MINERAL RESOURCE UPDATE FOR NORRLIDEN

- **An updated Mineral Resource Estimate for the Norrliden Project is 5.2Mt @ 2.1% Zn, 0.4% Cu, 0.2% Pb, 0.3g/t Au, 29g/t Ag calculated using a 1% Zn Eq.[1] cut-off grade.**
- **A positive optimisation calculation returned for the Norra deposit with the optimal open-pit shell containing 1.8Mt @ 4.13% Zinc Equivalent**
- **Depth extensions to both Norra and Bjurfors are yet to be drill-tested, along with follow up of earlier significant drill intercepts at Södra, not included in this release.**

In addition to this Mineral Resource Update, the Company wishes to advise that the Mozambique High Grade Mineral Sands Acquisition is progressing well and we expect to update shortly.

MRG Metals Limited (ASX: MRQ) is pleased to announce an updated JORC code (2012) Mineral Resource Estimate ("MRE") and preliminary optimisation results for its Norra and Bjurfors polymetallic sulphide deposits following a review and validation of historic diamond drilling data from across the project area. Norra and Bjurfors form part of MRG's Norrliden Project located within the Skellefte Belt in northern Sweden. MRG has a farm-in agreement with Mandalay Resources Corporation (Mandalay) at the Norrliden Project (refer ASX Announcement dated 29th May 2017).

Highlights from the updated Mineral Resource Estimate:

- **Norra:** 3.1Mt @ 2.3% Zn, 0.7% Cu, 0.2% Pb, 0.47g/t Au 39g/t Ag (1% Zn Eq. cut-off, 3.33t/m³ density)
- **Bjurfors**: 2.1Mt @ 1.9% Zn, 0.1% Cu, 0.1% Pb, 0.15g/t Au, 15g/t Ag (1% Zn Eq. cut-off, 3.33t/m³ density)
- **Global**: 5.2Mt @ 2.1% Zn, 0.4% Cu, 0.2% Pb, 0.3g/t Au, 29g/t Ag (1% Zn Eq. cut-off, 3.33t/m³ density)
- The addition of 2.1Mt of mineralisation from the Bjurfors deposits (Mellersta & Västra) has significantly increased the global MRE for the Norrliden Project. The previous MRE for the *Norra* deposit reported in 2012 was 1.497Mt @ 4.4% Zn, 0.8% Cu, 0.4% Pb, 0.8 g/t Au, 59.9 g/t Ag (Wheeler, 2012).
- The 2012 MRE for Norra is very similar to that produced during the current MRE when using a 3% Zn Eq. cut-off; 1.6Mt @ 4.2% Zn, 0.9% Cu, 0.4% Pb, 0.78g/t Au, 67g/t Ag (refer Table 3 below).

Highlights from the conceptual optimisation analysis (refer Cautionary Statement below):

- **Norra:** 1.8Mt @ 4.13% Zinc Equivalent
- **Bjurfors:** 118Kt @ 5.29% Zinc Equivalent.
- The optimisation analysis has demonstrated that the Norra mineralisation is economically robust due to its shallow depth, good metal grades over consistent thicknesses, sufficient mass and metallurgy which is amenable to reasonable recoveries and successful production of copper and zinc concentrates.
- The optimisation analysis has demonstrated that the Bjurfors deposits are more sensitive to price changes than the Norra mineralisation although a minable pit is still possible at lower prices with the appropriate strip ratios as long as capital investment can be minimised: possibly by running the Bjurfors deposits as satellite pits to the main processing facilities at Norra or through contract mining.

[1] Zinc equivalent was calculated using a zinc price of USD $3419/tonne, a lead price of USD $2552/tonne, a copper price of USD $7040/tonne, a gold price of USD $1280/oz and a silver price of USD $17/oz. The equation is as follows:
Zinc equivalent= (zinc (ppm)+(lead (ppm) X 0.75) + (copper (ppm) X 2.06) + (gold (ppm) X 12068) + (silver (ppm) X 158)
It is the company's opinion that the metal prices used in the metal equivalent calculations have a reasonable potential for recovery and sale based on historical metallurgical testwork (Norra) and mining (Bjurfors) from the project.

- This early stage study, with numerous go-forward risks needing to be taken into account, returned a total profit margin of US$111 Million for Norra and US$2.4 Million for Bjurfors.
- An underground stope development analysis was also completed for both deposits, although the results demonstrated that open-cut operations at both sites are currently the more profitable option. An open pit depth of 70 metres currently applies at Norra deposit, which remains open at depth. Deeper diamond drilling would increase MRG's understanding of the Norra deposit, it's economic potential and allow a further review of mining

MRG Chairman Mr Andrew Van Der Zwan commented: *"The updated MRE and positive optimisations for the Norrliden Project have provided MRG with the confidence in the economic viability of Norrliden. The optimisation results have demonstrated that the Norra deposit is economically viable within the current input and pricing parameters. These results coupled with the existing mining permit over Norra have significantly increased the value of the Norrliden Project and have provided a number of potential pathways to create shareholder value. These pathways are being evaluated with our partner, Mandalay, who is also interested in evaluating all options."*

Cautionary Statement

The optimisation calculation referred to in this announcement has been undertaken to gain an initial understanding of the potential economic viability of the Norrliden Project. It is based on low level technical and economic assessments that are not sufficient to support the estimation of ore reserves. Further exploration and feasibility-level evaluation work and appropriate studies are required before MRG will be in a position to estimate any ore reserves or to provide any assurance of an economic development case.

