



ASX RELEASE

14 July 2017

ASX: MGV

Resource Estimate Exceeds 350koz Gold

- **Mineral Resources reported in accordance with JORC 2012 are:**
 - **Break of Day (Indicated and Inferred)**
 - **868kt @ 7.15g/t Au for 199koz Au**
 - **Lena (Indicated and Inferred)**
 - **2,682kt @ 1.77g/t Au for 153koz Au**
 - **Total Break of Day and Lena (Indicated and Inferred)**
 - **3,550kt @ 3.09g/t Au for 352koz Au**
- **The Break of Day and Lena Mineral Resources are both located on a granted mining lease and remain open along strike and at depth**
- **These Mineral Resource estimates will be used as the basis for development studies**
- **Drilling to resume at Break of Day in early August to extend the high grade gold mineralisation**

Musgrave Minerals Ltd ("Musgrave" or "the Company") (ASX: **MGV**) is pleased to announce a significant upgrade to the total Mineral Resources at the Break of Day and Lena gold deposits on the Cue Project in the Murchison region of Western Australia (*Figure 1*). The Cue Project is a joint venture with Silver Lake Resources (ASX: SLR) where Musgrave holds a 60% interest and has elected to increase its interest to 80%.

Musgrave Managing Director Rob Waugh said, "This is a significant milestone for the Company that will enable the Company to assess multiple processing options going forward to maximise shareholder value. The Company has now drilled more than 22,000m on the project. The Mineral Resource estimate strengthens the open-cut potential of Lena and the underground potential of Break of Day and together with the proximity to existing road and processing infrastructure, significantly increases the future development potential of the project."

"Break of Day is still open in all directions and we are yet to define the limits to the high grade gold mineralisation. Further drilling planned for early August will aim to continue to grow the resource base."

The Mineral Resource estimates for the Break of Day and Lena gold deposits are reported by independent mining consultancy group CSA Global Pty Ltd ("CSA Global"). The Mineral Resource estimates have been reported in accordance with JORC 2012 (*Table 1*).

A summary report prepared by CSA Global forms part of this ASX release (refer Appendix), including JORC Table 1. The Minerals Resources are summarised below (*Tables 1, 2 and 3*).

The Break of Day and Lena deposits now host total Indicated (51%) and Inferred (49%) Mineral Resources of:

3.55 Mt @ 3.09 g/t Au for 352,000 ounces of gold.

Musgrave is very pleased with this initial estimate, which is a significant increase on the previous Lena (76koz Au) and Break of Day (21koz Au) Mineral Resource estimates (see ASX announcement 26 October 2016, “2016 Annual Report – Replacement Report”) and continues to support the Company’s aim of developing a low-cost future operation capable of delivering strong financial returns for its shareholders. The Break of Day and Lena Mineral Resource estimates will be used as the basis for development studies.

Further, the Company believes there is significant potential to extend existing mineralisation and also discover new high grade mineralisation within the Project area as shown by the recent success at Break of Day and Lena.

Table 1: **Break of Day Mineral Resource** by JORC Classification and reported above a cut-off grade of 3.0 g/t Au

JORC Classification	Tonnage ('000s)	Au (g/t)	Ounces Au
Indicated	445	7.73	111,000
Inferred	423	6.54	89,000
Total	868	7.15	199,000

** Due to the effects of rounding, the total may not represent the sum of all components*

Table 2: **Lena Mineral Resource** by JORC Classification and reported above a cut-off grade of 1.0 g/t Au

JORC Classification	Tonnage ('000s)	Au (g/t)	Ounces Au
Indicated	1,288	1.69	70,000
Inferred	1,394	1.85	83,000
Total	2,682	1.77	153,000

** Due to the effects of rounding, the total may not represent the sum of all components*

Table 3: **Total Combined Break of Day and Lena Mineral Resource** by JORC Classification

JORC Classification	Indicated			Inferred			Total		
Deposit	Tonnage ('000s)	Au (g/t)	Total oz. Au ('000s)	Tonnage ('000s)	Au (g/t)	Total oz. Au ('000s)	Tonnage ('000s)	Au (g/t)	Total oz. Au ('000s)
Break of Day	445	7.73	111	423	6.54	89	868	7.15	199
Lena	1,288	1.69	70	1,394	1.85	83	2,682	1.77	153
Total	1,733	3.24	181	1,817	2.94	172	3,550	3.09	352

**Due to the effects of rounding, the total may not represent the sum of all components*



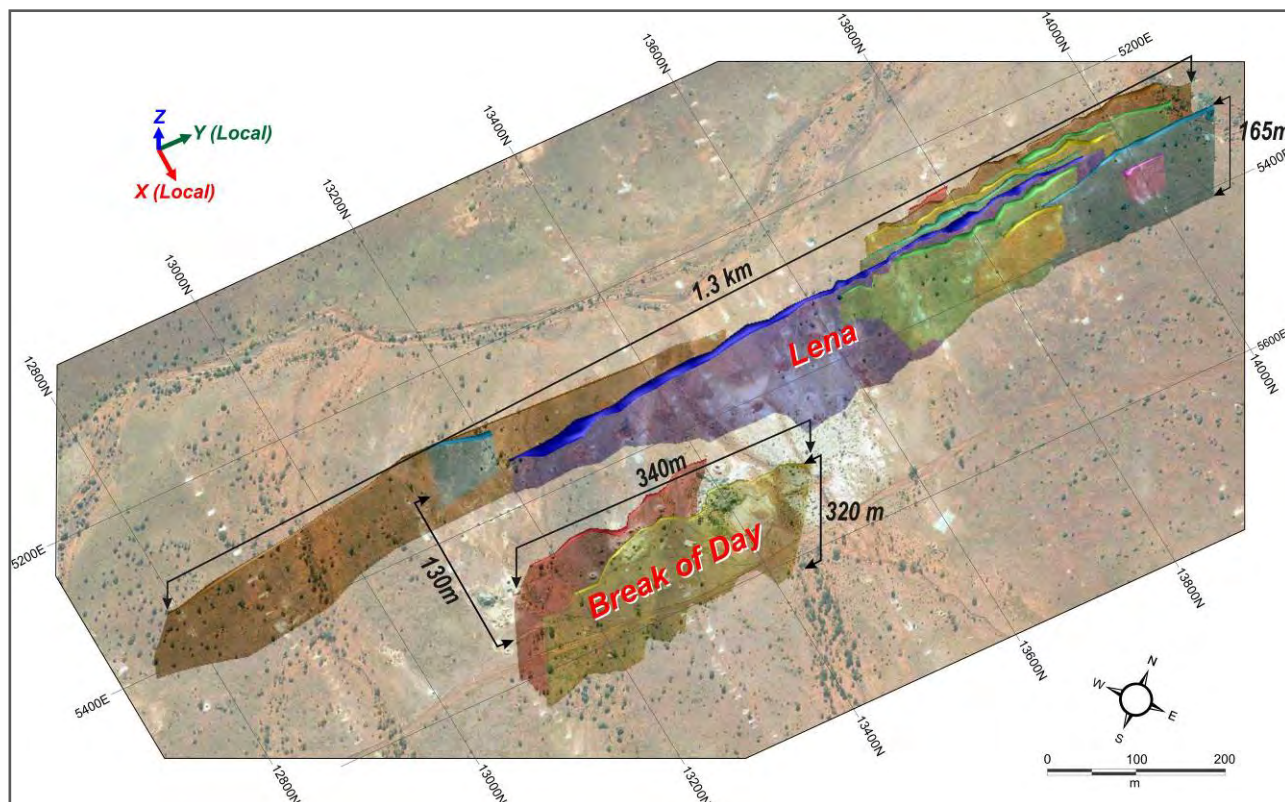


Figure 1: Schematic image showing Break of Day and Lena Mineral Resource models depicting multiple gold lodes on aerial photo

BREAK OF DAY GEOLOGY AND MINERAL RESOURCES

The Break of Day Mineral Resource estimate is based on analysis of information collected from numerous reverse circulation ("RC") and diamond drilling campaigns from 1984 through to mid-2017. Musgrave has completed 94 RC drill holes for more than 17,000 metres and 7 diamond drill holes for 1,889 metres on Break of Day since February 2016 (*Figure 2 and 3*).

At Break of Day drilling has delineated two vertical to steep westerly dipping, semi-parallel quartz lodes (Twilight and Velvet) hosting gold. The mineralisation is currently defined over a strike extent of 340m and is open along strike and down plunge. The mineralisation at Break of Day is currently modelled to a maximum depth of 320m below surface.

Importantly 55% of the Mineral Resource estimate at Break of Day is classified at the higher confidence Indicated category. The majority of the Mineral Resource is comprised of fresh rock and a 3g/t Au reporting cut-off grade was used considering the majority of the deposit is more likely to be developed as an underground mine. The Mineral Resource is currently located on a granted mining lease.

The resource model generated through interpretation of the drilling data is showing strong geological continuity and consistency of mineralisation sufficient to support the reported Mineral Resource classification levels. Recent drilling has shown that the high grade gold mineralisation in both lodes at Break of Day is still open in all directions (*Figure 3*). There is significant potential to the south of Break of Day to extend the mineralisation at relatively shallow levels. Drilling is currently planned to commence in early August to extend the mineralisation in this area.



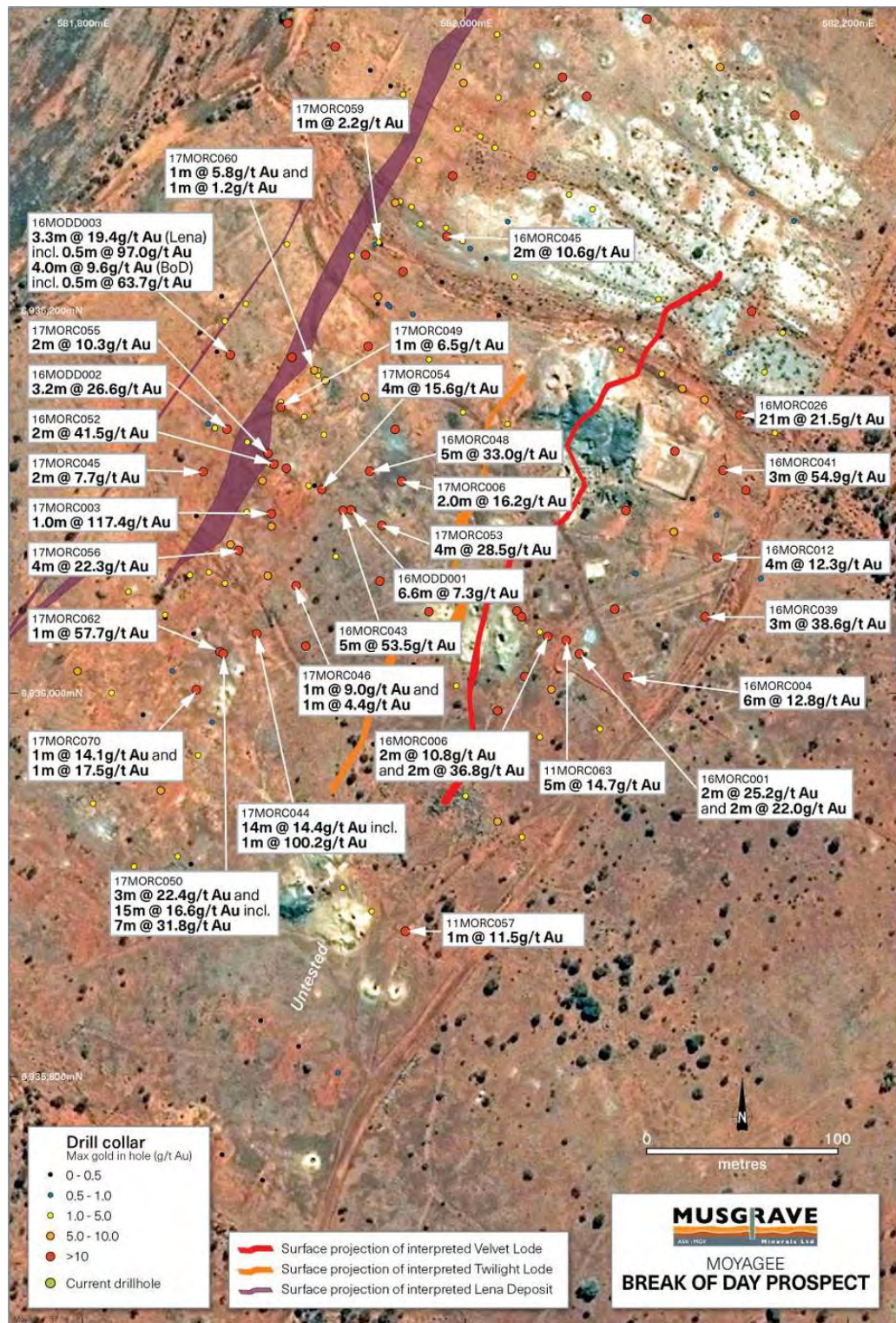


Figure 2: Location plan showing maximum gold in hole plotted at the drill hole collar and recent significant intersections for the Break of Day gold prospect

