# **ASX ANNOUNCEMENT**



18 March 2020

## FURTHER HIGH-GRADE DRILLING SUCCESS AT CASSINI NICKEL PROJECT

Latest infill diamond hole intersects <u>8.2m @ 7.6% Ni</u> in the CS4 channel as part of strategy to upgrade Inferred Mineral Resources as drilling at Cassini North identifies potential new channel

## **Highlights**

- Another high-grade sulphide intercept of 8.2m @ 7.6% Ni in MDD341, within the CS4 channel
- New intersection is from infill drilling designed to upgrade the Inferred category of the Mineral Resource
- Exciting new intersection (MDD342) of 7.7m @ 1.4% Ni (incl 0.5m @ 7.5% Ni) at Cassini North, where drilling
  has identified a new possible channel location
- Two diamond drill rigs now working at Cassini and Cassini North

Mincor Resources NL (ASX: MCR, "Mincor" or the "Company") is pleased to report significant new drilling results from its Cassini Nickel Project in the Kambalda region of Western Australia, where infill drilling of the Inferred section of the Mineral Resource is making excellent progress and initial drilling at the Cassini North prospect has delivered exciting results.

### **Cassini Main**

Following the results outlined in the December 2019 Quarterly Report and the outstanding intersection reported on 6 January 2020 (17.6m @ 5.0% Ni), two further drill holes were completed on the 6491350mN section.

One of the holes (MDD338W1B) intersected the CS5 contact returning a strong intercept of <u>3.4m @ 3.2% Ni</u> as well as a hanging wall intercept of <u>2.2m @ 11.1% Ni</u>. At this stage it is not known if this hanging wall intercept is an extension of an existing mineralised surface or the start of an entirely new surface.

While further holes are planned on this section, in order to increase confidence in the Inferred section of the Mineral Resource (and potentially convert it to the Indicated category), the rig was repositioned to drill an infill section, with the first hole (MDD341) returning an outstanding intercept of 8.2m @ 7.6% Ni (estimated true width 4.7m). This intersection lies 68m down-plunge from MDD317W2 and 58m up-plunge from MDD339 (17.6 m @ 5.0% Ni) - see 3D image Figure 1 and cross section Figure 3.

MDD341 is located within the Inferred Mineral Resource envelope in the delineated CS5/CS4 channels. This new intersection was recorded in the CS4 channel after intersecting the interpreted very top edge of CS5 (which returned 5.7m @ 1.3% Ni). The CS4 intersection is stronger than currently modelled and is more in line with the previously reported intercept in MDD338 (17.6m @ 5.0% Ni) referred to earlier.

MDD341 demonstrates the continuity, thickness and high-grade nature of the nickel sulphides contained within the CS5 and CS4 surfaces and confirms the Company's decision to potentially include these Inferred Resources as part of the Definitive Feasibility Study (DFS) to be announced by the end of this quarter.

The diamond drill rig has now moved to the down wedge below MDD341, targeting the CS5 channel.



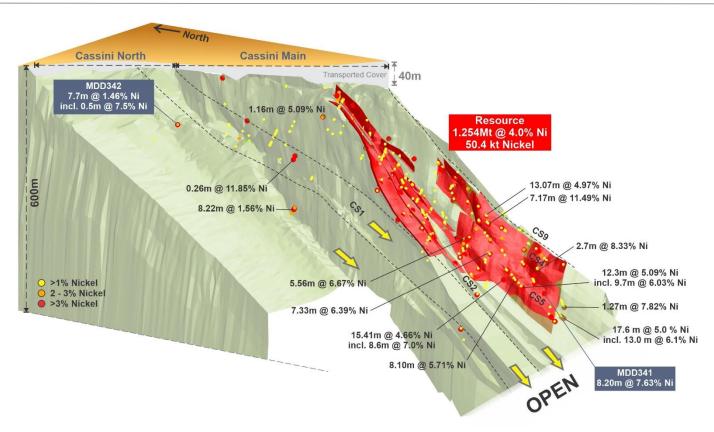


Figure 1 - Cassini 3D image showing Mineral Resource shapes, basalt model and drill holes

## **Cassini North**

A second diamond drill rig was sourced during February 2020 to accelerate testing of the Cassini North area, which includes the CS1 channel area.

