# **ASX ANNOUNCEMENT**



25 September 2019

# CASSINI KEEPS DELIVERING WITH ANOTHER STANDOUT NICKEL HIT

Latest diamond hole intersects <u>15.4m</u> @ <u>4.7%</u> Ni, including a high grade core of <u>8.6m</u> @ <u>7.0%</u> Ni, within the CS5 channel as the growing deposit continues to yield outstanding results

### **Highlights**

- New thick high-grade sulphide intercept of <u>15.4m @ 4.7% Ni</u> in MDD323W2
- Exceptionally thick true width of 13.2m means this is the highest value intercept at Cassini to date
- High grade massive sulphide core of 8.6m @ 7.0% Ni with a true width of 7.3m
- Intersection is 73m along strike of MDD329W2 (6.3m @ 7.1% Ni) announced on 6 September 2019
- These latest results will be incorporated into an updated Mineral Resource in the December quarter

Mincor Resources NL (ASX: MCR, "Mincor" or the "Company") is pleased to advise that ongoing diamond drilling at the Cassini nickel sulphide deposit at Kambalda has returned another exceptional high-grade nickel intercept which yielded 15.4m at 4.7% Ni including a massive sulphide high grade core of 8.6m @ 7.0% Ni (see Figure 1).

The intersection is part of the previously announced drilling program being completed over a six-week period before moving to the CS1 channel and the untested magnetic anomaly (see Figure 2).



Figure 1: MDD323W2 core photo showing massive and heavy matrix nickel sulphides



Mincor's Managing Director, David Southam, said the Cassini deposit was continuing to yield impressive high-grade, high-tenor nickel intercepts with ongoing drilling, clearly demonstrating its potential as a cornerstone deposit for the Company's nickel restart plans.

"The estimated true width of this latest intersection at 13.2 metres means this is the highest value intercept that Cassini has delivered so far – a fantastic achievement by our exploration team," he said.

"The deposit continues to evolve and grow with recent diamond drilling highlighting the thickness and high grade nature of the mineralisation in the CS5 channel, which was only identified relatively recently," he said.

"Pleasingly, today's result is 73m along strike from MDD329W2, which yielded 6.3m at 7.1% nickel. This shows the potential for Cassini to continue to grow as drilling continues to track the key nickel-hosting channels down-plunge, typical of all Kambalda komatiite-hosted nickel sulphide deposits."

#### **Details**

The new intersection lies on the boundary within the current Mineral Resource envelope in the recently delineated CS5 channel, which is becoming stronger as it is tested down-plunge. However, the new intersection is much higher grade and thicker than currently estimated in the Resource block model.

All results from this current phase of drilling at Cassini will be incorporated into a further update of the Mineral Resource Estimate and a maiden Ore Reserve due to be announced late in the December 2019 quarter as part of the Definitive Feasibility Study on the Company's Nickel Restart Strategy at Kambalda.

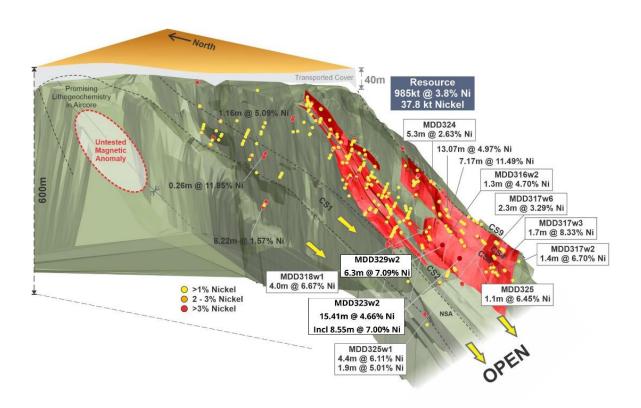


Figure 2: Cassini 3D of basalt surface and resource shapes



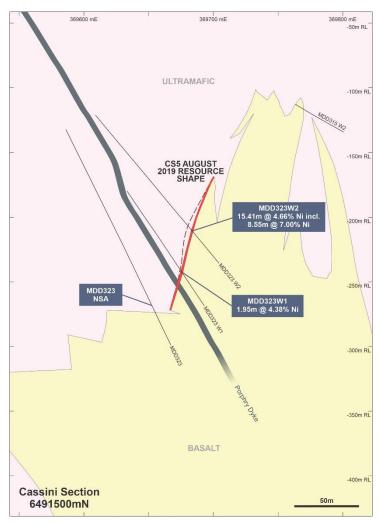


Figure 3: Cassini cross-section 6491500N showing extra mineralisation thickness vs the current model