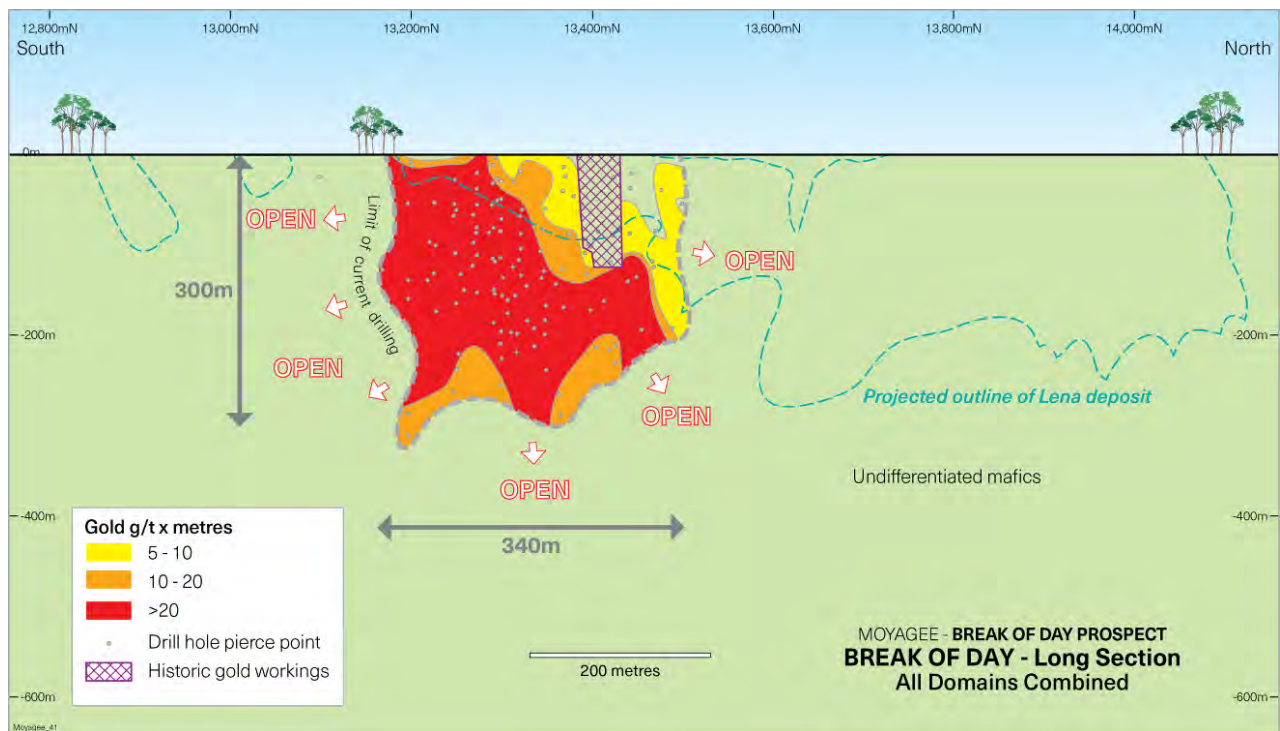


Figure 3: Break of Day schematic long section of the combined Twilight and Velvet gold lodes (a long section or longitudinal section is a section along the plane of the lode and in this instance shows gold grade x thickness variability with depth of the combined Lodes) and the projected outline of the Lena deposit which is located approximately 130m west of Break of Day

LENA GEOLOGY AND MINERAL RESOURCES

The Lena Mineral Resource estimate is based on analysis of information collected from numerous reverse circulation (“RC”) and diamond drilling campaigns from 1984 through to mid-2017. Musgrave has completed 44 RC drill holes for 3,704 metres of drilling on Lena since March 2017 (Figure 4).

At Lena drilling has delineated multiple vertical to steeply dipping, semi-parallel quartz lodes hosting gold within a high magnesium basalt and talc schist sequence. The gold mineralisation is currently open along strike to the north and down plunge. The resource is currently defined over a strike extent of 1.3km and occurs from surface. The mineralisation at Lena is currently defined within 12 lenses and all models are within 300m below surface.

46% of the Mineral Resource Estimate at Lena is classified at the higher confidence Indicated category. The Lena Mineral Resource occurs from surface and has a significant component as oxide and transitional material. A 1g/t Au cut-off grade was used to estimate the resource as the deposit is most likely to be developed as an open-cut proposition. The Mineral Resource is currently located on a granted mining lease.

The resource model generated through interpretation of the drilling data is showing strong geological continuity and consistency of mineralisation sufficient to support the reported Mineral Resource classification levels. Recent drilling has shown that the gold mineralisation is still open to the north and down plunge (Figure 5).



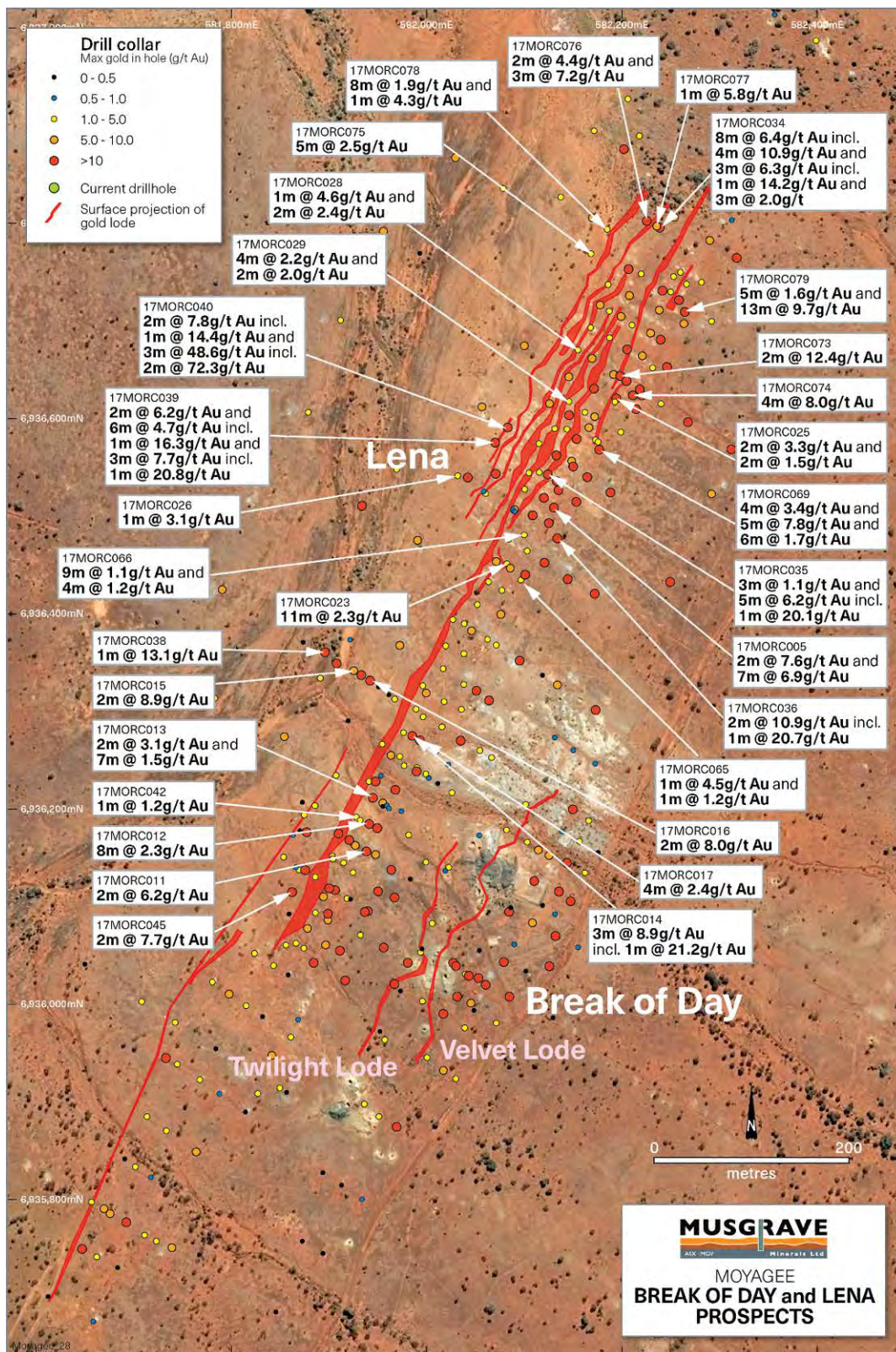


Figure 4: Location plan showing maximum gold in hole plotted at the drill hole collar and MGVS significant intersections for the Lena gold deposit

