



**CASSINI**  
RESOURCES LIMITED

ABN: 50 149 789 337

ASX Announcement

3 April 2014

## **Cassini Acquires BHP Billiton's West Musgrave Project**

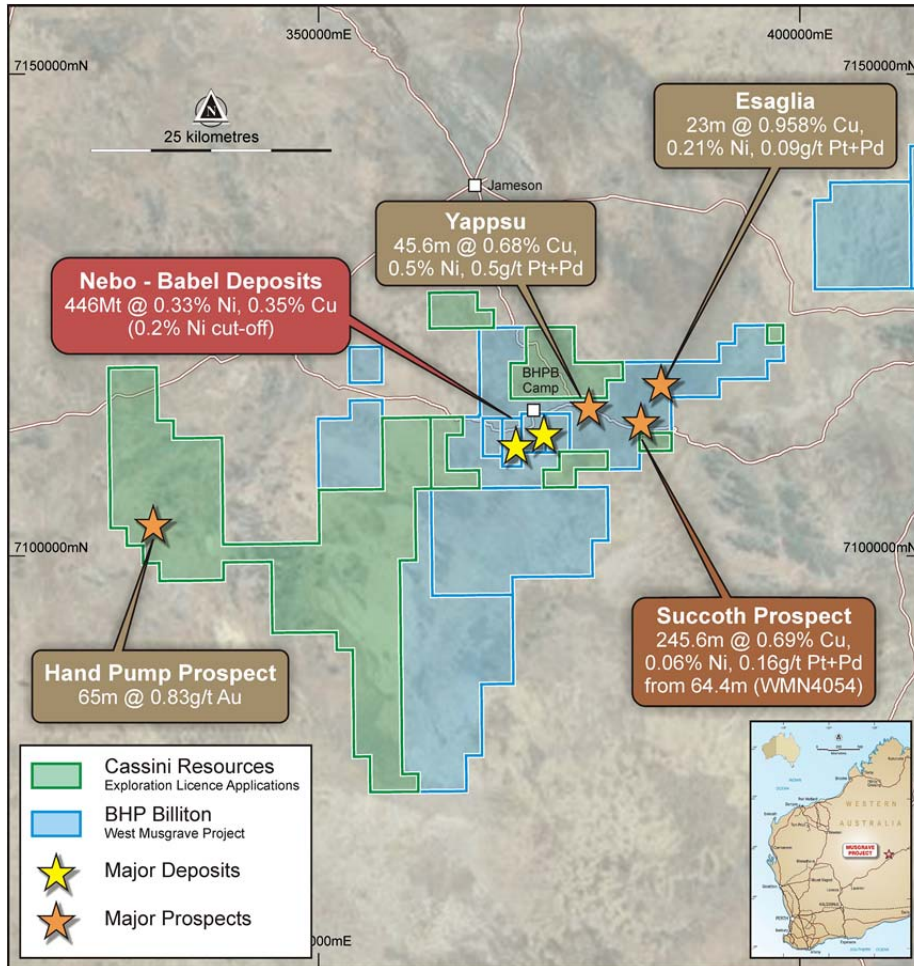
- **Cassini to acquire 100% of BHP Billiton's West Musgrave Project**
- **The West Musgrave Project includes the Nebo-Babel Ni-Cu sulphide deposits and the Succoth Cu sulphide prospect**
- **Nebo-Babel discovery hole: 26.55m @ 2.45% Ni, 1.78% Cu, 0.74g/t PGE+Au**
- **Nebo-Babel inferred resource 446Mt @ 0.33% Ni and 0.35% Cu (0.2% Ni cut-off) for 1.47Mt of contained Ni and 1.56Mt of contained Cu**
- **Significant opportunity for higher-grade resource definition at Nebo-Babel**
- **Excellent land package provides further exploration upside**
- **Minimal up-front cash requirement, with future consideration contingent upon successful mineral production**
- **Key milestones targeted over the next 6-12 months**
- **Dr Jon Hronsky, ex-WMC and BHP Billiton, to join Cassini Board**
- **Augments Cassini's existing landholding in the West Musgrave**

Cassini Resources Limited (ASX:CZI) ("Cassini" or the "Company") is very pleased to announce it has executed a Sale and Purchase Agreement (the "Agreement") to acquire 100% of the West Musgrave Project in Western Australia (the "Project") from BHP Billiton Nickel West Pty Ltd and BHP Billiton Minerals Pty Ltd, two subsidiaries of BHP Billiton Limited ("BHP Billiton"); (the "Acquisition").

