

## ASX ANNOUNCEMENT

2 March 2021

# Mon Ami High-Grade Gold Continues at Depth

### Highlights:

- High-grade gold intersected at depth highlighting underground potential
- Near-surface, high-grade gold mineralisation is expected to enhance open pit development
- High-grade gold mineralisation now extends for 500m and is open along strike and at depth
- Standout deep intersection of **10m @ 2.7 g/t Au from 241m including 5m @ 5.2 g/t Au**
- Standout shallow intersection of **4m @ 6.6 g/t Au from 8m including 2m @ 11.6 g/t Au**
- On track for targeted Resource classification upgrade (Q2 2021) and mining approvals (H2 2021)

Chief Executive Officer of Great Southern Mining Limited (ASX:GSN) (**GSN** or the **Company**), Sean Gregory, commented:

*"We are very pleased with the results from the recent RC drill program at Mon Ami. This program was designed to resolve two key questions – whether there is scope to improve the economics and confidence of the mineralisation inside the proposed mining envelope, and whether there is underground mining potential. Both questions have been resoundingly answered in the affirmative.*

*"The recent results define a coherent main lode of mineralisation that is expected to enhance our upcoming resource categorisation upgrade and mining plans. The deeper high-grade drill intersections demonstrate the underground potential, which now justifies high-priority follow up drilling to delineate further.*

*"We continue to progress Mon Ami down the development pathway. This involves current resource and mining studies coupled with permitting processes targeted at obtaining mining approvals during H2 2021."*

### Mon Ami RC Drilling

Fourteen Reverse Circulation (RC) holes were drilled at Mon Ami for a total of 1,601m in January 2021. The objectives of the Mon Ami drilling program were two-fold.

Firstly, to test for possible depth extensions analogous to the 176koz (at 22.8 g/t Au) Ida H deposit located 8km north of Mon Ami.

Secondly, the program was aimed to define and extend near-surface, high-grade gold mineralisation to the south, for incorporation into a targeted resource classification upgrade.

## Mon Ami Depth Extensions

Two deeper RC holes (21MARC009 and 10) were designed to test for depth extensions of the main lode at Mon Ami. The target gold mineralisation is considered analogous to the 176koz (at 22.8g/t Au) Ida H underground gold mine, located 8km to the north of Mon Ami along the same Bandicoat shear zone.

Both holes intersected gold mineralisation within a broad zone of chlorite-sericite alteration. Gold is concentrated within quartz veining at the lithological contact of a metasedimentary sequence and a basalt unit within the regional scale Bandicoat Shear Zone.

The long section of the Mon Ami deposit (Figure 1) highlights the dominant northerly plunge to the high-grade mineralisation, which this drilling aimed to extend. Both holes intersected significant mineralisation and 21MARC010 was extended 30m past planned hole depth as chlorite-sericite alteration and quartz veining was pervasive. Extension of hole 21MARC010 resulted in a standout wide zone of mineralisation of **10m @ 2.7 g/t Au from 241m including 5m @ 5.2 g/t Au and 21m @ 1.0 g/t Au from 255m**.

21MARC010 was a significant 100m step out, down plunge from previously identified high-grade mineralisation in MLRC036 (**2m @ 27.5 g/t Au**). The high-grade gold mineralisation at Mon Ami is now known to extend for at least **500m** and is open along strike and at depth.

This hole is regarded as highly significant as it is the deepest hole drilled to date at Mon Ami, with alteration and mineralisation widening at this location. The high-grade gold mineralisation intersected in hole 21MARC010 is at 210m below the surface, 60m deeper than the current Inferred Mineral Resource of **1.1Mt at 1.7g/t Au for 59,000 ounces of gold** (refer ASX announcement 7 November 2018), which is limited to 150m below surface. Mineralisation is currently constrained only by drilling and demonstrates the potential for mineralisation to persist further down plunge along strike.