The optimisation is based on the material assumptions outlined below. These include assumptions about the availability of funding. While MRG considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the optimisation calculation will be achieved.

Further funding will be required in order to realise a higher level of confidence in the range of outcomes indicated in the optimisation results. Funding to support a Preliminary Economic Assessment (PEA) or NI 43-101 level study would achieve this purpose. Investors should note that there is no certainty that MRG will be able to raise the funding to undertake this work when needed. It is also possible that such funding may only be available on terms that may be dilutive to, or otherwise affect the value of MRG's existing shares.

It is also possible that MRG could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce MRG's proportionate ownership of the project.

Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the optimisation calculation contained within this document.

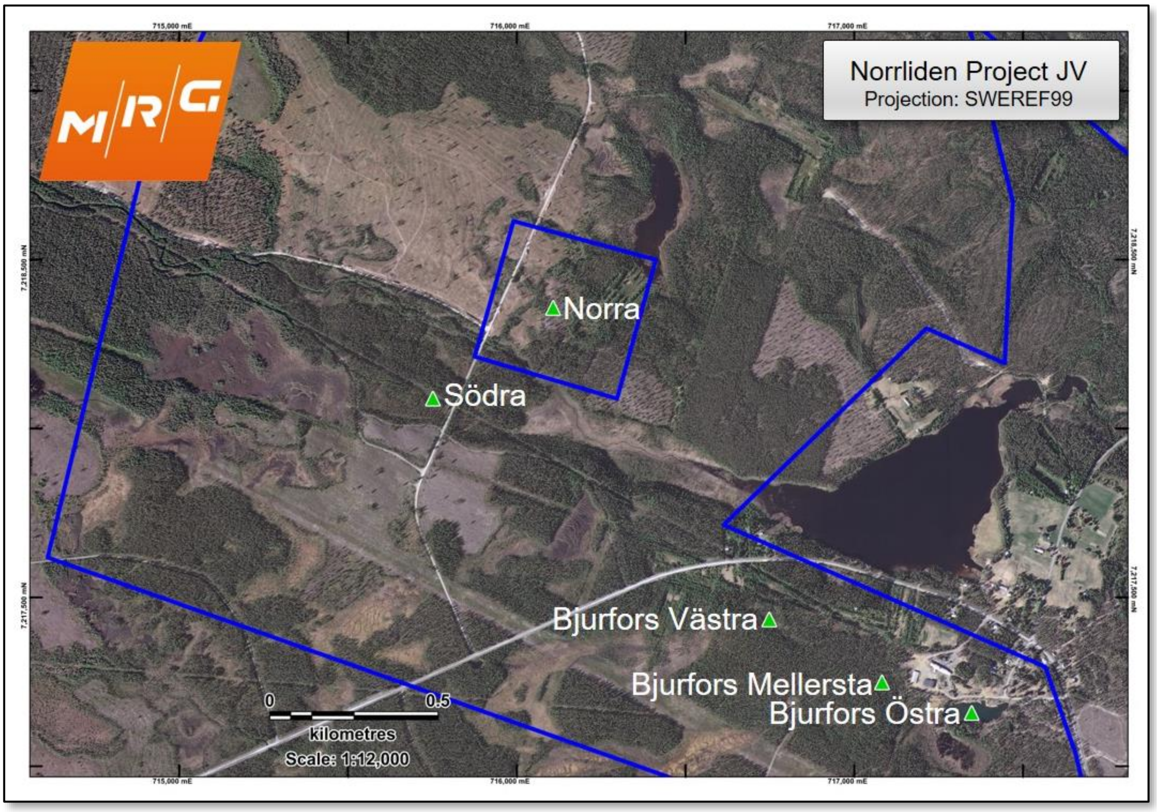

***Figure 1**: Prospect location map for the Norrliden Project. Current MRE results are from the Norra deposit and the Bjurfors (Västra & Mellersta only) deposits.*

Mineral Resource Estimate

The combined Norrliden (Norra & Bjurfors) MRE update has been completed by independent geological consultants Breakaway Mining Services (BMS) utilising results from historic diamond drilling completed across the project area. The Mineral Resource estimate complies with recommendations in the Australasian Code for Reporting of Mineral Resources and Ore Reserves (2012) by the Joint Ore Reserves Committee (JORC). The resource estimate, by classification, is summarised in Tables 1–4 below.