To date, CS1 has only been drilled on a couple of sections with some interesting off-contact nickel intersections. Given that CS1 area is located 400m from the existing Mineral Resource, reasonable success in this area would benefit from the planned infrastructure being contemplated for Cassini as part of the DFS to be released soon.

Initial drill testing was partly reported in the December 2019 Quarterly Report (MDD335 and MDD337) but, with recent follow-up drilling in MDD342, it can now be properly put into context.

The initial target was two discrete magnetic highs that appeared to be on the basal contact and were down-plunge from anomalous nickel geochemistry in historical aircore holes. The first hole tested the western-most magnetic feature but intersected no significant nickel mineralisation and thin komatiite flow units and sediments. The DHEM response from this hole identified a target further to the east. The second hole in the program intersected thin flow units with minor nickel mineralisation of 0.2m @ 2.5% Ni in a hanging wall position.

Holes MDD340 and MDD342 (the most recent hole) were drilled progressively to the east and tested the second magnetic feature and DHEM targets. All holes have delivered improved vectors and indicate potential for greater nickel prospectivity further to the east and up or down-plunge. MDD342 intersected 7.7m @ 1.4% Ni, which included matrix sulphides that returned 0.5m @ 7.5% Ni.

Two holes are planned to be drilled in the CS1 area and the plan beyond these holes remains flexible depending on results.



Mincor's Managing Director, David Southam, said that the Cassini Project continued to deliver outstanding results, both from infill drilling of the main Mineral Resource and from exploration targeting potential upside at Cassini North.

"The intersection of 8.2m at 7.6% nickel supports our belief that, as we drill deeper, Cassini Main is thickening and will deliver exceptionally high-grade results – although we should remember that this is still relatively shallow in the context of Kambalda nickel deposits.

"The focus of drilling is to convert some, if not all, of the Inferred material into the higher confidence Indicated category. We are also seeking potential Mineral Resource extensions to demonstrate that Cassini will have a significant life beyond what we ruled off for DFS purposes in November 2019.

"Outside of Cassini Main, we are particularly excited and now encouraged by the early drilling results at Cassini North, which is located roughly 400m from Cassini Main. To have early success of nearly 7.7m at 1.4% Ni, and which includes a high-grade subinterval of 7.5% Ni, shows that we could be onto a similar channel to Cassini Main. Drilling is continuing with two rigs."

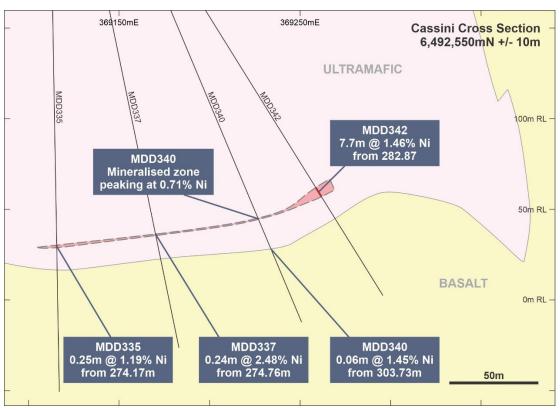


Figure 1 - Cassini North Section 6,492,550mN



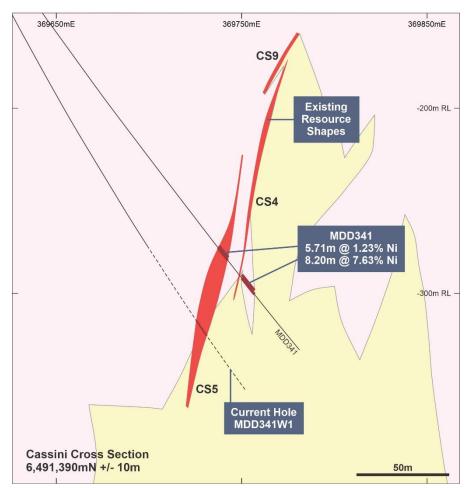


Figure 3 - Cassini cross section 6491390mN

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.