The information in this Public Report that relates to Exploration Results is based on information compiled by Robert Hartley, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hartley is a full-time employee of Mincor Resources NL. Mr Hartley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hartley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### - ENDS -

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#### **APPENDIX 1: Nickel Mineral Resources and Ore Reserves**

#### Nickel Mineral Resources as at 30 June 2019

| DECOLIDE      | MEASURED |        | INDICATED |        | INFERRED |        | TOTAL     |        |           |
|---------------|----------|--------|-----------|--------|----------|--------|-----------|--------|-----------|
| RESOURCE      | Tonnes   | Ni (%) | Tonnes    | Ni (%) | Tonnes   | Ni (%) | Tonnes    | Ni (%) | Ni tonnes |
| Cassini       |          |        | 902,000   | 3.9    | 83,000   | 3.4    | 985,000   | 3.8    | 37,800    |
| Long          |          |        | 410,000   | 4.0    | 340,000  | 4.4    | 750,000   | 4.2    | 32,000    |
| Redross       | 39,000   | 4.9    | 138,000   | 2.9    | 67,000   | 2.9    | 244,000   | 3.2    | 7,900     |
| Burnett       | -        | -      | 241,000   | 4.0    | -        | -      | 241,000   | 4.0    | 9,700     |
| Miitel        | 156,000  | 3.5    | 408,000   | 2.8    | 27,000   | 4.1    | 591,000   | 3.1    | 18,100    |
| Wannaway      | -        | -      | 110,000   | 2.6    | 16,000   | 6.6    | 126,000   | 3.1    | 3,900     |
| Carnilya*     | 33,000   | 3.6    | 40,000    | 2.2    | -        | -      | 73,000    | 2.8    | 2,100     |
| Otter Juan    | 2,000    | 6.9    | 51,000    | 4.1    | -        | -      | 53,000    | 4.3    | 2,300     |
| Ken/McMahon** | 25,000   | 2.7    | 183,000   | 3.9    | 54,000   | 3.2    | 262,000   | 3.7    | 9,600     |
| Durkin North  | -        | -      | 417,000   | 5.3    | 10,000   | 3.8    | 427,000   | 5.2    | 22,400    |
| Durkin Oxide  |          |        | 154,000   | 3.2    | 22,000   | 1.7    | 176,000   | 3.0    | 5,200     |
| Gellatly      | -        | -      | 29,000    | 3.4    | -        | -      | 29,000    | 3.4    | 1,000     |
| Voyce         | -        | -      | 50,000    | 5.3    | 14,000   | 5.0    | 64,000    | 5.2    | 3,400     |
| Cameron       | -        | -      | 96,000    | 3.3    | -        | -      | 96,000    | 3.3    | 3,200     |
| Stockwell     | -        | -      | 554,000   | 3.0    | -        | -      | 554,000   | 3.0    | 16,700    |
| TOTAL         | 256,000  | 3.7    | 3,783,000 | 3.7    | 633,000  | 3.9    | 4,671,000 | 3.7    | 175,300   |

#### Note:

- Figures have been rounded and hence may not add up exactly to the given totals.
- Note that nickel Mineral Resources are inclusive of nickel Ore Reserves.
- Subsequent drilling information is yet to be incorporated into the Resource estimates but will be updated for June 2019

The information in this report that relates to nickel Mineral Resources is based on information compiled by Rob Hartley, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hartley is a full-time employee of Mincor Resources NL and 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hartley consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

# Nickel Ore Reserves as at 30 June 2019

| DECEDI/E     | PROVED |        | PROBAB    | LE     | TOTAL     |        |           |  |
|--------------|--------|--------|-----------|--------|-----------|--------|-----------|--|
| RESERVE      | Tonnes | Ni (%) | Tonnes    | Ni (%) | Tonnes    | Ni (%) | Ni tonnes |  |
| Burnett      | -      | -      | 271,000   | 2.6    | 271,000   | 2.6    | 6,900     |  |
| Miitel       | 28,000 | 2.6    | 129,000   | 2.2    | 157,000   | 2.3    | 3,600     |  |
| Durkin North | -      | -      | 708,000   | 2.5    | 708,000   | 2.5    | 17,700    |  |
| TOTAL        | 28,000 | 2.6    | 1,108,000 | 2.5    | 1,136,000 | 2.5    | 28,200    |  |

#### Note:

- Figures have been rounded and hence may not add up exactly to the given totals.
- Note that nickel Mineral Resources are inclusive of nickel Ore Reserves.

