AC	581903	6935768	GPS Averaged Position	49	-60	120
18MOAC006	AC	582267	6936247	GPS Averaged Position	49	-60	120
18MOAC007	AC	582224	6936274	GPS Averaged Position	49	-60	120
18MOAC008	AC	582203	6936287	GPS Averaged Position	49	-60	120
18MOAC009	AC	582182	6936300	GPS Averaged Position	49	-60	120
18MOAC010	AC	582320	6936332	GPS Averaged Position	49	-60	120
18MOAC011	AC	582367	6936302	GPS Averaged Position	43	-60	120
18MOAC012	AC	582277	6936359	GPS Averaged Position	43	-60	120
18MOAC013	AC	582235	6936385	GPS Averaged Position	43	-60	120
18MOAC014	AC	582373	6936417	GPS Averaged Position	43	-60	120
18MOAC015	AC	582351	6936320	GPS Averaged Position	43	-60	120
18MOAC016	AC	582330	6936443	GPS Averaged Position	43	-60	120
18MOAC017	AC	582308	6936456	GPS Averaged Position	43	-60	120
18MOAC018	AC	582288	6936470	GPS Averaged Position	43	-60	120
18MOAC019	AC	583787	6937865	GPS Averaged Position	67	-60	120
18MOAC020	AC	583750	6937900	GPS Averaged Position	73	-60	120
18MOAC021	AC	583714	6937936	GPS Averaged Position	73	-60	120
18MOAC022	AC	583678	6937971	GPS Averaged Position	73	-60	120
18MOAC023	AC	583797	6938248	GPS Averaged Position	67	-60	120
18MOAC024	AC	583758	6938277	GPS Averaged Position	67	-60	120
18MOAC025	AC	583716	6938306	GPS Averaged Position	61	-60	120
18MOAC026	AC	583729	6938398	GPS Averaged Position	73	-60	120
18MOAC027	AC	583687	6938427	GPS Averaged Position	67	-60	120
18MOAC028	AC	583648	6938458	GPS Averaged Position	60	-60	120
18MOAC029	AC	583610	6938490	GPS Averaged Position	60	-60	120
18MOAC030	AC	583091	6939373	GPS Averaged Position	141	-60	120
18MOAC031	AC	583014	6939419	GPS Averaged Position	88 (hole abandoned)	-65	120
18MOAC032	AC	583422	6939240	GPS Averaged Position	118	-60	120
18MOAC033	AC	583401	6939254	GPS Averaged Position	133	-60	120
18MOAC034	AC	583381	6939269	GPS Averaged Position	134	-60	120
18MOAC035	AC	583360	6939284	GPS Averaged Position	137	-60	120
18MOAC036	AC	582900	6939500	GPS Averaged Position	85	-75	90
18MOAC037	AC	582850	6939500	GPS Averaged Position	101	-90	0
18MOAC038	AC	582800	6939500	GPS Averaged Position	117	-90	0
18MOAC039	AC	582750	6939500	GPS Averaged Position	105	-90	0
18MOAC040	AC	582700	6939500	GPS Averaged Position	96	-90	0
18MOAC041	AC	582650	6939500	GPS Averaged Position	84	-90	0
18MOAC042	AC	583050	6939600	GPS Averaged Position	127	-90	0
18MOAC043	AC	583000	6939600	GPS Averaged Position	110	-90	0
18MOAC044	AC	583011	6939467	GPS Averaged Position	118	-60	120
18MOAC045	AC	583295	6937609	GPS Averaged Position	82	-60	120
18MOAC046	AC	583252	6937636	GPS Averaged Position	80	-60	120
18MOAC047	AC	583210	6937662	GPS Averaged Position	69	-60	120
18MOAC048	AC	581097	6937758	GPS Averaged Position	106	-60	120
18MOAC049	AC	581056	6937795	GPS Averaged Position	95	-60	120
18MOAC050	AC	581029	6937838	GPS Averaged Position	90	-60	120
18MOAC051	AC	580989	6937868	GPS Averaged Position	95	-60	120
18MOAC052	AC	580950	6937900	GPS Averaged Position	100	-60	120
18MOAC053	AC	580909	6937930	GPS Averaged Position	90	-60	120
18MOAC054	AC	580867	6937959	GPS Averaged Position	88	-60	120
18MOAC055	AC	580829	6937991	GPS Averaged Position	88	-60	300
18MORC010	RC	582252	6936846	GPS Averaged Position	52	-60	300

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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>The drill hole sampling in this release has been carried out at numerous prospects on the Cue Project. The drill program comprises a combination of aircore and RC drill holes (approximately 110 drill holes for 12,000m) varying in depth down to approximately 150m. All drill holes were drilled at either -60° or -90° and at variable spacing but nominally 50m spacings along lines.</p> <p>Sampling is undertaken using standard industry practices including the use of duplicates and standards at regular intervals.</p> <p>One metre aircore and RC samples are laid out in rows of 10 or 20 on the ground and composite 6m samples collected by scoop sampling the one metre piles to produce a 2-3kg sample which was sent to the Genalysis laboratory in Maddington, Perth for analysis. Resampling of anomalous samples is undertaken at 1m intervals by scoop.</p> <p>A Thermo Scientific Niton GoldD XL3+ 950 Analyser is available on site to aid geological interpretation. No XRF results are reported.</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 differential GPS to an accuracy of 0.01m. The accuracy of historical drill collars pre-2009 is unknown.
