

#### **22 DECEMBER 2016**

#### **BROAD WIDTHS OF STRONG ALTERATION AND VEINING** INTERSECTED IN RC DRILLING AT THE YAMARNA GOLD PROJECT **ASSAYS PENDING**

Montezuma Mining Company Ltd ("Montezuma" or "Company") is pleased to announce that 20 reverse circulation holes for a total of 2754m have been completed at the 100% owned Yamarna Gold Project, located approximately 20km along strike from the recently discovered multi-million ounce ore body at Gruyere<sup>1</sup> by Gold Road Resources Ltd (ASX:GOR).

Several holes intersected broad zones of alteration including silica, biotite and sericite overprinting, associated with quartz veining +/- sulphides. The alteration occur over zones of up to 40m downhole and is interpreted to have resulted from a significant hydrothermal event.

If gold bearing, these new zones will significantly add to the prospectivity of the Yamarna Project for larger tonnage style gold mineralisation. Previous intersections at Yamarna have been high grade, but tended to be narrow in downhole width.

The drilling was completed at the Jatz, Le Snak and Salada prospects following a regional integrated structural review using the available aeromagnetic, gravity and drilling datasets.

Samples are currently on route to the laboratory for assay. Assays are pending and will be released to the market when available.



<sup>1</sup> http://www.goldroad.com.au/document/gruyere-resource-increases-to-6-2-million-ounces/

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#### ABOUT MONTEZUMA MINING

Listed in 2006, Montezuma Mining Company Ltd (ASX: MZM) is a diversified explorer primarily focused on gold and manganese. The Company's primary objective is to achieve returns for shareholders through selected strategic acquisitions and targeted exploration.

Montezuma has 100% interests in the Yamarna Gold Project in the Yamarna Greenstone Belt, the Holleton Gold Project in the Wheat Belt region and the Butcherbird Manganese/Copper Project in the Murchison region, all located in Western Australia.

#### **MARKET DATA**

ASX code:	MZM
Share price:	\$0.125
Shares on issue:	83.5M
Market capitalisation:	\$10.85M
Cash (at 30 September):	~\$5.2M
Investments (at 30 September):	~\$4.5M

## **BOARD AND MANAGEMENT**

Chairman **Executive Director** Non-Executive Director John Ribbons **Exploration Manager** 

Seamus Cornelius Justin Brown Dave O'Neill



Company information, ASX announcements, investor presentations, corporate videos and other investor material on the Company's projects can be viewed at



Figure 1: Sericite/biotite alteration with quartz veining and sulphides in YARC069.

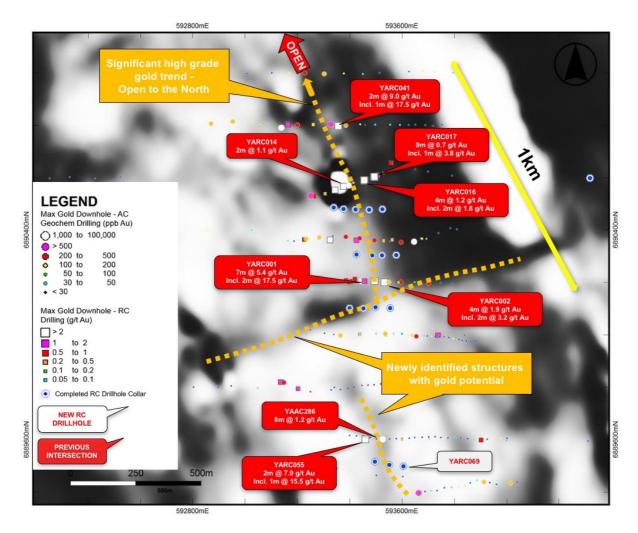
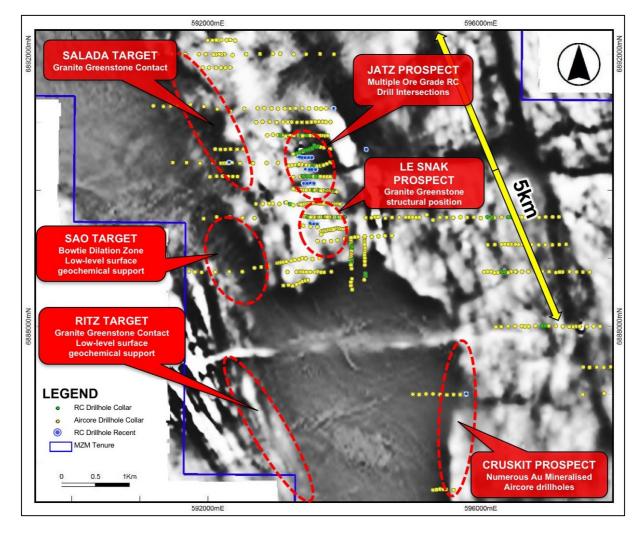


Figure 2: Jatz and Le Snak prospects drillhole location plan. All intersections are downhole widths<sup>2</sup>.