Cassini is a natural owner of the Project given its nearby tenure, experience in operating in the region, and its strong Board of Directors and management team. Cassini intends to apply a new, innovative approach to the development of these assets with the goal of becoming a significant base metal producer in a relatively short timeframe.

## Remarkable Asset Package

The Project area contains the Nebo and Babel sister deposits (“Nebo-Babel”), the Succoth advanced copper exploration prospect as well as some other exceptionally prospective exploration targets.



**Figure 1: BHP Billiton’s West Musgrave Project identifying major deposits and prospects.**

### Nebo Babel

Nebo-Babel was first discovered by Western Mining Corporation Limited (“WMC”) in 2000, where the discovery hole intersected 26.55m @ 2.45% Ni, 1.78% Cu, 0.74g/t PGE+Au.

Following the acquisition of WMC by BHP Billiton in 2005, the Nebo-Babel deposits were retained and significant work was performed, focusing on a large-scale, low-grade production model. Having conducted its own due diligence on the deposit, Cassini believes that Nebo-Babel has significant production potential as a smaller, higher-grade operation due to the following favourable characteristics of the deposits:

- Discrete higher-grade zones exist within the Nebo-Babel deposit but these are yet to be fully delineated by drilling.
- Both Nebo and Babel deposits are amenable to open pit co-development as they are very close to the surface, with the Babel deposit outcropping.
- There is very limited supergene oxidation therefore fresh sulphide ore occurs close to surface.

- Nebo-Babel has extremely favourable ore-body geometry. It is a flat dipping deposit which gives rise to potential for an open-pit operation with a very low stripping ratio.

### Succoth

Located only 13km to the north east of Nebo-Babel, the Succoth prospect was a significant copper discovery and was the subject of considerable market speculation during early 2013.

The Succoth deposit is characterised by its significant size and the continuity of mineralisation, which provides large-scale mining potential. This potential is demonstrated by the limited drilling (approximately 35 RC & diamond drill holes) undertaken to date, which includes results such as 245.6m @ 0.69% Cu, 0.06% Ni, 0.16g/t Pt+Pd from 64.4m (WMN4054). The system is open at depth.

Mineralisation at Succoth starts near surface, and a development scenario is considered likely to include open pit mining in the first instance. The proximity of Succoth to Nebo-Babel offers potential operational synergies and cost savings.

### Other Mineralised Prospects

In addition to Nebo-Babel and Succoth, the Acquisition includes an extensive drilling and geochemical database, which confirms strong regional exploration prospectivity. The Project contains several early-stage exploration targets. Two of the more notable targets, Yappsu and Esagila, have been the subject of preliminary drilling, with promising results. Intersections include:

- Yappsu – 45.6m @ 0.5% Ni, 0.68% Cu, 0.5g/t Pt+Pd
- Esagila – 23m @ 0.95% Cu, 0.21% Ni, 0.09g/t Pt+Pd

Furthermore, Cassini has been successful in its application for new tenements in the West Musgrave region. These tenements host the Hand Pump gold prospect (65m @ 0.83 g/t Au) formerly held by Beadell Resources Limited. This is in addition to Cassini's existing West Musgrave Project, where a maiden drilling program was undertaken last year confirming a mineralised geological system at the Pandora target.

### **Transaction Terms**

The consideration payable for the Project involves minimal up-front cash requirement, with future consideration contingent upon successful mineral production from the Project. This significantly de-risks the acquisition for the Company and allows the Company to focus on assessing development options.