Resource Category	Tonnes (Mt)	Zn Grade (%)	Cu Grade (%)	Pb Grade (%)	Au Grade (g/t)	Ag Grade (g/t)
Measured	1.3	2.6	0.7	0.2	0.6	40
Indicated	1.8	2.4	0.3	0.2	0.3	30
Inferred	2.1	1.6	0.4	0.1	0.2	22
TOTAL	**5.2**	**2.1**	**0.4**	**0.2**	**0.3**	**29**

***Table 1:** Global MRE for the Norrliden Project. Calculated via Ordinary Kriging using a **1%** Zn Eq. cut-off and a density of 3.33 t/m³.*

Resource Category	Tonnes (Mt)	Zn Grade (%)	Cu Grade (%)	Pb Grade (%)	Au Grade (g/t)	Ag Grade (g/t)
Measured	1.3	2.6	0.7	0.2	0.55	40
Indicated	0.8	2.6	0.5	0.3	0.52	42
Inferred	0.9	1.6	0.8	0.2	0.31	34
TOTAL	**3.1**	**2.3**	**0.7**	**0.2**	**0.47**	**39**

***Table 2:** MRE for the Norra deposit, Norrliden Project. Calculated via Ordinary Kriging using a **1%** Zn Eq. cut-off and a density of 3.33 t/m³.*

Resource Category	Tonnes (Mt)	Zn Grade (%)	Cu Grade (%)	Pb Grade (%)	Au Grade (g/t)	Ag Grade (g/t)
Measured	0.7	4.7	0.8	0.4	0.91	67
Indicated	0.4	5.0	0.7	0.5	0.93	78
Inferred	0.5	2.8	1.1	0.3	0.48	57
TOTAL	**1.6**	**4.2**	**0.9**	**0.4**	**0.78**	**67**

Table 3: *MRE for the Norra deposit, Norrliden Project. Calculated via Ordinary Kriging using a **3%** Zn Eq. cut-off and a density of 3.33 t/m³.*

Resource Category	Tonnes (Mt)	Zn Grade (%)	Cu Grade (%)	Pb Grade (%)	Au Grade (g/t)	Ag Grade (g/t)
Indicated	1.0	2.2	0.1	0.1	0.14	18
Inferred	1.1	1.6	0.1	0.1	0.15	12
TOTAL	**2.1**	**1.9**	**0.1**	**0.1**	**0.15**	**15**

Table 4: *MRE for the Bjurfors deposit, Norrliden Project. Calculated via Ordinary Kriging using a **1%** Zn Eq. cut-off and a density of 3.33 t/m³.*

Geology

The Norra and Bjurfors deposits are located within the Skellefte Belt of Northern Sweden which is a world-renowned ore district that has been the main source of the country's copper, zinc, and gold production since the commencement of modern mining and exploration in 1918. The district is centred on the Paleoproterozoic (c. 1890-1870 Ma) Skellefte greenstone belt that covers an area roughly 120km long by 30km wide, extending from Skellefteå on the Baltic Sea coast to west of the town of Malå.

The Skellefte Belt is comprised of felsic to mafic arc-volcanic rocks with intercalated, generally fine-grained sediments (Skellefte Group) partially covered by a sequence of fine to coarse grained sediments, and intercalated volcanic rocks (Vargfors Group).

The Norrliden polymetallic VMS deposits are hosted in a sequence of bimodal volcanic rocks (c. 1890-1870Ma Skellefte Group) that includes coherent basalt lavas and/or sills, mafic agglomerates to conglomerates, rhyolitic to dacitic lavas, tuffs and quartz-porphyritic intrusions. Intervals of volcanic-derived sedimentary units including lithic sandstone and conglomerates, as well as cherty altered sediments are all common as narrow lenses in the overall sequence at Norrliden. The metamorphic grade is mid greenschist facies with primary sedimentary and volcanic textures having been well preserved. Closed to tight folding is observed in the project area and in drill core with the most common and dominant fold geometry being upright folding about the dominant foliation plane along hinges that plunge shallow to the WNW and ESE.

The Norra deposit consists of sub-vertical lenses of massive sulphide up to 30m thick with an east-west strike length of 400m and a depth extent of at least 300m. The deposit is apparently open on the east side at a depth of 300 m. The depth to the top of the deposit is 15 m from the surface, sitting under glacial moraine. The mineralisation is characterised by sulphides occurring in numerous lenses which lie subparallel the volcanic stratigraphy, close or at the contact between acid and basic volcanic rocks in a strongly deformed quartz-sericite rich horizon. The mineralised material consists mainly of pyrite, fine-grained sphalerite and chalcopyrite with dispersed galena and minor arsenopyrite. Pyrite is the dominant sulphide mineral present.