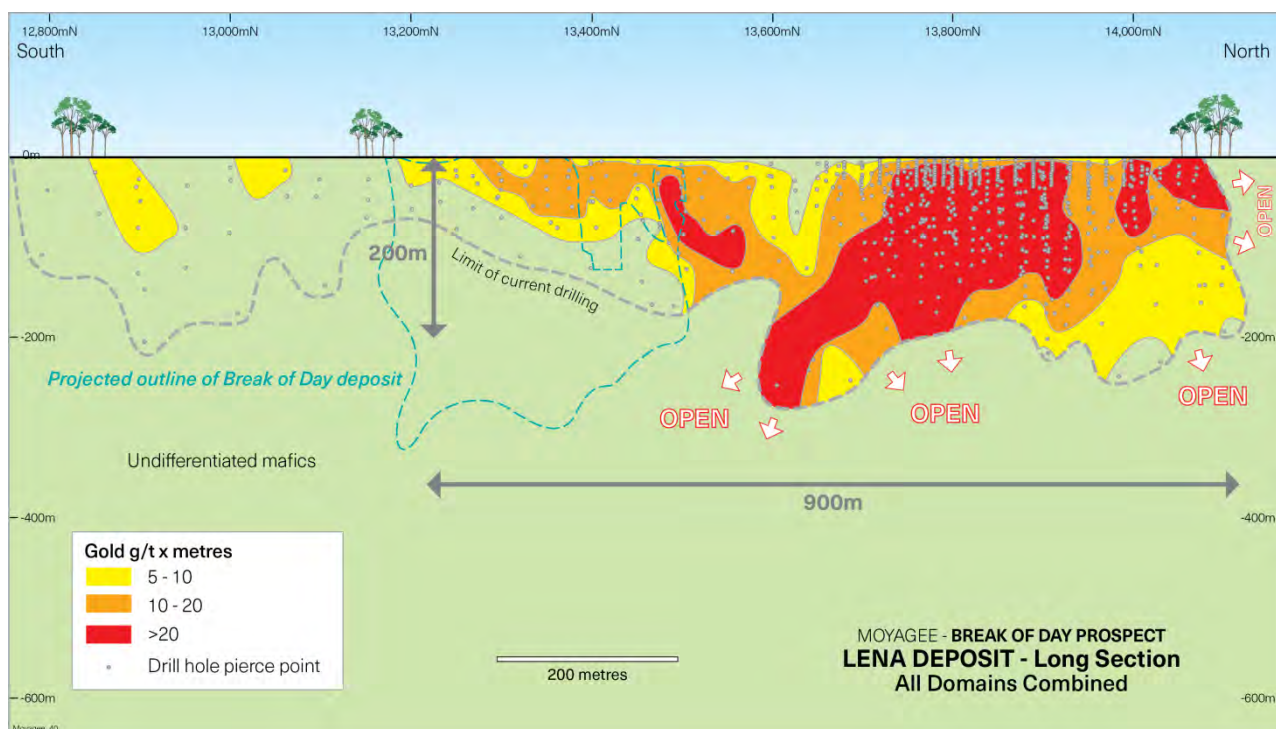


Figure 5: Lena schematic long section of all the combined gold lodes (a long section or longitudinal section is a section along the plane of the lode and in this instance shows gold grade x thickness variability with depth of the combined Lodes) and the projected outline of the Break of Day deposit which is located approximately 130m east of Lena

The updated Break of Day and Lena Mineral Resources together with the historical Leviticus and Numbers Mineral Resources add to the total Mineral Resource base for the Moyagee Project (Table 4).

Table 4: **Total Moyagee Mineral Resources** by JORC Classification

JORC Classification	Indicated			Inferred			Total		
Deposit	Tonnage ('000s)	Au (g/t)	Total oz. Au ('000s)	Tonnage ('000s)	Au (g/t)	Total oz. Au ('000s)	Tonnage ('000s)	Au (g/t)	Total oz. Au ('000s)
Break of Day	445	7.73	111	423	6.54	89	868	7.15	199
Lena	1,288	1.69	70	1,394	1.85	83	2,682	1.77	153
Leviticus				42	6.0	8	42	6.00	8
Numbers				278	2.5	22	278	2.46	22
Total Moyagee	1,732	3.24	181	2,137	2.94	202	3,870	3.07	382

* Due to the effects of rounding, the total may not represent the sum of all components.

Notes to Table 4:

The Break of Day and Lena Mineral Resources at Moyagee are reported 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 JORC Table 1 compiled by CSA in the appendix of this release.

The Mineral Resource estimates at Leviticus and Numbers were first prepared and disclosed in accordance with the 2004 Edition of the Australian Code of Reporting of Mineral Resources and Ore Reserves (JORC 2004) and have not been updated since to comply with JORC 2012 on the basis that the information has not materially changed since it was last reported. For further details refer to SLR ASX announcement 26 August 2016, “Mineral Resources and Ore Reserves Update”.

EXPLORATION UPSIDE

At Break of Day there is significant potential to extend the high grade gold mineralisation to the south and at depth (*Figure 3*). RC drilling is currently planned to commence in early August to extend the mineralisation to the south of the currently defined resource.

A review of shallow historical rotary air-blast (“RAB”) and aircore drilling has defined an 8km long zone of anomalous gold ($>0.1\text{g/t Au}$) associated with the Lena and Break of Day shear zones (*Figure 6*). The Mineral Resources at Lena and Break of Day occur within this anomalous zone, and there is excellent potential to discover further high grade gold resources along the Lena and Break of Day shears, beyond those defined to date. Individual targets along the Lena and Break of Day shears are currently being prioritised for follow-up drilling.

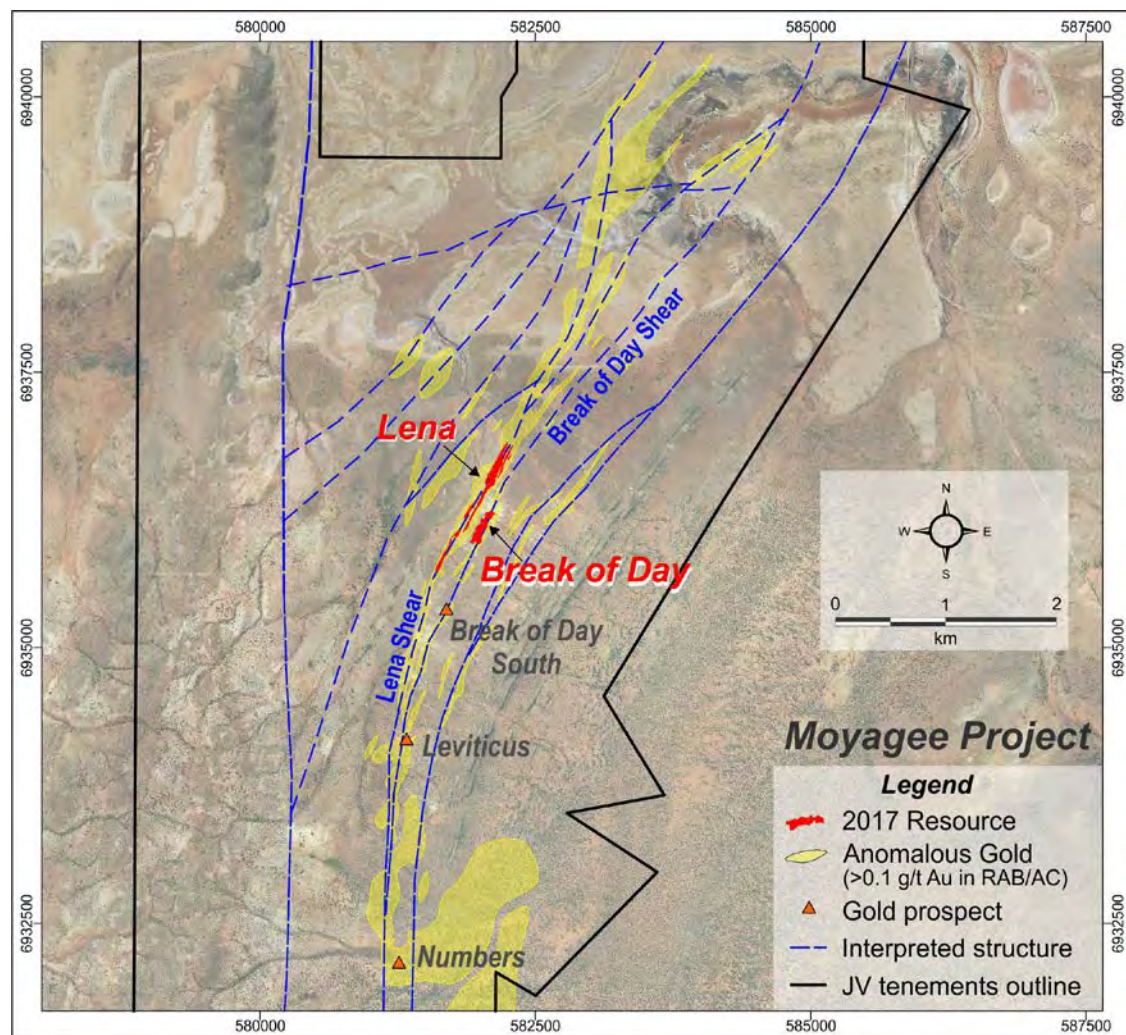


Figure 6: Plan of the Moyagee Project area showing the surface projection of the Break of Day and Lena Mineral Resource outlines, prospects and the anomalous gold corridor



MINERAL RESOURCE ESTIMATE – MATERIAL INFORMATION SUMMARY

Geology and Geological Interpretation

The Break of Day mineralisation lies within the Break of Day Shear Zone (parallel with the Lena Shear Zone), and alteration associated with the Break of Day Shear Zone. The Break of Day Shear Zone is interpreted to be a highly strained sequence of high-magnesium basalts with minor interflow sediments. The mineralisation is interpreted to occur in vertical to steep westerly dipping, semi parallel shears hosting high grade gold with minor (<2%) pyrite, within a basaltic stratigraphic sequence. The gold mineralisation is fine grained and often but not always, spatially related to quartz veining. The separation of the gold lodes varies along strike from 10m to 60m.

There is both a primary and a supergene component to the Break of Day mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution to the mineralisation. While the main trend of the mineralised zones is clear, significant complexity exists locally that has not been resolved by the current drilling.

The Lena mineralisation lies within a widened portion of the alteration associated with the Lena Shear Zone, immediately south of a large intrusive body. The Lena Shear Zone is a highly strained sequence of high-magnesium basalt and talc schist. The main controls to the mineralisation are structural, and mineralisation occurs as a series of discontinuous higher-grade zones within broader low-grade envelopes. The gold mineralisation at Lena is fine grained and often, but not always spatially related to quartz veining.

There is both a primary and a supergene component to the Lena mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution of the mineralisation. Given the complex structural controls, multi-phase development of the Lena Shear Zone and both primary and supergene controls on the mineralisation, the distribution of gold is likely to be very complicated. While the main trend of the mineralised zones is clear, significant complexity exists in the gold distribution.

Models of the mineralisation were created that were consistent with geological understanding of the controls to the mineralisation. A 0.3g/t Au cut-off grade was selected to define boundaries to the following statistical analysis and based on geological intuition that this grade reasonably reflects the boundary between mineralised and unmineralised material. Weathering surfaces were also modelled. Two mineralisation models were created for Break of Day and 12 were created for Lena. These mineralisation models represented grade estimation domains.

Sampling and Sub-sampling

Samples used in the Mineral Resource estimate were obtained through RC and diamond drilling methods collected from campaigns completed since 1984. Aircore (AC) and rotary air-blast (RAB) drilling has also been completed. These holes were used to guide the interpretation but not used for grade estimation. Diamond core has been sawn in half or quarter using a core saw. RC samples were collected using slightly different methods over the projects history. Musgrave use a cone splitter mounted at the bottom of the cyclone. The cone splitter has three shoots at the base for sample collection. The main shoot collects approximately 88% of the sample, and two small shoots collect 6% of the sample each. The cyclone is air-blasted at the end of each 6m run. The bulk sample is collected in a plastic bag, and one of the smaller samples is collected in a calico bag for assay. The other is lost on the ground.



Drilling Technique

Drilling has taken place over numerous periods since 1984. Drilling from 1984 through 2003 was completed by several companies including Paringa Mining and Exploration Company, P.L.C., Molopo Australia Limited and Perilya Mines N.L. Silver Lake Resources completed drilling from 2009 through 2013 and MGV have been drilling from 2016 through 2017. Documentation is available that describes data collection procedures for all RC and diamond drilling programmes.