The consideration payable by Cassini for the Acquisition comprises the following:

- \$250,000 in cash, 10% of which has already been paid by Cassini as a deposit. The balance will be payable by Cassini upon Completion of the Acquisition;
- A 2% net smelter royalty ("NSR") which applies to the net proceeds from future production from the tenements within the Project; and
- A production milestone payment due 12 months after production from the Project commences, amounting to \$10 million in cash (and escalated for CPI).

Completion of the Acquisition will occur once conditions precedent relating to necessary third party consents and notifications have been satisfied.



## Director's Comments

Managing Director of Cassini, Richard Bevan said "These are truly significant assets, and it is a great result for Cassini to have been successful in acquiring them. Nebo-Babel was a very prominent discovery for WMC in the early 2000's and is widely regarded as a world-class deposit. As a smaller company, we can apply a different, innovative approach to these assets, focussing on higher-grade opportunities, with the aim of progressing their development to production as a priority. We believe significant value can be generated for our shareholders in a reasonably short time frame. We foresee that a number of significant project milestones are capable of being achieved within the next 6-12 months."

Chairman of Cassini, Mike Young said, "This is an extraordinary, once-in-a-cycle opportunity for Cassini. The divestment of assets by major mining companies has been the genesis of some of today's most prominent, mid-capped, base metals companies, including Independence Group NL, Western Areas Limited and Mincor Resources NL. We believe that history is repeating itself and that this acquisition is the start of a prominent new base metals company."

"BC Iron, of which I was the founding MD, was developed on an asset which fell below the development threshold of the majors. BC Iron is now an ASX200 company and we consider it possible to repeat that success here."

## Cassini's Approach & Project Milestones

Given the extensive work undertaken on the Project, Cassini's strategy will be to undertake resource definition drilling to infill known higher-grade zones to build a higher-grade subset to the overall Nebo-Babel Mineral Resource. The outcome of this program will determine future development scenarios.

The near term project milestones are anticipated to be as follows:

- In-fill and extension drilling at Nebo-Babel to test the continuity of known higher grade Ni zones which remain poorly constrained;
- Conducting metallurgical testing to ensure acceptable recoveries within higher-grade ore at Nebo-Babel;
- Definition of a JORC compliant Mineral Resource estimate at Succoth; and
- Further targeting generation work across the Project, utilising the extensive technical database and Cassini's understanding of the area to identify opportunities within the combined landholding.

The Company is currently reviewing the data and interpretations used for the previous Mineral Resource Estimate at Nebo-Babel, which was completed by an independent resource consultancy group in August 2012 in accordance with the JORC Code (2004) with parameters and interpretations based on a large tonnage, low-grade deposit aligned with a large-scale mining operation. The resource was estimated at **446Mt @ 0.33% Ni and 0.35% Cu utilising a 0.2% Ni cut-off**. This contains over 1.47Mt of nickel metal and 1.56Mt of copper metal. Cassini has conducted an extensive review of the estimate and considers there have been no material changes to the estimate since its original publication. Details of the estimate are provided in Appendix A.

Cassini considers that there is potential for a lower tonnage, but higher-grade Mineral Resource to be established following further resource definition drilling. Once this is completed, the Company plans to re-interpret the mineralisation with a view to issuing a revised resource estimate.



## Cassini's Board of Directors

The Directors of Cassini are delighted to welcome Dr Jon Hronsky to the board. Jon will take up the position of Non-executive Director and continue to fulfil his current role as a technical consultant to the Company.

Dr Hronsky has 30 years of experience in the mineral exploration industry, primarily focused on project generation, technical innovation and exploration strategy development. He has particular expertise in targeting for nickel sulphide deposits, but has worked across a diverse range of commodities. He was an integral part of the team that discovered the West Musgrave nickel sulphide province. Dr Hronsky is currently a director of consulting group Western Mining Services and was previously Manager-Strategy & Generative Services for BHP Billiton Minerals Exploration. Prior to that, he was Global Geoscience Leader for WMC Resources Ltd.