The mineralisation at Bjurfors was one of the first VMS deposits discovered in the Skellefte Belt. The Bjurfors Östra deposit was mined (open-cut and underground) during the early 1930's where approximately 200kt @ 2.6% Cu was mined. The Östra deposit is ~185m x 30m x 50m (open) and is predominantly comprised of chalcopyrite, pyrite and pyrrhotite and is hosted by chlorite-altered quartz-porphyry and mafic greenstones and the Mineralisation dips ~60-70° to the west. The Mellersta and Västra Bjurfors deposits are located ~180m to the west of Östra and are dominantly zinc and lead rich as opposed to copper-gold rich ore at Östra. The copper-gold rich mineralisation at both Östra and Norra is dominated by a chlorite-dominant alteration assemblage whereas the pyrrhotite-sphalerite-pyrite stringer, banded and massive sulphide ore at both Norra and Bjurfors Mellersta/Västra have a strong sericite-silica alteration assemblage. (Note that the current MRE (2018) includes ore from Mellersta and Västra only and not from the Östra deposit.)

Estimation Methods

Ordinary Kriging (OK) was used to estimate average block grades within the mineralised domains using Maptek Vulcan software. The block size used in the model was based on drill sample spacing and mineralisation orientation and Kriging Neighbourhood Analysis (KNA). The Norra deposit parent block size of 50m x 25m x 25m with sub-cells of 12.5m x 3.125m x 3.125m and 1m composites were used for the 3 mineralised domains. The Bjurfors deposit parent block size of 20m x 20m x 10m with sub-cells of 2m x 2m x 1m and 1m composites were used for the 3 mineralised domains. An oriented "ellipsoid" search was used to select data and was based on parameters taken from the variography. The variography was conducted using Snowdon's Supervisor Software. An Inverse Distance (IVD) check estimate in Maptek Vulcan software was carried out by BMS.

An oriented ellipsoid search was used to select data and was based on geometry of the deposit and drill hole spacing. The Norra initial interpolation pass was used with a maximum distance of 32m which filled on average 36% of blocks. The second interpolation pass was used with a maximum distance of 69m which filled on average 53% of blocks. The remaining blocks were filled by expanding the search distance to 310m and reducing the minimum samples to 2. A minimum of 10 samples and a maximum of 30 samples was used for the first and second passes. A minimum of 2 samples was used for the third pass and high-grade cuts were applied.

The Bjurfors initial interpolation pass was used with a maximum distance of 50m which filled on average 16% of blocks. The second interpolation pass was used with a maximum distance of 100m which filled on average 57% of blocks. The remaining blocks were filled by expanding the search distance to 300m and reducing the minimum samples to 2. A minimum of 10 samples and a maximum of 30 samples was used for the first and second passes. A minimum of 2 samples was used for the third pass and high-grade cuts were applied.

Wireframes were created using the drillholes and database provided with three-dimensional interpretation in cross-section, long section and plan views to ensure suitable continuity in all directions.

Zinc equivalent was calculated using a zinc price of UUD $3419/tonne, a lead price of USD $2552/tonne, a copper price of USD $7040/tonne, a gold price of USD $1280/oz and a silver price of USD $17/oz. The equation is as follows:

Zinc equivalent: zinc (ppm) + (lead (ppm) X 0.75) + (copper (ppm) X 2.06) + (gold (ppm) X 12068) + (silver (ppm) X 158)

BMS wireframed two high grade domains (at a nominal 3% zinc equivalent grade) and one low grade domain (at a nominal 1% zinc equivalent grade) of the mineralisation for Norra. The wireframes were applied as hard boundaries in the estimate.

BMS wireframed three low grade domains (at a nominal 1% zinc equivalent grade) of the mineralisation for Bjurfors. The wireframes were applied as hard boundaries in the estimate.

Based on recommendations through the Kriging Neighbourhood Analysis (KNA), a series of high grade cuts were determined and implemented on the low-grade domains (lg, 2a, 2b and 2c) and the high-grade domains (hg1 and hg2)

Bulk density was assigned to the block model using average values per domain. The average mineralisation density is 3.33 t/m^3.

Conceptual Optimisation Analysis

At the conclusion of the MRE, Vanguard Consulting completed an updated optimisation analysis using the updated mineral resource estimate results. The results of the optimisation calculation are based on mineral resource estimates prepared by a competent person (Breakaway Mining Services) in accordance with the requirements of the JORC Code (2012). A proportion of the mineral resource estimate is classified as inferred. There is a low level of geological confidence associated with Inferred mineral resources and there is no certainty that further exploration work will result in the determination of Indicated mineral resources or that the optimisation results will be realised.

Pit optimisations provide a snapshot of where the minable value exists in relation to particular mineralisation and are a first test of financial viability. As the optimisation is a cashflow calculation only, no capital has been taken into consideration.

The bulk of the mining input parameters (refer Table 5 below) came from the mining permit application lodged by previous owner North Atlantic Resources (NAN) in 2007. These input parameters have been reviewed and updated where required. The single biggest change since the previous optimisation calculation (Wheeler, 2012) has been the significant increase in metal prices.

