

# CASSINI CONTINUES TO GROW WITH MORE HIGH-GRADE NICKEL INTERCEPTS

### **HIGHLIGHTS**

• Significant new nickel sulphide intercepts in diamond wedge hole MDD314W1, 40m up-dip of the impressive high-grade intercept of 7.17m @ 11.49% Ni<sup>1</sup> reported earlier this week:

MDD314W1: 13.07m @ 4.97% Ni (estimated true width of 9.4m), including intervals:

**3.47m @ 6.23% Ni (**estimated true width of 2.5m) **3.68m @ 9.50% Ni** (estimated true width of 2.6m)

- New results demonstrate the continuity of mineralisation in the CS4 Channel, with the extensional intercepts located approximately 105m down-plunge of the June 2018 Mineral Resource boundary (Figures 1 and 3).
- The potential for further CS4 extensions beyond the first step-out section is demonstrated by an associated strong down-hole electromagnetic (DHEM) conductor (Figures 1 and 3).
- MDD314W1 continued beyond CS4 and confirmed new targets along the structurally repeated "limbs" of the Cassini basal contact, with a significant zone of high-grade nickel also intersected on a limb located near the footwall of the CS4 Channel (Figure 2):

**MDD314W1: 1.37m** @ **3.88% Ni** – (estimated true width of 0.4m)

- This intersection on the edge of a major interpreted synform, in combination with a separate large DHEM conductor, highlights the potential for additional nickel sulphide-bearing channels to be located nearby (Figures 2 and 3).
- Cassini is continuing to emerge as a significant greenfields nickel sulphide discovery, with two openended resource trends delineated so far (CS2 and CS4) and promising intersections returned in adjacent channels – highlighting the opportunity to rapidly build substantial high-grade nickel resources.

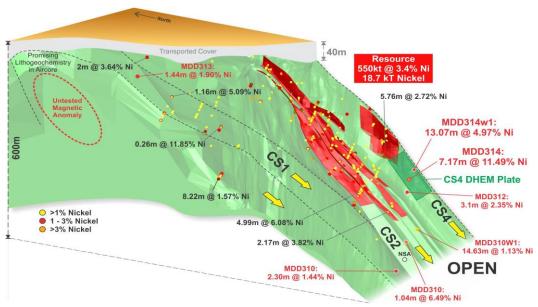


FIGURE 1: 3D Cassini basal contact shown in green, nickel Resources in red and drilling<sup>1</sup> (note only the DHEM conductor relating to MDD314 intersection is plotted)

<sup>&</sup>lt;sup>1</sup> For further details on Cassini exploration results, refer to Mincor's September 2018 quarterly report, and ASX releases dated 17 December 2018, 2 August 2018, 23 May 2018, 17 May 2018 18 April 2018, 8 March 2018, 5 March 2015, 9 April 2015 and 27 November 2014.



Further to its ASX announcement of 17 December, Mincor Resources NL (ASX: MCR) is pleased to report additional significant results from ongoing step-out diamond drilling at its **Cassini Project** in Kambalda.

Ongoing drilling has continued to intersect high-grade nickel sulphide mineralisation more than 100m down-plunge of the current Mineral Resource boundary in the CS4 Channel, while also highlighting the potential for significant nickel sulphide zones and new discoveries on adjacent channel trends.

The ongoing resource extension drilling program at Cassini is part of Mincor's core focus of building on its high-grade nickel sulphide **Mineral Resource base of 3.3Mt @ 3.6% Ni for 118Kt of nickel-in-ore** in the Kambalda region (Appendix 2).

# The Cassini Mineral Resource currently stands at 550,000 tonnes @ 3.4% Ni for 18,700 nickel tonnes.

Mincor's current drilling program is targeting down-plunge extensions of the CS4 Channel and has so far returned impressive nickel results in the first step-out section on 6,491,600N (Figure 2).