As a key member of the targeting strategy and exploration team that led to the discovery of Nebo-Babel, Dr Hronsky will bring significant technical capabilities and a high level of understanding and knowledge of the Project to the Company.

## Other Matters

Cassini's corporate advisors are Hartleys Limited and Grange Consulting Group Pty Ltd. Cassini's legal advisor is Steinepreis Paganin.

For further information, please contact:

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## Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resource Estimates 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.

## APPENDIX A – RESOURCE STATEMENT AND PARAMETERS

### Nebo – Babel Inferred Mineral Resource Estimate

Prospect	Cut-off Ni%	Mt	Ni%	Cu%	As ppm	Co ppm	Fe %	MgO %	S %
Nebo	0.2	84	0.39	0.31	3	153	9.48	5.86	2.47
Babel	0.2	356	0.32	0.36	3	118	9.94	7.79	2.08
<b>Total</b>	<b>0.2</b>	<b>446</b>	<b>0.33</b>	<b>0.35</b>	<b>3</b>	<b>125</b>	<b>9.85</b>	<b>7.42</b>	<b>2.15</b>
Nebo	0.5	15.9	0.82	0.48	3	323	14.2	3.73	5.63
Babel	0.5	17.3	0.64	0.70	3	196	12.9	6.00	4.38
<b>Total</b>	<b>0.5</b>	<b>33.2</b>	<b>0.73</b>	<b>0.59</b>	<b>3</b>	<b>257</b>	<b>13.5</b>	<b>4.91</b>	<b>4.98</b>

Figures in the above table have been rounded to reflect the relative uncertainty of the estimate.

