CASSINI RESOURCES LIMITED

ABN: 50 149 789 337

ASX Announcement 25 February 2015

Nebo-Babel Resource Provides Excellent Foundation for Scoping Study

- **Updated Mineral Resource Estimate of 31.2Mt @ 0.7% Ni and 0.6% Cu**
  - **Contains globally significant 218,000t of Ni and 187,000t of Cu**
- **Favourable geometry confirmed (shallow, flat lying), ideal for open pit mining**
- **Higher grade mineralisation proven to be continuous**
- **Higher grade mineralisation concentrated at the top of the orebody**
- **Very low levels of arsenic and other deleterious elements detected, and a smelter-friendly Fe:MgO ratio**
- **Excellent foundation for the Scoping Study which is due in March 2015**

Cassini Resources Limited (ASX:CZI) ("**Cassini**" or the "**Company**") is pleased to announce the upgraded Mineral Resource estimate for the Nebo-Babel Deposits at Cassini's 100% owned West Musgrave Project (the "**Project"**).

Globally Significant Resource – Updated Estimate

Cassini engaged independent resource consultants CSA Global Pty Ltd (CSA Global) to provide an updated Mineral Resource estimate for both Nebo and Babel Deposits, incorporating results from the Company's 2014 drilling program, which is summarised in Table 1.

Table 1. Nebo-Babel Indicated and Inferred Mineral Resource (0.45% Ni cut off) - February 2015

Prospect	Classification	Tonnes Mt	Ni %	Cu %	Co ppm	Fe_2O_3 %	MgO %	As ppm	S %
Nebo	Indicated	7.6	0.9	0.6	353	21.4	3.6	2.3	5.2
	Inferred	0.9	1.2	0.8	424	24.4	3.9	3.0	8.6
	Total	**8.6**	**0.9**	**0.7**	**361**	**21.7**	**3.6**	**2.4**	**5.6**
Babel	Indicated	10.0	0.6	0.7	191	18.6	6.1	2.1	4.1
	Inferred	12.7	0.6	0.5	179	16.5	6.7	2.4	3.5
	Total:	**22.6**	**0.6**	**0.6**	**185**	**17.4**	**6.4**	**2.3**	**3.8**
Combined	**Total:**	**31.2**	**0.7**	**0.6**	**233**	**18.6**	**5.7**	**2.3**	**4.3**

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The new Mineral Resource estimate totals 31.2Mt @ 0.7% Ni and 0.6% Cu (0.45% Ni cut-off), with a significant portion now in the higher confidence Indicated category. The Mineral Resource estimate has been completed in accordance with the guidelines of the JORC Code (2012 edition).

Cassini considers that there is substantial upside associated with the Resource, given the likelihood of extensions to known mineralisation. Furthermore, there is a significant impact from changes in the cut-off grade – reducing from 0.45% to 0.4% Ni nearly doubles the size of the Resource from 31.2Mt to 58.4Mt.

Updated Mineral Resource Completes Successful Drill Program

The Mineral Resource estimate is the culmination of Cassini's 2014 drill campaign comprising 147 reverse circulation holes for 23,135m. The program successfully achieved its primary goals – to demonstrate the continuity of higher grade zones within the orebody, as well as upgrading a large portion of the Inferred Mineral Resource to Indicated category.

As a bonus, the program also resulted in some excellent exploration success, with drilling successfully identifying additional mineralised zones, such as the Sugar Lode at Nebo and the northern margin at Babel (CZC0129).

Cassini's drill program targeted only those portions of the deposits at depths likely to be amenable to open pit mining. This indicates that a significant portion of the Mineral Resource to be included in the Company's Scoping Study will fall in the higher confidence Indicated category. Furthermore, the geometry of the mineralisation is conducive to open pit mining methods being close to surface and flat dipping.

Importantly, the revised Mineral Resource estimate confirms that the Nebo Babel deposits are low in arsenic and other deleterious elements and should produce high quality concentrates with a smelter-friendly Fe:MgO ratio. More detailed metallurgical testwork and analysis is on schedule, and will be released in the imminent scoping study.