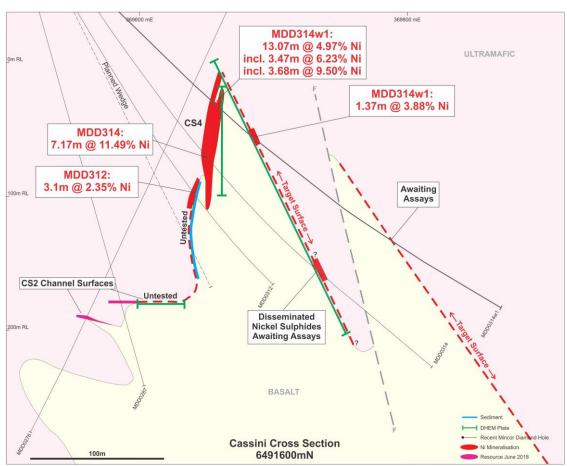


FIGURE 2: Cross section 6491600N 1

The CS4 has recently delivered the best-ever intersection for the Project with MDD314 returning **7.17m @ 11.49% Ni** (see ASX announcement, 17 December 2018). Due to limited drilling, the CS4 Channel only hosts 4% of the current Mineral Resource inventory at the Cassini Project.

DHEM surveys have identified six off-hole conductors down-plunge of the Cassini resource, three of which are in proximity to the CS4 Channel position (Figure 3). Mincor plans to drill a series of sections to extend the impressive intersections achieved so far in the CS4 Channel. The extensional program will recommence early in the New Year.

Mincor has recently completed MDD314W1 as a wedge to the parent hole MDD314. In addition to the highly encouraging intercepts approximately 40m up-dip of the original intercept reported in the highlights, the hole was extended and intersected other basal contacts to the east. The confirmation of structurally repeated basal contacts with favourable litho-geochemical indicators and no sediment units within ultramafic host rock is considered to be very encouraging and opens up the potential prospectivity in the area.



The wedge did return a promising intersection of **1.37m** @ **3.88% Ni**. This interval is located along an interpreted folded limb of the basal contact in the footwall of the CS4 Channel (Figure 2) and in combination with a separate large DHEM conductor, highlights the potential for additional nickel sulphide-bearing channels to be located nearby (Figures 2 and 3).

This promising new target surface will be tested by extending planned wedge holes testing the CS4 Channel (Figure 2).

Hole MDD314W1 will also provide an excellent platform to carry out a DHEM survey, scheduled for early in the New Year, to help guide ongoing drilling.

Drilling in early 2019 will continue testing the shallower CS4 and CS1 channels trends and other emerging surfaces, before completing the extensional program at the CS2 Channel to a depth of 550m below the surface.

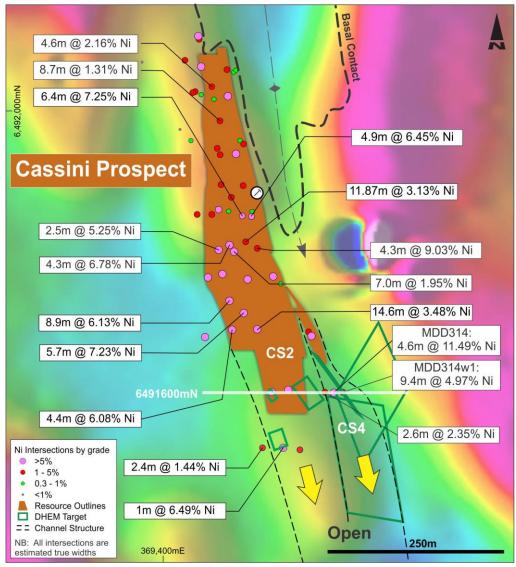


FIGURE 3: Cassini trend with prospective DHEM plates over high resolution magnetics<sup>1</sup>

The information in this Public Report that relates to Exploration Results is based on information compiled by Mr Muller, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Muller is a full-time employee of Mincor Resources NL. Mr Muller 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 20012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Muller consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

- ENDS -



# APPENDIX 1: Cassini Drill-Hole Information (1% Ni cut-off)

	Collar coordinates								Estimated				
Hole ID	MGA easting	MGA northing	MGA RL	EOH depth	Dip	MGA azimuth	From	То	Interval	Estimated true width	% Ni	% Cu	% Co
Cassini													
MDD314W1	369394.7	6491604.5	307.5	648.3	-56	90	425.19	438.26	13.07	9.4	4.97*	0.21	0.07
including							425.19	428.66	3.47	2.5	6.23	0.24	0.10
including							434.58	438.26	3.68	2.6	9.50	0.40	0.13
MDD314W1						·	452.3	454.5	1.37	0.4	3.88	0.20	0.05
MDD314W1							557.29	557.39	Awaiting Assays				

<sup>\*</sup> Interval includes an internal zone of 5.92m @ 0.43% from 428.66m Ni which carries both ways greater than 1%

