

## First two drill holes at South Sammy complete

### HIGHLIGHTS:

- First two diamond holes of current drill program at Big Springs completed.
- Targeted to test extension of the South Sammy 401 deposit to the south-east and depth.
- Sulphide mineralisation observed and argillic alteration readily identifiable in the drill core.
- As the host to gold mineralisation at South Sammy, the presence of this alteration in the core is highly encouraging.
- Assays results awaited; drilling of the third hole in the program has commenced.

Anova Metals Limited (ASX: AWV) (**Anova** or the **Company**) advises of drilling progress at its Big Springs Gold Project in Nevada (**Big Springs**).

The current drilling program is the first at Big Springs since early 2017. It comprises 13 diamond drill holes for a total of approximately 2,000 metres. The program consists of infill and extensional drilling of the existing 1.03 Moz Big Springs Mineral Resource<sup>1</sup> plus active testing of new exploration targets.

The first two diamond holes at the South Sammy 401 deposit (ZBF003 and ZBF001) have now been completed to the target depth of 132.4 and 168.9 metres respectively. These holes were targeted to follow up high-grade intercepts returned from a drilling program conducted in 2005 and to test extension of the deposit towards the south-east and depth.

Mineralisation at Big Springs occurs as alteration and metals enrichment of carbonate paleozoic rocks with Mesozoic to Cenozoic intrusive events resulting in disseminated gold mineralisation. Intermediate to felsic intrusive dikes were encountered in ZBF001 at down hole depth of 85m to 89m and ZBF003 at down hole depth of 29m to 33.5m; the felsic intrusive dikes are the host rock of the high-grade mineralisation at North Sammy.

Minerals of interest that are observable in diamond core include pyrite, arseno-pyrite, calc-silicates, hematite, limonite, illite, and graphite. Sulphide mineralisation has been observed in ZBF001 within shear zones close to the intrusive dikes at the intervals of 46m to 64m, 68m to 90m, and 105m to 148m. Sulphide minerals content varied in the range of 0.5% to 10% in general. Spotty sulphide mineralisation with contents up to 20% has been observed as well. Sulphide mineralisation was found in ZBF003 at the interval of 32m to 80m, with contents varying from 2.5% to 12.5%.

Massive jasperoid alteration was developed in both ZBF001 and ZBF003 as a result of significant hydrothermal fluids interaction at the down hole depths of 89m and 82m respectively. Argillic alteration is readily identifiable at the intersection of Unit D and the Briens Fault in drill core ZBF001 at the interval of 12m to 23m. As the host to gold mineralisation at South Sammy, the observed presence of this alteration in the core is highly encouraging.