	<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>Aircore and 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.</p> <p>Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverization stage.</p> <p>The sample size is deemed appropriate for the grain size of the material being sampled.</p> <p>Samples are sent to the Genalysis – Intertek laboratory in Maddington. Samples are pulverized to 85% passing -75um and six 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> <p>Individual one metre gold samples are analysed using a 50g fire assay with ICP-MS finish for gold.</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>The aircore/RC drilling program is undertaken by Strike Drilling with a 3.5 inch drill pipe and blade (104mm) or hammer (102 or 124mm) using a X350 rig mounted on a VD3000 Morooka track vehicle. A total of 55 aircore/RC holes have to date been drilled in this program.</p> <p>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> <p>Details of historical aircore and Rotary Air Blast (RAB) drilling techniques are not clearly reported in the historical data although these drilling methods produce cut and air blasted regolith samples and not core.</p>
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<p>Aircore and RC drill samples are usually dry but some wet samples exist where ground water pressure is high. The sample size and condition (wet, damp, dry) is recorded every metre. Generally recovery is 80-100% but occasionally down to 10% on rare occasions when water pressure is very high.</p> <p>The cyclone is routinely cleaned to reduce the likelihood of cross sample contamination.</p> <p>RC bulk sample weights are observed and noted in a field Toughbook computer by MGV field staff.</p> <p>Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.</p>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>Drillers use industry appropriate methods to maximise sample recovery and minimise downhole contamination. 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. In the case of diamond core, core recovery is recorded as a percentage every sample interval.</p> <p>Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.</p>
	<i>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.</i>	No significant sample loss or bias has been noted.

Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	All geological, structural and alteration related observations are stored in the database.  All pre 2009 historical drilling was intended with an exploration focus and not for Mineral Resource estimation or mining and metallurgical studies. Although drill chip samples have been historically logged for geological, structural and alteration related observations the drill holes have not been logged to a level that would support appropriate Mineral Resource estimation or mining and metallurgical studies.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of lithology, structure, alteration, mineralisation, colour and other features of core or chips is undertaken on a routine 1m basis in RAB, aircore, RC and for all core.
	<i>The total length and percentage of the relevant intersections logged.</i>	All drill holes are logged in full on completion.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Historical MGV diamond drilling is HQ size core. Core is cut with a diamond blade saw at the Intertek laboratory in Maddington where half core is crushed to 90% nominally pass 75Um.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Aircore & RC samples are routinely cyclone split and kept dry by the use of pressurised air. Minimal wet sampling occurred and only in areas of high ground water pressure. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Aircore and RC samples were collected as 6m composites for all drill holes in the current program using a scoop methodology. One metre individual samples are immediately submitted for analysis where anomalous composite assays exist using a scoop methodology.  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. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	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. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Sampling is carried out using standard protocols and QAQC procedures as per industry practice. Duplicate samples are inserted (~1:30) and more frequently when in high-grade gold veins, and routinely checked against originals. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate for grain size of sample material to give an accurate indication of gold mineralisation at Break of Day. Sample is collected from full width of sample interval to ensure it is representative of samples lithology.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	In aircore and RC drilling one metre individual samples are analysed through potential gold mineralised zones. Analysis is by 50g fire assay with ICP-MS finish for gold. This is also the technique used for sampling of diamond core. On six metre composite 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. For drilling pre 2009 analysis for gold was by aqua regia digest with AAS finish and considered appropriate for the type of exploration undertaken.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No geophysical tools were used to estimate mineral or element percentages. Musgrave utilise a Thermo Scientific Niton GoldD XL3+ 950 Analyser to aid geological interpretation.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Standards, duplicates, blanks, and repeats are utilised as standard procedure. Certified reference materials that are relevant to the type and style of mineralisation targeted are inserted at regular intervals. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.