The current optimisation produced five nested pit shells for each optimisation run each representing pits of decrementing revenue factors in 20% intervals. For both deposits the pit shell using a revenue factor of 1 has returned the most profitable pit shell.

No boundary constraints were used for the pit crest limits. Overall pit wall angles were based on a previous geotechnical analysis of the deposit (Norra) and adjusted based on the inclusion of 5m berms with 20m bench heights in the hanging wall and 5m berms with 15m bench heights in the footwall. These constraints were chosen as a rule of thumb.

Contained metals which were used to calculate revenue include copper, zinc, gold and silver. Although lead is also present it is not considered to be economically recoverable.

An open cut mining study should consider an analysis of the product market, extraction costs, geotechnical constraints, and metallurgical recoveries to better understand the optimum cut-off grade and sensitivity to price and cost. The design of mineable staged pit shells with associated mining rates, capital investment requirements, equipment, infrastructure, dump designs and scheduling would also be necessary.

		Optimisation Inputs	Optimisation Inputs
		Base Case	Base Case
		$USD	SEK
Exchange Rate		1	6.7
Gold Price	$/oz	$1,400.00	9,380.00 kr
Gold Price	$/g	$45.01	301.57 kr
Silver Price	$/oz	$20.00	134.00 kr
Silver Price	$/g	$0.64	4.31 kr
Copper Price	$/lb	$3.10	20.77 kr
Copper Price	$/t	$6,834.26	45, 789.54 kr
Zinc Price	$/lb	$1.36	9.12 kr
Zinc Price	$/t	$3,000.00	20,100.00 kr
NSR	SEK/(feed tonne)/(%head grade)		
Payability Zn Conc	%	85	85
Payability Cu Conc	%	99	99
Payability Pb Conc	%	0	0
Payability Ag in Cu Conc	%	95	95
Payability Au in Cu Conc	%	98	98
Open-Cut Mining Cost-Waste	$/t mined	$5.16	34.57 kr
Open-Cut Mining Cost-Ore	$/t mined	$5.63	37.72 kr
Underground Mining Cost	$/t mined	$65.00	435.50 kr
Underground Development Cost	$/m mined	$2,400.00	16,080.00 kr
Vertical Mining Cost	$/t/m depth from surface	$0.003	0.02 kr
Haulage Cost	$/t mined	N/A	N/A
Surface Handling/Crushing	$/t mined	-	-
Floatation Cost Cu	$/t concentrate	$80.00	536.00 kr
Floatation Cost Zn	$/t concentrate	$240.00	1,608.00 kr

		Optimisation Inputs	Optimisation Inputs
Sales Cost Cu Concentrate	$/t concentrate	$65.67	440.00 kr
Escalation Cu Concentrate	% of $/t price	10	10
Sales Cost Zn Concentrate	$/t concentrate	$41.04	275.00 kr
Escalation Zn Concentrate	% of $/t price	12	12
Refining Charge Cu	$/lb Cu Concentrate	$0.08	0.54 kr
Royalty	% of Revenue	1.5	1.5
Ore Density Default	t/m³ in situ	3.33	3.33
Waste Density Default	t/m³ in situ	3.33	3.33
Mining Dilution	%	5	5
Mining Loss	%	2	2
Ag in Copper Concentrate	g/t	1700	1700
Au in Copper Concentrate	g/t	20	20
Pb Recovery	%	0	0
Cu Recovery	%	80	80
Zn Recovery	%	85	85
Ag Recovery	%	69	69
Au Recovery	%	61	61
Cut-Off Grade	NSR ($/t mined)	$20.15	135.00 kr
Pit Wall Angle	Footwall	51	51
Pit Wall Angle	Hanging wall & Ends	71	71
Pit Wall Angle	Overburden	35	35
Open-Cut Mining Rate	m³/pa	1,000,000	1,000,000

Table 5: *Pit optimisation parameters and constraints used for both the Norra and Bjurfors deposits, Norrliden Project.*

Andrew Van Der Zwan

Chairman

Competent Persons Statements

The information in this document that relates to exploration results, geological interpretation and drill hole information is based on information compiled by Amanda Scott, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Scott Geological AB. Amanda Scott has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Amanda Scott consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this document that related to mineral resource estimates is based on information reviewed and prepared by Mr Geoff Reed, who is a Member of the Australasian Institute of Mining and Metallurgy and is employed by Breakaway Mining Services (BMS). Mr Geoff Reed has over 20 years of diverse mining and exploration industry experience with various major mining and junior exploration companies in Australia and Sweden. Mr Reed has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Reed consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code 2012 Edition