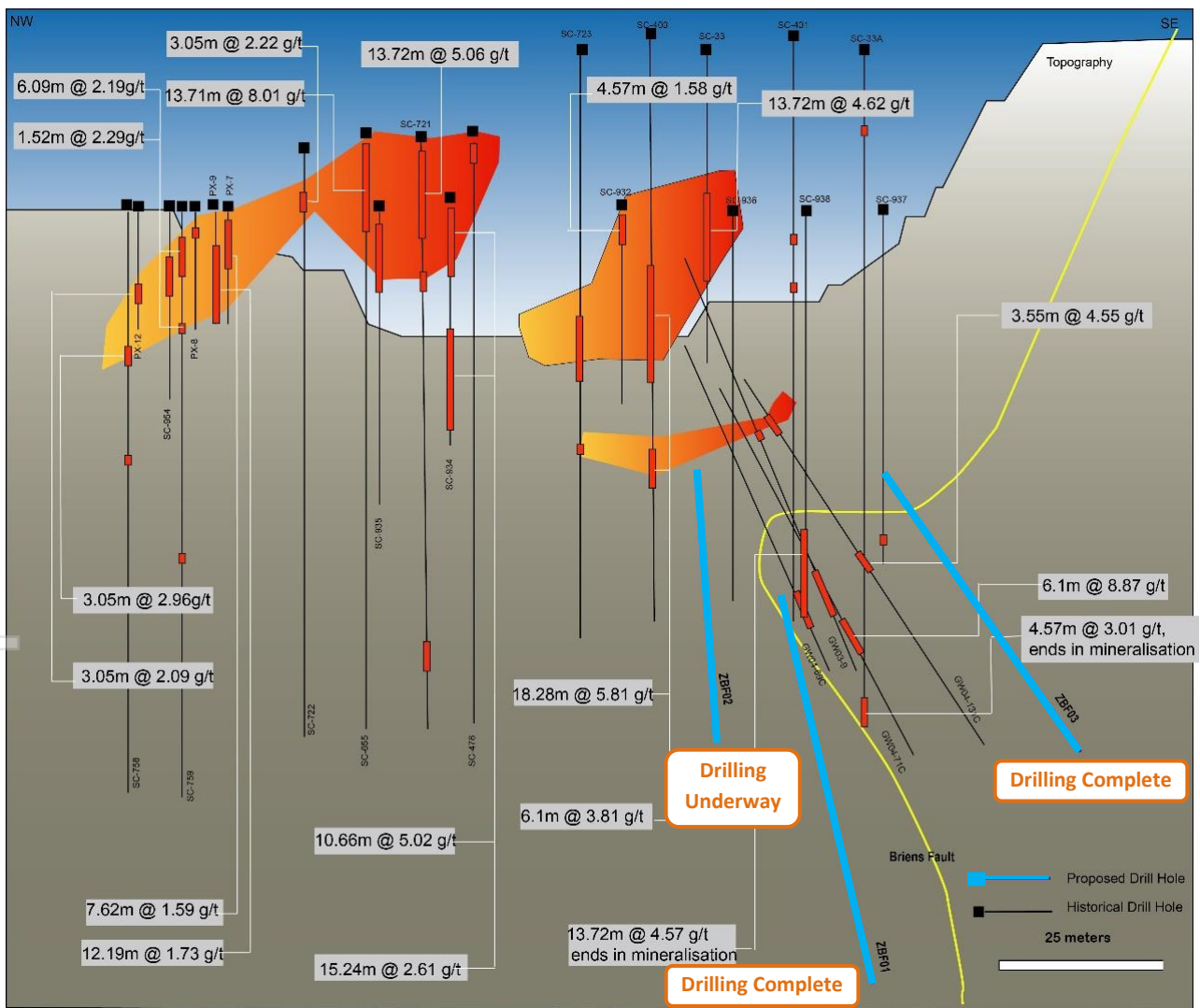
Geological logging and sampling of the drill core is ongoing. Assay results will be released to the market shortly.

In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide and oxide material abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.

Drilling of the third hole in the program (ZBF002) has commenced.

**Table 1: Drill hole location details for ZBF001 and ZBF003**

Drillhole	Area	Target Depth (m)	Easting	Northing	Elevation	Azimuth	Dip
ZBF001	401	168.9	585982.6	4601929	7693.1	261	-63
ZBF003	401	132.4	585982.6	4601929	7693.1	233	-50



**Figure 1: Proposed Drill Holes at South Sammy 401 deposit**





**Figure 2: Intermediate to felsic intrusive dikes developed within shear zone in drill hole ZBF001.**



**Figure 3: Sulphide mineralisation (highlighted by red) with fold and shear structures developed above intrusive dike in drill hole ZBF001**





**Figure 4: Argillic alteration developed in Unit D intercept with Briens Fault in drill hole ZBF001**

**This announcement has been authorised for release by: Mingyan Wang, Managing Director**

**CONTACT:**

**Investors**

+61 8 9481 0389

[info@anovametals.com.au](mailto:info@anovametals.com.au)

**Media**

Michael Vaughan (Fivemark Partners)

+61 422 602 720

For personal use only

## About the Big Springs Gold Project

The Big Springs Gold Project is a Carlin-style gold deposit located 80 km north of Elko in northeast Nevada, USA. Big Springs produced 386,000 ounces of gold between 1987 and 1993, ceasing production due to low gold prices. It is located in proximity to multiple +10 Moz resource Carlin-style gold projects within the region, including the producing Jerritt Canyon Gold Mine which is 20km south of Big Springs (see Figure 6). Big Springs has Measured, Indicated and Inferred Mineral Resources of 16 Mt at 2.0 g/t Au for 1.03 Moz (refer Table 1 and Anova ASX release dated 26 June 2014), over 50 km<sup>2</sup> of highly prospective ground. The high-grade portion of the Mineral Resources, reported at a cut-off grade of 2.5 g/t gold, contains 3.1 Mt at 4.2 g/t for 415 koz. Big Springs is fully permitted for Stage 1 mining operations.