## **APPENDIX 2: Nickel Mineral Resources and Ore Reserves**

## Nickel Mineral Resources as at 30 June 2018

DECOLIDEE	MEASURED		INDICATED		INFERRED		TOTAL		
RESOURCE	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Tonnes	Ni (%)	Ni tonnes
Cassini			499,000	3.5	51,000	2.6	550,000	3.4	18,700
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
McMahon/Ken**	25,000	2.7	103,000	3.1	105,000	4.6	234,000	3.7	8,700
Durkin North	-	-	417,000	5.3	10,000	3.8	427,000	5.2	22,400
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	2,736,000	3.6	290,000	3.9	3,282,000	3.6	117,900

#### Notes:

- 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 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 2018

RESERVE	PROVED		PROBABL	.E	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	

#### Notes:

- 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 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.

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



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

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

JORC Code explanation	Commentary
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	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 samples are
sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	usually 1.5m or less.  Air-core sampling is usually for geochemical purposes samples are composited into 2m or 3m intervals, although some programs also collect the bottom 1m sample separately.
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.	
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 surface core is orientated. Air-core for reconnaissance drilling.
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	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.  No air-core samples are assessed for recovery.
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	All drilling is geologically logged and stored in database. For diamond core, basic geotechnical information is also recorded.
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.	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.
	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 1 m 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.  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.).  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.  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.  If core, whether cut or sawn and



Criteria	JORC Code explanation	Commentary
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is	Drill core assayed by four-acid digest with ICP finish and is considered a total digest.
laboratory tests	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.	A handheld XRF instrument (Olympus Innov-X Spectrum Analyser model DP-6000-C) is used to analyse the drill core and used to report an interval grade. In such instances multiple readings are taken at set intervals and averaged to provide the estimate interval grade. The instruments are routinely serviced and calibrated. Field calibration of the XRF instrument using standards is routinely performed.  The handheld XRF results are only used for preliminary
	been established.	assessment and reporting of element compositions, prior to the receipt of assay results from the certified laboratory.
		Laboratory assays are required to confirm the nickel grades which have been estimated using portable XRF analysis
		Reference standards and blanks are routinely added to every batch of samples submitted to a laboratory. Total QA/QC samples make up approx. 10% of all samples.
		Monthly QA/QC reports are compiled by database consultant and distributed to Mincor personnel.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.  The use of twinned holes.	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.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to assay data.	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	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other	Surface holes surveyed in by DGPS in MGA coordinates by registered surveyor both at set out and final pick up.
	locations used in Mineral Resource estimation.	Air-core may be set out by GPS only.
	Specification of the grid system used.  Quality and adequacy of topographic control.	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	Data spacing for reporting of Exploration Results.  Whether the data spacing and distribution is sufficient to	Current drill hole spacing is 40–80m between sections and 10–25m between intercepts on sections.
distribution	establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	This program in infilling to a nominal 40–50m strike spacing to allow for a possible Inferred/Indicated Resource classification.
Orientation of	Whether sample compositing has been applied.  Whether the orientation of sampling achieves unbiased	Surface drill boles usually intersect at various angles to
Orientation of data in relation	sampling of possible structures and the extent to which this is	Surface drill-holes usually intersect at various angles to contact due to the complex folding in the Cassini area.
to geological structure	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.	Mineralised bodies at this prospect are irregular which will involve drilling from other directions to properly determine overall geometries and thicknesses.
Sample security	The measures taken to ensure sample security.	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	The results of any audits or reviews of sampling techniques and data.	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	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	All resources lie within owned 100% by Mincor Resources NL. Listed below are tenement numbers and expiry dates:  • M15/1457 – Cassini (01/10/2033)  • M5/1458 – Higginsville West (01/10/2033).			
	known impediments to obtaining a licence to operate in the area.				
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	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:	See attached tables in releases.			
	<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>				
	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.				
Data aggregation methods	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.	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.			
	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 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			
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	vary markedly within a single orebody.			
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill-hole	The general strike and dip of the orebodies is well understood so estimating likely true widths is relatively simple, although low angle holes can be			
intercept lengths	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').	problematic. See cross section in body of release.			
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 and cross section.			
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 plan and characterised by m% Ni 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	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.	Resources at the extremities are usually still open down plunge (see plan).			
	provided this information is not confinitionally sensitive.				