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representability and the appropriate calibration of any measurement tools or systems used. 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. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Historic sampling method has been by diamond drilling. In the case of NAN it has been half-core sampling of non-conventional WL 56 drill core, in the case of SGU half-core of non-conventional WL39 drill core. • Historic sampling appears to have been representative with all visible sulphides having been sampled where checked. Sampling has been completed largely to geological boundaries. • NAN assaying was completed using 30g Fire Assay for gold and four-acid/ICP for multi-element assaying; Cone and later ALS Minerals carried out the assaying. • SGU sampling as completed to geological boundaries and assaying was completed by the state laboratory in Stockholm although the method of analysis is not known.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Diamond drilling, WL56 or WL39. • Historic drill core was not orientated. • Historic downhole surveying completed for all drillholes although specific instruments are not known. NAN completed a round of check downhole surveying completed using Devico in Norway.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• For both NAN and SGU core recoveries have been measured geologists and recorded in the drill logs. Sampling recoveries were on the whole very good. • A sampling bias has not been determined.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• For both NAN and SGU drillholes geological descriptions have been recorded including a description of the lithological, alteration and structural characteristic of the core. • All historic drillholes have been logged previously. NAN re-logged a large majority of the older SGU holes during the time they owned the project. • MRG has since re-logged select drillholes from both NAN and SGU drilling and is satisfied with the previous logging and sampling.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representability of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• All historic samples, both for NAN and SGU are half-core except for duplicate samples (NAN) in which case quarter-core samples have been taken. • The NAN sample preparation followed industry best practice sample preparation including jaw crushing followed by ring grinding. A 200-300g sub-sample of pulp was taken for digestion in a four-acid digest for multi-element analysis and fire assay for gold. • NAN duplicate sampling results were satisfactory with a repeatability of 95% or more for all elements. • NAN also using blank material as part of their QAQC routine and showed satisfactory results. • The sample sizes are considered appropriate for the type of mineralisation under consideration.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e.*	• NAN samples were assayed using a four-acid digest multi-element suite (33 elements or 48 elements) with ICPOES or ICPMS finish. The acids used are hydrofluoric, nitric, hydrochloric and perchloric with the method approaching near total digest for most elements. Gold was analysed via fire assay. • It is not known what analytical methods were used by SGU at the state lab. • NAN completed a rigorous QAQC campaign during their time including check assaying of the older SGU data, duplicate sampling and through the use of blank

Criteria	JORC Code explanation	Commentary
	lack of bias) and precision have been established.	material. NAN produce a QAQC report of which MRG has since reviewed and is satisfied with the results produced by NAN.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• MRG has not completed any independent check assaying of either the NAN or SGU drilling although MRG staff have re-logged a number of holes drilled by each party and is satisfied with both the logging and sampling completed. • MRG is not aware of any previous specific twin-hole drilling although several sets of NAN holes are drilled within ~1m of an older SGU hole and appear to be twins. • SGU logs were digitised by NAN and all NAN generated data was stored in Excel spreadsheets. MRG has completed a process of validation of all historic data prior to entering into an Access database. • No adjustments or calibrations were made to any assay data used in this document other than where specified with the appropriate metal equivalent calculations.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Historic drill hole locations have largely been set out on the local mine grid established by the SGU in the 1960's. • NAN drillholes were located using handheld GPS. • Historic downhole surveying completed for all drillholes although specific instruments are not known. NAN completed a round of check downhole surveying completed using Devico in Norway. • The grid system currently being used by MRG is Swedish Coordinate system RT90 2.5. The historic • Topographic control has been established by MRG and BMS by cross-correlating high resolution digital laser topographic imagery with the collar co-ordinates and have produced satisfactory results.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The drill profile separation at Norra is approximately 15-20m. • The drill profile separation at Bjurfors is approximately 50-60m. • The data spacing and distribution is considered sufficient to establish a relatively good degree of geological and grade continuity which is considered adequate for the greenfields exploration completed. • Sample compositing has been applied as part of the mineral resource estimate process; refer Table 3 below.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• The drill hole orientation is considered appropriate for the sampling completed, with the drill holes drilled perpendicular to the interpreted strike of the mineralisation. • No mineralised intercepts have been reported in this document. • No sample bias as a consequence of orientation-based sampling has been identified.
Sample security	• *The measures taken to ensure sample security.*	• For historic drillholes, sample security measures are not known.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No independent audits or review of sampling have been completed to date although MRG has completed an internal review and validation of the historic data prior to commencing the current mineral resource estimate and no major issues have been identified.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Norrliden Project is located within exploration licences Norrliden K nr 1 and Malånäset nr 100 owned 100% by MRG's Joint Venture Partner's (Mandalay Resources Ltd) Swedish subsidiary, Björkdal Exploration AB. Details of the Joint Venture Agreement were released to the ASX by MRG on the 29th of May 2017. • The licences are wholly owned by Explor Björkdalsgruvan AB and are predominantly located in an area of pine and birch forest. The area is used for seasonal grazing by local indigenous Sami reindeer herders. • The licence is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The mineralisation at Norrliden and Bjurfors was discovered by the Swedish Geological Survey (SGU) during the 1930's. Bjurfors Östra was mined during the second world war by mining company Boliden. The SGU completed a substantial amount of exploration at Norra during the 1960's. • More recent exploration was completed by North Atlantic Resources Ltd (NAN) during the 1990's and 2000's culminating in the lodgement and subsequent grant of a mining permit over Norra. • The previous operator prior to MRG was local Swedish company Copperstone Resources who had the joint venture agreement with Elgin Mining who was the previous owner prior to Mandalay.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Norrliden Project is located within the central part of the Skellefte Mining District in Northern Sweden. The district is centred in the Paleoproterozoic Skellefte Greenstone Belt which is comprised of felsic to mafic arc-volcanic rocks. The district is host to more than 85 known poly-metallic massive sulphide deposits which have largely been classified as VMS-type deposits. • At Norrliden Norra the mineralisation is hosted by rhyolite, quartz-feldspar porphyry, felsite and greenstones. The mineralisation is often surrounded by a well-developed alteration halo characterised by chlorite-sericite-silica. The mineralisation is present as massive-banded pyrite-sphalerite ore, stringer-type pyrite-pyrrhotite-chalcopyrite ore, massive pyrite-chalcopyrite ore and silica-sericite altered pyrite-sphalerite-galena ore. • At Bjurfors (Mellersta & Västra) the observed mineralisation is hosted by a silica-sericite altered felsic-intermediate volcanic unit that contains predominantly semi-massive to disseminated pyrite ore. • Geological evaluation by MRG is ongoing.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• No drill hole results reported in this document.

