



17 JULY 2018

**ASX: ARV** 

**ATY: FRANKFURT** 

# Base, Battery and Precious Metals

ARTEMIS RESOURCES LIMITED IS AN AUSTRALIAN MINERAL DEVELOPER ADVANCING ITS WEST PILBARA BASE METALS, BATTERY AND PRECIOUS METALS ASSETS TOWARDS PRODUCTION.

ARTEMIS HAS CONSOLIDATED A MAJOR LAND HOLDING IN THE WEST PILBARA AND IS THE 100% OWNER OF THE RADIO HILL OPERATIONS AND PROCESSING INFRASTRUCTURE, STRATEGICALLY LOCATED 30 KM FROM THE CITY OF KARRATHA, THE POWERHOUSE OF THE PILBARA.

# WANT TO KNOW MORE ABOUT ARTEMIS?

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# UPDATE ON SUPER-DEEP HOLE IN WEST PILBARA - Western Australia -

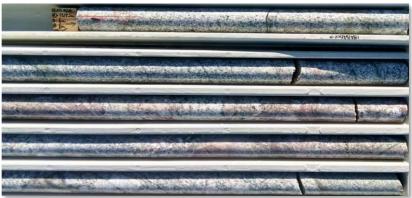
Artemis Resources Limited ("Artemis" or "the Company") (ASX: ARV) is pleased to provide this update on ASD-1, the West Pilbara super-deep diamond drill hole.

Diamond Drill Hole – ASD-1 Super Deep Hole				
Date	16 July 2018			
Time	6 pm WST			
Drill Size (outside diameter)	PQ (~122.6mm)			
	(0-500m)			
Drill Size (outside diameter)	HQ (~96mm)			
	(500m - TBA)			
Current Depth of Drill hole	1225.5 metres			

## **Highlights**

- On 16 July 2018 ASD-1 was at a depth of 1225.5 metres and within an intermediate-felsic intrusive (diorite granodiorite) (Figure 1).
- The diorite-granodiorite was entered into at a depth 644.4 metres and the change in geology from Hardey Formation at such a shallow depth was unexpected, with alteration, bleaching and a number of quartz and pegmatitic veins now being observed.
- The intersection of the granodiorite at a downhole depth of 644.5 metres and the resulting relative level above sea level, means that Artemis is ~180m higher than at Munni Munni as observed in MMD178 (Figure 1).
- This means that the interpreted basin deepening to the south of Munni Munni gabbro is incorrect and it is possible that the Fortescue Basin topography (when sediments were emplaced) is undulating and therefore ia fertile for trap sites and areas where mafic rich conglomerates can accumulate with detrital gold.
- Further analysis of the Felsic Intrusive (diorite-granodiorite) will be ongoing with work by GSWA and CSIRO.

Figure 1: Core photo from ASD-1





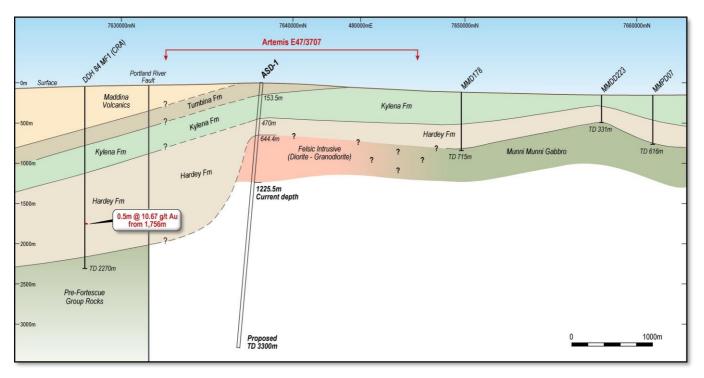
### Overview

ASD-1 is planned for a vertical depth of +3,300m and designed to test the many rock sequences in the Pilbara Basin from surface and deep into the basement's geology. These deeper rock sequences were interpreted or inferred to exist, based on very sparse data. This surface and shallow data does not explain observed surface mineralisation of diamonds, cobalt, zinc, lead and gold.

What Artemis has defined at this early stage is very valuable as it shows the basement (hard rock geology) is undulating and actually dips to the north from ASD-1. The sediments (now rock) have filled in the topography that existed, which would have been hills, valleys, crevices. This means there are trap sites for mafic conglomerates in a multitude of possible locations, like between ASD-1 and Munni Munni (Figure 2).

Artemis continues to review work at Munni Munni with a view to using diamond drill holes to look for shallow mafic conglomerates.