### JORC 2012 Table 1 – Nebo – Babel Resource Estimate

#### Section 1 – Sampling Techniques & Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Nebo and Babel Deposits were sampled using Reverse Circulation (RC) and diamond drill (DD) holes over a number of drilling programs. Drilling was completed on nominal 200m spaced section with drill holes spaced between 50 – 200m for both deposits.</li> <li>Measures taken by the previous operator to ensure sample representivity are unknown.</li> <li>Samples were collected at various intervals ranging between 0.05m – 4.0m, although the majority of samples were taken on 1m intervals. RC samples were collected by conventional riffle splitter, while diamond core samples were obtained by cutting core and submitting half core for analysis. Information about assay laboratories and procedures have not been provided by the previous operator.</li> <li>Drill collar positions have been surveyed by handheld and/or differential GPS.</li> <li>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 geological units. The reliability of downhole surveying for the majority of Nebo-Babel is considered poor.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Nebo resource was based on 80 RC &amp; DD holes for 18,911m and Babel 97 RC &amp; DD holes for 38,797m. RC samples are assumed to be face sampled, while no information is available about core orientation.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Recoveries during the drilling process are unknown.</li> <li>• Unknown</li> <li>• No sample bias has been observed in reports reviewed by Cassini.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All holes were field logged by company geologists. Weathering, lithology, alteration, structure, mineralogy information were recorded.</li> <li>• Cassini believes previous operators logged drill core for rock type, texture, alteration, veining, percentage of sulphides, and foliation angles and intensities. RC logging of geology and colour are interpretative and qualitative, whereas logging of mineral percentages is quantitative.</li> <li>• No core photos are been reviewed by Cassini</li> <li>• All drill holes are believed to have been logged in full.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the</i></li> </ul>	<ul style="list-style-type: none"> <li>• Cassini believes historical core in storage is generally half core, with some quarter core remaining; it is assumed that half core was routinely analysed, with quarter core perhaps having been used for check assays or other studies.</li> <li>• Sampling techniques and preparation are not known for all the historical drilling.</li> <li>• Previous operators employed QAQC procedures involving the use of certified reference materials. These procedures have varied over the life of the project. Some minor evidence for assay bias and contamination has been observed. This data is yet to be reviewed by Cassini.</li> <li>• Unknown.</li> <li>• Sample sizes are considered appropriate for</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<p><i>grain size of the material being sampled.</i></p> <ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>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.</i></li> </ul>	<p>the style of mineralisation.</p> <ul style="list-style-type: none"> <li>Information about assay laboratories is yet to be reviewed by Cassini.</li> <li>Not applicable.</li> <li>Previous operators employed QAQC procedures involving the use of certified reference materials. These procedures have varied over the life of the project. Some minor evidence for assay bias and contamination has been observed. This data is yet to be reviewed by Cassini.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>.</li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Cassini has verified some of the significant intersections identified by the previous operator.</li> <li>No twin holes appear to have been drilled.</li> <li>Previous operators have collected data electronically which has been stored on an acquire database. Protocols are yet to be reviewed.</li> <li>Cassini believes assay values that were below detection limit were adjusted to equal half of the detection limit value..</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill collar positions have been surveyed by handheld and/or differential GPS. Differential GPS positions have reported accuracy of +/- 5cm. Accuracy of hand-hld 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 geological units. The reliability of downhole surveying for the majority of Nebo-Babel is considered poor.</li> <li>All drill collars have been located in UTM, MGA94, Zone 52S grid system</li> <li>.</li> <li>Topographic control has been provided by drill collar pick ups. There is very little topographical relief at the deposits and this method is considered satisfactory.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling was completed on nominal 200m spaced sections with drill holes spaced between 50 – 200m for both deposits.</li> <li>The main mineralised domains have demonstrated sufficient continuity in both geological and grade continuity to support the definition of an Inferred Mineral Resource, and the classifications applied under the 2012 JORC Code.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>For the Resource estimation the samples were composited to 1m lengths using best fit techniques..</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drill holes were generally orientated vertically. As the mineralisation is generally horizontal or with a shallow plunge, the drilling orientation is considered appropriate.</li> <li>No orientation based sampling bias has been identified in the data.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No information has been supplied to Cassini</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Cassini's review of previous sampling techniques appears to have been conducted to industry standards.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The deposits are covered by four mining licenses (M69/72 – M69/75) surrounded by exploration license E69/2201. Cassini has entered an agreement to acquire 100% of the leases from the previous operator. The previous operator retains a 2% NSR.</li> <li>The tenements are in good standing and have an existing Aboriginal Heritage Access Agreement in place although no Mining Agreement has been negotiated.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All exploration has been completed by BHP Billiton as the previous operator. This work is considered by Cassini to be of a very high standard which has identified the Nebo-Babel Deposits as well as a number of other prospects.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposits are located in the Mesoproterozoic Musgrave Province bounded by Neoproterozoic and Paleozoic basins which extend 800km east to west and 300km north to south across the boundaries of Northern Territory, South Australia and Western Australia. The deposits are hosted in a Giles age (1068Ma) mafic intrusion, which has intruded into an amphibolite facies orthogneiss country rock. The intrusion is a tube-like body comprised of several subtly different gabbro-norites, which have intruded along the same pathway. Subsequent units have generally intruded within the last, creating an inflated, concentrically ringed chonolith. Mineralisation mainly occurs as continuous layers of low-grade disseminated mineralisation within a recognised unit of the gabbro-norite.</li> </ul>

<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length</li> </ul> </li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Over 2,000 drill holes have been completed at the project. A full table of drill hole information is not practical at this time.</li> <li>• Exploration results are not material to this report because the Mineral Resource estimate is based on all available and relevant RC and core drilling data and represents the most significant mineralisation in the project.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are reported as weighted averages using a 0.1% Ni or Cu cut-off.</li> <li>• Not relevant in this report.</li> <li>• Metal equivalent values are not being reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• 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').</li> </ul>	<ul style="list-style-type: none"> <li>• Mineralisation at Nebo and Babel is generally flat-lying or gently plunging. While intercepts are reported as down hole widths, the intercepts approximate true-width due to being near perpendicular to the drilling orientation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• All relevant plans and sections have been included at the end of the report.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill collar positions have been surveyed by handheld and/or differential GPS.</li> <li>• 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 geological units. The reliability of downhole surveying for the majority of Nebo-Babel is considered poor.</li> <li>• Comprehensive reporting of results is not possible at this time due to the large number of drill holes in the project.</li> </ul>
<b>Other substantive</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not</li> </ul>	<ul style="list-style-type: none"> <li>• The project includes a vast amount of drill hole and surface sample geochemical data.</li> </ul>