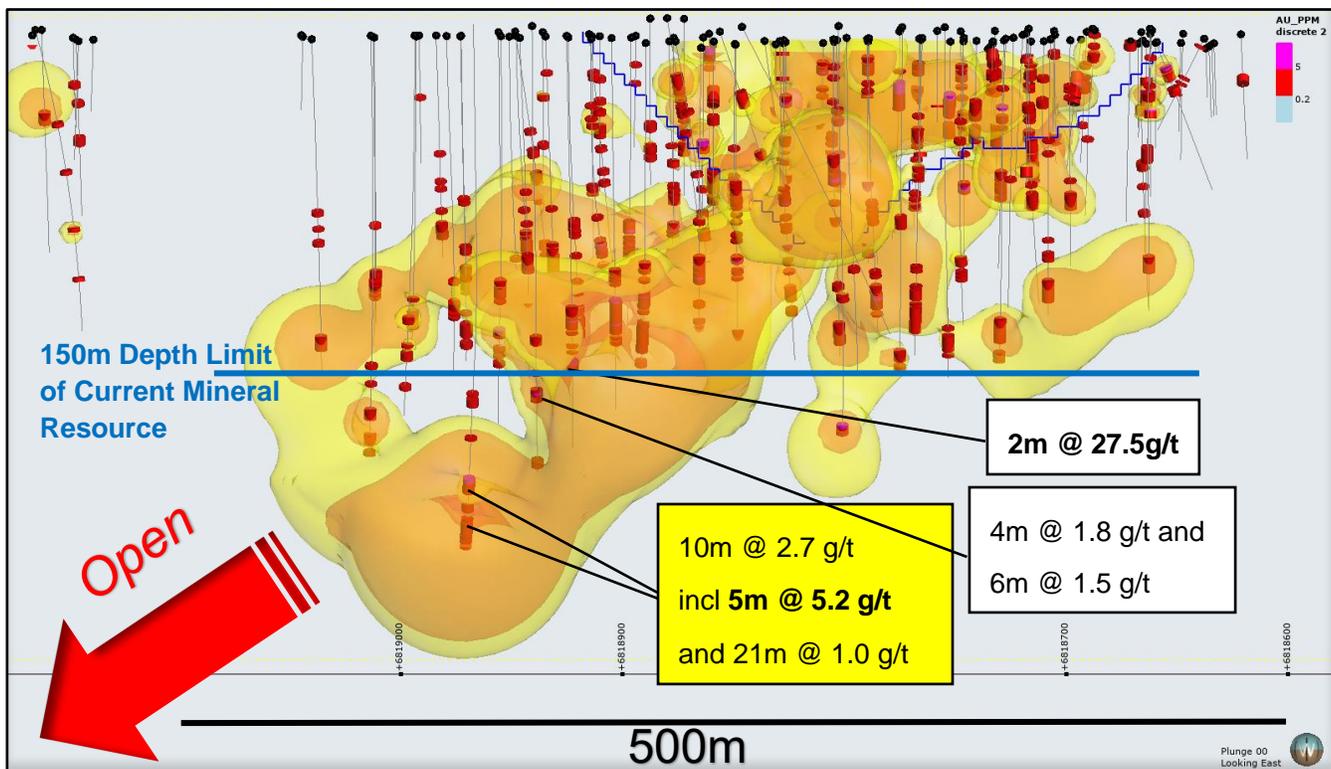


Figure 1: Long Section looking east highlighting the recent drill results at depth and the coherent north plunging shoot of mineralisation extending well below the current Mineral Resource (leapfrog grade shells yellow = 0.5 g/t Au and orange = 0.75 g/t Au)

## Near Surface Definition and Extension

Twelve shallower holes were drilled into the southern portion of the deposit seeking to define and extend near-surface gold mineralisation. Coherent mineralisation was intersected across all holes with better intersections including;

- 10m @ 1.0 g/t Au from 18m and 8m @ 1.1 from 47m in 21MARC001
- 10m @ 1.4 g/t Au from 51m in 21MARC002
- 5m @ 1.8 g/t Au from 55m in 21MARC003
- 4m @ 1.4 g/t Au from 12m in 21MARC005
- 4m @ 0.8 g/t Au from 33m in 21MARC006
- 4m @ 2.5 g/t Au from 120m in 21MARC007
- **4m @ 6.6 g/t Au** from 8m including **2m @ 11.6 g/t Au** in 21MARC008

These results have aided in the domaining of mineralisation and a main lode of coherent mineralisation is now well defined (Figure 2).

