

**ASX / Media Announcement** 

7 September 2017

Update-High Grade Gold Nuggets at Silica Hills
-Karratha, Western Australia-



Figure 1: Two specimen quartz/gold nuggets recovered in the last 7 days. Left nugget weighs 90 grams (2.89 oz) and the right nugget weighs 55 grams (1.76 oz) including quartz content.

# **Highlights:**

- Since the release on the 28<sup>th</sup> August 2017, a further 24 ounces of specimen gold has been recovered from Artemis's Silica Hills Gold Project (Figure 1, two selected examples).
- Gold from multiple quartz reefs recovered from Silica Hills, 12 km north of Purdy's Reward in the Karratha region of WA.
- On 28 August 2017, Artemis announced that 26 ounces of gold nuggets and specimens had been recovered from Silica Hills.
- Of this 26 ounces, 22.8 ounces of fine gold and 3 ounces of fine silver reported from the Perth Mint assays, with a purity of 87.63% gold and 12.27% Silver, totalling 99.9% precious metals purity.
- A POW has been submitted to DMIRS and a heritage survey has been requested for new undisturbed areas at Silica Hills.
- Artemis highlights to prospectors that the Silica Hills tenements are granted Mining Licenses and no prospecting is permitted.

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**Company Secretary:**Guy Robertson

Corporate Information ASX Code: ARV





## David Lenigas, Artemis's Executive Chairman, commented;

"The quartz vein stock work and coarse nuggetty gold with high silver content, makes Silica Hills unique in the area. Typical gold nuggets from the Karratha region, like those at Purdy's Reward, usually have very high gold content and purity. Exploration has been continuing at Silica Hills over the past months with the use of small costeans and metal detecting. This has led to the submission of a Programme of Work to DMIRS and a request for an expanded heritage survey with Ngarluma Aboriginal Corporation over the Silica Hills Mining Licenses and surrounding areas."

Artemis Resources Limited ("Artemis" or "the Company") (ASX: ARV) is pleased to announce an update further high grade gold has been recovered from Silica Hills. Exploration at Silica Hills has been ongoing over the past 6 months and this work has increased the Company's confidence in the project. Current work has exposed a quartz vein system style gold deposit within a silicified intrusive environment. Since the ASX release on the 28<sup>th</sup> August 2017 a further 24 ounces of quartz and gold specimen has been recovered via metal detecting from M47/177. Examples of specimen gold recovered to date can be seen in figures 3 and 4.

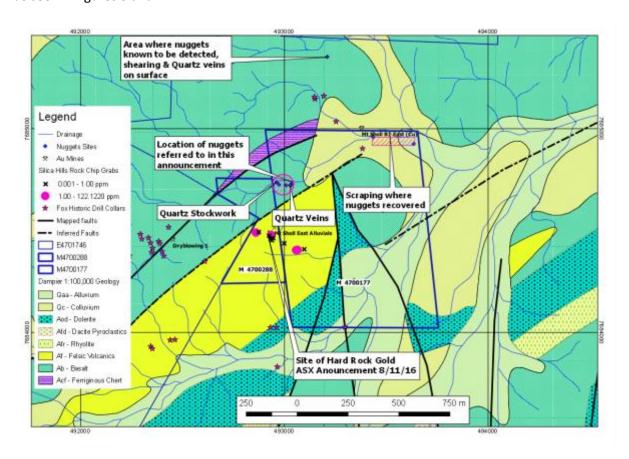


Figure 2: Map of the Silica Hills area showing distribution nugget recovery areas and location of known quartz veins and stockworks.

The geology of the project is characterised by a poorly exposed quartz vein system within Archean felsic and mafics rocks. The work over the past 6 months has helped develop a strategy to further advance Silica Hills and a Programme of Work (POW) has been submitted to the Department of Mines, Industry, Regulation and Safety (DMIRS).





Figure 3: Some of the poorly developed quartz vein systems apparently sourcing the nuggets recovered.

The POW submitted for Silica Hills consists of pitting on a 25 metre by 25 metre grid pattern over the eastern portion of M47/177 and the adjacent E47/1746 at 100m by 100m spacing, Figure 4. The pits are planned to have nominal 2m by 2m by 2m dimensions to reach basement and enable safe sampling conditions.

The work is intended to assist with understanding the gold distribution and structural orientation within quartz vein systems, which will assist in the design of a drill programme. A request for a heritage survey has also been submitted to Ngarluma Aboriginal Corporation. The intended target areas for ground disturbing activities are within areas not previously explored or disturbed by previous operators.



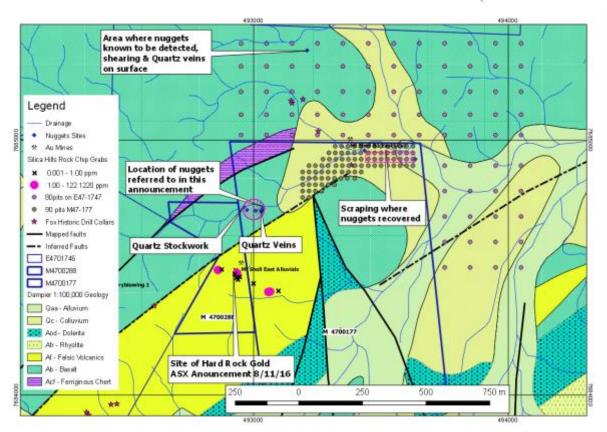


Figure 4: Distribution of proposed exploration pits on M47/177 and E47/1747.