<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Samples are verified by the geologist before importing into the main database (Datashed). Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
	<i>The use of twinned holes.</i>	No twin holes have been drilled by Musgrave Minerals Ltd during this program.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data is collected using a standard set of templates. Geological sample logging is undertaken on one metre intervals for all RC drilling with colour, structure, alteration and lithology recorded for each interval. Data is verified before loading to the database. Geological logging of all samples is undertaken.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations are made to any MGV assay data reported. To our knowledge, no adjustments or calibrations were made to any historical 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 down hole tool in either continuous reading mode or at regular 20m intervals.
	<i>Specification of the grid system used.</i>	Drill hole and sample site co-ordinates are in UTM grid (GDA94 Z50) and 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. Differential GPS is used to survey drill hole collars with an accuracy of $\pm 0.01$ metre including RL's. Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.
<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. Regional drill hole traverse spacing is variable from 200m to 400m and 50m along lines. At present at Break of Day a general pattern of 20-40m drill spacings on 25m spaced sections is underway. At Louise and Numbers drill holes were spaced $\sim 50$ m apart. Historical drill hole spacings at Break of Day are variable although SLR drilled a number of holes at approximately 20m on 50m sections in 2011-12. Variable drill hole spacings were used in historical drilling with drill traverses spaced between 200m and 1km apart. Drill hole spacings on traverse lines varied from 50m to 150m.
	<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 MGV ASX announcement 14 July 2017: "Resource Estimate Exceeds 350koz Au" and MGV ASX announcement 24 October 2017, "Annual report 2017".
	<i>Whether sample compositing has been applied.</i>	Aircore and RC samples were collected as 6m composites for all drill holes in the current program using a scoop methodology from one metre sample piles. One metre individual samples are submitted for analysis where anomalous composite assays exist using a scoop methodology from one metre sample piles. Composite sampling is undertaken using a stainless steel spear (trowel) on one metre samples and combined in a calico bag for a combined weight of approximately 2-3kg. One metre individual samples were collected in mineralised zones on all pre 2009 historical drill holes.
<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. 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. The true width of drill intersections is not known at this time.
	<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 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). Pre 2009 drilling results noted in this report are historical and not reported in detail. As such these details are unknown.

<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. Open file reports confirm the historical mineralisation as reported.
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## 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 now secured 100% of the Moyagee Project area (see MGX ASX announcement 2 August 2017: "Musgrave Secures 100% of Key Cue Tenure"). The Break of Day, Lena and Louise prospects are located on granted mining lease M21/106 and the primary tenement holder is Musgrave Minerals Ltd. The Numbers prospect is on E58/335 and Lake targets on E21/129, E21/ 194, E21/177 and M21/107. The Mt Eelya prospect is located on granted exploration licence E20/608 and the primary tenement holder is Musgrave Minerals Ltd. The Hollandaire and Hollandaire West deposits are located on E20/699 and the primary tenement holder is Musgrave Minerals Ltd. The Hunky Dory prospect is located on granted mining leases M20/225, M20/245, M20/277 and the primary tenement holder is Musgrave Minerals Ltd. Purple Rain is located on M58/224 and the primary tenement holder is Musgrave Minerals Ltd. The Cue project tenements consist of 22 licences (Lena and Break of Day are 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.
	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 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 drilling from 1991-1999 was undertaken by Perilya Mines Ltd and from 2001-2006 by Mines and Resources Australia Pty Ltd. Prior to MGX, Silver Lake Resources Ltd also did historical drilling at Break of Day, Lena, Leviticus and Numbers between 2009-2011.
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.
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: eastings and northings 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 relevant historical drill hole information has previously been reported by SLR and MGX and through open file reporting by previous explorers.  All new drill holes completed and assayed by MGX with material results (>100ppb Au (0.1g/t Au)) are referenced in this release.
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.
	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 have been reported. All intervals are down hole intervals with a minimum width of one metre and not true widths.
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').	All significant new drill hole assay data of a material nature are reported in this release. 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 new data can be found in the body of this release. Some diagrams referencing historical data can also 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 material assays received to date from Musgrave's drilling are reported in this release together with reference to historical drilling results of significance.
<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 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.
<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 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.