<b>exploration data</b>	<i>limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	Cassini is not aware of any information that may significantly impact the Resource Estimate or other results in this report.
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Cassini intends to undertake further infill drilling at the Nebo and Babel Deposits as well as the other prospects to improve resource confidence and geological understanding as well as identify high-grade mineralisation.</li> <li>A project-scale review of the project by Cassini is underway.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

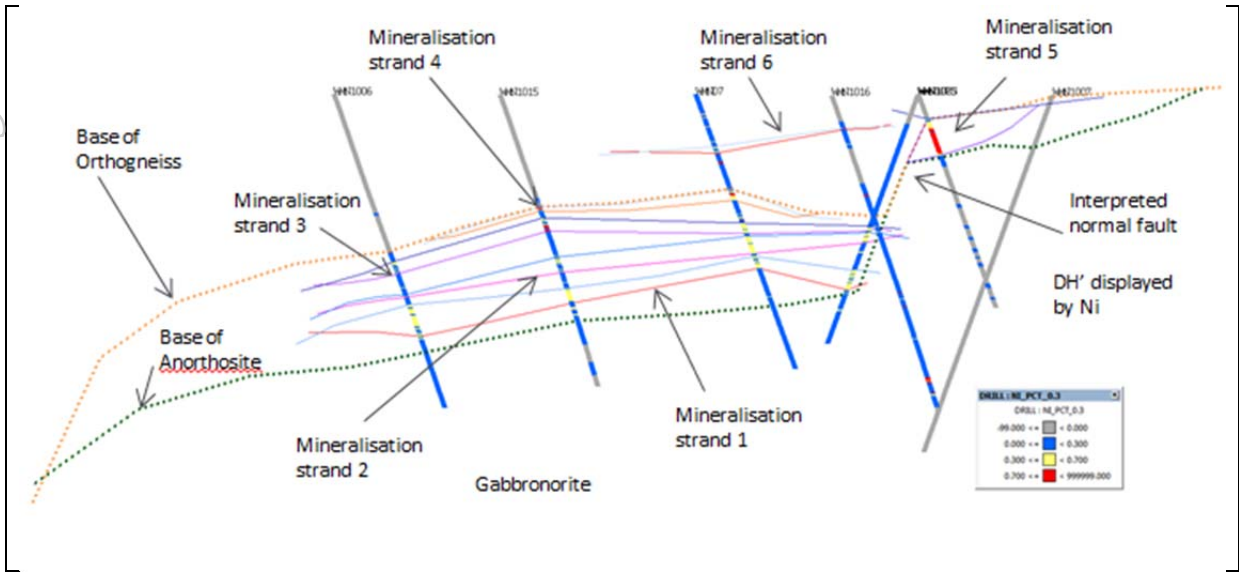
Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li><i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole data up to 1 June 2012 was provided to the Resource Consultant in multiple data packages of CSV files containing collar, survey, assay &amp; lithology information. Internal integrity checks were completed prior to loading into the modelling software. The drilling data provided appears to have no significant errors that would impact the estimation process.</li> <li>Internal database validation routines including checks for duplicate collar positions, null values, overlapped or inverted sample intervals, downhole survey variance and duplications of data. Cassini has not conducted any data validation at the time of release other than typical due diligence on the resource report and associated reports.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Resource Consultant does not declare if a site visit has been completed.</li> <li>Cassini did not have site access to the Project at the time of review.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling</i></li> </ul>	<ul style="list-style-type: none"> <li>The geology of Nebo &amp; Babel has been the subject of numerous studies including exploration reports and PhD theses.</li> <li>Geological interpretations were based on logging and geochemical data. Interpreted geology sections were imported into Vulcan software to create sections strings and wireframes. Validation of wireframes was performed using standard Vulcan check routines. Visual validation was also completed by creating section slices for comparison against the geological interpretations.</li> <li>Minor variations were made to the interpretation on completion of modelling, however these did not significantly impact the estimation</li> </ul>