The POW submitted for Silica Hills consists of pitting and trenching on a 50 metre by 50 metre grid pattern over the eastern portion of M47/177 and the adjacent E47/1746. The work is intended to assist with gold distribution and structural orientation within quartz vein stock works, which will assist in the design of a drill programme. A request for a heritage survey has also been submitted to Ngarluma Aboriginal Corporation. The intended target areas for ground disturbing activities are within areas not previously explored or disturbed by previous operators.

	North	East	MGA
Point	MGA	MGA	Zone
Centroid of 20mx40mx1m scraping.	7684732	493037	50
Small quartz vein	7684722	493031	50
Quartz Stock work 5m radius	7684725	492973	50
Quartz Stock work	7684738	492962	50
Location of 11ounces of alluvial or shed nuggets.	7684722	493008	50
Quartz Vein	7684722	493028	50
Significant shearing and quartz veins at surface.	7685353	493210	50
Known nugget location on E47/1746	7685464	493935	50
West end of Spinifex scraping	7684959	493435	50
East end of Spinifex scraping	7684926	493635	50





Figure 5: The scraped area which produced the majority of nuggets, approximately 40m by 20m.

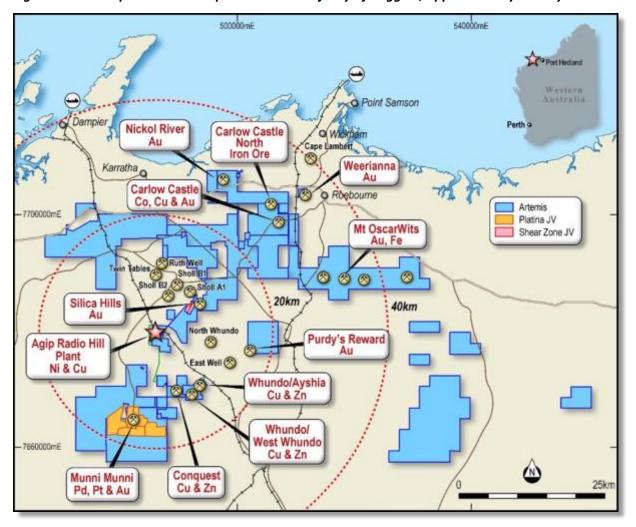


Figure 6: Artemis' tenement package in the Karratha Region of Western Australia.



#### **BACKGROUND INFORMATION ON ARTEMIS RESOURCES:**

Artemis Resources Limited is a resources exploration and development company with a focus on its prospective Karratha (gold, cobalt, base metals, platinum group elements and iron ore) and the Mt Clement Paulsens (gold) project in Western Australia.

Artemis owns the fully permitted 425,000tpa Radio Hill nickel and copper operations and processing plant located 25 km south of Karratha. JORC 2004 compliant resources of Gold, Nickel, Copper PGE's and Zinc, all situated within a 40 km radius of the Radio Hill plant and on 1,536sqkm form the newly consolidated assets of Artemis Resources.

Artemis have signed Definitive Agreements with Novo Resources Corp. ("Novo"), whereby Novo can farm-in to 50% of gold (and other minerals necessarily mined with gold) in conglomerate and/or paleoplacer style mineralization in Artemis' tenements within 100km of the City of Karratha, including at Purdy's Reward ("the Gold Rights"). The Gold Rights do not include (i) gold disclosed in Artemis' existing (at 18 May 2017) JORC compliant Resources and Reserves or (ii) gold which is not within conglomerate and/or paleoplacer style mineralization or (iii) minerals other than gold. Artemis' Mt Oscar tenement is excluded from the Definitive Agreements.

The farm-in commitment now requires Novo to expend AUD \$2 million on exploration within two years of satisfying conditions precedent in the definitive agreements.

The Definitive Agreements cover 38 tenements/tenement applications that are 100% owned by Artemis. On completion of the farm-in commitment, three 50:50 joint ventures will be formed between Novo's subsidiary, Karratha Gold Pty Ltd ("Karratha Gold") and three subsidiaries of Artemis. The joint ventures will be managed as one by Karratha Gold. Artemis and Novo will contribute to further exploration and mining of the Gold Rights on a 50:50 basis. Further definitive agreements covering approximately 19 Artemis tenements/tenement applications that are already subject to third party interests are expected to be signed once all necessary third party consents have been obtained.