RC (4.5" to 5 5/8" face sampling hammer) and diamond drilling (primarily HQ and NQ) were completed to support the preparation of the Mineral Resource estimate. The database used to prepare the Break of Day Mineral Resource estimate is dominated by RC samples, which represent 92.5% of the total data within the mineralisation envelopes. The remaining data (7.5%) is diamond. The database used to prepare the Lena Mineral Resource estimate is also dominated by RC samples, which represent 85% of the total data within the mineralisation envelopes. The remaining data (15%) is diamond.

Classification Criteria

The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1.

After considering data quality and geological continuity, grade estimation quality was assessed. The block model was initially coloured by slope of regression (SOR). Drill hole composites were then loaded to gain an understanding of how SOR related to drill hole spacing. SOR values of >0.4 were found to relate to a drill hole spacing of less than approximately 15-25mN by 15-25mRL. SOR values of between 0.2 and 0.4 related to a drill hole spacing of 20-50mN by 20-50mRL.

With due consideration of data quality, geological continuity and grade estimation quality, the Competent Person classified areas as Indicated where the drill hole spacing was denser than 25m by 25m. Areas were classified as Inferred Mineral Resource where the drill hole spacing was 25-75m by 25-75m. Only continuous areas were classified to avoid the "spotted dog effect". This was achieved by digitising a string on-screen in Datamine, or flagging the blocks by northing and elevation in a macro on a per domain basis.

Sampling Analysis Method

Drill hole sampling at Lena was undertaken from the period 1985 through to 2017 and at Break of Day from 1994 to 2017.

RC and diamond drilling samples collected by Musgrave were analysed by Genalysis-Intertek by fire assay using a 50g charge with an inductively coupled plasma-optical emission spectrometry (ICP-OES) finish. The detection limit is 0.005ppm. 1m RC samples are collected for all holes where there is a high probability of mineralisation. RC samples are split to 1-3kg weight through a cone splitter. Samples are pulverised at the laboratory to 85% passing -75µm. A 50g sub-sample was then taken for fire assay analysis.

Samples submitted by SLR from 2009 through 2013 were prepared by Ultratrace Perth. All samples were dried to a temperature not exceeding 110°C. Samples were crushed using a Jaw Crusher and cone to a maximum size of 3mm. If the total mass was >3kg, the samples were rotary split to a sample size of approximately 2.5kg. Samples were then pulverised using an LM5 pulveriser, to a nominal size of 90% passing 75µm. A 300 to 400g sub-sample of the pulp was then taken, with the residue retained for future reference. A 40g sub-sample was then taken for fire assay analysis.



Samples submitted by MGV in 2016 and 2017 were prepared at Intertek Genalysis, which is an independent accredited laboratory located in Maddington, Perth. Samples are pulverised to 85% passing -75µm. A 50g sub-sample was then taken for fire assay analysis.

Samples submitted by Paringa from 1985 through 1986 were dried, crushed and disc pulverised to nominal minus 80 mesh. Samples were then riffle split to produce a 200g portion. Fine pulverising was then completed to 95% passing minus 200 mesh. Molopo samples (1988 drilling) were submitted to Genalysis laboratories in Perth. Detailed sample preparation techniques are not known. Perilya samples (1994 – 1999 drilling) were submitted to Analabs, Perth or Multilabs in Mount Magnet. Detailed sample preparation techniques are not known.

Estimation Methodology

Statistical analysis was completed using Supervisor software. The coefficient of variation (COV), histograms and probability plots were reviewed for Au to understand the distribution of grades, and assess the requirement for top cuts for each estimation domain. Top cutting was deemed necessary where the COV was high (>1.2) and individual high-grade samples were deemed to potentially result in biased block model results. The drill samples were composited (1m) prior to top cutting. Further statistical analyses using log probability plots was then completed, and a visual inspection in Datamine of any potential clustering of very high-grade sample data was then carried out prior to selecting a top-cut value.

Variography was completed for each grade domain using Supervisor software. Quantitative kriging neighbourhood analysis was then undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids. Search ellipse parameters were selected based on the results.

A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate. Dynamic anisotropy was used to ensure undulation in the mineralisation was captured by the search ellipses. Interpolate of grades into cells was completed using ordinary kriging techniques. All geological modelling and grade estimation was completed using Datamine software.

Cut-off Grade

At Break of Day the Mineral Resource is reported above a cut-off grade of 3.0g/t Au. The adopted cut-off grade is considered reasonable for Mineral Resources which are likely to be extracted by underground methods.

At Lena the Mineral Resource is reported above a cut-off grade of 1.0g/t Au. The adopted cut-off grade is considered reasonable for Mineral Resources which are likely to be extracted by open pit methods.

Mining and Metallurgical Methods

Mining

In selecting the reporting cut-off grade, potential mining methods have been considered. Some internal dilution exists within the interpreted mineralisation boundaries but this material was not modelled. Further drilling is required to ascertain if these zones are continuous and can therefore be selectively removed during mining.



Metallurgy

At Lena two composite samples were selected for gravity and cyanide leach gold recovery test work in 2017.

Conclusions from the gravity and cyanide leach test work of the two samples were as follows:

- There is a high gravity recovery component for both the oxide and transitional samples. A gravity recovery circuit should be included in all future process plant flow sheets.
- Cyanide leach gold recovery is expected to be in excess of 95% after 12 hours of leaching.
- Reagent consumptions were undertaken in a sample of site water. Cyanide consumptions were low for both samples with the Lena 02 (transitional) sample extremely low, though the gravity recovery for this sample was high. Lime consumption was very high for both samples but this was due to the laboratory going past the site water pH buffering point. It is expected the lime consumption to be between 0.5 to 1.0 kg/t for the two samples.

At Break of Day preliminary metallurgical test work was carried out on three composited RC samples with the following interpreted results:

- Gravity recovery test work was undertaken and show that for all three samples there is an extremely high gravity gold recoverable component of the ore, each exceeding 80% recovery.
- Cyanide leach gold recovery test work shows recoveries of >95% after 24 hours of leaching.

The Competent Person considers it is reasonable to assume the deposits are amenable to metallurgical treatment using conventional processing methods.

THE CUE PROJECT

The Cue Project ("the Project") is a Farm-In and Joint Venture Agreement with Silver Lake Resources Limited ("Silver Lake") (ASX: SLR). Musgrave has met the Stage 1 Earn-In holding a 60% Joint Venture interest in the Project and has elected to progress to Stage 2 and increase its interest to 80%. The Project consists of the Moyagee Gold and Hollandaire Copper Resources (see *ASX announcement 25 November 2015, "Musgrave Secures Advanced Gold and Copper Project"*) and surrounding tenure in the highly prospective Murchison province of Western Australia.

On 23 June 2017 Silver Lake Resources Ltd announced that it had agreed to sell its 40% interest in the Cue Joint Venture to Westgold Resources Ltd subject to Musgrave Minerals Ltd not exercising its pre-emptive right pursuant to the Cue Farm-in and Joint Venture Agreement (Agreement). Pursuant to the terms of the Agreement, Musgrave has 30 days from receipt of notice of offer in which to exercise its pre-emptive right to purchase the JV interest on equivalent terms. Musgrave Minerals' Board is reviewing the offer documents and will make a decision to exercise, or waive its pre-emptive right in due course.

On 23 June 2017 Westgold Resources Ltd announced that it would purchase the 1.2mtpa Tuckabianna Gold Plant to increase its optionality for growth in the Southern Part of its Central Murchison Gold Project.

The Cue Project is in a well-endowed historical gold producing district in the Murchison region of Western Australia with three currently operating gold plants (and potentially a fourth in Tuckabianna) within trucking distance of the Moyagee Gold Project (*Figure 7*).

The Company believes there is significant potential to extend existing mineralisation and also discover new high grade mineralisation within the Project area as shown by the recent success at Break of Day and Lena.



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

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's focus is to increase gold and copper resources through discovery and extensional drilling to underpin studies that will demonstrate a viable path to near term development. Musgrave also holds the highly prospective active epithermal Ag-Pb-Zn-Cu Corunna Project in the prospective silver and base metals province of the southern Gawler Craton and a large exploration footprint in the Musgrave Province in South Australia. Musgrave has a powerful shareholder base with three mining and exploration companies currently participating as cornerstone investors.

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.

Mineral Resources and Ore Reserves

The information in this report that relates to Mineral Resources at Break of Day and Lena is based on information compiled by Mr Aaron Meakin. Mr Meakin is a full-time employee of CSA Global Pty Ltd and is a Member of the Australasian Institute of Mining and Metallurgy. Mr Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Persons as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Meakin consents to the disclosure of the information in this report in the form and context in which it appears.

All other information in this report that relate to Mineral Resources at Leviticus and Numbers is based on information compiled and/or thoroughly reviewed by Mr Antony Shepherd, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Shepherd is a full-time employee of Silver Lake Resources Limited. Mr Shepherd 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 Shepherd 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.

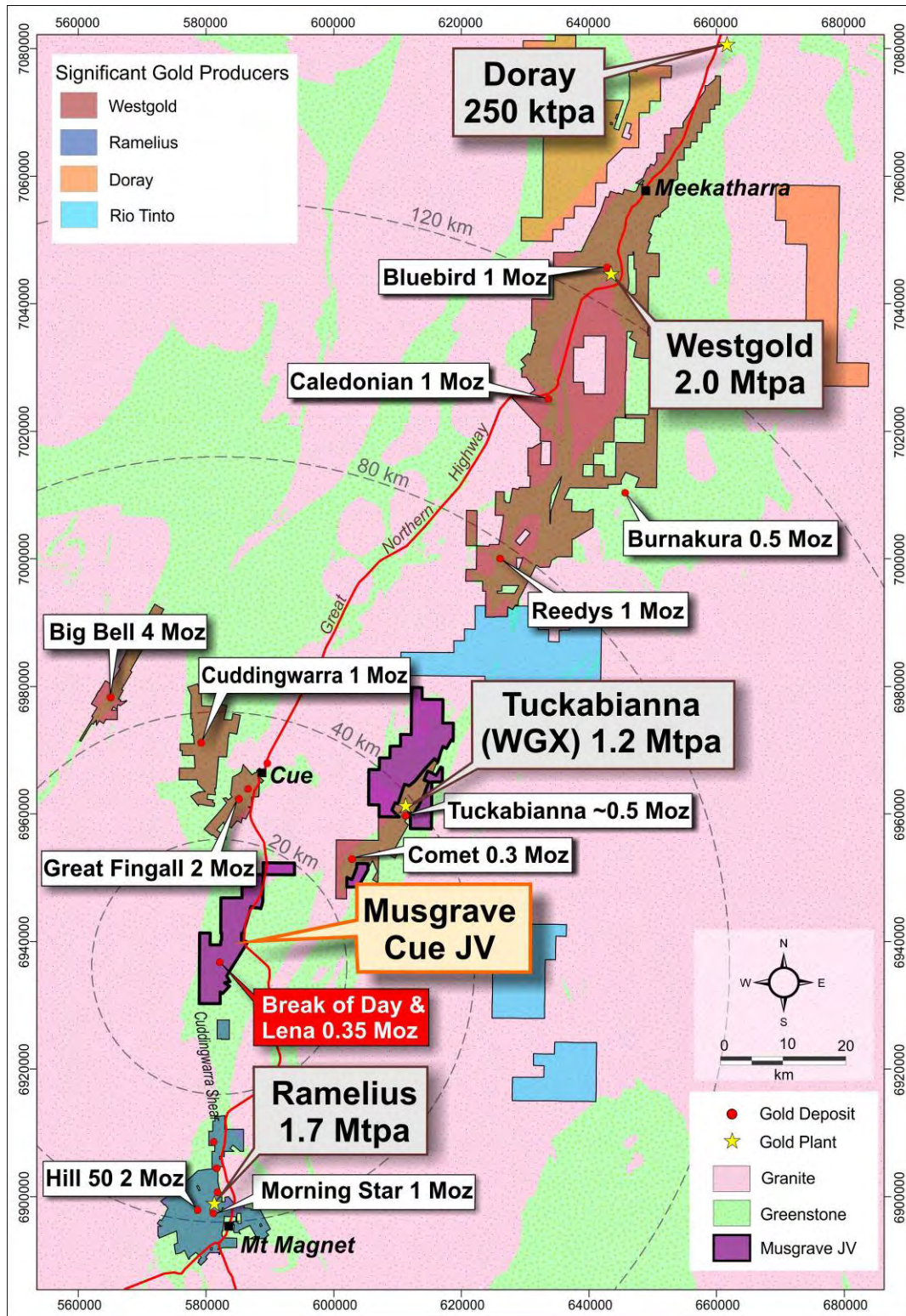


Figure 7: Cue Project location plan showing existing gold processing plant locations