<sup>\*</sup>Nickel Mineral Resource shown for Carnilya Hill are those attributable to Mincor – that is, 70% of the total Carnilya Hill nickel Mineral Resource.

<sup>\*\*</sup>Ken/McMahon also includes Coronet (in the 2010/11 Annual Report it was included in Otter Juan).



The information in this report that relates to nickel Ore Reserves is based on information compiled by Paul Darcey, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Darcy is a full-time employee of Mincor Resources NL and 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 "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Darcey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

### **APPENDIX 2: Drill Hole Tabulations**

|               | Collar coordinates         |                 |           |              | Estimated | %           | %      | %     |          |            |        |        |        |
|---------------|----------------------------|-----------------|-----------|--------------|-----------|-------------|--------|-------|----------|------------|--------|--------|--------|
| Hole ID       | MGA easting                | MGA<br>northing | MGA<br>RL | EOH<br>depth | Dip       | MGA azimuth | From   | То    | Interval | true width | Nickel | Copper | Cobalt |
| Cassini - Dia | Cassini - Diamond Drilling |                 |           |              |           |             |        |       |          |            |        |        |        |
| MDD323W2      | 369375.0                   | 6491514.8       | 308.4     | 642.5        | -64       | 90.0        | 599.39 | 614.8 | 15.41    | 13.2       | 4.66   | 0.45   | 0.08   |
| incl          |                            |                 |           |              |           |             | 606.25 | 614.8 | 8.55     | 7.3        | 7.00   | 0.69   | 0.12   |
| MDD329W3      | 369399.0                   | 6491559.1       | 307.8     | 585.4        | -67       | 90.0        | 556    | 558.7 | 2.71     | 2.5        | 1.33   | 0.24   | 0.03   |
| MDD329W4      | 369399.0                   | 6491559.1       | 307.8     | 612.5        | -67       | 90.0        | 453.21 | 454.0 | 0.79     | NA         | 2.37   | 0.16   | 0.09   |
| MDD329W4      |                            |                 |           |              |           |             | 566.14 | 567.9 | 1.76     | NA         | 2.81   | 0.17   | 0.05   |
| MDD329W4      |                            |                 |           |              |           |             | 579.93 | 580.2 | 0.25     | NA         | 0.29   | 0.08   | 0.04   |
|               |                            |                 |           |              |           |             |        |       |          |            |        |        |        |



# **APPENDIX 3: JORC Code, 2012 Edition – Table 1**

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

| Criteria                                      | JORC Code explanation   | Commentary  |
|---|---|---|
| Sampling techniques                           | <ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</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.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul> <li>Mineralisation is visible so only a few metres before and after intersection are sampled.</li> <li>For diamond drill core, representivity is ensured by sampling to geological contacts. Diamond samples are usually 1.5m or less.</li> </ul>  |
| Drilling<br>techniques                        | Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).   | Diamond drill core is NQ or HQ sizes. All core is orientated.   |
| Drill sample recovery                         | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>  | <ul> <li>For diamond core, recoveries are measured for each drill run. Recoveries generally 100%. Only in areas of core loss are recoveries recorded and adjustments made to metre marks.</li> <li>There is no relationship to grade and core loss.</li> </ul>  |
| Logging                                       | <ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>   | <ul> <li>All drilling is geologically logged and stored in database.</li> <li>For diamond core, basic geotechnical information is also recorded.</li> </ul>   |
| Subsampling techniques and sample preparation | <ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>  | <ul> <li>Half cut diamond sawn core sampled, marked up by Mincor geologists while logging and cut by Mincor field assistants.</li> <li>Sample lengths to geological boundaries or no greater than 1.5m per individual sample.</li> <li>As nickel mineralisation is in the 1% to 15% volume range, the sample weights are not an issue vs grain size.</li> </ul> |