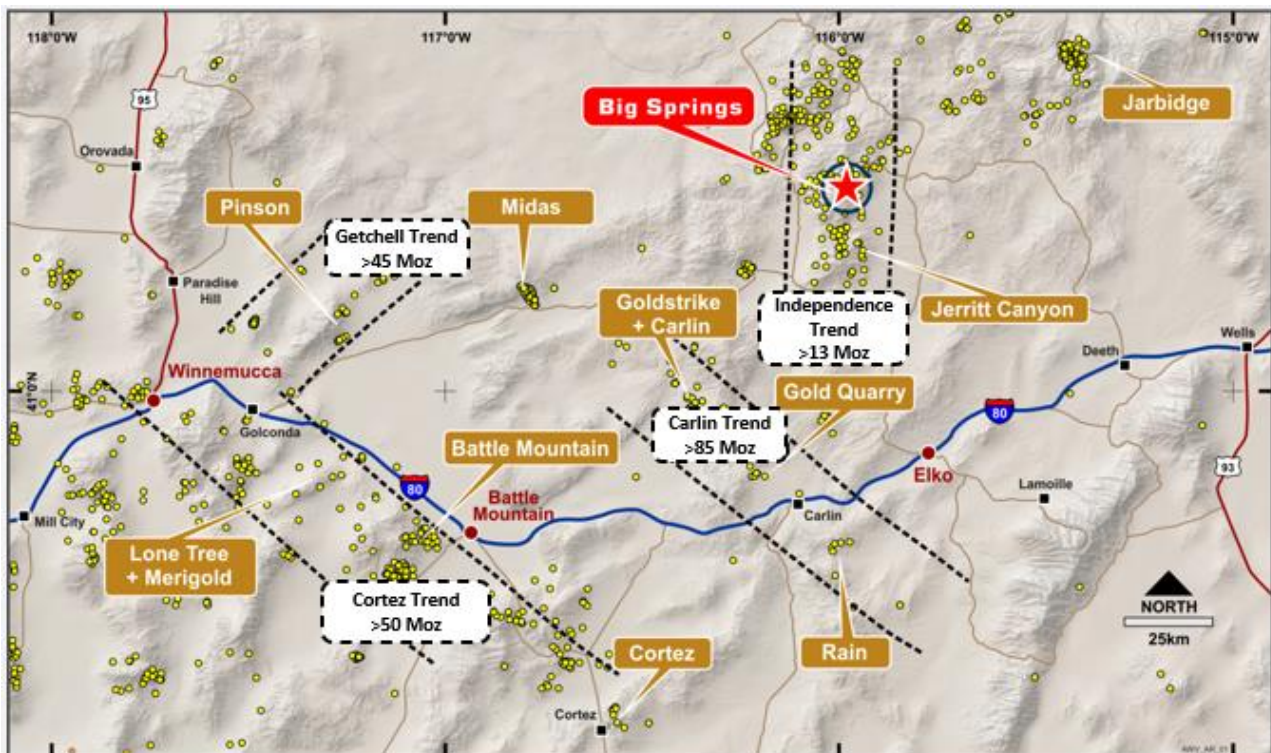


Figure 6: Location of Big Springs Project, Nevada USA

**Table 1: Mineral Resources**

Project	Measured			Indicated			Inferred			Combined		
	kT	Grade	Koz	kT	Grade	Koz	kT	Grade	Koz	kT	Grade	Koz
<b>Big Springs (JORC 2012)</b>												
North Sammy	346	7.0	77.9	615	3.1	62.2	498	2.8	44.1	1,458	3.9	184.1
North Sammy Contact				443	2.3	32.4	864	1.4	39.3	1,307	1.7	71.8
South Sammy	295	4.0	38.2	3,586	2.1	239.9	3,721	1.3	159	7,602	1.8	437.2
Beadles Creek				119	2.2	8.2	2,583	2.3	193.5	2,702	2.3	201.7
Mac Ridge							1,887	1.3	81.1	1,887	1.3	81.1
Dorsey Creek							278	1.4	12.9	278	1.4	12.9
Briens Fault							799	1.6	40.5	799	1.6	40.5
<b>Big Springs Sub-Total</b>	<b>641</b>	<b>5.6</b>	<b>116.1</b>	<b>4,762</b>	<b>2.2</b>	<b>343.3</b>	<b>10,630</b>	<b>1.7</b>	<b>570.4</b>	<b>16,032</b>	<b>2.0</b>	<b>1,029.9</b>

*Note: Appropriate rounding applied*

1. The information in this announcement that relates to the mineral resources for the Company's Big Springs Project was first reported by the Company in its resource announcement ("Resource Announcement") dated 26 June 2014. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Resource Announcement, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the Resource Announcement continue to apply and have not materially changed.

### Competent Person Statement

The information in this report that relates to Exploration Result for the Big Springs Project is based on information compiled by Dr. Geoffrey Xue. Dr. Xue is a full time employee of Anova and a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr. Xue consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

The information in this report that relates to Mineral Resources for the Big Springs Project is based on information compiled by Mr Lauritz Barnes, Principal Consultant Geologist – Trepanier Pty Ltd. Mr Barnes is a shareholder of Anova. Mr Barnes is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Barnes consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.



**Appendix 1: JORC Code, 2012 Edition – Supporting tables.**

The following section is provided to ensure compliance with the JORC (2012) requirements for the reporting of exploration results for the Big Springs gold deposit in Nevada.