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MEMORANDUM

To: Rob Waugh
Cc: Glenn Martin
Date: 13th July 2017
From: Aaron Meakin
CSA Global Report №: R260.2017
Re: Lena and Break of Day Mineral Resource estimates

CSA Global Pty Ltd
 Level 2, 201 Leichhardt
 Street
 Spring Hill QLD 4000
 PO Box 1077
 Spring Hill QLD 4004
 Australia
 T +61 7 3106 1200
 E csaqlid@csaglobal.com
 ABN 67 077 165 532
 www.csaglobal.com

SUMMARY

CSA Global Pty Ltd (CSA Global) was commissioned by Musgrave Minerals Limited (MGV) to prepare Mineral Resource estimates for the Lena and Break of Day gold deposits, located in Western Australia. The Mineral Resource estimates were required to be reported in accordance with the JORC Code¹.

The Mineral Resource estimates for Lena and Break of Day are shown in Table 1 and Table 2 respectively. The Lena Mineral Resource estimate is reported above a cut-off grade of 1 g/t Au and the Break of Day Mineral Resource estimate is reported above a cut-off grade of 3 g/t Au.

Table 1: Lena Mineral Resource estimate, > 1 g/t Au

JORC Classification	Tonnage (kt)	Au (g/t)	Ounces (oz.)
Indicated	1,288	1.69	70,000
Inferred	1,394	1.85	83,000
Total	2,682	1.77	153,000

* Due to the effects of rounding, the total may not represent the sum of all components

Table 2: Break of Day Mineral Resource estimate, > 3 g/t Au

JORC Classification	Tonnage (kt)	Au (g/t)	Ounces (oz.)
Indicated	445	7.73	111,000
Inferred	423	6.54	89,000
Total	868	7.15	199,000

* Due to the effects of rounding, the total may not represent the sum of all components

DATA COLLECTION TECHNIQUES

High-quality diamond core and reverse circulation (RC) samples have informed the Mineral Resource estimate. Drilling data has been collected during numerous drilling campaigns, commencing in 1984. The drilling history is summarised in Table 3.

¹ Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Table 3: Lena and Break of Day drilling history

Year(s)	Company	Holes	Prospect(s)	Hole Size	Hole Type	Metres	Hole ID From	Hole ID To
1984–1999	Paringa Mining, Molopo Australia, Perilya Mines	152	VARIOUS	4 1/2" (PM), ? (MA), 4 1/4" (PM)	RC	12,634	MGRC001	MGRC207
1995–1999	Perilya Mines	26	LENA	NQ2	Diamond	10,164.77	MGDD1	MGDD25
1996–1997	Perilya Mines	30	VARIOUS	4 1/4"	RC	5,663	MYR001	MYR030
2001	Perilya Mines?	27	VARIOUS	4 1/4"	RC	2,900	MORC001	MORC027
2009	Silver Lake Resources	14	LENA	?	Diamond	3,092.2	09MODD001	09MODD014
2010	Silver Lake Resources	11	LENA	?	Diamond	2,125.5	10MODD018	10MODD029
2010	Silver Lake Resources	80	LENA	5 3/4"	RC	8,720.5	10MORC001	10MORC119
2011	Silver Lake Resources	5	LENA	?	Diamond	1,081.1	11MODD001	11MODD005
2011	Silver Lake Resources	26	LENA	5 3/4"	RC	2,366.8	11MORC011	11MORC049
2011	Silver Lake Resources	21	BOD	5 3/4"	RC	2,088	11MORC050	11MORC070
2013	Silver Lake Resources	236	LENA	5 3/4"	RC(GC)	7,568	LGC004	LGC390
2016	Musgrave Minerals	11	BOD	NQ, NQ2, HQ	Diamond/RC	2,391.6	16MODD001	16MODD008
2016	Musgrave Minerals	54	BOD	5 5/8"	RC	9,911	16MORC001	16MORC059
2017	Musgrave Minerals	5	BOD	5 5/8"	RC	718	17MORC001	17MORC007
2017	Musgrave Minerals	1	LENA	5 5/8"	RC	93	17MORC008	
2017	Musgrave Minerals	1	BOD	5 5/8"	RC	75	17MORC009	
2017	Musgrave Minerals	1	LENA	5 5/8"	RC	45	17MORC010	
2017	Musgrave Minerals	2	BOD	5 5/8"	RC	144	17MORC011	17MORC012
2017	Musgrave Minerals	32	LENA	5 5/8"	RC	2,815	17MORC013	17MORC044
2017	Musgrave Minerals	26	BOD	5 5/8"	RC	5,463	17MORC045	17MORC070

Documentation is available which describes data collection techniques for all phases of drilling. Although collar location, downhole survey, logging and analytical techniques have varied slightly over the projects history, all can be considered industry standard at the time.

The amount of quality control (QC) data that was collected has varied over the project's history. No QC data is available to support drilling programmes completed by Molopo and Paringa, which constitutes a minor portion of the dataset. QC data is available to support the drilling completed by Perilya. Review of historical documentation lends support to the precision and accuracy of the analytical data collected at that time. Silver Lake Resources (SLR) and MGV inserted blanks to monitor carry-over contamination and no significant issues were detected. Field duplicates were used to assess sample precision and certified reference materials (CRMs) were used to assess analytical accuracy. Field duplicate results, which are dominated by RC splits, provide some confidence in RC sampling techniques adopted during the drilling programmes. The accuracy of the laboratories used by MGV and SLR has been adequately demonstrated using CRMs. Although some outliers are present which require explanation, no significant bias is noted.

DEPOSIT GEOLOGY AND MINERALISATION CONTROLS

Lena

The Lena mineralisation lies within a widened portion of alteration associated with the Lena Shear Zone, immediately south of a large intrusive body. The Lena Shear Zone is a highly strained sequence of high-magnesium basalt and talc schist.

The main controls to the mineralisation are structural, and mineralisation occurs as a series of discontinuous higher-grade zones within broader low-grade envelopes. The gold mineralisation at Lena is fine grained, and often but not always spatially related to quartz veining.

There is both a primary and a supergene component to the mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution of the mineralisation.

Features of the Lena Shear Zone are summarised below:

- The Lena Shear Zone trends north-south, parallel to the stratigraphy.
- Ductile deformation is dominant.
- Stratigraphy trends north-south and dips near vertical.
- Cleavage/shear fabrics trend 30 degrees west of grid north-south, and dip near vertical.
- Veining is both parallel and oblique to the main shear zone.
- The Lena Shear Zone is likely to have had a complex, multi-stage development history.

Given the complex structural controls, multi-phase development of the Lena Shear Zone and both primary and supergene controls on the mineralisation, the distribution of gold is likely to be very complicated. While the main trend of the mineralised zones is clear, significant complexity exists locally which has not been resolved by the current drilling.

Break of Day

The Break of Day mineralisation lies within the Break of Day Shear Zone (parallel with the Lena Shear Zone), and alteration associated with the Break of Day Shear Zone. The Break of Day Shear Zone is interpreted to be a highly strained sequence of high-magnesium basalts with minor interflow sediments.

The mineralisation is interpreted to occur in vertical to steep westerly dipping, semi parallel shears hosting high grade gold with minor (1–2%) pyrite, within a basaltic stratigraphic sequence. The gold mineralisation is fine grained, and often but not always spatially related to quartz veining. The separation of the gold lodes varies along strike from 10 m to 60 m.

There is both a primary and a supergene component to the mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution of the mineralisation.

Features of the Break of Day Shear Zone are summarised below:

- The Break of Day Shear Zone trends north-south, parallel to the stratigraphy.
- Ductile deformation is dominant.
- Stratigraphy trends north-south and dips near vertical.
- Cleavage/shear fabrics trend 30 degrees west of grid north-south, and dips near vertical.
- Veining is both parallel and oblique to the main shear zone.
- The Break of Day Shear Zone is likely to have had a complex, multi-stage development history.

While the main trend of the mineralised zones is clear, significant complexity exists locally which has not been resolved by the current drilling.

MINERAL RESOURCE ESTIMATION METHODOLOGY

The following approach was adopted when creating the mineralisation outlines for the Lena and Break of Day deposits:

- The geology of the deposit was the primary consideration, with a series of sub-parallel north-south striking shear zones (Lena) and two sub-parallel north-south striking shear zones (Break of Day) interpreted.
- Given that the mineralisation is not contained within a discrete geological unit, it was deemed appropriate to use a grade cut-off when interpreting the mineralisation.
- A cut-off grade of 0.3 g/t Au was broadly applied to define boundaries to the mineralisation, based on preliminary statistical assessment and geological intuition that this grade reasonably reflects the boundary between mineralised and unmineralised material. There are numerous grades below 0.3 g/t Au within the modelled envelopes, however, and inclusion of this material was necessary to maintain continuity of the lenses. There is also mineralisation above 0.3 g/t Au between the modelled lenses which did not have sufficient continuity to model.
- A minimum downhole width of 2 m was applied.
- Although it is recognised that there is both a primary and supergene component to the mineralisation, an effort was made to retain the primary mineralisation geometry in the oxide and transitional zones. CSA Global considers there is potential for significant complexity in the distribution of gold mineralisation with the oxide and transitional zone given the influence of weathering processes.

The topography, base of complete oxidation (BOCO) and top of fresh rock (TOFR) were also modelled. The methodology used to construct each of these digital terrain models (DTMs) is described below:

- The topography file was generated by linking collar locations, loaded into Leapfrog as point data.
- The BOCO was interpreted on a cross sectional basis, with strings digitised approximately capturing the oxidation state as logged. The strings were imported into Leapfrog to construct the BOCO surface. The sectional interpretations were then joined to create a DTM.
- The TOFR was constructed in a similar manner to the BOCO.

MGV provided CSA Global with a string file containing two polygons representing the outer perimeter of two underground voids at Break of Day. CSA Global used these strings to construct two wireframe solids which were used to deplete the Break of Day Mineral Resource model.

Statistical analysis and variography was completed in Supervisor software. Sample data were composited to 1 m lengths, and top cuts were then applied. Top cuts were applied on a domain basis at Lena and varied from 8 g/t Au to 30 g/t Au (where applied). Some domains were not top cut given that no significant outliers existed in the data. A top cut of 80 g/t Au was applied at Break of Day. Quantitative kriging neighbourhood analysis was then undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates.