The drill results reported to the ASX by GSN on 12 August 2020 also included several near-surface high-grade intersections including **11m @ 7.9 g/t gold** from 26m (including **4m @ 15.9g/t** gold) in 20MARC011, and **4m @ 12.4 g/t gold** from 80m in 20MARC003 (4m composite sample). These results, in conjunction with the recent shallow gold intersections above, are to be incorporated in an updated resource model for Mon Ami targeting an increase in JORC categorization levels to support the mine development objectives at Mon Ami.

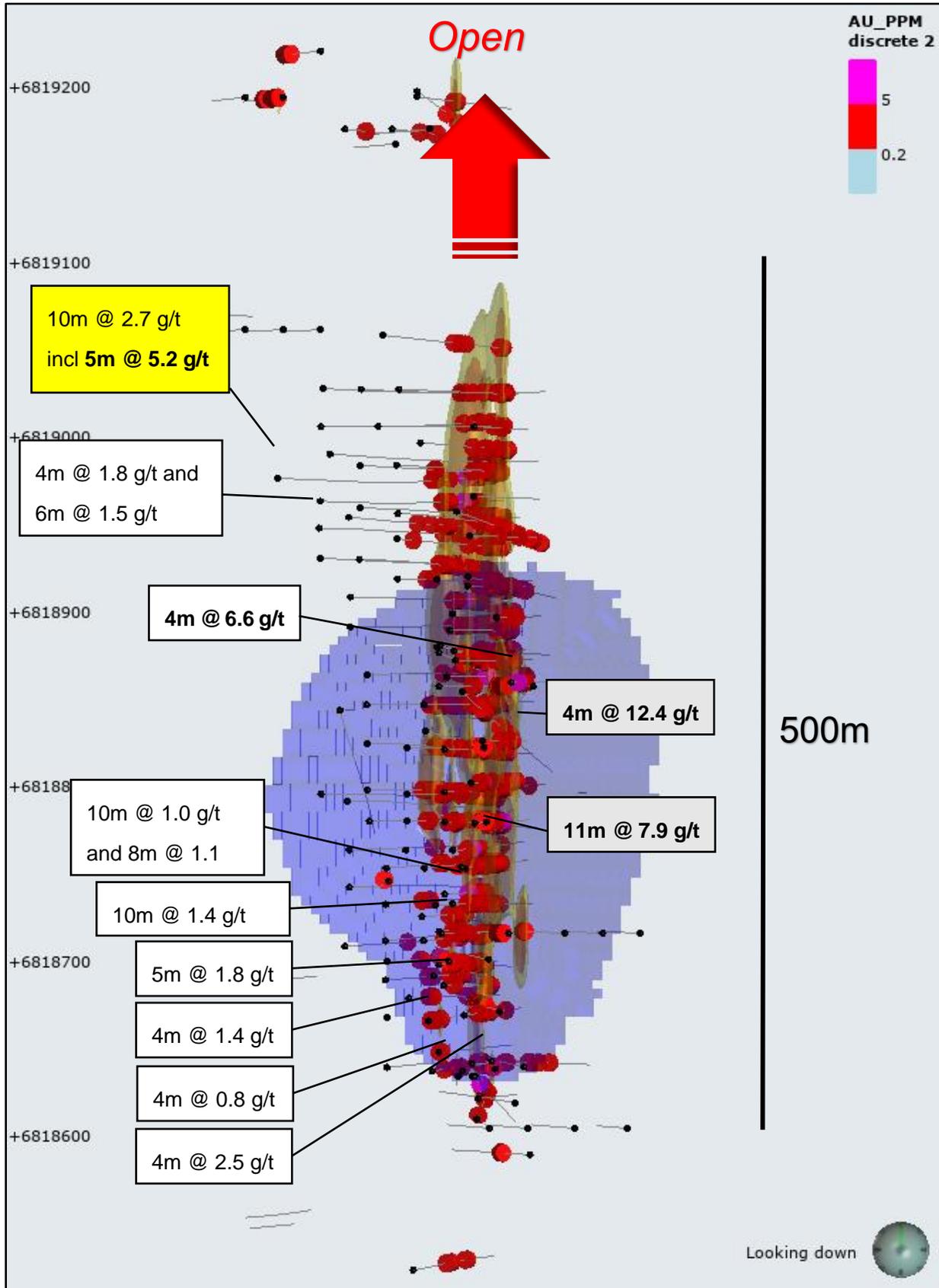


Figure 2: Plan view of the Mon Ami Project highlighting coherent main lode of mineralisation with the proposed open pit envelope (blue) and recent significant drill results.

## Next Steps

GSN will complete the Mineral Resource classification upgrade for Mon Ami in the second quarter of 2021. The Company is also on track with the necessary technical and environmental studies to facilitate a mining approval in the second half of 2021 that contemplates processing at one of several nearby mills (refer ASX announcement 13 November 2020).

The high-grade down-plunge extension to the Mon Ami deposit discovered in this recent drilling campaign highlights the potential for further deposit extensions at a grade potentially suitable for future underground mining. Further assessment of the recent results is being undertaken for planning and design of a follow-up drill program.

## About Mon Ami

GSN's 100%-owned Mon Ami Gold Project is located 17km south-east of Laverton in Western Australia (Figure 3). Historically the Laverton Goldfield has produced over 25 Moz of gold. Mon Ami has an Inferred Mineral Resource of **1.1Mt at 1.7g/t Au for 59,000 ounces of gold** (refer ASX announcement 7 November 2018) and favorable metallurgical recoveries averaging 95% in oxide and transitional mineralisation (refer ASX announcement 24 January 2019).