Figure 2: Schematic Interpretative Long-Section. North-South orientation of section with Munni Munni and Purdy's Reward to the north (right side of image)



### **Previous Exploration**

The primary target for all previous drilling was the Munni Munni Igneous Complex gabbros that host the PGE reef mineralisation at Munni Munni. A substantial amount of the drill holes reviewed to date have little to no information on sediments above the Munni Munni Igneous Intrusion. The drill database that Artemis has acquired while earning in to the Platina Resources Munni Munni Joint Venture is the source for drill holes MMD178, MMD223 and MMPD07 which have been used to generate and expanded Schematic Interpretive Long Section as seen in Figure 2. A comparison drill log with the CRA drill hole can be seen in **Figure 3.** 

Further analysis of the Felsic Intrusive (Diorite-Granodiorite) will be ongoing with work by GSWA and CSIRO. This work will be looking at the exact type of felsic intrusive and how it relates to observed surface mineralisation observed to date.



Drill core from ASD-1 is being moved from the drill site to Artemis's Radio Hill Operations, located some 43 km to the north, where core is being logged and photographed. The whole core will then be sent to the GSWA's Perth Core Library for analysis. The current drilling rate has reduced to about 20m/shift due to ground hardness.

ASD-1 is located on E47/3707 (co-ordinates 480100mE, 7637370mN, 330m RL, Azi: 180, Dip: -85 degrees, Estimated Depth: 3,300m), some 43km south of Artemis' Radio Hill Mine in the West Pilbara, of Western Australia. (Refer to previous Artemis news release, dated 22 March 2018 for further details on ASD-1).

**Figures 2 and 3** highlights the CRA diamond drill hole DDH 84 MF1 that was drilled in 1986, which now resides at the WA Core Library.

Figure 3: Summary drill logs for CRAE drill hole and progress summary drill log for Artemis's ASD-1. Geology comparison.

# DDH 84 MF1

_	(alter OTAL)					
Depth (m)	Stratigraphic Unit	Lithology	Rock Type			
	Maddina Basalt (Maddina Fm)		Amygdaloidal and massive basalt 538 m			
-	Pillingini Tuff (Tumbiana Fm)		Tuffs, partially stromatolitic, epislastic sandstone, siltstones and shales 731 m			
-750 - - - - - -1000	Kylena Basalt (Kylena Fm)		Amygdaloidal, massive and pillowed basalt, interbedded tuff			
- - - - - - - - - - - - - - - - - - -		******* ****** ******	Tuffs, lithic sediments 1200 m  Tuffaceous sandstone, tuffs 1500 m			
- - - - - - - 1750	Cliff Springs Fm (Hardey Fm)		Tuffaceous grits, diamictites and pepple conglomerate			
			0.5m @ 10.67 glt Au in Conglomerates from 1,756m			
- - -2250	Pre-Fortescue Group Rocks	4 9 4 4 9 4	2133 m Pillow basalts, cherts			
			EOH 2270 m			

### ASD-1

	Depth (m)	Stratigraphic Unit	Lithology	Rock Type
		Tumbiana Fm		Tuffaceous sediments, minor lapilli tuff and laminated shales 153.5 m
- -2 - - -	50	Kylena Fm		Amygdaloidal, massive basait, interbedded tuffs 470 m
-5 - -	00	Hardey Fm		Tuffs, lithic sediments
	50			Intermediate-felsic intrusive (Diorite - Granodiorite) with alteration and bleaching and a number of narrow quartz veins
- - - - - - -	250 500			1225.5 m - Current depth  Proposed depth 3300 m