**Section 1: Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Sampling techniques</b>	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.	<ul style="list-style-type: none"> <li>• 13 diamond drill holes are designed for this program to test mineralisation extension at both North and South Sammy</li> <li>• diamond core samples have been half cut with automatic core saw</li> <li>• about 1-1.5 meter samples are collected from the core trays as marked out by the supervising geologist</li> <li>• Reflex multishot camera survey is used for downhole dip measurement.</li> <li>• Core is continuously cut on the same side of the orientation line and the same side is sampled to ensure the sample is representative and no bias is introduced.</li> <li>• Determination of mineralisation has been based on geological logging. Samples will be sent to lab for Au and other multi elements analysis.</li> <li>• Diamond Core drilling was used to obtain 3-6m length samples from the barrel which are then marked in one meter intervals based on the drillers core block measurement.</li> <li>• Assay samples are selected based on geological logging boundaries or on the nominal meter marks.</li> <li>• Collect samples weigh a nominal 2-3 kg (depending on sample recovery) was sent to lab and pulverised.</li> <li>• Samples have been dispatched to a commercial laboratory in Reno, NV for analysis</li> <li>• Fire assay will be used for Au analysis and aqua regia/ICP MS will be used for multi element analysis.</li> </ul>
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (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.	
<b>Drilling techniques</b>	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).	<ul style="list-style-type: none"> <li>• Drilling was undertaken using HQ sized drill core.</li> <li>• Hole was collar with mud rotary from surface.</li> <li>•</li> </ul>
<b>Drill sample recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul style="list-style-type: none"> <li>• Core recovery was recorded by the drill crew and verified by the geologist.</li> <li>• RQD measurements were recorded to ensure recovery details were captured.</li> </ul>
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	