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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of*	• No drill hole results reported in this document.

Criteria	JORC Code explanation	Commentary
	low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Observations from drill hole and resource modelling indicate that drilling is cutting across the foliation plane, and interpreted plane of mineralisation at around 60-70 degrees.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• The appropriate figures, plans and maps have been included in this document.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• No drill hole results reported in this document. • This document provides the total information available to date and is considered to represent a balanced report.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• All meaningful and material information has been reported in this document.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Bottom-till geochemistry drilling completed in May 2018 with results pending. Follow-up and infill drilling if results are positive. • Follow-up diamond drilling at Norra, Södra and Bjurfors.

Criteria	JORC Code explanation	Commentary
Database Integrity	• *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.* • *Data validation procedures used.*	• The Data base was validated by MSAccess. All drill logs have been validated digitally by MRG's database administrator. • BMS also performed data audits in Maptek Vulcan and checked collar coordinates, down hole surveys and assay data for errors; no Errors were found.
Site Visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Competent Person Geoff Reed has previously visited the SGU core archive in Malå where the historic drill core is stored. Mr Reed has also previously visited the project area. • Mr Reed has not made a site visit in 2018.
Geological Interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the geological interpretation for the deposits is considered to be good. The Norrliden Project mineralisation is located within the Paleoproterozoic (c. 1890-1870 Ma) Skellefte greenstone belt. • The mineralised domains are wireframed based on geochemistry and geological logs from drillholes. • BMS wireframed two high grade domains (at a nominal 3% zinc equivalent grade) and one low grade domain (at a nominal 1% zinc equivalent grade) of the mineralisation for Norra. The wireframes were applied as hard boundaries in the estimate. BMS wireframed three low grade domains (at a nominal 1% zinc equivalent grade) of the mineralisation for Bjurfors. The wireframes were applied as hard boundaries in the estimate. • The dip and strike of the geology, along with geological contacts were used to determine the geometry of the

Criteria	JORC Code explanation	Commentary
		interpreted mineralisation wireframes. • Wireframes were created using the drillholes and database provided with three-dimensional interpretation in cross-section, long section and plan views to ensure suitable continuity in all directions.

Dimensions	• *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.*	• The extent of the mineralisation is shown below (along strike length x (maximum depth from surface x width):
		  ○ - Norra: 220 m x 300m (variable) x 7 – 16m (variable)
		  ○ - Bjurfors: 600 m x 200m (variable) x 5 – 22m (variable)
		• The Norra mineralisation strikes approximately 115 degrees and dip varies between 60 and 70 degrees to the southwest.
		• The Bjurfors mineralisation strikes approximately 112 degrees and dip varies between 40 and 50 degrees to the southwest.