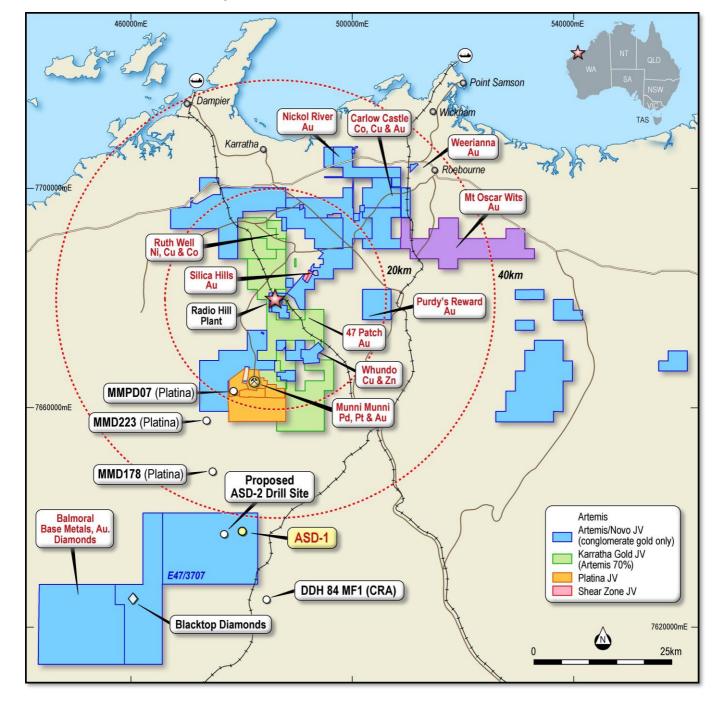


Figure 4: Artemis's Tenements in the Karratha Area

### **COMPETENT PERSONS STATEMENT:**

The information in this document that relates to Exploration Results and Exploration Targets is based on information compiled or reviewed by Edward Mead, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Mead is a Director of Artemis Resources Limited and is a consultant to the Company, and is employed by Doraleda Pty Ltd. Mr Mead has sufficient experience that is 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 Mead consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



# Appendix 1: CRAE Collar Location & Significant Analyses from DDH84MF#1 drilled in 1984-85, reported in 1987.

Note: Latitude /Longitude converted to MGA Zone 50 co-ordinates by Artemis personnel.

							From	То	Au	Au
Hole_ID	Hole Type	Max Depth	MGA_N	MGA_E	Latitude	Longitude	(M)	(M)	(ppm)	(ppm) (rpt)
DDH84MF#1	DDH	2270	7627119	484459	-21° 27.5"	116° 51"	1756	1756.5	10.67	11.7

## Appendix 2: Platina Resources Collar Locations used in the Schematic InterpretativeLong Section

			Col	lar Coordinate	es in MGA_Zone	e 50
DRILL HOLE	RL	MGA_E		MGA_N		EOH
Platina MMPD07	180		478314		7662894	615.7
Platina MMD223	180		473450		7657515	330.7
Platina MMD178	200		474510		7648250	714.84

## 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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g</li> </ul>	Munni Munni (Platina) Project  • No sampling being reported.



Criteria	JORC Code explanation	Commentary
	charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>CRA drillhole</li> <li>Diamond drilling has been undertaken by Rockdrill Pty Ltd</li> <li>Drilling was Reverse Circulation to 257.5m, HQ diamond drilling to 960.5m and NQ diamond drilling to 2269.95m.</li> <li>ASD-1</li> <li>Diamond drilling from surface is being undertaken by DDH 1 Drilling Pty Ltd.</li> <li>All core to date is PQ which is intended to be finished at 600m, when core size will change to HQ.</li> <li>Munni Munni (Platina) Project</li> <li>A combination of drilling by Reverse Circulation and Diamond core.</li> </ul>
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>been excellent and close to 100%.</li> <li>The core is measured against core blocks placed at the end of each drill rod pull.</li> <li>ASD-1</li> <li>Diamond drill recovery to date is</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> </ul>	Reverse Circulation drill chips were



Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	<ul> <li>A combination of drilling by Reverse Circulation and Diamond core was lithologically logged for Platinoids.</li> </ul>
Sub-sampling techniques	<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 sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu 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>	ASD-1  • Diamond core has not been cut or sampled
Quality of assay data an	, , ,	considered appropriate for the style of mineralisation defined at the time:  Crush to -2 mm and pulverised to 95% passing 75 microns  Au – 30gm fire assay/AAS  Co, Cu, Ni, Pb, Zn, Ag – Perchloric acid/AAS  Ba, U – Pressed der XRF.  Use of standards was not reported.  Use of duplicates was not reported.  ASD-1  No assaying completed.
Verification of sampling and assaying	The verification of significant intersections by either independent	<ul><li><u>CRA drillhole</u></li><li>All geological logging was typed into hard</li></ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>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>copy records.</li> <li>Hard copy of analytical results included in report.         ASD-1     </li> <li>No assaying completed.</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>Method of survey location not reported.</li><li>Latitude &amp; longitude were converted by</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>CRA drillhole</li> <li>A single Diamond drill was reported in 1987.         ASD-1     </li> <li>This drill hole is ~12km NNW of the CRAE drill hole and comparisons on exploration are being made with information that also relates to geology at Munni Munni and at Purdy's Reward.         Munni Munni (Platina) Project     </li> <li>Drilling of Diamond core is ~12km north of ASD-1 with a series of drillholes drilled in the late 90's. Three drill holes have been used in this release for a schematic interpretative Long Section using MMD178, MMD223 and MMPD07.</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</li> </ul>	<ul> <li>Diamond drill hole was vertical to intersect the stratigraphy, orientations at depth were</li> </ul>