 $<sup>^2\</sup> http://montezuma.com.au/images/uploads/160926\_High\_Grade\_Gold\_Trend\_Confirmed\_at\_Jatz\_FINAL.pdf$ 



Hole ID	Easting (MGA 94 Z51)	Northing (MGA 94 Z51)	Nominal RL (m)	Dip (°)	Azimuth (mag °)	Total Depth (m)
YARC061	593842	6891198	393	-60	90	108
YARC062	592308	6890406	394	-60	270	150
YARC063	593377	6890479	400	-60	270	150
YARC064	593423	6890477	400	-60	270	150
YARC065	593475	6890476	400	-60	270	156
YARC066	593526	6890478	400	-60	270	150
YARC067	593497	6889515	405	-60	270	96
YARC068	593552	6889503	405	-60	270	150
YARC069	593606	6889497	405	-60	270	150
YARC070	593400	6890100	398	-60	270	192
YARC071	593453	6890099	398	-60	270	150
YARC072	593499	6890104	398	-60	270	150
YARC073	593555	6890100	398	-60	270	150
YARC074	593427	6890305	398	-60	270	150
YARC075	593487	6890302	398	-60	270	150
YARC076	593525	6890302	398	-60	270	150
YARC077	593578	6890303	400	-60	270	144
YARC078	593340	6890485	400	-60	270	90
YARC079	594320	6890597	395	-60	90	138
YARC080	595785	6887005	447	-60	270	30

Table 1: Drillhole collar details.

#### FOR MORE INFORMATION...

Justin Brown

Executive Director Phone: +61 8 6315 1400 Email: jbrown@montezuma.com.au Company information, ASX announcements, investor presentations, corporate videos and other investor material on the Company's projects can be viewed at http://www.montezuma.com.au.

The information in this report that relates to Exploration Results, Mineral Resources and Mineral Reserves is based on information compiled by Mr Justin Brown who is a member of the Australasian Institute of Mining and Metallurgy. At the time that the Exploration Results, Mineral Resources and Mineral Reserves were compiled, Mr Brown was an employee of Montezuma Mining Company Ltd. Mr Brown is a geologist and 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 Brown consents to the inclusion of this information in the form and context in which it appears in this report

Please note with regard to exploration targets, the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

JORC Table 1	• 1 (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 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>Reverse circulation (RC) percussion drill chips collected through a cyclone and cone splitter at 1m intervals (except for the first 8m of transported overburden, which is collected from the bulk reject as 4m composite samples).</li> <li>Spitter is cleaned regularly during drilling.</li> <li>Splitter is cleaned and levelled at the end of each hole.</li> <li>Mineralisation determined qualitatively through rock type, sulphide and quartz content and intensity of alteration.</li> <li>Mineralisation determined quantitatively via assay (25g Fire Assay and AAS determination for gold at 4m intervals or less).</li> <li>RC samples pulverized to 75 µm with gold determined by 25g Fire Assay and AAS finish.</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>	<ul> <li>Face sampling Reverse Circulation drilling.</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>Recoveries qualitatively noted at the time of drilling and recorded in the MZM database.</li> <li>Sample splitter is cleaned at the end of each rod to ensure no sample hang-ups have occurred.</li> <li>Wet samples due to excess ground water are noted where present.</li> <li>No relationship between grade and recovery has yet been established.</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>	<ul> <li>All samples are logged to a level of detail to support future use in a mineral resource calculation should it be required.</li> <li>Qualitative: Lithology, alteration, mineralisation.</li> <li>Quantitative: Vein percentage, assaying for gold and other elements.</li> <li>All holes for their entire length are logged.</li> </ul>		