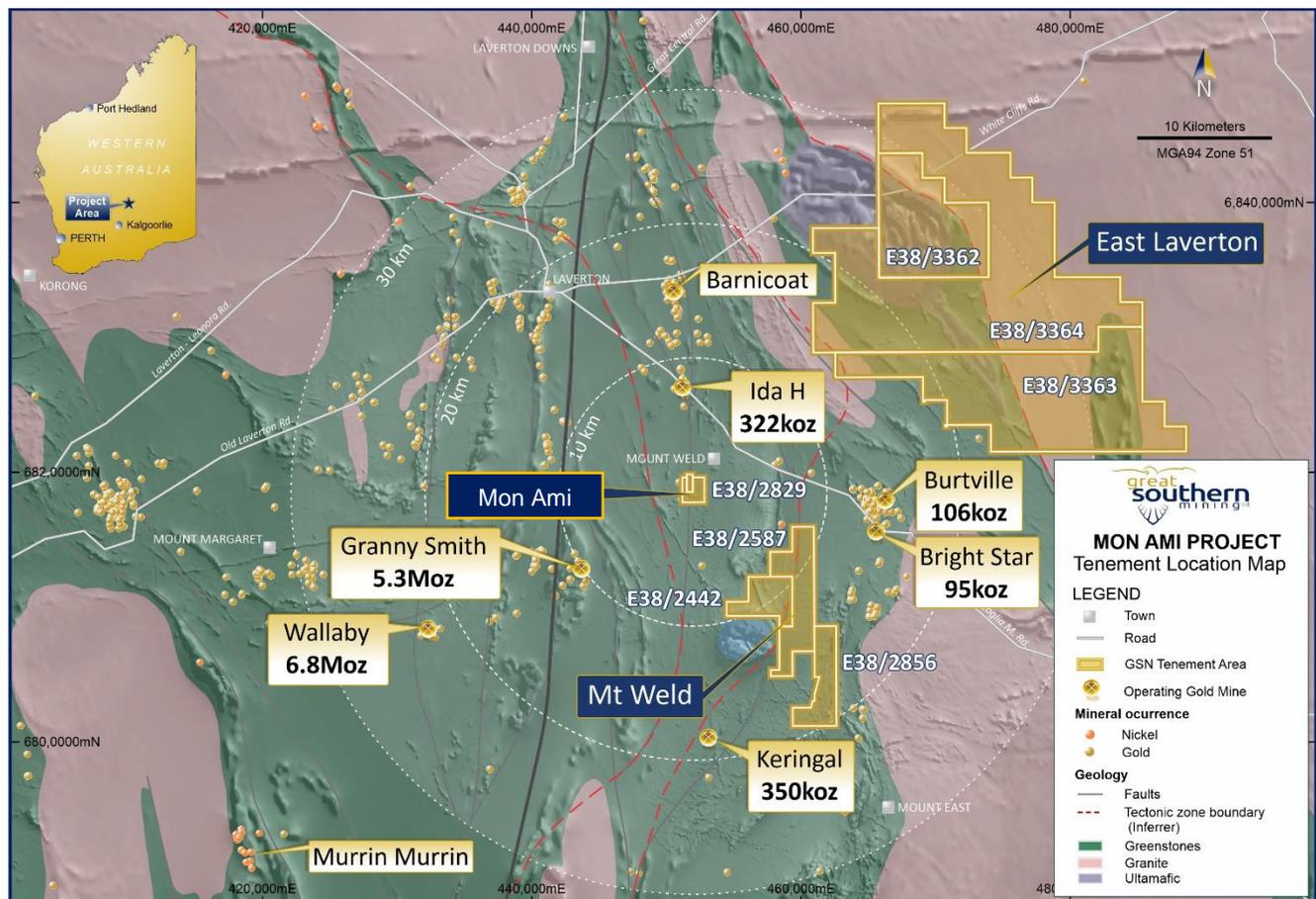


Figure 3 – Mon Ami Tenement Location Map

This ASX release was approved by the Executive Chairman on behalf of the GSN Board

## For Further Information Contact:

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## About Great Southern Mining

Great Southern Mining Limited is a leading Australian listed gold exploration company. With significant land holdings in the world-renowned gold districts of Laverton in Western Australia and Mt Carlton in North Queensland, all projects are located within 25km of operating gold mills and major operations.

The Company's focus is on creating and capturing shareholder wealth through efficient exploration programs and strategic acquisitions of projects that complement the Company's existing portfolio of quality assets.

For further information regarding Great Southern Mining Limited please visit the ASX platform (ASX:GSN) or the Company's website [www.gsml.com.au](http://www.gsml.com.au).

## Competent Person's Statement

<b>Deposit</b>	<b>Competent Person</b>	<b>Employer</b>	<b>Professional Institute</b>
<i>Mon Ami 2020-21 Exploration Results</i>	<i>Simon Buswell-Smith</i>	<i>Great Southern Mining Ltd</i>	<i>MAIG</i>
<i>Mon Ami 2019 Exploration Results incl. metallurgy</i>	<i>Dr Bryce Healy</i>	<i>Noventum Group Pty Ltd</i>	<i>MAIG</i>
<i>Mon Ami Mineral Resource</i>	<i>Dr Michael Cunningham</i>	<i>SRK Consulting (Australasia) Pty Ltd</i>	<i>MAusIMM, MAIG</i>

*The information in this report that relates Exploration Results and Mineral Resources is based on the information of the Competent Persons listed in the table above. Each of the Competent Persons have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as Competent Persons under the JORC Code (2012). For new information each consent to the inclusion in the report of the matters based on his information in the form and context in which they occur. Previously announced information is cross referenced to the original announcements. In these cases, the Company is not aware of any new information or data that materially affects the information presented and that the technical parameters underpinning the estimates continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements.*

## Forward Looking Statements

*Forward-looking statements are only predictions and are not guaranteed. They are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of the Company. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. The occurrence of events in the future are subject to risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to differ from those referred to in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company, its directors, officers, employees and agents do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplated.*