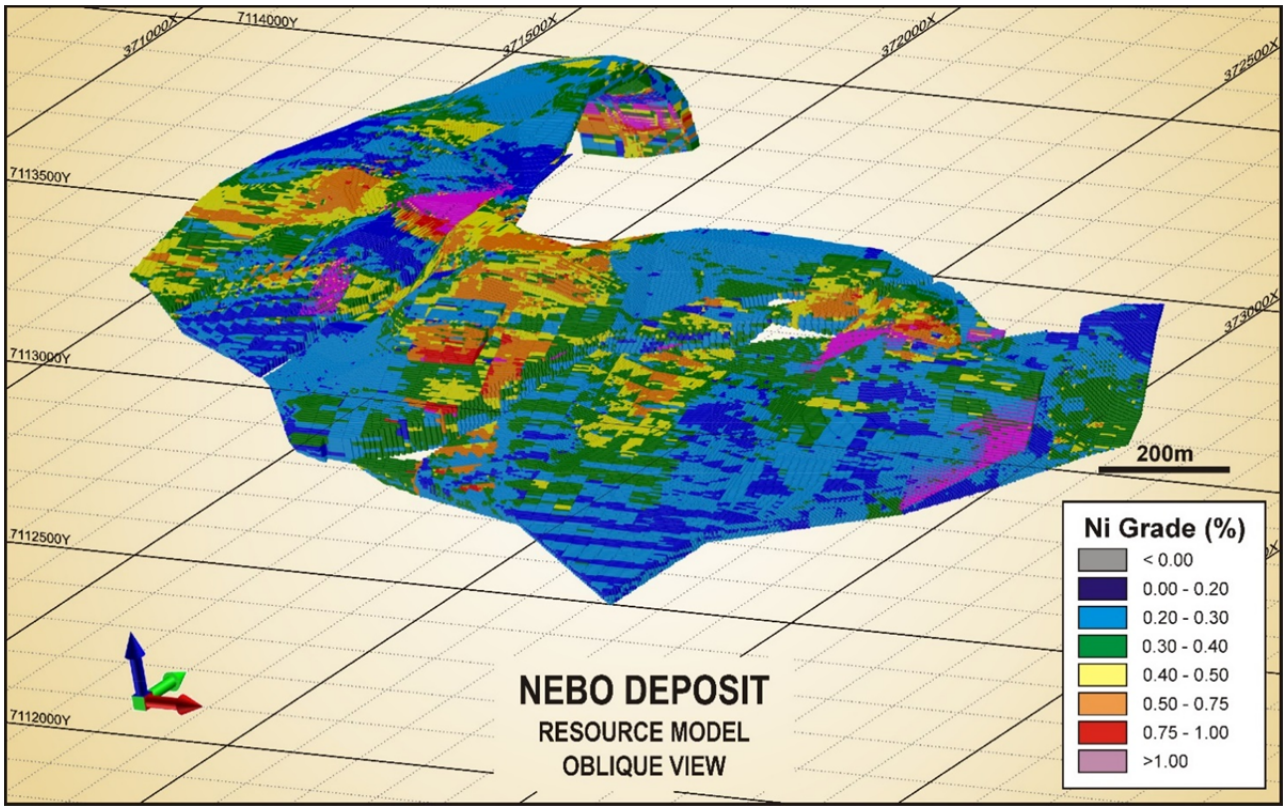
Imminent Scoping Study

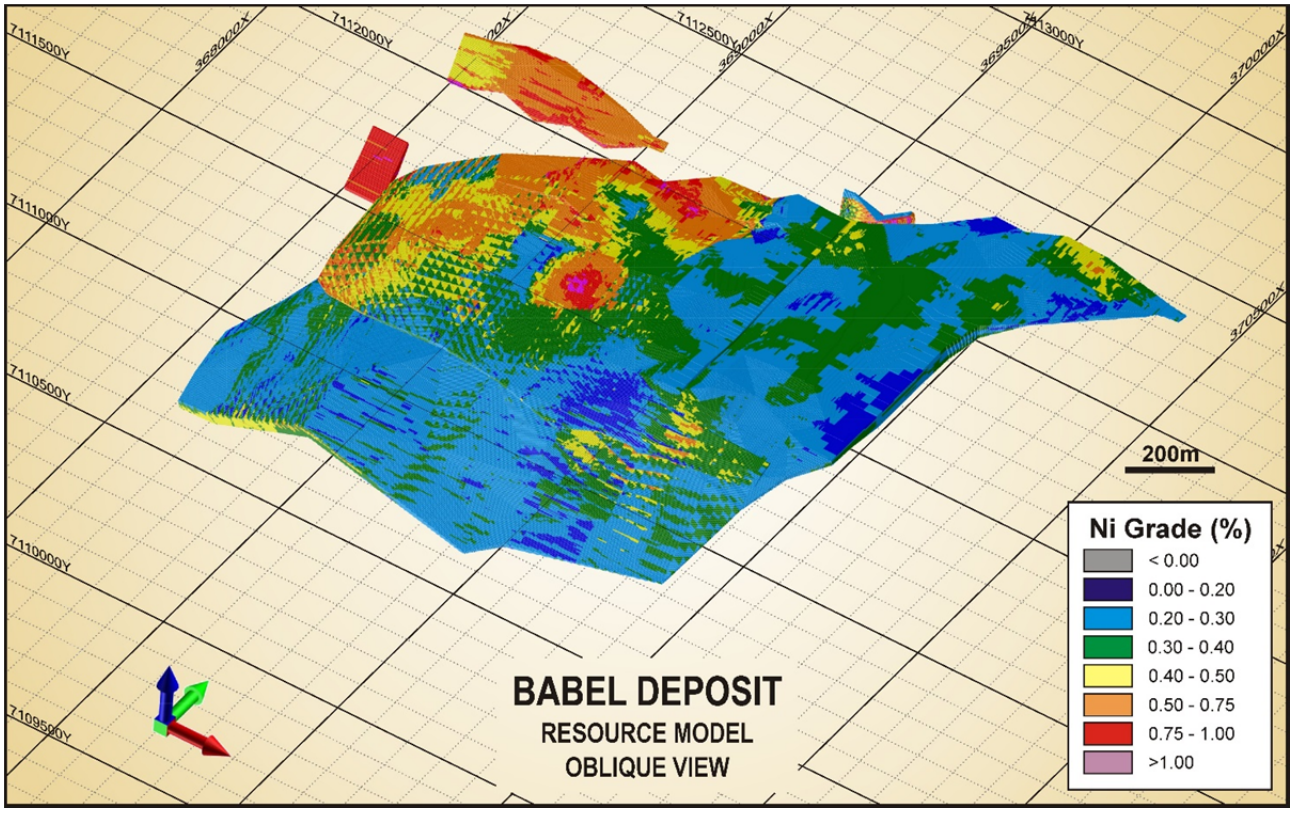
Cassini's Scoping Study for Nebo-Babel is on track for release in March 2015. In addition to resource consultants CSA Global, Strategic Metallurgy is preparing the metallurgy analysis and Bill Cunningham from WH Cunningham & Associates has undertaken preliminary concentrate marketing analysis. The Scoping Study will provide a comprehensive analysis detailing all material aspects of the Project.