## Approved by:

**Board of Mincor Resources NL** 

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

#### Nickel Mineral Resources as at 5 November 2019

DECOLIDE	MEASURED		INDICATED		INFERRED		TOTAL			
RESOURCE	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Ni tonnes	
Cassini			1,092,000	4.0	162,000	4.3	1,254,000	4.0	50,400	
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	3,973,000	3.7	712,000	4.1	4,940,000	3.8	187,900	

#### 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 Cassini and Long Resource estimates but will be updated when appropriate.
- \*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 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

	PROVED		PROBABLE		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.

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 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.

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



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

	Collar coordinates								Estimated				
Hole ID	MGA easting	MGA northing	MGA RL	EOH depth	Dip	MGA azimuth	From	То	Interval	true width	% Ni	% Cu	% C
Cassini - Diam	ond Drilling												
MDD338W1	369539.1	6491359.0	311.3	762.5	-70	90.0	603.47	604.13	0.66	0.5	1.73	0.16	0.04
MDD339W1	369418.1	6491359.3	310.9	200.7*	-69	90.0	Hole Ab	andoned					
MDD339W1A	369418.1	6491359.3	310.9	14.6*	-69	90.0	Hole Ab	andoned					
MDD339W1B	369418.1	6491359.3	310.9	792.4	-69	90.0	710.33	712.51	2.18	1.5	11.13	1.22	0.20
MDD339W1B							730.16	733.56	3.40	2.8	3.20	0.33	0.08
MDD340	369111.2	6492544.5	304.1	345.3	-65	90.0	303.73	303.79	0.06	0.1	1.45	0.06	0.04
MDD341	369445.5	6491399.8	310.2	726.5	-69	90.0	669.34	675.05	5.71	4.9	1.23	0.13	0.03
MDD341							680.14	688.34	8.20	4.6	7.63	0.30	0.12
MDD342	369112.5	6492542.5	304.2	351			282.87	290.60	7.73	NA	1.46	0.09	0.03
MDD342						Including	282.87	283.35	0.48	NA	7.53	0.28	0.17
MDD343	369140.6	6492386.8	304.9	442.5	-65	90.0	372.01	372.02	0.01	NA	3.00		



## 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 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 assay data and laboratory 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 and 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 data in relation to geological 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>	<ul> <li>Surface drill-holes usually intersect at various angles to contact due to the complex folding in the Cassini area.</li> <li>Mineralised bodies at this prospect are irregular which will involve drilling from other directions to properly determine overall geometries and thicknesses.</li> </ul>
Sample security	The measures taken to ensure sample security.	<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> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>In-house audits of data are undertaken on a periodic basis.</li> </ul>

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> <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> </ul>	All resources lie within owned 100% by Mincor Resources NL. Listed below are tenement numbers and expiry dates:     M15/1457 – Cassini (01/10/2033)
	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.	



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Jupiter Mines and WMC have previously explored this area, but Mincor has subsequently done most of the drilling work.
Geology	Deposit type, geological setting and style of mineralisation.	Typical "Kambalda" style nickel sulphide deposits.
Drill-hole information	<ul> <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> <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>downhole 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>	See attached tables in previous releases and Appendix 2 of this release.
Data aggregation methods	<ul> <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> <li>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.</li> <li>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.</li> </ul>
Relationship between mineralisation widths and intercept 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 is well understood so estimating likely true widths is relatively simple, although low angle 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 substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	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).