### **CONTACTS:**

For further information on this update or the Company generally, please visit our website at <a href="https://www.artemisresources.com.au">www.artemisresources.com.au</a> or contact:

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#### **COMPETENT PERSONS STATEMENT**

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

## FORWARD LOOKING STATEMENTS AND IMPORTANT NOTICE

This report contains forecasts, projections and forward looking information. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions it can give no assurance that these will be achieved. Expectations, estimates and projections and



information provided by the Company are not a guarantee of future performance and involve unknown risks and uncertainties, many of which are out of Artemis' control. Actual results and developments will almost certainly differ materially from those expressed or implied. Artemis has not audited or investigated the accuracy or completeness of the information, statements and opinions contained in this presentation. To the maximum extent permitted by applicable laws, Artemis makes no representation and can give no assurance, guarantee or warranty, express or implied, as to, and takes no responsibility and assumes no liability for (1) the authenticity, validity, accuracy, suitability or completeness of, or any errors in or omission from, any information, statement or opinion contained in this report and (2) without prejudice to the generality of the foregoing, the achievement or accuracy of any forecasts, projections or other forward looking information contained or referred to in this report.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities.

## 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 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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>A metal detector was used to identify anomalous zones and gold nuggets within the near surface profile.</li> <li>The initial surface was prospected then approximately 0.2m of material was scraped off using a D9L bulldozer; this surface was then prospected and the process repeated to a depth of approximately 1m.</li> <li>Total weight of Specimen samples, 26 ounces, was weighed and sent to the Perth Mint for gold recovery.</li> </ul>
Drilling techniques	<ul> <li>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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	recovered.
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</li> </ul>	Not drill samples.



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Criteria	JORC Code explanation	Commentary
	<ul> <li>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>	
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>Samples-specimens were geologically described-logged when collected. These samples are not for the purpose of Mineral Resource estimation, mining studies or metallurgical studies.</li> </ul>
Sub-sampling 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 sub-sampling 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>Specimens containing nugget gold and silver of various sizes was collected (approximately 26 ounces in total).</li> <li>The nuggets came from this 40m by 20m area.</li> </ul>
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	Perth Mint reported 22.8 ounces of fine gold and 3 ounces of fine silver from the submitted specimens (purity of 87.63% gold & 12.27% silver totaling 99.9% precious metals purity).
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>	Not drill samples.
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>Handheld GPS unit used to position sampling locations.</li> <li>A specific listing of the nugget sites was not compiled by the prospector, this has been requested for all future situations.</li> </ul>



Criteria	JORC Code explanation	Commentary
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>Randomly spaced reconnaissance sampling by metal detector around 493100mE 7684750mN.</li> <li>Not for ore resource estimation.</li> <li>No compositing applied.</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>Samples have been obtained via the establishment of bulldozer scrapings and metal detecting.</li> <li>At this stage the prospective structure/zone is along a creek system aligned to a major fault; there is no evidence as yet that the gold is derived from the fault system.</li> </ul>
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>The gold samples remained in the custody of the prospector/contactor until delivered to the Perth Mint.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No audit of rock sampling data has been completed to date</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 operate in the area.</li> </ul>	<ul> <li>Tenements that make up the Silica Hills         Project are M47/177 and M47/288, which are         granted and in good standing. The tenements         are owned by Western Metals Pty Ltd, a 70%         owned subsidiary company of Artemis         Resources Limited. A 2% Gross Royalty is         payable to Exchange Minerals Limited.</li> <li>Tenement E47/1746 is owned by Armada         Mining Pty Ltd, a 100% owned subsidiary         company of Artemis Resources Limited.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The project area has a history of alluvial and elluvial mining by prospectors. RC drill holes were drilled in 2005 on M47/288 and have not been digitised. Most historical work has consisted of field reconnaissance and rock chip sampling (a total of some 180 samples including 16 BLEG from the late 1980's). Trenching has been proposed on both M47/177 and M47/288.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Archean felsic intrusion. Not enough is known about the primary gold mineralisation at this early stage, other than the gold appears to be primarily associated with a quartz stock work of veins. Gold mineralisation and purity is ~87.6% gold and ~12.3% silver.</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 –</li> </ul> </li> </ul>	<ul> <li>Not drillholes. No drilling has been completed on M47/177 where the gold was retrieved by metal detector.</li> </ul>



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Criteria	JORC Code explanation	Commentary
Data	elevation above sea level in metres) of the drill hole collar  o dip and azimuth of the hole o down hole length and interception depth o 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.	
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>	No weighted grade results have been reported.
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>Sampling refers to hand specimens collected from costeans and identified by metal detectors</li> <li>No relationship between samples and underlying geological structures is known at this stage</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	No diagrams have been drawn up as no drilling has been undertaken.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Factual data of the gold supplied to the Perth Mint has been reported.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Other extensive work over the years has been carried out (such as airborne geophysics). The results of which are not reported here.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg 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</li> </ul>	The structural setting and orientation of the quartz veins and stock work is to be further investigated with the use of pitting and trenching. A POW has been submitted for extensive pitting on E47/1746, and M47/177 on new undisturbed areas with no previous exploration by previous operators. A drill



Criteria	JORC Code explanation	Commentary
	drilling areas, provided this information is not commercially sensitive.	programme will be designed on a better understanding of structure orientation.