| Criteria  | JORC Code explanation   | Commentary  |
|---|---|---|
| Quality of<br>assay data<br>and laboratory<br>tests                 | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul> | <ul> <li>Drill core assayed by four-acid digest with ICP finish and is considered a total digest.</li> <li>Reference standards and blanks are routinely added to every batch of samples. Total QAQC samples make up approx. 10% of all samples.</li> <li>Monthly QAQC reports are compiled by database consultant and distributed to Mincor personnel.</li> </ul>           |
| Verification of sampling and assaying                               | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>   | <ul> <li>As nickel mineralisation is highly visible and can be relatively accurately estimated even as to grade, no other verification processes are in place or required.</li> <li>Holes are logged on Microsoft Excel templates and uploaded by consultant into Datashed format SQL databases; these have their own inbuilt libraries and validation routines.</li> </ul> |
| Location of data points   | <ul> <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>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>   | <ul> <li>Surface holes surveyed in by differential GPS in MGA coordinates by registered surveyor both at set out and final pick up.</li> <li>Downhole surveys are routinely done using single shot magnetic instruments. Surface holes or more rarely long underground holes are also gyroscopic surveyed.</li> </ul>   |
| Data spacing<br>and<br>distribution                                 | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>  | <ul> <li>Current drill-hole spacing is 40–80m between sections and 10–25m between intercepts on sections.</li> <li>This program is infilling to a nominal 20–40m strike spacing to allow for a possible Inferred/Indicated Resource classification.</li> </ul>  |
| Orientation of<br>data in<br>relation to<br>geological<br>structure | <ul> <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>  | geometries and thicknesses.   |
| Sample security  Audits or  | <ul> <li>The measures taken to ensure sample security.</li> <li>The results of any audits or reviews of sampling techniques and</li> </ul>  | <ul> <li>Core is delivered to logging yard by drilling contractor but is in the custody of Mincor employees up until it is sampled. Samples are either couriered to a commercial lab or dropped off directly by Mincor staff.</li> <li>In-house audits of data are undertaken on a</li> </ul>   |
| reviews   | data.   | periodic basis.   |

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

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| Mineral<br>tenement and<br>land tenure<br>status | <ul> <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 licence to operate in the area.</li> </ul> | <ul> <li>All resources lie within owned 100% by Mincor<br/>Resources NL. Listed below are tenement<br/>numbers and expiry dates:</li> <li>M15/1457 – Cassini (01/10/2033)</li> </ul> |



| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
| Exploration done by other parties   | Acknowledgment and appraisal of exploration by other parties.   | Jupiter Mines and WMC have previously<br>explored this area, but Mincor has<br>subsequently done most of the drilling work.  |
| Geology   | Deposit type, geological setting and style of mineralisation.   | Typical "Kambalda" style nickel sulphide deposits.   |
| Drill-hole<br>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  | See attached tables in previous releases and<br>Appendix 2 of this release.  |
|   | <ul> <li>dip and azimuth of the hole</li> <li>downhole length and interception depth</li> <li>hole length.</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>                                      |  |
| Data<br>aggregation<br>methods  | <ul> <li>In reporting Exploration Results, weighting averaging techniques,<br/>maximum and/or minimum grade truncations (e.g. cutting of high<br/>grades) and cut-off grades are usually Material and should be<br/>stated.</li> </ul>  | <ul> <li>Composites are calculated as the length and<br/>density weighted average to a 1% Ni cut-off.</li> <li>They may contain internal waste; however, the<br/>1% composite must carry in both directions.</li> </ul>              |
|   | <ul> <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>                                     | The nature of nickel sulphides is that these composites include massive sulphides (8–14% Ni), matrix sulphides (4–8% Ni) and disseminated sulphides (1–4% Ni). The relative contributions can vary markedly within a single orebody. |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept<br>lengths | <ul> <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> | The general strike and dip of the basalt contact<br>is well understood so estimating likely true<br>widths is relatively simple, although low angle<br>holes can be problematic.   |
| 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.   | See plan, cross section and 3D image   |
| 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 holes are represented on the 3d image and characterised by grade ranges to show distribution of metal.   |
| Other<br>substantive<br>exploration<br>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.                               | Downhole electromagnetic modelling has been used to support geological interpretation where available.   |
| Further work  | <ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>   | Resources at the extremities are usually still open down plunge (see 3D image).  |