	<p><i>Mineral Resource estimation.</i></p> <ul style="list-style-type: none"> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mineralisation occurs preferentially in some geological units and is therefore strongly constrained by the geological interpretation.</li> <li>• Yet to be determined</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Nebo mineralisation is approximately 1,600m long (north-south) by 1,200m wide (east-west). The Babel mineralisation is approximately 2,200m long (north-south) by 1,400m wide (east-west). Mineralisation for both deposits occurs approximately 20m below surface.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation</i></li> </ul>	<ul style="list-style-type: none"> <li>• Grade estimation was carried out using Ordinary Kriging for As, Co, Cu, Fe, MgO, Ni &amp; S for both Nebo and Babel.</li> <li>• Ellipsoidal search geometries were determined by variography on all 1m composite data to determine major, semi-major and minor orthogonal directions of grade continuity.</li> <li>• An earlier estimate was completed in May 2011. The variance between this estimate and the previous estimate was approximately 10% for both tonnes and grade (Ni &amp; Cu).</li> <li>• No recovery assumptions have been made.</li> <li>• Estimates of deleterious elements have been included in the estimate.</li> <li>• A Vulcan block model utilised consistent block size of 100m on x-axis, 100m on y-axis and 5m on z-axis (vertical) with sub-cells of 10m (x) x 10m (y) x 1m (z).</li> <li>• No assumptions about selective mining units were made</li> <li>• No assumptions about correlation between variables were made</li> <li>• Interpreted geology sections were imported into Vulcan software to create sections strings and wireframes. Validation of wireframes was performed using standard Vulcan check routines. Visual validation was also completed by creating section slices for comparison against the geological interpretations.</li> <li>• Statistical analysis determined that high-grade restraining of outliers was required across several domains in both deposits. High grade cuts ranged across domains up to 3.5% Cu and 3.0% Ni.</li> <li>• Described above.</li> </ul>

