

9 September 2020

NEW HIGH-GRADE NICKEL SULPHIDE DISCOVERY AT CASSINI NORTH

Significant massive and matrix sulphides grading 6.6% Ni intersected in a new channel position at shallow depth, immediately adjacent to the high-grade Cassini Main orebody

Highlights

- **New high-grade intercept of 2.5m at 6.6% Ni in a new channel at Cassini North (MDD350 – estimated true width 2.5m and 260m vertical depth)**
- **Represents the first ore grade intercept in an exciting new channel position north of Cassini Main**
- **MDD350 is the first hole drilled following an update to Mincor’s geological model for the area**
- **Intersection is approximately 700m to the north of the planned infrastructure at the Cassini Main Ore Reserve (1.2Mt @ 3.3% Ni for 40,100 nickel tonnes)**
- **Recent down-hole EM (DHEM) indicates a conductor down-plunge from this hole**
- **Early results at Cassini North have similarities to the early stages of the Cassini Main discovery**
- **Very limited drilling in the area further reinforces the significant emerging opportunity at Cassini North**

Mincor Resources NL (ASX: MCR, “Mincor” or the “Company”) is pleased to advise that it has intersected high-grade massive and matrix nickel sulphide mineralisation at its **Cassini North** prospect, located 700m to the north of its cornerstone Cassini Main deposit at Kambalda in Western Australia.

This is the first diamond hole drilled at Cassini North following a recent reassessment and geological re-modelling of the area completed by Mincor’s exploration team. MDD350 returned a significant intercept of **2.5m @ 6.6% Ni (including a higher-grade core of 2.0m @ 7.7% Ni)**, comprising a mix of high tenor massive and matrix nickel sulphides.

Given the significant grade and tenor of the mineralisation, its location within an interpreted new channel position that runs sub-parallel to the Cassini Main deposit (see Figure 3) and the presence of a significant DHEM conductor down-plunge from the intercept, the Company’s exploration team regards the intercept as a significant breakthrough which heralds an important new discovery for the Company.

Mincor’s Managing Director David Southam said: *“This is a really exciting development which stems directly from the systematic approach which the geology team has adopted to nickel sulphide exploration. The discovery intercept of 2.5 metres at 6.6% Ni in a new area at Cassini North is the result of our latest re-interpretation of the basalt model from recent drilling and DHEM results.*

“We’ve completed DHEM on MDD350 and the results indicate a conductor which requires follow-up. The team will immediately commence planning for a discrete drilling program which will help to enhance our understanding of the geology in this lightly drilled area over the next few months.

“Given that the intersection is relatively shallow at 260 metres and is only 700 metres to the north of the designed Cassini Main infrastructure, we are excited by the potential for the broader Cassini area to emerge as a new mining district in its own right within the general Kambalda region. The early exploration results at Cassini North are very similar to what we saw at Cassini Main itself in the early days, supporting our view that the Cassini area has the potential to be a nickel camp.”

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“The next few months will be a really exciting time for Mincor, with project financing discussions progressing well, ahead of a Final Investment Decision. Following our recent Exploration and Development update on 17 August 2020, I can also confirm that we have now awarded the Stage 2 early works at the Northern Operations and the additional infrastructure works at Cassini to Pit N Portal.”

Other Information

The intersection is located on the lower eastern side of the Cassini North channel – a position that has not been the focus of previous exploration. The new geological interpretation suggests that the Cassini North channel trends sub-parallel to the Cassini Main system and is open for 250m to the north and at least 1.2km to the south.

Furthermore, this new intersection is located on the contact rather than the hangingwall position – unlike previous less significant intersections at Cassini North – and is sediment free. These characteristics are similar to the early stage of the Cassini Main deposit

Figure 1: MDD350 core photo showing a section of massive and matrix nickel sulphides



Figure 2: Close-up of MDD350 massive nickel sulphides



APPENDIX 1: Nickel Mineral Resources and Ore Reserves

Nickel Mineral Resources as at 25 June 2020

RESOURCE	MEASURED		INDICATED		INFERRED		TOTAL		
	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Ni tonnes
Cassini			1,282,000	4.0	194,000	4.1	1,476,000	4.0	58,700
Long			487,000	4.1	303,000	4.0	791,000	4.1	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	4,420,000	3.8	708,000	3.9	5,203,000	3.8	196,100

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.