Cassini is exceptionally pleased with the progress of the Scoping Study and the detailed work that has gone into its preparation, aspects of which are closer to a pre-feasibility level of certainty.

Managing Director Comment

Cassini's Managing Director, Richard Bevan said *"The new Resource provides us with a strong level of confidence around the integrity of the deposits, and also great encouragement around potential project economics. Although the Resource is of a strongly economic grade and very large as it stands, there is significant upside given the potential to discover additional higher grade material with further drilling. This result is an excellent platform for the imminent Scoping Study."*





Figures 1 & 2 – Nebo-Babel Resource Models

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Geology & Technical Resource Information

The Nebo and Babel deposits are hosted in a mafic intrusion, which has intruded into an amphibolite facies orthogneiss country rock. The intrusion is a tube-like body comprised of several, subtly different gabbronorite bodies, which have intruded along the same pathway. Subsequent units have generally intruded internal to the previous intruded unit, creating an inflated, concentrically ringed chonolith. Mineralisation mainly occurs as continuous layers of low-grade disseminated mineralisation within a distinct recognised unit of the gabbronorite. The two deposits are originally thought to be part of the one orebody but have been subsequently dislocated by approximately 1km by a later stage cross-cutting fault.

Cassini field QAQC procedures involves the use of certified reference material (CRM) as assay standards, along with blanks and duplicates. The insertion rate of these averaged 1:15 with an increased rate in mineralised zones. Historical QAQC was routinely conducted throughout historical drilling and although methodologies changed over time, no material issues were identified and the data is reliable.

The drilling database was combined with the historical legacy data from 177 RC and diamond holes with good quality sampling of mineralisation. The combined data formed the base for a new interpretation and construction of a new geological model.

The estimate was completed using Ordinary Kriging and classified as Indicated and Inferred based on a number of factors including drill hole density and geological continuity. A cut-off grade of 1% S and/or0.2% Ni was used for wireframing of mineralisation. Higher grade 'massive sulphide' mineralisation at Nebo was wireframed using a combination of geological logging and a nominal 10% S cut-off grade. A cut-off grade of 0.45% Ni was used for reporting of the Mineral Resource estimate based on statistical analysis of grade variability and comparison against similar disseminated-style deposits.

Cut Off Grade Sensitivities

The tonnage and contained metal within the resource is highly sensitive to the grade cut-off applied as demonstrated in Table 2.

Table 2. Nebo-Babel Indicated and Inferred Mineral Resource (various cut-offs)- February 2015