Criteria	JORC Code explanation	Commentary
	orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>Geological structure will be captured.         <u>Munni Munni (Platina) Project</u> </li> <li>Drilliing was near vertical on all drill holes at Munni Munni.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>CRA drillhole</li> <li>Core is now held in WA Core Library.         ASD-1     </li> <li>The drill hole core is being trucked to the WA Core Library.         Munni Munni (Platina) Project     </li> <li>Drill core and Reverse Circulation drill chips is in possession of Artemis at Radio Hill Minesite or at the Munni Munni core farm.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>CRA drillhole</li> <li>Not reported.</li> <li>ASD-1</li> <li>No sampling reported as not completed at this stage.</li> <li>Munni Munni (Platina) Project</li> <li>Not reported.</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> <li>The security of the tenure         held at the time of         reporting along with any         known impediments to         obtaining a licence to</li> </ul>	<ul> <li>CRA drillhole</li> <li>The tenement was historically called EL47/182, was an application at time of drilling held by CRA Exploration Pty Ltd.         ASD-1 and Balmoral Project     </li> <li>The Balmoral Project consists of E47/3707, E47/3708 and E47/3709 covering a total of 599km².</li> <li>ASD-1 is on E47/3707.</li> <li>All tenements are in good standing.</li> <li>The tenements are 100% owned by KML no2 Pty Ltd, a 100% owned subsidiary of Artemis Resources Limited. The tenements also form part of the Novo Joint Venture where Novo Resources Corp have a 50% interest in paleoplacer and conglomerate gold.         Munni Munni (Platina) Project     </li> </ul>



Criteria	JORC Code explanation	Commentary
	operate in the area.	<ul> <li>The Munni Munni project consist of M47/123-126 and E47/3323.</li> <li>The tenements are in good standing and Artemis is earning in to a 70% interest with Platina Resources Limited.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>CRA drillhole</li> <li>Work was entirely completed by CRA Exploration. Balmoral Project</li> <li>Tawanna Resources and De Beers Australia Exploration (DBAE) discovered Black top 1 and 2 where gem quality diamonds were recovered in 2006 with trial mining.</li> <li>As part of DBAE exploration stream sediment sampling was conducted over a large area of the West Pilbara. This data covers the Balmoral Project, but has not been publicly released.</li> <li>A VTEM survey was flown over the northern part of the Balmoral tenements by Fox Resources Limited in 2007.</li> <li>Fixed Loop Electromagnetics has been undertaken on several VTEM anomalies.</li> <li>Fox Resources Limited also conducted rock chip sampling.</li> <li>All exploration to date is considered of a good quality, and other companies recommended further exploration was warranted.</li> <li>Artemis believes that further exploration is required and that this will create a better understanding of the geology and geological model which encapsulates mineralisation identified to date, which includes cobalt, zinc, lead, gold and diamonds.</li> <li>Munni Munni (Platina) Project</li> <li>The Project was originally owned by Helix Resources which then sold the project to Platina Resources.</li> <li>Drilling by Reverse Circulation and Diamond was completed in the 1990's and early 2000's for Platinoid elements.</li> <li>All Diamond drill core and Reverse Circulation chips are in the possession of Artemis resources.</li> </ul>



Criteria	JORC Code explanation	Commentary
		either at Radio Hill or at the Munni Munni core farm.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>CRA drillhole</li> <li>The drillhole was completed to test stratigraphic concepts relating to sediment hosted gold and uranium deposits, with strong affinities to the Witwatersrand style.</li> <li>Balmoral Project</li> <li>All mineralisation models that relate to sedimentary, and intrusion related deposits are being investigated.</li> <li>Munni Munni (Platina) Project</li> <li>An Igenous complex predominantly Gabbro with a PGE resource defined by Platina Resources Limited.</li> </ul>
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>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly</li> </ul>	All drill hole information is contained in the body of the release above.



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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>	Not relevant to exploration being undertaken.
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 (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>CRA drillhole</li> <li>A better understanding of the thicknesses of stratigraphic units in the Fortescue Group is required.         Balmoral Project     </li> <li>Not being reported.         Munni Munni Project     </li> <li>Not being reported in Platina drillholes.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any</li> </ul>	<ul> <li>Appropriate maps and sections are available in the body of this announcement.</li> </ul>



Criteria	JORC Code explanation	Commentary
	significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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.	Reporting of results in this report is considered balanced.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Interpretation of regional geophysical data is ongoing.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions, depth extensions or largescale 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>	<ul> <li>Artemis is planning with GSWA and CSIRO to complete significant work programmes on the diamond drill core from ASD-1.</li> <li>Hylogger, XRF and high quality core photos with structural logging will be completed, before the core is cut and sent for whole rock assay analysis.</li> <li>The results of this work and how the drill hole compares to exploration results to date will be used to further exploration.</li> </ul>