Table 1 table of significant intersections (>0.1 g/t Au with more than 1m internal dilution) \* denotes 4m composite sample

Hole ID	Depth From	Depth To	Interval Width	Au ppm
<b>21MARC001</b>	18	26	8	1.0
<i>incl</i>	20	22	2	2.9
<b>21MARC001</b>	29	30	1	1.0
<b>21MARC001</b>	35	36	1	0.4
<b>21MARC001</b>	45	55	10	1.0
<i>incl</i>	53	55	2	2.4
<b>21MARC002</b>	16	18	2	0.72
<b>21MARC002</b>	21	27	6	0.48
<b>21MARC002</b>	32	35	3	0.3
<b>21MARC002</b>	51	61	10	1.4
<i>incl</i>	58	60	2	3.4
<b>21MARC003</b>	11	14	3	0.4
<b>21MARC003</b>	55	60	5	1.81
<i>incl</i>	56	58	2	3.0
<b>21MARC004</b>	18	19	1	2.08
<b>21MARC004</b>	24	25	1	0.47
<b>21MARC004</b>	27	32	5	0.77
<b>21MARC004</b>	50	51	1	1.17
<b>21MARC005</b>	58	59	1	0.6
<b>21MARC006</b>	14	15	1	0.4
<b>21MARC006</b>	33	37	4	0.8
<b>21MARC006</b>	62	70	8*	0.4
<b>21MARC007</b>	120	128	8*	1.4
<i>incl</i>	120	124	4*	2.5
<b>21MARC008</b>	8	12	4	6.6
<i>incl</i>	8	10	2	11.6
<b>21MARC008</b>	13	15	2	0.4
<b>21MARC008</b>	18	19	1	0.5
<b>21MARC009</b>	163	167	4	1.8
<b>21MARC009</b>	182	183	1	1.6
<b>21MARC009</b>	191	197	6	1.5

Hole ID	Depth From	Depth To	Interval Width	Au ppm
<i>incl</i>	192	194	2	3.7
<b>21MARC010</b>	195	202	7	0.6
<b>21MARC010</b>	219	220	1	0.4
<b>21MARC010</b>	241	251	10	2.7
<i>incl</i>	241	246	5	5.2
<b>21MARC010</b>	255	276	21	1.0
<i>incl</i>	265	273	7	1.7
<b>21MARC012</b>	24	32	8*	0.3
<b>21MARC013</b>	36	48	12*	0.3
	64	68	4*	0.5
<b>21MARC014</b>	44	48	4*	0.2

Table 2: Collar details for Mon Ami RC holes. Coordinates are in GDA94, Zone 51. RL is nominal at 475m and surveyed using a hand-held GPS.

Hole ID	East (MGA)	North (MGA)	Dip	Azi	EOH Depth
<b>21MARC001</b>	451725	6818740	-60	90	80
<b>21MARC002</b>	451725	6818725	-60	90	80
<b>21MARC003</b>	451725	6818700	-60	90	71
<b>21MARC004</b>	451725	6818680	-60	90	71
<b>21MARC005</b>	451710	6818680	-60	90	100
<b>21MARC006</b>	451710	6818655	-60	90	119
<b>21MARC007</b>	451685	6818655	-60	90	149
<b>21MARC008</b>	451750	6818860	-60	90	77
<b>21MARC009</b>	451652	6818943	-63	90	235
<b>21MARC010</b>	451638	6818971	-60	90	281
<b>21MARC011</b>	451760	6818630	-60	270	71
<b>21MARC012</b>	451760	6818605	-60	270	71
<b>21MARC013</b>	451700	6818545	-60	90	101
<b>21MARC014</b>	451700	6818488	-60	90	95