Prospect	Ni% Cut-off	Classification	Tonnes Mt	Ni %	Cu %	Co ppm	Fe_2O_3 %	MgO %	As ppm	S %
Nebo	0.2	Indicated	50.4	0.4	0.4	161	13.9	5.3	1.9	2.2
		Inferred	8.4	0.4	0.3	143	13.2	6.1	2.6	2.3
		Total	**58.8**	**0.4**	**0.4**	**159**	**13.8**	**5.4**	**2.0**	**2.2**
Babel		Indicated	133.2	0.3	0.4	121	13.8	7.5	2.0	2.0
		Inferred	218.7	0.3	0.3	119	14.0	7.7	2.2	2.0
		Total:	**351.9**	**0.3**	**0.4**	**120**	**13.9**	**7.7**	**2.1**	**2.0**
Combined		**Total:**	**410.7**	**0.3**	**0.4**	**126**	**13.9**	**7.3**	**2.1**	**2.0**
Nebo	0.4	Indicated	10.9	0.8	0.6	305	19.5	3.9	2.2	4.3
		Inferred	1.2	1.0	0.7	376	22.2	4.0	2.9	7.4
		Total	**12.0**	**0.8**	**0.6**	**312**	**19.8**	**3.9**	**2.3**	**4.6**
Babel		Indicated	18.6	0.5	0.6	171	16.9	6.9	2.0	3.4
		Inferred	27.7	0.5	0.5	160	15.9	7.6	2.6	3.0
		Total:	**46.3**	**0.5**	**0.5**	**164**	**16.3**	**7.3**	**2.4**	**3.1**
Combined		**Total:**	**58.4**	**0.6**	**0.5**	**195**	**17.0**	**6.6**	**2.4**	**3.4**
Nebo	**0.45**	Indicated	7.6	0.9	0.6	353	21.4	3.6	2.3	5.2
		Inferred	0.9	1.2	0.8	424	24.4	3.9	3.0	8.6
		Total	**8.6**	**0.9**	**0.7**	**361**	**21.7**	**3.6**	**2.4**	**5.6**
Babel		Indicated	10.0	0.6	0.7	191	18.6	6.1	2.1	4.1
		Inferred	12.7	0.6	0.5	179	16.5	6.7	2.4	3.5
		Total:	**22.6**	**0.6**	**0.6**	**185**	**17.4**	**6.4**	**2.3**	**3.8**
Combined		**Total:**	**31.2**	**0.7**	**0.6**	**233**	**18.6**	**5.7**	**2.3**	**4.3**
Nebo	0.5	Indicated	5.5	1.1	0.7	406	23.8	3.2	2.6	6.5
		Inferred	0.8	1.3	0.8	459	26.0	3.8	3.2	9.6
		Total	**6.3**	**1.1**	**0.7**	**412**	**24.1**	**3.3**	**2.6**	**6.9**
Babel		Indicated	6.9	0.7	0.8	206	19.8	5.6	2.2	4.6
		Inferred	7.3	0.7	0.5	199	17.4	6.0	2.2	4.0
		Total:	**14.2**	**0.7**	**0.7**	**202**	**18.6**	**5.8**	**2.2**	**4.3**
Combined		**Total:**	**20.5**	**0.8**	**0.7**	**267**	**20.3**	**5.0**	**2.4**	**5.1**

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About Cassini

Cassini Resources Limited (ASX: CZI) is an Australian resource company that successfully listed on the ASX in January 2012. In April 2014, Cassini acquired the Nebo and Babel nickel and copper sulphide deposits in the Musgrave region of WA. The Company's primary focus is now on the development of these deposits and progressing them through to successful mineral production as a matter of priority.

Cassini aims to progress its development projects, to explore and add value to its exploration stage projects with the aim of increasing shareholder value.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Mr Greg Miles, who is an employee of the company. Mr Miles is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Miles consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

The information in this report that relates to the Mineral Resources has been compiled by Mr Aaron Green, who is a full-time employee of CSA Global Pty Ltd. Mr Green 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 a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Green consents to the disclosure of this information in this report in the form and context in which it appears.

ANNEXURE 1:

The following Tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of the Exploration Results and Resource Estimate at the Nebo deposit.

Section 1: Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg 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.*	The Nebo and Babel deposits were sampled using diamond drill holes (DD) and Reverse Circulation (RC) drill holes on a nominal spacing of 50m x 100m at Nebo and on a nominal spacing of 100m x 100m at Babel. Cassini completed a total of 86 RC drill holes for 12,816m and 2 DD drill holes for 187.1m at Nebo; and a total of 61 RC drill holes for 10,319m and 3 DD drill holes for 382m at Babel. Previous drilling, completed by WMC and BHP Billiton included diamond drilling and reverse circulation. A total of 33 DD and 2 RC drill holes were included in the Resource for Nebo and a total of 54 DD and 3 RC at Babel. Holes were generally angled towards grid north at 60 degrees (Nebo) and at 70 degrees (Babel) dip angles to optimally intersect the mineralised zones.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Drill hole locations were picked up and downhole surveyed by survey contractors. Diamond core and RC drilling was used to delineate the resource. The RC samples have been obtained by a cone splitter. Diamond core was used to obtain high quality samples that were logged for lithological, structural, density and other attributes. Sampling for drilling post 2014 was carried out under Cassini protocols and QAQC procedures as per industry best practice. Cassini does not have access to historical sample practices, however Cassini has inferred from project database that diamond sampling was selective based on geological logging and observations and it is assumed that the previous operators had procedures in place in line with industry best practice.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 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 (eg submarine nodules) may warrant disclosure of detailed information.	Diamond core is HQ and NQ2 size, sampled on visible variation in rock type and range from 0.05m to 2.0m. Half core appears to have been routinely analysed, and in some cases a further 25% of the core analysed (quarter core). Samples were crushed, dried and pulverised (total prep) to produce a sub sample for a combination of Fusion XRF, Four Acid Digest ICP and Fire Assay methods. Reverse Circulation drilling was used to obtain 1m samples for Nebo and 2m samples for Babel. From which 3 kg was pulverised (total prep) to produce a sub sample for analysis. The analytical suite consisted of a combination of fused bead X-ray fluorescence (for whole rock elements Si, Al, Fe, Ti, Ca, Na, K, Mg, P, S, Zr, Mn, Cr, and V), four acid digest (hydrochloric, nitric, hydrofluoric and perchloric acid) followed by an ICP-AES and ICP-MS finish (for Co, Cu, Zn, Ni, As, Nb and Y), and fire assay with a silver secondary collector and ICP-MS finish for Pt, Pd and Au. Loss on ignition (LOI) was measured gravimetrically at 1000°C.