3D block models of the mineralisation were created using Datamine software. Composited and top cut samples were used to interpolate grades into blocks using ordinary kriging. The block models were validated prior to being reported.

Figure 1 shows the modelled mineralisation envelopes for Lena and Break of Day.

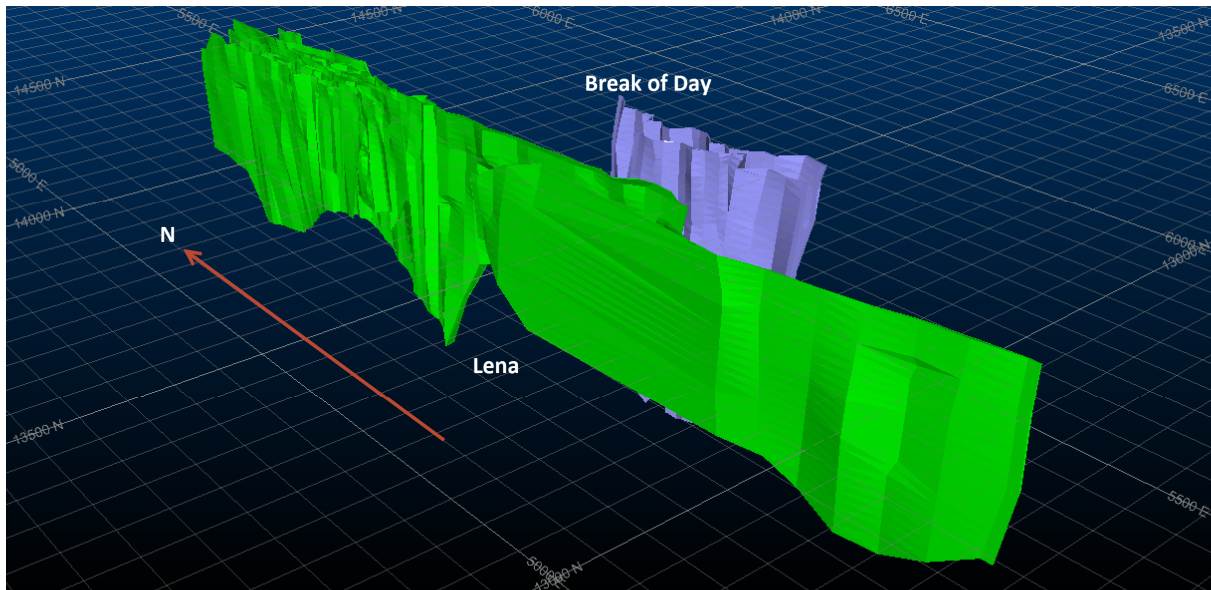


Figure 1: Oblique view showing Lena and Break of Day mineralisation envelopes (looking down from southwest)

SITE VISIT

Aaron Meakin, Competent Person for the Mineral Resource estimate, completed a site visit to the Lena and Break of Day prospects from 8 May through 10 May 2017. During this time, the following actions were completed:

- Core was inspected from Break of Day.
- RC chips were inspected from Lena and Break of Day.
- The RC drill rig which was operating at the time was inspected, including sampling systems.
- The controls to the mineralisation were discussed with MGV's Chief Geologist.
- Sectional interpretations for Lena and Break of Day were reviewed.
- The collar positions of six holes were checked with a hand-held global positioning system (GPS) instrument, and compared with the surveyed coordinates in the drill hole database, with no significant differences.
- Geological data collection systems were reviewed.
- Quality assurance (QA) protocols were reviewed.

Data collection systems were found to be consistent with industry good practice. Furthermore, geological controls to the mineralisation were sufficiently understood to enable a Mineral Resource to be reported in accordance with the JORC Code.

REASONABLE PROSPECTS HURDLE

Clause 20 of the JORC Code (2012) requires that all reports of Mineral Resources must have reasonable prospects for eventual economic extraction, regardless of the classification of the Mineral Resource.

The Competent Person deems that there are reasonable prospects for eventual economic extraction of mineralisation at Lena and Break of Day on the following basis:

- The mineralisation at Lena is close to surface and therefore is amenable to open pit mining.
- The mineralisation at Break of Day is high-grade and could potentially support underground extraction.
- The mineralisation at Lena and Break of Day is continuous over a considerable strike length.
- Lena lies near the Break of Day deposit; hence it is likely that dual development will occur and common infrastructure could be developed.
- There are several options for toll-treating in the region, which would significantly reduce the capital expenditure requirement for the project.

MINERAL RESOURCE CLASSIFICATION

The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code. The classification applied reflects the author's view of the uncertainty that should be assigned to the Mineral Resources reported herein. Key criteria that have been considered when classifying the Mineral Resource are detailed in JORC Table 1 which is contained in Attachment 1.

After considering data quality and geological continuity, grade estimation quality was assessed. The block model was initially coloured by slope of regression (SOR). Drill hole composites were then compared to the model blocks to gain an understanding of how SOR related to drill hole spacing. SOR values of >0.4 were found to relate to a drill hole spacing of less than approximately 15–25 m N by 15–25 m RL. SOR values of between 0.2 and 0.4 related to a drill hole spacing of 20–50 m N by 20–50 m RL.

The Competent Person classified volumes as Indicated where the drill hole spacing was denser than 25 m by 25 m. Volumes were classified as Inferred Mineral Resources where the drill hole spacing was 25–75 m by 25–75 m. Only continuous areas were classified to avoid the “spotted dog effect”.

In accordance with the requirements of the JORC Code, the Competent Person deems that the reported Indicated Mineral Resources represent areas where there is sufficient geological evidence to assume geological and grade continuity between points of observation where data and samples are gathered. Inferred Mineral Resources represent areas where there is sufficient geological evidence to imply but not verify geological and grade continuity between points of observation where data and samples are gathered.

RECOMMENDATIONS

CSA Global recommends the following actions are completed to support the ongoing evaluation effort at Lena and Break of Day:

- The historical void model for Break of Day should be further validated and a work program designed to improve the accuracy of this model. If access into the voids is possible, useful geological data may be gathered.
- Additional density measurements should be taken in the oxide zone to support the assumption made in this Mineral Resource estimate.
- All drill hole data should be merged into a single database. This will create a single “point of truth” with robust and transparent validation systems.

- A high-resolution topographic survey should be completed across the project area. CSA Global understands MGV intend to complete a LIDAR survey in the near future.
- To convert Inferred Mineral Resources to higher classification categories, further infill drilling is required. CSA Global recommends a drill spacing of 25 m E (along strike) by 25 m RL (down dip) to allow Mineral Resources to be considered for Indicated classification, and a drill spacing of 25–75 m E (along strike) by 25–75 m Z (down dip) for Inferred Mineral Resources. Further interrogation of the sampling data and geological controls is recommended to support the classification of Measured Mineral Resources.
- Field duplicate samples should be collected via the alternate chute at the base of the cone splitter, rather than using a spear.
- Although the controls to the mineralisation are relatively well understood, continued development of the geological model is recommended to support future Mineral Resource estimation and establishment of the mine geology function. Further understanding of the controls to high grade mineralisation within the broader mineralised zones at Lena and Break of Day is required.
- Establishment of the mine geology system should be considered well in advance of mining. Systems to ensure development of the geological model, high-quality sampling, rapid capture and storage of data, quality control assessment, robust ore block interpretation, minimisation of ore loss and dilution, production tracking and reporting, and reconciliation should be established.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Mineral Resources is based on information compiled by Mr Aaron Meakin. Mr Aaron Meakin is a full-time employee of CSA Global Pty Ltd and is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Aaron Meakin has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Persons as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Aaron Meakin consents to the disclosure of the information in this report in the form and context in which it appears.

Attachment 1 JORC Table 1

JORC Table 1 Section 1 – Key Classification Criteria

Criteria	JORC Code 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>	Samples used in the Mineral Resource estimate were obtained through reverse circulation (RC) and diamond drilling methods collected from campaigns completed since 1984. Air core (AC) and rotary air-blast (RAB) drilling has also been completed. These holes were used to guide the interpretation but not used for grade estimation.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Diamond core has been sawn in half or quarter using a core saw. RC samples were collected using various methods over the projects history. Musgrave Minerals Limited (MGV) use a cone splitter mounted at the bottom of the cyclone. The cone splitter has three shoots at the base for sample collection. The main shoot collects approximately 88% of the sample, and two small shoots collect 6% of the sample each. One of these samples is collected in a calico bag for assay and the other is lost on the ground.
	<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 (e.g. "RC drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	RC and diamond drilling samples were analysed by Genalysis–Intertek by fire assay using a 50-g charge with an inductively coupled plasma- optical emission spectrometry (ICP-OES) finish. The detection limit is 0.005 ppm. 1 m RC samples are collected for all holes where there is a high probability of mineralisation. RC samples are split to 1–3 kg weight through a cone splitter. Samples are then pulverised to 85% passing –75 µm.
Drilling techniques	<i>Drill type (e.g. core, RC, 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>	Drilling has taken place over numerous periods since 1984. Drilling from 1984 through 2003 was completed by several companies including Paringa Mining and Exploration Company, P.L.C., Molopo Australia Limited and Perilya Mines N.L. Silver Lake Resources (SLR) completed drilling from 2009 through 2013 and MGV have been drilling from 2016 through 2017. Documentation is available that describes data collection procedures for all RC and diamond drilling programmes. RC (4.5" to 5 5/8" face sampling hammer) and diamond drilling (primarily HQ and NQ) drilling were completed to support the preparation of the Mineral Resource estimate. The database used to prepare the Lena Mineral Resource estimate is dominated by RC samples, which represent 85% of the total data within the mineralisation envelopes. The remaining data (15%) is diamond. The database used to prepare the Break of Day Mineral Resource estimate is also dominated by RC samples, which represent 92.5% of the total data. The remaining data (7.5%) is diamond.
Drill sample	<i>Method of recording and assessing core and chip sample recoveries and results</i>	In RC chips, recovery is visually estimated based on the size and weight of the sample bag and residue. Excellent recoveries were

Criteria	JORC Code explanation	Commentary
recovery	<i>assessed.</i>	observed in dry samples and reasonable recovery was observed in wet samples with some loss of fines. Diamond core recoveries are recorded by MGCV. Some zones of poor recovery were noted, however most intervals achieved 100% recovery. The average core recovery across the project area is 97.4%.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Triple tube drilling has occasionally been used in addition to larger (HQ) diameter core sizes to maximise sample recovery. RC drilling utilised an external booster typically keeping samples dry to maximise recoveries.
	<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 relationship between grade and recovery has been identified.
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>	Comprehensive logs capturing lithological, mineralogical, and magnetic susceptibility data are available for all recent drilling.
	<i>Whether logging is qualitative or quantitative in nature. Core (or core, channel, etc.) photography.</i>	Logging is generally qualitative in nature. All core stored has been photographed wet and dry.
	<i>The total length and percentage of the relevant intersections logged.</i>	All diamond core and RC drilling has been geologically logged.
Subsampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Diamond samples are half-core, with core sawn in half by the laboratory using a core-saw.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	<p><u>Lena</u></p> <p>RC sub-sampling techniques have varied slightly over the projects history.</p> <p>Paringa (1985–1986 drilling) used a riffle splitter to obtain a 2–3 kg sample for analysis. The splitter was blown out and cleaned after each 6-m drill rod to reduce contamination.</p> <p>Perilya (1994–1999 drilling) collected 1 m samples for complete holes. Initially, spear samples were taken of 1 m intervals to form a 5 m composite for assay. Anomalous composite assays (>0.1–0.2 g/t Au) were re-sampled by spear and submitted at 1 m intervals.</p> <p>SLR (2009–2013 drilling) and MGCV (2016–2017 drilling) used a cone splitter mounted at the bottom of the cyclone at regular 1 m intervals. The splitter was blown out and cleaned after each 6-m drill rod to reduce contamination. The vast majority of samples were dry. Occasionally, damp or slightly wet samples were taken and no major issues with the sampling were noted.</p> <p><u>Break of Day</u></p> <p>RC samples were collected using a cone splitter mounted at the bottom of the cyclone at regular 1 m intervals. The splitter was blown out and cleaned after each 6-m drill rod to reduce contamination. The vast majority of samples were dry. Occasionally, damp or slightly wet samples were taken and no major issues with the sampling were noted.</p>
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<p><u>Lena</u></p> <p>Samples submitted by Paringa from 1985 through 1986 were dried, crushed and disc pulverised to nominal minus 80 mesh. Samples were then riffle split to produce a 200 g portion. Fine pulverising was then completed to 95% passing minus 200 mesh.</p>