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

The information in this report that relates to nickel Exploration Results and 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 2020

RESERVE	PROVED		PROBABLE		TOTAL		
	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Ni tonnes
Cassini			1,212,000	3.3	1,212,000	3.3	40,100
Long			162,000	2.7	162,000	2.7	4,300
Burnett	-	-	271,000	2.6	271,000	2.6	6,900
Miitel	19,000	2.9	126,000	2.1	145,000	2.2	3,300
Durkin North	-	-	675,000	2.4	675,000	2.4	16,500
TOTAL	19,000	2.9	2,445,000	2.9	2,465,000	2.9	71,100

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.
- Durkin North Ore Reserves have had a minor reduction since the Ore Reserves were last reported as at 30 June 2019 as a result of a mine design access change removing the J and K ore zones from reserves.
- The Miitel Ore Reserve has a minor reduction since the Ore Reserve were last reported as at 30 June 2019 from removing two small stopes from Ore Reserves.

The information in this report that relates to nickel Ore Reserves at Cassini and Long is based on information compiled by Dean Will, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Will 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 Will consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to nickel Ore Reserves at Burnett, Miitel and Durkin North is based on information compiled by Paul Darcey, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Darcey 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

Hole ID	Collar coordinates						From	To	Interval	Estimated true width	% Nickel	% Copper	% Cobalt
	MGA easting	MGA northing	MGA RL	EOH depth	Dip	MGA azimuth							
Cassini													
MDD350	369482.6	6492545	305	310	-70	270	278.09	280.62	2.53	2.5	6.56	0.30	0.13

APPENDIX 3: Exploration Results- 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 style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 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. 	<ul style="list-style-type: none"> Mineralisation is visible so only a few metres before and after intersection are sampled. For diamond drill core, representivity is ensured by sampling to geological contacts. Diamond core samples are usually 1.5m or less.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> Diamond drill core is NQ or HQ sizes. All surface core is orientated.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> 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. There is no relationship to grade and core loss.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All drilling is geologically logged and stored in database. For diamond core, basic geotechnical information is also recorded.

Criteria	JORC Code explanation	Commentary
Subsampling techniques and sample preparation	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all subsampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> • Half cut diamond sawn core sampled, marked up by Mincor geologists while logging and cut by Mincor field assistants. • Sample lengths to geological boundaries or no greater than 1.5m per individual sample. • As nickel mineralisation is in the 1% to 15% volume range, the sample weights are not an issue vs grain size.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> • samples assayed by four-acid digest with ICP finish and is considered a total digest. • Reference standards and blanks are routinely added to every batch of samples. Total QAQC samples make up approx. 10% of all samples. • Monthly QAQC reports are compiled by database consultant and distributed to Mincor personnel.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> • 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. • Holes are logged on Microsoft Excel templates and uploaded by consultant into Datashed format SQL databases; these have their own in-built libraries and validation routines.
Location of data points	<ul style="list-style-type: none"> • Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> • Surface holes surveyed in by differential GPS in MGA coordinates by registered surveyor both at set out and final pick up. • Downhole surveys are routinely done using single shot magnetic instruments. Surface holes or more rarely long underground holes are also gyroscopic surveyed.
Data spacing and distribution	<ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied. 	<ul style="list-style-type: none"> • Current drill-hole spacing is 40–80m between sections and 10–25m between intercepts on sections. • This program is infilling to a nominal 20–40m strike spacing to allow for a possible Inferred/Indicated Resource classification.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> • Surface drill-holes usually intersect at various angles to contact due to the complex folding in the Cassini area. • Mineralised bodies at this prospect are irregular which will involve drilling from other directions to properly determine overall geometries and thicknesses.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • 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.
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • In-house audits of data are undertaken on a 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 tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> All resources lie within owned 100% by Mincor Resources NL. Listed below are tenement numbers and expiry dates: <ul style="list-style-type: none"> M15/1457 – Cassini (01/10/2033)
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Jupiter Mines and WMC have previously explored the Cassini area, but Mincor has subsequently done most of the drilling work.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Typical “Kambalda” style nickel sulphide deposits.
Drill-hole information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill-holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill-hole collar dip and azimuth of the hole downhole length and interception depth hole length. 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. 	<ul style="list-style-type: none"> See attached tables in previous releases and Appendix 3 of this release.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Composites are calculated as the length and density weighted average to a 1% Ni cut-off. They may contain internal waste; however, the 1% composite must carry in both directions. 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 between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’). 	<ul style="list-style-type: none"> The general strike and dip of the basalt contact is well understood so estimating likely true widths is relatively simple, although low angle holes can be problematic.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See body of text for Cassini diagrams.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All holes are represented on the 3d image for Cassini and characterised by grade ranges to show distribution of metal.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Downhole electromagnetic modelling has been used to support geological interpretation where available.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Resources at the extremities are usually still open down plunge (see 3D image).