Criteria	JORC Code explanation	Commentary
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 of standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).*	At Nebo, diamond drilling accounts for 33% of the drilling and comprises HQ and NQ2 sized core. At Babel, diamond drilling accounts for 51% of the drilling and comprises HQ and NQ2 sized core. RC drilling comprises 140 mm diameter face sampling hammer drilling. Hole depths range from 42 to 300m. For Cassini drilling, diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Historical drill core was orientated, however the method is unknown.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	For Cassini drilling, Diamond core and RC recoveries are visually logged for every hole and recorded in the database. Actual recoveries for RC drilling were calculated for the first two drill holes for each rig and for every tenth hole thereafter. Overall recoveries are >95% and there have been no significant sample recovery problems. Of the 87 historical diamond drill holes that are used in resource, Cassini has confirmed that 37 DD holes had recovery details recorded. Cassini is not aware of recovery records for the remaining holes.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	For Cassini drilling, diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the drillers. RC samples are routinely checked for recovery, moisture and contamination. Cassini is not aware of the historical drilling practices employed to maximise recoveries.
	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.	The massive sulphide style of the mineralisation and the consistency of the mineralised intervals are considered to preclude any issue of sample bias due to material loss or gain.
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.*	Drill core and chip samples have been geologically logged and the level of understanding of these variables increases with the maturity of the prospect.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging of diamond core and RC samples at Nebo and Babel recorded lithology, mineralogy, mineralisation, structural (DDH only), weathering, colour and other relevant features of the samples. Logging is both qualitative (eg. colour) and quantitative (eg. mineral percentages). Core was photographed in both dry and wet form.
	The total length and percentage of the relevant intersections logged.	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Core for Nebo and Babel was cut in half and half core submitted as a first pass analysis. In some cases, further quarter core was analysed.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were collected on the rig using cone splitters. All samples in mineralised zones were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation of RC samples for Nebo and Babel follows industry best practice in sample preparation involving oven drying, followed by pulverisation of the entire sample (total prep) using Essa LM5 grinding mills to a grind size of 90% passing 75 micron.

Criteria	JORC Code explanation	Commentary
		The sample methodologies for diamond core are identical, with the addition of coarse crushing of the half core sample prior to pulverisation.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Cassini field QAQC procedures involves the use of certified reference material (CRM) as assay standards, along with blanks and duplicates. The insertion rate of these averaged 1:15 with an increased rate in mineralised zones. Historical QAQC was routinely conducted throughout historical drilling, however methodologies changed over time.
	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.	Cassini field duplicates were taken on 1m (at Nebo) and 2m (at Babel) composites directly from the cone splitter. Historical methodology varied, however a combination of sample standards (CRM), blanks and field duplicates were submitted.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the rock type, style of mineralisation (massive and disseminated sulphides), the thickness and consistency of the intersections, the sampling methodology and percent value assay ranges for the primary elements at Nebo and Babel.
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.*	Cassini drilling analytical techniques used a four acid digest multi element suite with ICP/AES or ICP/MS finish (25 gram) for base metals and a FA/AAS for precious metals. The acids used are hydrofluoric, nitric, perchloric and hydrochloric acids, suitable for silica based samples. Total sulphur and whole rock elements were assayed by XRF. Information is not available for drilling completed between 2000-2002. For samples analysed 2003-2012, a combination of Fire Assay, Mixed Acid Digest ICP and Fusion XRF methods was employed. Fire Assay and Fusion XRF methods are considered a complete digest. Four Acid Digest analyses approach a total digest for most minerals, however some refractory minerals are not completely attacked.
	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.	Hand held assay devices have not been reported.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Cassini drilling • Sample preparation for fineness were carried by the laboratory as part of their internal procedures to ensure the grind size of 90% passing 75 micron was being attained. Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in-house procedures. • Certified reference materials, having a good range of values, were inserted blindly and at a rate of every 20th sample. Results highlight that sample assay values are accurate and that contamination has been contained. • Repeat or duplicate analysis for samples reveals that precision of samples is within acceptable limits.