Criteria	JORC Code explanation	Commentary
		<p>Molopo samples (1988 drilling) were submitted to Genalysis laboratories in Perth. Detailed sample preparation techniques are not known.</p> <p>Perilya samples (1994–1999 drilling) were submitted to Analabs, Perth or Multilabs in Mount Magnet. Detailed sample preparation techniques are not known.</p> <p>Samples submitted by SLR from 2009 through 2013 were prepared at Ultratrace Perth. All samples were dried to a temperature not exceeding 110° C. Samples were crushed using a Jaw Crusher and cone to a maximum size of 3 mm. If the total mass was >3 kg, the samples were rotary split to a sample size of approximately 2.5 kg. Samples were then pulverised using an LM5 pulveriser, to a nominal size of 90% passing 75 µm. A 300 to 400 g sub-sample of the pulp was then taken, with the residue retained for future reference. A 40 g sub-sample was then taken for fire assay analysis.</p> <p>Samples submitted by MGCV in 2016 and 2017 were prepared at Intertek Genalysis, which is an independent accredited laboratory located in Maddington, Perth. Samples are pulverised to 85% passing –75 µm. A 50 g sub-sample was then taken for fire assay analysis.</p> <p><u>Break of Day</u></p> <p>As above for Lena for the period 1994 through 2017.</p>
	<i>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</i>	Subsampling is performed during the preparation stage according to the assay laboratories' internal protocol.
	<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>	RC field duplicates were inserted in the sample stream by Perilya, SLR and MGCV. Results given confidence in sample collection procedures from 1995 through 2017.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered to be appropriate to the grain size of the material being sampled.
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>	The assaying and laboratory procedures used are consistent with industry good practise. The technique is considered total.
	<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 in the preparation of the Mineral Resource estimate.
	<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>	Given all available QC results, CSA Global considers that a relatively high level of confidence can be placed in the precision and accuracy of the analytical data used in the preparation of this Mineral Resource estimate.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant intersections have been verified by alternative MGCV company personnel. CSA Global also verified the some of the significant intersections at Lena and Break of Day during the site visit.
	<i>The use of twinned holes.</i>	No twinning has been completed.
	<i>Documentation of primary data, data</i>	Templates have been set up to facilitate geological logging. Prior

Criteria	JORC Code explanation	Commentary
	<i>entry procedures, data verification, data storage (physical and electronic) protocols.</i>	to the import into the central database, logging data is validated for conformity and overall systematic compliance by the geologist. CSA Global is responsible for data management and hosting the database. This database only contains drilling data collected by MGCV. The remaining data is hosted in an Access database. Data collected in the field by MGCV is collated into an industry standard relational database using Maxwell GeoService's Datashed with a SQL back-end by a database specialist. Data is loaded into the database using import layouts which read the templated data (using standard logging lookups). Assay data is loaded into the database using layouts to ensure data received from laboratories are loaded into the database with no interference. The database is hosted on CSA Global's server and is backed up on a nightly basis.
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made to the analytical data, other than replacing below detection results with a value equal to half the detection limit.
<i>Location of data points</i>	<i>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Collar data is considered accurate. MGCV used a real time kinematic (RTK) Base BD01 survey method. SLR used a differential global position system instrument. Qualified surveyors surveyed all historical collars. Downhole deviations have been measured by downhole survey instruments. In most cases, this has been by a gyroscope.
	<i>Specification of the grid system used.</i>	The adopted grid is a local grid system.
	<i>Quality and adequacy of topographic control.</i>	The topography at Lena and Break of Day is flat. The topographic digital terrain model was constructed from drill hole collar coordinates and the Competent Person (Mineral Resources) is satisfied that this approach is satisfactory for the current classification categories of the Mineral Resource.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	<u>Lena</u> The drill spacing varies along strike and down dip. Drilling has been completed on approximately 50 m section spacings from 12,800 m N through 13,200 m N, 20 m spacings from 13,200 m N through 13,660, 10 m spacings from 13,650 m N through 14,000 m N and 20 m spacings from 14,000 m N through 14,120 m N. On each section, the drill hole spacing varies considerably. Holes close to surface are approximately 5–10 m apart on section. At depth, holes are approximately 25–50 m apart on section. <u>Break of Day</u> The drill hole spacing is irregular, but overall averages 25 m section spacing over a strike length of about 325 m, from 13,175 m N to 13500 m N. Holes close to surface are approximately 20–25 m apart on section. At depth, holes are approximately 25–50 m apart on section.
	<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>	The Competent Person believes the mineralised lenses have sufficient geological and grade continuity to support the classification applied to the Mineral Resources given the current drill pattern.
	<i>Whether sample compositing has been applied.</i>	Sample compositing was applied prior to geostatistical analysis and grade interpolation.
<i>Orientation of data in relation to geological</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is</i>	Drilling was orthogonal to the strike of the interpreted mineralisation, and the orientation is not perceived to impart any material bias to the samples.

Criteria	JORC Code explanation	Commentary
structure	<i>known, considering the deposit type.</i>	Most holes dip at –60° to the west or –60° to the east. The mineralisation at Lena and Break of Day is interpreted to be sub-vertical, hence intersection angles are at approximately 30°.
	<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 bias based on hole orientation is known to exist.
Sample security	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by MGCV staff. A MGCV geologist and field assistant are always present at the RC drill rig while samples are being drilled and collected. On completion of logging, samples are bagged and tied for transport to the Cue compound. The Cue compound is locked when no personnel are present. Samples are then placed on a pallet, weighed, and transported by Toll IPEC from Cue to the laboratory in Perth. Sample submission sheets are emailed by the project geologist to the laboratory. When at the laboratory, samples are stored in a locked yard before being processed.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits of sampling techniques and data have been completed to the best of CSA Global's knowledge.

JORC 2012 Table 1 Section 2 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>	Lena and Break of Day are located on granted Mining Lease M21/106 which is held by MGCV (60%) and SLR (40%) in joint venture. The tenement was granted for a period of 21 years from 19 May 1999 to 18 May 2020. MGCV commenced a Farm-In and Joint Venture on the project on 24 November 2015. MGCV has currently secured a 60% equity interest and is planning to increase its stake to 80%. The tenement is subject to state and third-party royalties.
	<i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	Rent has been paid in full until 18 May 2018. No impediments to obtaining a licence to operate in the area are known to exist.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Exploration has been completed by numerous parties in the project area. All companies who have completed drilling in the deposit area have been acknowledged in Table 1 Section 1 and the body of this report.

Criteria	JORC Code explanation	Commentary
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<p><u>Lena</u></p> <p>The Lena project lies within a widened portion of the alteration associated with the Lena Shear Zone, immediately south of a large intrusive body. The Lena Shear Zone is a highly strained sequence of high-magnesium basalt and talc schist.</p> <p>The main controls to the mineralisation are structural, and mineralisation occurs as a series of discontinuous higher-grade zones within broader low-grade envelopes. The gold mineralisation at Lena is fine grained, and often but not always spatially partially related to quartz veining.</p> <p>There is both a primary and a supergene component to the mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution to the mineralisation.</p> <p>Features of the Lena Shear Zone are summarised below:</p> <ul style="list-style-type: none"> • The Lena Shear Zone trends north-south, parallel to the stratigraphy. • Ductile deformation is dominant. • Stratigraphy trends north-south and dips near vertical. • Cleavage/shear fabrics trend 30 degrees west of grid north-south, and dips near vertical. • Veining is both parallel and oblique to the main shear zone. • The Lena Shear Zone is likely to have had a complex, multi-stage development history. <p>Given the complex structural controls, multi-phase development of the Lena Shear Zone and both primary and supergene controls the mineralisation, the distribution of gold is likely to be very complicated. While the main trend of the mineralised zones is clear, significant complexity exists in the gold distribution.</p> <p><u>Break of Day</u></p> <p>The Break of Day mineralisation lies within the Break of Day Shear Zone (parallel with the Lena Shear Zone), and alteration associated with the Break of Day Shear Zone. The Break of Day Shear Zone is interpreted to be a highly strained sequence of high-magnesium basalts with minor interflow sediments.</p> <p>The mineralisation is interpreted to occur in vertical to steep westerly dipping, semi parallel shears hosting high grade gold with minor (1–2%) pyrite, within a basaltic stratigraphic sequence. The gold mineralisation is fine grained, and often but not always spatially partially related to quartz veining. The separation of the gold lodes varies along strike from 10 m to 60 m.</p> <p>There is both a primary and a supergene component to the mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution to the mineralisation.</p> <p>Features of the Break of Day Shear Zone are summarised below:</p> <ul style="list-style-type: none"> • The Break of Day Shear Zone trends north-south, parallel to the stratigraphy. • Ductile deformation is dominant. • Stratigraphy trends north-south and dips near vertical. • Cleavage/shear fabrics trend 30 degrees west of grid north-south, and dips near vertical. • Veining is both parallel and oblique to the main shear zone. • The Break of Day Shear Zone is likely to have had a complex, multi-stage development history. <p>While the main trend of the mineralised zones is clear, significant complexity exists locally which has not been resolved by the current drilling.</p>

Criteria	JORC Code explanation	Commentary
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: <ul style="list-style-type: none"> • 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 • Downhole length and interception depth • Hole length. 	Exploration results are not being reported.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Exploration results are not being reported.
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.	Exploration results are not being reported.
	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.	Exploration results are not being reported.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Exploration results are not being reported.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Exploration results are not being 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. “downhole length, true width not known”).	Exploration results are not being reported.
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 drillhole collar locations and appropriate sectional views.	Exploration results are not being reported. Relevant diagrams are included in the body of the report.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and	Exploration results are not being reported.

Criteria	JORC Code explanation	Commentary
	<i>high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	
<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>	No substantive exploration data not already mentioned in this table has been used in the preparation of this Mineral Resource estimate.
<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>	Further work will be focused on testing for dip extensions and strike extensions and to confirm grade and geological continuity implied by the current block model.
	<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>	Diagrams have been included in the body of this report.