## JORC Code 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• RC drill cuttings were collected over 1m intervals via cyclone into plastic bags (15-35 kg of sample material):               <ul style="list-style-type: none"> <li>○ For RC assay sampling, 1-3kg of sample was split from each 1meter sample length via a cone splitter. The cyclone was manually cleaned at the completion of each rod and thoroughly cleaned at the completion of each hole. The 1-3kg samples were pulverised to produce 50g charge for fire assay.</li> <li>○ 4-meter comps via spear method and have been taken for the portion of the hole that is interpreted to not be within the main shear zone. The anomalous 4m samples will be assayed in 1m intervals. No reassays have been taken to date.</li> </ul> </li> <li>• RC samples were collected and submitted for analysis at ALS Laboratories in Perth for Fire assay analysis. Field QC procedures involved the use of Certified Reference Materials (CRM's) as assay standards (2) and blanks (1).</li> </ul>
<b>Drilling techniques</b>	<p>The drilling operation was undertaken by experienced drilling contractor PXD Drilling.</p> <ul style="list-style-type: none"> <li>• Reverse Circulation (RC) drilling was conducted with a modern truck mounted Schramm. RC samples were obtained utilizing high pressure and high-volume compressed air using RC 143mm diameter face bit.</li> <li>• Holes orientations were surveyed using a Reflex-multi at 30m intervals.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• RC sample recoveries of less than approximately 80% are noted in the geological/sampling log with a visual estimate of the actual recovery. Very few samples were recorded with recoveries of less than 80%.</li> <li>• Wet RC samples are recorded in logs with only a small portion (5%) detected</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• All RC drilling was logged at the rig by an experienced geologist.               <ul style="list-style-type: none"> <li>○ Lithology, veining, mineralisation, alteration, weathering and oxidation were recorded;</li> <li>○ Evidence for structural features is noted.</li> <li>○ RC logging is qualitative and descriptive in nature and</li> </ul> </li> <li>• representative portions of samples were retained in chip trays for future reference.</li> </ul> <p>All data was recorded/logged in the field in Log Chief deposit and subsequently transferred to the electronic drillhole database (DataShed5).</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>RC samples (nominal 15-35 kg weight) were split through a cyclone splitter, and a 2-3 kg sub-sample submitted as the primary sample for assay.</p> <p>4-meter comps have been taken for the portions of the drilling. The anomalous 4m samples will be assayed in 1m intervals. No assays have been received to date.</p> <p>Field duplicates were taken every 50 samples as a control on sample representivity.</p> <p>Sample size is regarded as appropriate</p>

Criteria	Commentary
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• Assay technique is Fire assay and is regarded as total</li> <li>• Assaying of the RC drilling samples are being conducted by ALS laboratory, Perth.</li> <li>• Field QC procedures involved the use of Certified Reference Materials (CRM's) as assay standards (2), in conjunction with duplicates and blanks (1). The results of this analysis are reviewed when results are received.</li> <li>• The fire assay gold analyses undertaken are considered a total assay method and is an appropriate assay method for the target-style mineralisation.</li> </ul> <p>Standard lab QC was also implemented as part of the geochemical testing protocol.</p> <p>No geophysical tools have been applied to the samples, or down hole, at this stage.</p>
<p><b>Verification of sampling and assaying</b></p>	<p>Results are verified by the geologist before importing into Datashed.</p> <p>No twin holes have been conducted</p> <p>Data is collected by tablet in the field and is imported into Data .</p> <p>RC Field QC procedures involved the use of Certified Reference Materials (CRM's) as assay standards (2) and blanks (1). Field duplicates were collected for future analysis.</p> <p>Assay data is reviewed prior to importing into Mx deposit no adjustments are made to raw assay files.</p>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• All data location points referred to in this report are in:</li> <li>• Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA)</li> <li>• Zone: Zone 51</li> <li>• All collar surveys were completed using handheld GPS (+/- 5m accuracy).</li> <li>• Drill rig alignment was attained using a handheld compass and verified with downhole surveys collected near-surface followed by approximately every 30m.</li> <li>• Downhole surveys were routinely carried out, generally on continuous measure, conducted using Reflex-multishot.</li> <li>• The 3D location of individual samples is considered to be adequately established and in line with industry standards for this stage of exploration.</li> <li>• Topography is nominal at this stage holes will be picked up using a DGPS in the future</li> </ul>
<p><b>Data spacing and distribution</b></p>	<ul style="list-style-type: none"> <li>• The drill hole spacing ranges is not systematic, nor grid based outside the resource area. Drill hole collar positions are based solely on the drilling of specific exploration targets.</li> <li>• The RC drill holes were planned to test the extension or down plunge extension of the ore body.</li> <li>• Other RC drilling holes were designed over areas of interest from field mapping activities.</li> <li>• Sampling of RC cuttings has been undertaken at 1m intervals, appropriate high-grade mineralisation.</li> <li>• The current drill hole spacing and distribution within the resource area</li> </ul>