## **JORC Table 1** (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
	• The total length and percentage of the relevant intersections logged.	
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>RC chips cone split, sampled dry where possible and wet when excess ground water could not be prevented.</li> <li>Sample condition (wet, dry or damp) is recorded at the time of logging.</li> <li>The entire sample (approx. 2-3kg) has been dried and pulverised to 85% passing 75µm.</li> <li>Field duplicates have been collected and results are within expected limits.</li> <li>Sample sizes are considered appropriate for the grainsize of the material sampled.</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>	<ul> <li>Fire assay is a total digest technique and is considered appropriate for gold.</li> <li>Assays were returned for the following elements: Au,</li> <li>Certified Reference Material (Standards and blanks) are submitted with batches (approximately 1 in every 25 samples) and laboratory inserted standards, blanks and duplicates are also reported. The results reported for are all within tolerable limits.</li> <li>Field duplicates are also inserted.</li> <li>Gold is apparently nuggetty in the highest grade intervals with duplication between laboratory and field duplicates variable. Averaging has been applied to these highest grade intervals.</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>All data have been checked internally for correctness by senior MZM geological and corporate staff.</li> <li>All data is collected via Geobank Mobile software and uploaded into the MZM Geobank Database following validation.</li> <li>No adjustments have been made to assay data.</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> </ul>	<ul> <li>All location points were collected using handheld GPS in MGA 94 – Zone 51.</li> <li>Downhole surveys are conducted at approximately 50m intervals using industry standard downhole survey tools.</li> </ul>

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<ul> <li>Quality and adequacy of topographic control.</li> <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>Drillhole collars are spaced at various intervals.</li> <li>Hole spacing is appropriate for drilling at this early stage in the exploration process.</li> <li>Sample compositing has been applied for only the top 8m of each hole in transported overburden, the remainder being sampled at 1m intervals.</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>The orientation of structures is not known with certainty but drilling was conducted using appropriate orientations for interpreted structures.</li> <li>Bias introduced by drill orientation with respect to structures is not known.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Chain of custody was managed by company representatives and is considered appropriate. All samples are bagged in a tied numbered calico bag, grouped into larger polyweave bags and cable tied. Polyweave bags are placed into larger bulky bags with a sample submission sheet and tied shut. Consignment note and delivery address details are written on the side of the bag and delivered to Toll in Laverton. The bags are delivered directly to MinAnalytical in Canning Vale, WA who are NATA accredited for compliance with ISO/IEC17025:2005.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No external audits or reviews have been conducted apart from internal company review.</li> </ul>

# Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<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>E38/2889 is 100% owned by Montezuma Mining Company Limited and is in good standing and there are no known impediments to maintaining a licence to operate in the area.</li> <li>The land on which E38/2889 is situated within Aboriginal Reserve 20396. Montezuma Mining Company Limited has obtained "Mining Entry Permits" to operate within the licence area.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Very little exploration has been undertaken in the area of E38/2889 previously. The most detailed work was carried out by WMC during the mid-1990's where they collected -75um soil samples on a regional scale. WMC did not follow-up the low tenor anomalies they defined in the current work area at the time.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Not enough information has been gathered to adequately define the precise geology in the area as it is largely covered in recent sand.</li> <li>Early observations indicate that the mineralisation present at Yamarna appears to be part of a typical Yilgarn Craton, Archaean, shear hosted, meso-thermal style system.</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> </ul>	See appendix to the release.
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</li> </ul>	<ul> <li>No top-cuts have been applied when reporting results.</li> <li>First assay from the interval in question is reported (i.e. Au1) unless the interval is very high grade and duplicates performed erratically due to nuggety gold. In such cases, an average of several determinations has been reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>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>Aggregate sample assays calculated using a length weighted average.</li> <li>Significant grade intervals based on intercepts &gt; 0.2 g/t gold.</li> <li>No metal equivalent values have been used for reporting of results.</li> </ul>
Relationship between mineralisatio n widths and intercept lengths	<ul> <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>Not enough information has been gathered to adequately define the precise geology in the area as it is largely covered in recent sand.</li> <li>True widths are not known, however, initial observations indicate the drilling is appropriate to the interpreted orientation of mineralising structures and downhole widths will approximate true widths.</li> </ul>
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.	Refer to figures in document.
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>All drillhole locations are reported and a table of significant intervals is provided in the release text.</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>All meaningful and material information is reported.</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 drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Drilling at the Yamarna Project is continuing at the present time.</li> </ul>