JORC 2012 Table 1 Section 3 – Key Classification Criteria

Criteria	JORC Code explanation	Commentary
Database integrity	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i>	Logging is completed onto templates using standard logging codes. CSA Global is responsible for data management and hosting the database. Data is loaded into the database using import layouts which read the templated data (using standard logging lookups). Assay data is loaded into the database using layouts to ensure data received from laboratories are loaded into the database with no interference. The database is hosted on CSA Global's server and is backed up on a nightly basis.
	<i>Data validation procedures used.</i>	CSA Global checked the drill hole files for the following errors prior to Mineral Resource estimation: <ul style="list-style-type: none"> • Absent collar data • Multiple collar entries • Questionable downhole survey results • Absent survey data • Overlapping intervals • Negative sample lengths • Sample intervals which extended beyond the hole depth defined in the collar table. Only minor validation errors were detected which were communicated to MGCV. De-surveyed drill hole files were visually checked as a final validation exercise.
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	The Competent Person carried out a site visit from 8 through 10 May 2017. The outcome of the site visit (broadly) was that data has been collected in a manner that supports reporting a Mineral Resource estimate in accordance with the JORC Code, and controls to the mineralisation are relatively well-understood.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	Not applicable.
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	Mineralisation interpretations were completed by MGCV geologist Glenn Martin and consultant geologist Ross Corben. The Competent Person reviewed the interpretations and is satisfied that they were completed in a competent manner.
	<i>Nature of the data used and of any assumptions made.</i>	No material assumptions have been made which effects the Mineral Resource estimate reported herein.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	Alternative interpretations are likely to materially impact on the Mineral Resource estimate on a local but not global basis. The Competent Person has no reasons to support any alternative geological interpretation with the current sample data and geological understanding.
	<i>The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.</i>	Drill samples were used to interpret the mineralisation envelope and weathering surfaces on a cross sectional basis along the strike of mineralisation. A 0.3 g/t Au envelope was interpreted from the sample Au grades, with wireframe solids constructed from the sectional Au envelopes. Au grade continuity within these envelopes was modelled from variograms.
Dimensions	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	<u>Lena</u> The Lena deposit constitutes 12 lenses that have been modelled between 12,780 m N and 14,120 m N. The lenses have variable strike and dip continuity. All models are within 300 m of surface. The plan width of the lenses varies between approximately 2 m and 20 m. <u>Break of Day</u>

Criteria	JORC Code explanation	Commentary
		<p>The Twilight Lode has a strike extent of 250 m, a plan width of between 1 and 5 m, and extends to 320 m below surface.</p> <p>The Velvet Lode has a strike extent of 310 m, a plan width of between 1 and 7 m, and extends to 320 m below surface.</p>
Estimation and modelling techniques	<p><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></p>	<p><u>Lena</u></p> <p>The Mineral Resource estimate has been completed using 12 grade estimation domains (MINZONs 100, 200, 300, 500, 600, 800, 1000, 1200, 1300, 1400, 1500 and 1800). The following top cuts were applied following statistical analysis:</p> <ul style="list-style-type: none"> • MINZON 100: 15 g/t Au • MINZON 200: 30 g/t Au • MINZON 300: No top cut • MINZON 500: 8 g/t Au • MINZON 600: 8 g/t Au • MINZON 800: No top cut • MINZON 1000: 15 g/t Au • MINZON 1200: 25 g/t Au • MINZON 1300: 20 g/t Au • MINZON 1400: 10 g/t Au • MINZON 1500: No top cut • MINZON 1800: No top cut <p><u>Break of Day</u></p> <p>The Mineral Resource estimate has been completed using two grade estimation domains (MINZONs 100 and 200). The following top cuts were applied following statistical analysis:</p> <ul style="list-style-type: none"> • MINZON 100: 80 g/t Au • MINZON 200: 80 g/t Au <p><u>Lena and Break of Day</u></p> <p>The weathering horizons acted as a soft boundary during grade interpolation.</p> <p>Variography was completed using Supervisor software. Quantitative kriging neighbourhood analysis was then undertaken to assess the effect of changing key kriging neighbourhood parameters on block grade estimates. Kriging efficiency and slope of regression were determined for a range of block sizes, minimum/maximum samples, search dimensions and discretisation grids.</p> <p>A three-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not select sufficient data for the block estimate. Dynamic anisotropy was used to ensure undulation in the mineralisation was captured by the search ellipses.</p> <p>Ordinary kriging was adopted to interpolate grades into cells, with variogram rotations consistent with search ellipse rotations.</p> <p>Statistical analysis was completed using Supervisor software. All geological modelling and grade estimation was completed using Datamine software.</p>
	<p><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></p>	<p><u>Lena</u></p> <p>Several previous Mineral Resource estimates were reported in accordance with earlier versions of the JORC Code. The Mineral Resource reported herein is larger the 2014 Mineral Resource estimate following additional drilling.</p> <p><u>Break of Day</u></p> <p>An Inferred Mineral Resource was prepared in 2012 and</p>

Criteria	JORC Code explanation	Commentary
		reported in accordance with the 2004 Edition of the JORC Code. The current Mineral Resource represents a material increase in tonnes and grade following completion of a significant drilling program.
	<i>The assumptions made regarding recovery of by-products.</i>	No assumptions have been made regarding recovery of by-products.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i>	No deleterious elements or other non-grade variables were estimated.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	A 2.5 m E by 10 m N by 10 m RL parent cell size was used with sub-celling to 1 m E by 1 m N by 1 m RL to honour wireframe boundaries. The drill hole data spacing is highly variable but approximates 10 m to 50 m along strike (north-south) by 15 m to 50 m down-dip. The block size represents approximately half of the drill spacing in the more densely drilled areas of the deposit.
	<i>Any assumptions behind modelling of selective mining units.</i>	No assumptions were made regarding selective mining units.
	<i>Any assumptions about correlation between variables</i>	No assumptions have been made regarding correlation between variables.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	The wireframe solids representing the mineralisation envelopes were used to code the block model. Au grade was interpolated into the block model with search ellipses orientated along the local strike and dip of the mineralisation models. There is both a primary and a supergene component to the mineralisation. The depth of weathering is highly variable, which adds to the complexity of the distribution to the mineralisation. Soft boundaries have been applied across oxidation boundaries given that no clear statistical differences could be demonstrated.
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	The coefficient of variation (COV), histograms and probability plots were reviewed for Au to understand the distribution of grades, and assess the requirement for top cuts for each estimation domain. Top cutting was deemed necessary where the COV was high (>1.2) and individual high-grade samples were deemed to potentially result in biased block model results. The drill samples were composited (1 m) prior to top cutting. Further statistical analyses using log probability plots was then completed, and a visual inspection in Datamine of any potential clustering of very high-grade sample data was then carried out prior to selecting a top-cut value.
	<i>The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</i>	Drillhole grades were initially visually compared with cell model grades. Domain drill hole and block model statistics were then compared. Swath plots were also created to compare drillhole grades with block model grades for easting, northing and elevation slices throughout the deposit. The block model reflected the tenor of the grades in the drill hole samples both globally and locally.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnages are estimated on a dry basis.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<u>Lena</u> The Mineral Resource reported above a cut-off grade of 1.0 g/t Au.

Criteria	JORC Code explanation	Commentary
		<p>The adopted cut-off grade is considered reasonable for Mineral Resources which are likely to be extracted by open pit methods.</p> <p><u>Break of Day</u></p> <p>The Mineral Resource reported above a cut-off grade of 3.0 g/t Au.</p> <p>The adopted cut-off grade is considered reasonable for Mineral Resources which are likely to be extracted by underground methods.</p>
<i>Mining factors or assumptions</i>	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	<p>In selecting the reporting cut-off grade, potential mining methods have been considered.</p> <p>Some internal dilution exists within the interpreted mineralisation boundaries but this material was not modelled. Further drilling is required to ascertain if these zones are continuous and can therefore be selectively removed during mining.</p>
<i>Metallurgical factors or assumptions</i>	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	<p><u>Lena</u></p> <p>Two composite samples were selected for gravity and cyanide leach test work in 2017.</p> <p>Conclusions from the gravity and cyanide leach test work of the two samples were as follows:</p> <ul style="list-style-type: none"> There is a high gravity recovery component for both the oxide and transitional samples. A gravity recovery circuit should be included in all future process plant flow sheets. Cyanide leach gold recovery is expected to be in excess of 95% after 12 hours of leaching. Reagent consumptions were undertaken in a sample of site water. Cyanide consumptions were low for both samples with the Lean 02 (transitional) sample extremely low, though the gravity recovery for this sample was high. Lime consumption was very high for both samples but this was due to the laboratory going past the site water pH buffering point. It is expected the lime consumption to be between 0.5 to 1.0 kg/t for the two samples. <p>The Competent Person therefore considers it is reasonable to assume the deposit is amenable to metallurgical treatment using conventional processing methods.</p> <p><u>Break of Day</u></p> <p>Preliminary test work was carried out on three composited RC samples with the following interpreted results:</p> <ul style="list-style-type: none"> Gravity recovery test work was undertaken and show that for all three samples there is an extremely high gravity gold recoverable component of the ore, each exceeding 80% recovery. Cyanide leach gold recovery test work shows recoveries of >95% after 24 hours of leaching.
<i>Environmental factors or</i>	<i>Assumptions made regarding possible waste and process residue disposal</i>	Environmental considerations have not yet been considered due to the early stage of this project. It is therefore assumed that

Criteria	JORC Code explanation	Commentary
<i>assumptions</i>	<i>options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i>	waste could be disposed in accordance with a site-specific mine and rehabilitation plan.
<i>Bulk density</i>	<i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i>	Density measurements have been completed in most cases by the analytical laboratory using the Archimedes method of water immersion with wax coating. Density determinations were made on drill core samples from 2009 through 2010, and in 2016. Most of the measurements were taken in fresh rock.
	<i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i>	Porosity is generally not an issue with the determinations, at least below the limit of oxidation.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	A total of nine measurements were within the transitional zone, 83 measurements in fresh rock and no measurements within the oxide zone. A mean was applied to each oxidation zone as shown below: <u>Lena</u> <ul style="list-style-type: none"> • Oxide 2.0 t/m³ • Transitional 2.67 t/m³ • Fresh 2.83 t/m³ <u>Break of Day</u> <ul style="list-style-type: none"> • Oxide 2.0 t/m³ • Transitional 2.67 t/m³ • Fresh 2.79 t/m³ (Twilight), 2.85 t/m³ (Velvet)
<i>Classification</i>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	The Mineral Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC 2012 Table 1. After considering data quality and geological continuity, grade estimation quality was assessed. The block model was initially coloured by SOR. Drill hole composites were then loaded to gain an understanding of how SOR related to drill hole spacing. SOR values of >0.4 were found to relate to a drill hole spacing of less than approximately 15–25 m N by 15–25 m RL. SOR values of between 0.2 and 0.4 related to a drill hole spacing of 20–50 m N by 20–50 m RL. The Competent Person classified areas as Indicated where the drill hole spacing was denser than 25 m by 25 m. Areas were classified as Inferred Mineral Resources where the drill hole spacing was 25–75 m by 25–75 m. Only continuous areas were classified to avoid the “spotted dog effect”. This was achieved by digitising a string on-screen in Datamine, or flagging the blocks

Criteria	JORC Code explanation	Commentary
		by northing and elevation in a macro on a per domain basis.
	<i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i>	Appropriate account has been taken of all relevant criteria including data integrity, data quantity, geological continuity, and grade continuity.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The current model has not been audited by an independent third party but has been subject to CSA Global's internal peer review processes.
<i>Discussion of relative accuracy/ confidence</i>	<i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i>	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.
	<i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i>	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	No modern mining has occurred at the Lena and Break of Day deposits.