Criteria	JORC Code explanation	Commentary
		Historical drilling • Previous operators employed QAQC procedures involving the use of certified reference materials. These procedures have varied over the life of the project. Minor evidence for assay bias and contamination has been observed.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Both the Exploration Manager and the Technical Director of Cassini have viewed the RC chip samples and the historical drill core.
	The use of twinned holes.	Twin holes have not been completed.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Cassini collected data for the West Musgraves Project using a set of standard Field Marshal templates on laptop computers using lookup codes. The information was sent to Geobase Australia for validation and compilation into a SQL database server. Previous operators collected data electronically and stored it on an acQuire database.
	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data used in either estimate.
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.*	Cassini drilling • Hole collar locations were surveyed by MHR Surveyors of Cottesloe using RTK GPS with the expected relative accuracy compared to the Control Point established by MHR. Expected accuracy is ± 5cm for easting, northing and elevation coordinates. • Downhole surveys were completed every 5m using Reflex gyroscopes after hole completion by McKay Drilling. Stated accuracy is ± 0.25° in azimuth and ± 0.05° in inclination. • A north-seeking gyroscope was used to pick up the starting azimuth and dip and this data was used to process the Reflex gyroscope data. Historical drilling • Previous operators survey drill holes by handheld and/or differential GPS. Differential GPS positions have reported accuracy of ± 5cm for easting, northing and elevation coordinates. Accuracy of handheld GPS is unknown. • All drill holes were surveyed downhole by single shot downhole camera. Many of the drill holes have substantial deviation from the initial azimuth which is believed to be the effects of magnetic minerals within certain geological units. The reliability of the historical downhole surveying is considered poor.
	Specification of the grid system used.	The grid system for the West Musgrave Project is MGA_GDA94, Zone 52.
	Quality and adequacy of topographic control.	Topographic control was provided by drill collar pickups. The area exhibits subdued relief with undulating sand dunes and topographic representation is considered sufficiently controlled.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The nominal drill hole spacing in the core of the deposit at Nebo is 50m (northing) by 100m (easting) and at Babel is 100m (northing) by 100m (easting).
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade	The mineralised domains for Nebo and Babel have demonstrated sufficient continuity in both geological

Criteria	JORC Code explanation	Commentary
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	and grade continuity to support the definition of Mineral Resources and Reserves, and the classifications applied under the 2012 JORC Code.
	Whether sample compositing has been applied.	Samples were been composited direct from the splitter to one (1) metre lengths for Nebo and two (2) metre lengths for Babel. Samples were adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit).
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.*	The Nebo and Babel deposits are drilled towards grid north at 60° (Nebo) and at 70° (Babel) to intersect the mineralised zones at a close to perpendicular relationship for the bulk of the deposit.
	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.	To date, mineralisation orientation has been favourable for perpendicular drilling and sample widths are not considered to have added a sampling bias.
Sample security	*The measures taken to ensure sample security.*	For drilling completed by Cassini, the sample chain of custody is managed by Cassini. Samples for the West Musgrave Project are stored on site and delivered to Perth by recognised freight service and then to the assay laboratory by a Perth-based courier service. Whilst in storage the samples are kept in a locked yard. Tracking sheets tracks the progress of batches of samples. No information is available for historical drilling sample security.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	A review of the sampling techniques and data was carried out by CSA Global during September 2014. The sampling techniques and data were considered to be of sufficient quality to carry our resource estimation.

Section 2: Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

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.*	Nebo is located wholly within Mining Lease M69/0074. Babel is located Mining Leases M69/0072 and M69/0073. Cassini entered into an agreement to acquire 100% of the leases comprising the West Musgrave Project (M69/0072, M69/0073, M69/0074, M69/0075, E69/1505, E69/1530, E69/2201, E69/2069, E69/2070, E69/2313, E69/2338), over which the previous operator retains a 2% NSR. The tenement sits within Crown Reserve 17614.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	All tenements are in good standing and have existing Aboriginal Heritage Access Agreements in place. No Mining Agreement has been negotiated.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Previous exploration has been conducted by BHP Billiton and WMC. The work completed by BHP Billiton and WMC is considered by Cassini to be of a high standard.
Geology	*Deposit type, geological setting and style of mineralisation.*	The deposits are located within the West Musgrave Province of Western Australia, which is part of an extensive Mesoproterozoic orogenic belt. The Nebo and Babel deposits are hosted in a mafic intrusions of the Giles Complex (1068Ma) that has intruded into amphibolite facies orthogneiss country rock. Mineralisation is hosted within tubular chonolithic