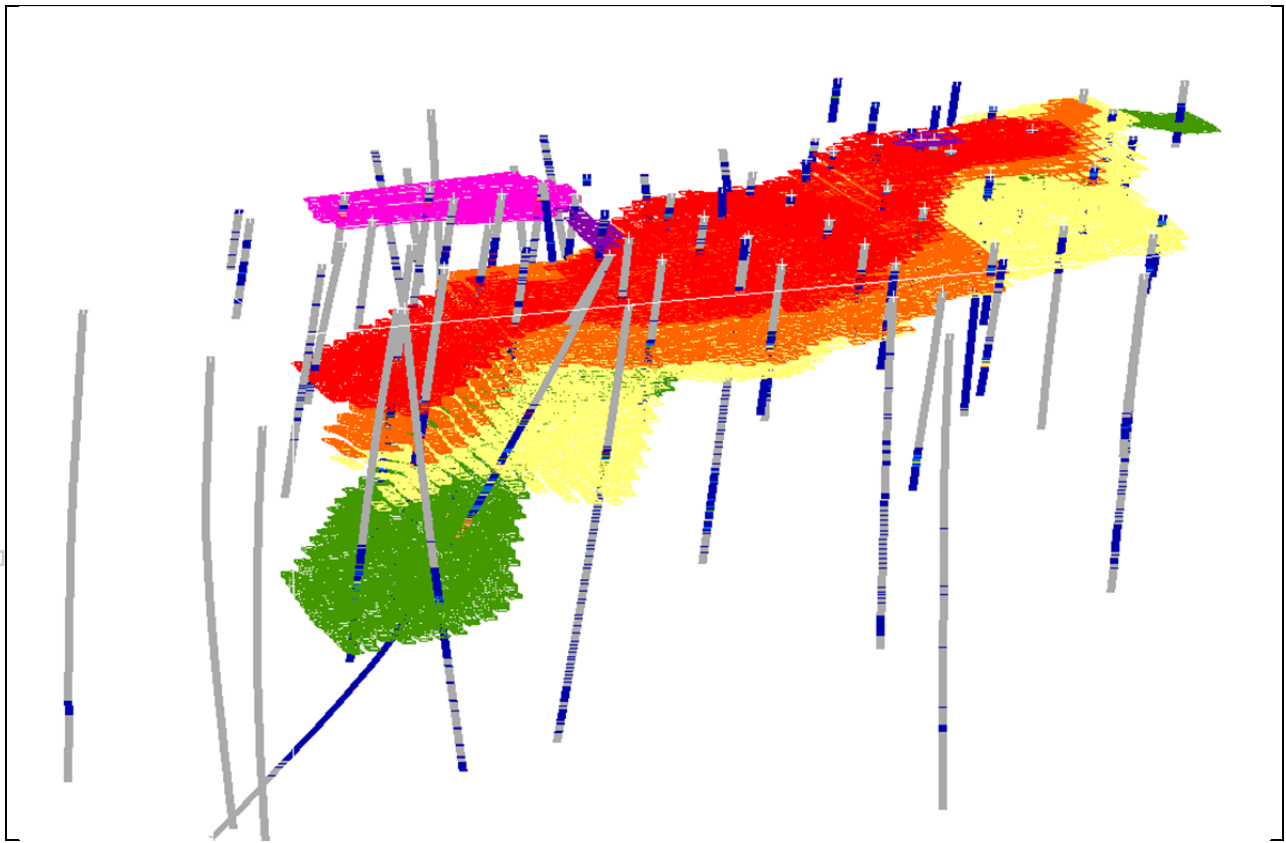
	data if available.	
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>A nominal cut-off grade of 0.2% Ni was used for reporting by the previous operator. Cassini has also reported this resource at 0.5% Ni cut-off as the resultant higher grades may provide a more economic operation.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Cassini believes that a significant portion of the Nebo &amp; Babel Deposits have reasonable prospects for eventual economic extraction by medium to large-scale open pit mining methods, taking into account current mining costs and metal prices and allowing for potential economic variations. Historically, economic mining of similar grade deposits has occurred in other regions of Australia.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Only limited metallurgical testwork has been carried out on large-scale composite samples with a view to determining the possibility of producing saleable concentrates. Testwork involved floatation and a comparative acid leach bottle roll tests. Recoveries varied between 40-94%. Cassini believes further additional metallurgy is required on selective, higher-grade composites.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The Resource Consultant has made no assumptions regarding environmental factors.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Over 1,000 density samples were obtained "in-house" and by external laboratory using submersion in water techniques and assigned to each model by weathering or estimation domain. It is recommended that future estimates obtain a larger number of density samples.</li> </ul>

	<ul style="list-style-type: none"> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Methods are assumed to have been appropriate.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource Estimate was originally conducted in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC Code, 2004). The Estimate has been classified as Inferred based upon the drill hole spacing, sampling intervals, geological interpretation, kriging performance and representativeness of all available assay data.</li> <li>The Mineral Resource Estimate appropriately reflects the view of the Competent Person.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Cassini has not conducted an external audit of the resource and is continuing to review the resource Estimate.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.</li> <li>The Mineral Resource statement relates to global estimates of tonnes and grade.</li> <li>The deposit is not currently being mined.</li> </ul>

Geological cross section - section 368900 mE



Overview of mineralisation strands – looking NE



DH's displayed by Ni

Blocks displayed by mineralisation coding

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