Criteria	Commentary
	<p>is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure and classification. The resource is classified as inferred at this stage.</p> <ul style="list-style-type: none"> <li>• 2m sampling compositing has been applied within key mineralised intervals.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• The drill holes have been designed to cross cut the main lithology to maximise structural, geotechnical and geological data.</li> <li>• No drilling orientation and/or sampling bias has been recognised at this time.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• Logging has been carried out by GSN and contract personal who were always on-site during drilling.</li> <li>• No third parties have been allowed access to the samples.</li> <li>• Samples were shipped directly from site to a secure stored site in Laverton to undergo evaluation.</li> <li>• Select samples for geochemical analysis were transported from Laverton to ALS in Perth where upon receipt the samples are officially checked in and appropriate chain of custody documentation received.</li> </ul> <p>All sample information is kept in paper and digital form. Digital data is backed up onto the Company server regularly and then externally backed up daily.</p>
<b>Audits or reviews</b>	No audits or reviews have been conducted.

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<p>Mon Ami consists of Mining Lease M38/1256 and Exploration Licence E38/2829. GSN holds 100% ownership of the tenements.</p> <p>A royalty agreement is in place between GSN and Valleybrook Investments Pty Ltd relating to GSN's acquisition of the Project in 2018.</p>
<b>Exploration done by other parties</b>	Relevant exploration done by other parties has been previously disclosed to the market.
<b>Geology</b>	<p>Mon Ami lies on the Barnicoat Shear zone which defines the eastern flank of the central terrain of the Laverton Tectonic Zone traces through the central part of the tenement. The shear zone marks the contact between conglomerate sedimentary package to the west and basalt to the east and hosts gold-bearing quartz veins that are the primary exploration. Gold is localised within quartz veining at the lithological contact of a sedimentary sequence and a basalt unit, within the regional shear zone. It is interpreted that the presence of cross cutting, NE splays intersecting the regional shear zone is concentrating gold at these intersections along the regional shear zone</p>
<b>Drill hole Information</b>	<p>All the drill holes reported in this report are summarized in in the report Easting and northing are given in MGA94 – Zone 51 coordinates.</p> <p>RL is AHD</p> <p>Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction the hole is drilled. MGA94 and magnetic degrees vary by &lt;10 in the project area.</p> <p>Down hole length is the distance measured along the drill hole trace.</p>

Criteria	Commentary
	<p>Intersection length is the thickness of an anomalous gold intersection measured along the drill hole trace.</p> <p>Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.</p>
<b>Data aggregation methods</b>	<p>Significant assay intervals are recorded above 0.1g/t Au with a maximum internal dilution of 1m. no top cuts applied.</p> <p>A breakdown of the high-grade Interval is shown in the body of the report.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>All significant intersections are quoted as downhole widths. The mineralisation has a near vertical orientation most holes are drilled at a -60-degree dip which is industry standard.</p> <p>All lengths are reported as downhole and the section in the body of the report displays the relationship between drill hole angle and mineralisation interpretation.</p>
<b>Diagrams</b>	<p>Relevant Diagrams are included in the body of this report.</p>
<b>Balanced reporting</b>	<p>All matters of importance have been included.</p>
<b>Other substantive exploration data</b>	<p>All relevant information has been included.</p>
<b>Further work</b>	<p>Future exploration includes assessment of recent drill results. Mineralisation is open along strike and at depth. Diagrams highlight potential area of interest for follow up work.</p>