Criteria	JORC Code explanation	Commentary
		gabbronorite bodies and are expressed primarily as a broad zones of disseminated sulphides and comagmatic accumulations of, matrix to massive and breccia sulphides.
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.*	Refer to the body of this report for significant intercepts pertaining to this announcement.
	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.	Not applicable, all information is included.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Weighted averages for the Nebo and Babel deposits were calculated using parameters of a 0.4% Ni and/or Cu lower cut-off, minimum reporting length of 2m, maximum length of consecutive internal waste of 4m and the minimum grade of the final composite of 0.4% Ni and/or Cu.
	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.	Short lengths of high grade results use a nominal 1% Ni and/or Cu lower cut-off, no minimum reporting length and 2m maximum internal dilution.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are currently being used for reporting exploration results.
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 (eg 'down hole length, true width not known').*	Mineralisation at Nebo-Babel is a shallow dipping, south-westerly plunging body of variably mineralised mafic rock. Mineralisation is generally intersected with true-width down-hole lengths. Refer to Annexure 1 and Figures in body of text.
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.*	Refer to Figures in body of text.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All results are reported.
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 relevant exploration data is shown on figures, in text and Annexure 1.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or*	Further infill drilling is warranted to improve the confidence of the remaining inferred resources.

Criteria	JORC Code explanation	Commentary
	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.*	Additional exploration drilling is also warranted to extend the known resource. All relevant diagrams and inferences have been illustrated in this report.

Section 3 Estimation and Reporting of Mineral Resources (Criteria listed in the preceding section also apply to this section

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.*	The drillhole database is maintained externally by GeoBase Australia Pty Ltd. All data is sent directly to Geobase for compilation into a SQL database server. The database is regularly validated and checked Previous operators collected data electronically and stored it on an acQuire database.
	Data validation procedures used.	All data is regularly validated by Geobase and Cassini. CSA Global has reviewed and audited selected portions of the database and approved the data for use in the resource estimation.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Aaron Green, CSA Director – Australian Operations and Competent Person for the Mineral Resources visited the West Musgrave Project from 22nd to 24th September 2014.
	If no site visits have been undertaken indicate why this is the case.	Not applicable as site visit undertaken.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Geological interpretation was completed by Cassini staff geologists. The geological interpretations were found to be of a high standard. Continuity of mineralisation is very good and is intimately associated with the brecciated contact of a mafic (gabbronorite) intrusive into the surrounding orthogneiss host rock. The geological interpretation provided a sound foundation for interpretation of boundaries to the Ni-Cu mineralisation.
	Nature of the data used and of any assumptions made.	Detailed geological logging in conjunction with the chemical assays has been used to identify individual lithological units during the interpretation process. Ni, Cu, S and lithology were plotted on drill hole traces to assist the interpretation.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	The disseminated mineralisation is closely associated with the brecciated gabbronorite intrusive contact. Infill drilling has closely supported previous interpretations. Alternative interpretations are likely to materially impact on the Mineral Resource estimate on a local but not global basis.
	The use of geology in guiding and controlling Mineral Resource estimation.	Geology has been the primary influence in controlling the Mineral Resource estimation. Wireframes have been constructed for the various lithological zones, host rock and oxidation state as determined by the geological logging and chemical assays.

Criteria	JORC Code explanation	Commentary
	The factors affecting continuity both of grade and geology.	Continuity of geology and structures can be identified and traced between drillholes by visual, geophysical and geochemical characteristics. Breccia zones related to the mafic intrusion, and hosing a significant portion of the mineralisation, have been logged in the drill core and chips and have been modelled.
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 Nebo Mineral Resource is contained within an area defined by a strike length of 1,585m and across-strike width of 1,170m. All reported mineral resources lie within 280m of surface. The Babel Mineral Resource is contained within an area defined by a strike length of 2,150m and across-strike width of 1,415m. All reported mineral resources lies within 790m of surface.
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 Mineral Resource area was separated into two separate deposits as follows: • Nebo • Babel Hard boundaries were placed between disseminated and massive sulphide domains which is consistent with the geological interpretation. No high grade cuts were applied following statistical analysis. Variography was completed for Ni, Cu and S only on both deposits. Ni parameters were used for the estimation of Co, Au, As, Pt, Pd, Fe_2O_3, MgO. A multiple-pass search ellipse strategy was adopted whereby search ellipses were progressively increased if search criteria could not be met. The search parameters were based on the semi-variogram ranges and the drilling density. Ordinary kriging has been adopted for grade estimation for both the Nebo and Babel deposits. The Micromine 'unfolding' process was used for grade interpolation due to the highly variable orientation of the mineralisation around the Nebo and Babel intrusive host rocks. Statistical and geostatistical analysis was completed using GeoAccess and Micromine software. All geological modelling was completed using Surpac software. Block model construction and grade interpolation was completed using Micromine software. All software packages are used commonly in the mining industry.
	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 following Mineral Resource estimates have been completed previously: 2008 – QG (Nebo, Babel) 2012 – Golder (Nebo, Babel) 2014 – Xstract (Babel only) CSA completed check estimates for each model using the inverse distance squared (ID2) interpolation method. The global results are comparable with the reported OK models with localised differences as expected. No mining has yet taken place at these deposits.