Estimation and Modelling Techniques	• *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.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• Ordinary Kriging (OK) was used to estimate average block grades within the mineralised domains using Maptek Vulcan software. The block size used in the model was based on drill sample spacing and mineralisation orientation and Kriging Neighbourhood Analysis (KNA). The Norra deposit parent block size of 50m x 25m x 25m with sub-cells of 12.5m x 3.125m x 3.125m and 1m composites were used for the 3 mineralised domains. • The Bjurfors deposit parent block size of 20m x 20m x 10m with sub-cells of 2m x 2m x 1m and 1m. 1m composites were used for the 3 mineralised domains. • Block discretisation was set to 3 by 3 by 3. • An oriented "ellipsoid" search was used to select data and was based on parameters taken from the variography. • The variography was conducted using Snowdon's Supervisor software. • An Inverse Distance (IVD) check estimate in Maptek Vulcan software has been carried out by BMS. • Previous resource estimates have been completed and compare well with the current estimate. • An oriented ellipsoid search was used to select data and was based on geometry of the deposit and drill hole spacing. • The Norra initial interpolation pass was used with a maximum distance of 32m which filled on average 36% of blocks. The second interpolation pass was used with a maximum distance of 69m which filled on average 53% of blocks. The remaining blocks were filled by expanding the search distance to 310m and reducing the minimum samples to 2. A minimum of 10 samples and a maximum of 30 samples was used for the first and second passes. A minimum of 2 sample was used for the third pass. High grade cuts were applied. • The Bjurfors initial interpolation pass was used with a maximum distance of 50m which filled on average 16% of blocks. The second interpolation pass was used with a maximum distance of 100m which filled on average 57% of blocks. The remaining blocks were filled by expanding the search distance to 300m and reducing the minimum samples to 2. A minimum of 10 samples and a maximum of 30 samples was used for the first and second passes. A minimum of 2 sample was used for the third pass. • BMS wireframed two high grade domains (at a nominal 3% zinc equivalent grade) and one low grade domain (at a nominal 1% zinc equivalent grade) of the mineralisation for Norra. The wireframes were applied as hard boundaries in the estimate. • BMS wireframed three low grade domains (at a nominal 1% zinc equivalent grade) of the mineralisation for Bjurfors. The wireframes were applied as hard boundaries in the estimate. • No assumptions have been made on selective mining

Criteria	JORC Code explanation	Commentary
		units. • No assumptions have been made about correlation between variables. • No assumptions have been made regarding recovery of by-products. • No estimation of deleterious elements was carried out. • Values for Zn, Cu, Au, and Ag were interpolated into the block model. • Selective mining units were not modelled in the mineral resource estimate. • The interpolated grades were validated by visually comparing input composite sample grades to block grades, statistically comparing grades by domain and by validation (Swath) plots plotting grade in blocks and samples by Easting and Northing.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis, using a bulk in-situ density. No moisture values were reviewed.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The mineral resource estimate has been reported at a 1% Zn Eq. cut off and also modelled at a 3% Zn Eq. cut-off. The results of the 3% Zn Eq. cut-off have not been reported in this document. • Based on recommendations through the Kriging Neighbourhood Analysis (KNA), a series of high-grade cuts were determined and implemented on the low-grade domains (lg, 2a, 2b and 2c) and the high-grade domains (hg1 and hg2).
Mining factors or assumptions	• *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.*	• The deposit has not previously been mined. • For the mineral resource estimate it has been assumed that open pit mining of both deposits is possible at the project. • No mining parameters or modifying factors have been applied to the mineral resource estimate. • A whittle pit optimisation analysis has been estimated for the deposit and assumptions are in Table 5 of this report. • A pit optimisation analysis has been completed to determine the reasonable prospects for eventual economic extraction for each of the two deposits at the conclusion of the mineral resource estimate. • The optimisation analysis has been completed by Vanguard Consulting using Deswik CAD software. • The analysis and assumptions are conceptual in nature
Metallurgical factors or assumptions	• *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.*	• No metallurgy parameters or modifying factors have been applied to the Mineral Resource.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal 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.*	• No environmental factors or assumptions have been taken into account. • The area is not known to be environmentally sensitive and the Norra deposit is located on a granted mining licence and there is no known hindrance to obtaining an environmental court approval to commence mining in the future. The Bjurfors Mellersta and Västra deposits a located less than 200m west of the old open-pit and waste dumps from the historic Östra mine and similarly there is no known impediments to obtaining a mining permit and subsequent environmental court permit at Bjurfors. • Numerous base metal and gold operations are present in this region of Sweden. The operating Maurliden mine is located approximately 2km northwest of Norrliden.

Criteria	JORC Code explanation	Commentary
Bulk density	• *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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The average density of 3.33t/m³ has changed from the previous mineral resource estimate 3.38. The average density is based on the average density of high-grade domains being 3.5 t/m³ and low-grade domains being 3.16 t/m³. • Bulk density determinations were made on samples from drill core using the weight in air/weight in water method. • Bulk density was assigned to the block model using average values per domain.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Mineral resources have been classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC code, 2012). • The mineral resource for Norra has been classified as Measured, Indicated and Inferred on the basis of data quality, sample spacing, and lode continuity. • The mineral resource for Bjurfors has been classified as Indicated and Inferred on the basis of data quality, sample spacing, and lode continuity. • The Mineral Resource estimate appropriately reflects the view of the competent person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• There have been no audits or reviews of the mineral resource estimates.
Discussion of relative accuracy/ confidence	• *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.* • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Norra and Bjurfors deposit mineral resource estimates are considered to be reported with a high degree of confidence. The consistent deposit geometry and continuity of mineralisation is reflected in the mineral resource classification. The data quality is good and the drill holes have detailed logs produced by qualified geologists. • The mineral resource statements published in this document relate to both a global estimate of tonnes and grade and the individual deposits themselves. • The deposits are not currently being mined.