Criteria	JORC Code explanation	Commentary
	The assumptions made regarding recovery of by-products.	Co, Au, Pt and Pd have been estimated and are assumed to be potentially recoverable as part of the Ni-Cu recovery processes.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Potentially deleterious As, Fe_2O_3, MgO and S have been estimated into the model to assist with future metallurgical work and mining studies, but are not reported at this stage.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	A 25m E by 25m N by 5m RL parent cell size was used for both models with sub-celling to 5m E by 5m N by 1m RL to honour wireframe boundaries. The block size is considered to be appropriate given the dominant drill hole spacing and style of mineralisation.
	Any assumptions behind modelling of selective mining units.	No assumptions were made regarding selective mining units.
	Any assumptions about correlation between variables.	Variography was not completed for Co, Au, Pt, Pd or the deleterious elements. Ni variogram parameters were used to interpolate these elements. It is therefore assumed that these elements (excluding Cu) have the same spatial characteristics as Ni.
	Description of how the geological interpretation was used to control the resource estimates.	The geometry of the brecciated gabbronorite formed the basis for mineralisation interpretations. Soft boundaries were used within the mineralised domain zones where significant changes in lode orientation occurred. Hard boundaries for estimation were used between mineralised lithological domains and also for continuous massive sulphide domains within the Nebo deposit.
	Discussion of basis for using or not using grade cutting or capping.	There were no significant outliers in the dataset and therefore grade cutting was not considered necessary.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Validation checks included statistical comparison between drill sample grades, the OK and ID2 estimate results for each domain. Visual validation of grade trends for each element along the drill sections was completed and trend plots comparing drill sample grades and model grades for northings, eastings and elevation were completed. These checks show reasonable correlation between estimated block grades and drill sample grades. No reconciliation data is available as no mining has taken place.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages have been estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The disseminated mineralisation was wireframed using a nominal 1% S cut-off grade. This equated to approximately 0.2% Ni and 0.2% Cu in fresh rock. The massive sulphide zones were delineated using the logged geology and a nominal 10% S cut-off grade. The Mineral Resource has been reported above a cut-off grade of 0.45% Ni based on preliminary mining studies.
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*	It has been assumed that these deposits will be amenable to open cut mining methods, and are economic to exploit with this methodology at the reported average model grades. A minimum mining width of 2m was applied (downhole

Criteria	JORC Code explanation	Commentary
	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.	composite width). No other mining assumptions were made. Several zones of internal dilution, below the defined cut-off grade for wireframing mineralisation, were wireframed and removed from the estimate.
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.*	The oxide and fresh zones for both deposits were estimated separately. It is expected that recoveries within the oxide zones will be materially different from the fresh zones, however detailed metallurgical results were not available at the time of completion of the Mineral Resource estimate. Preliminary metallurgical testwork on broad composite zones of both Nebo and Babel mineralisation has shown that acceptable recoveries of both Ni and Cu can be achieved using conventional extraction methods. More detailed metallurgical testwork is ongoing.
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 assumptions regarding possible waste and process residue disposal options have been made. It is assumed that such disposal will not present a significant hurdle to exploitation of the deposit and that any disposal and potential environmental impacts would be correctly managed as required under the regulatory permitting conditions.
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.*	Within the resource area, the database contained a total of 14,011 density measurements (3,541 at Nebo, 10,470 at Babel). In-situ dry bulk density values have been calculated for the modelled mineralisation based on linear regression formulas for fresh material only. This is based on reasonable correlations having been found between measured bulk density results and sulphur (S).
	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.	Density measurements were calculated using the water immersion method from drill core across the deposits and from the various rock types and weathering zones.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Water immersion density data was used to develop a regression between density and % S for the fresh mineralised material. Average densities (derived from density measurements with less than 1% S) were applied to oxide material as well as the various lithological domains based on measured densities.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	Classification of the Mineral Resource estimates into both Indicated and Inferred categories was carried out taking into account the level of geological understanding of the deposit, quality of samples, density data and drill hole spacing.

Criteria	JORC Code explanation	Commentary
	Whether appropriate account has been taken of all relevant factors (ie 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).	The classification reflects areas of lower and higher geological confidence in mineralised lithological domain continuity based the intersecting drill sample data numbers, spacing and orientation. Overall mineralisation trends are reasonably consistent within the various lithotypes over numerous drill sections.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	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.*	Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate. No external audits have been undertaken.
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 Mineral Resource accuracy is communicated through the classification assigned to various parts of the deposit. 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.
	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.	The Mineral Resource statement relates to global estimates of in-situ tonnes and grade.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The deposits have not, and are not currently being mined.