Criteria	JORC Code explanation	Commentary
	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.	<ul style="list-style-type: none"> <li>• Sample recovery in both holes was high.</li> <li>•</li> </ul>
<b>Logging</b>	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.	<ul style="list-style-type: none"> <li>• Detailed industry standard of collecting core in core trays, marking meter intervals &amp; drawing core orientation lines was undertaken</li> <li>• Core trays were photographed wet and dry prior to sampling.</li> <li>• Drill hole logs are recorded in Excel spread sheets and validated in Micromine Software as the drilling progressed.</li> <li>• The entire length of both holes was logged.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
<b>Sub-sampling techniques and sample preparation</b>	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul style="list-style-type: none"> <li>• Core is half cut using an automatic core saw to achieve a nominal 2-3kg split sample for laboratory submission</li> <li>• The sample preparation technique is considered industry best standard practice</li> <li>• No field duplicates have been collected in this program.</li> <li>• Sample sizes are appropriate to the grain size of the mineralisation.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	<ul style="list-style-type: none"> <li>• Field QC procedures will be involved the use of certified reference material assay standards and blanks, as well as assay duplicates</li> <li>• The sample sizes are considered appropriate for the style of mineralisation, which is fine grained disseminated gold with minimal nugget effect.</li> <li>• The ALS lab in Reno, NV will be used for Au and multi elements analysis (including 51 elements). Fire assay used for Au analysis and aqua regia for multi elements.</li> </ul>
	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.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	<ul style="list-style-type: none"> <li>• Results verified by Company geologist</li> <li>• The data was collected and logged using Excel spreadsheets. The data will be</li> </ul>



Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	loaded into an externally hosted and managed database and loaded by an independent consultant, before being validated and checked. <ul style="list-style-type: none"> <li>No adjustments have been made to the assay data other than length weighted averaging.</li> </ul>
<b>Location of data points</b>	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. Specification of the grid system used. Quality and adequacy of topographic control.	<ul style="list-style-type: none"> <li>The holes were pegged by the Company contract geologist on site using a sub meter GPS</li> <li>The rig was setup over the nominated hole position and final GPS pickup occurred at the completion of the hole.</li> <li>UTM Zone 11 using NAD83 datum.</li> </ul>
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.	<ul style="list-style-type: none"> <li>The nominal drillhole spacing is approximately 50ft by 50ft (15m), is down to 40ft by 40ft in the Measured resource zones at 601 - and increases in places. Correspondingly, as the drillhole spacing increases and confidence in geological and mineralisation continuity decreases, the resource classification changes from Measured to Indicated to Inferred. Gateway and Anova holes have been drilled as infill to these grids as confirmation of mineralisation.</li> <li>The 2020 drilling program is designed as infill and resource extension. Drill hole spacing is varied from 30 meters to 15 meters.</li> <li>The mineralised domains have demonstrated sufficient continuity in both geological and grade to support the definition of Mineral Resource and Reserves, and the classification applied under the 2012 JORC code.</li> <li>No sample compositing is applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul style="list-style-type: none"> <li>Azimuth for the proposed drill hole in 2020 varies in a wide range. Dip angle is in the range of 50 – 90 degree. The orientation of the mineralisation is variable.</li> <li>The drill holes were planned to intersect mineralised zones as close to perpendicular as possible. The orientations of mineralised zones were determined from previous angled drilling and no bias has been identified.</li> <li></li> </ul>
<b>Sample security</b>	The measures taken to ensure sample security.	<ul style="list-style-type: none"> <li>All data will be digitally stored by the Contractor and relayed to Anova.</li> </ul>
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	<ul style="list-style-type: none"> <li>All information were initially processed and interpreted by a qualified person.</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	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	<ul style="list-style-type: none"> <li>The Big Springs project tenements, comprising a total of 710 unpatented Lode Mining Claims (14,149 acres or 5,726 ha) are all owned by Anova. Claims are subject to a Net Smelter Return ranging from zero 3% payable to various parties. There are no known adverse surface rights.</li> </ul>
	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.	<ul style="list-style-type: none"> <li>There are no known impediments. All liabilities with respect to the decommissioning of the open pit mines are the responsibility of AngloGold Ashanti N.A Inc.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul style="list-style-type: none"> <li>Not Applicable</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul style="list-style-type: none"> <li>The Project's disseminated, sediment-hosted gold deposits have been classified by several authors as typical Carlin-type deposits. The Big Springs deposits are hosted predominantly within the flaser bedded siltstone of the Overlap Assemblage, which is Mississippian to Permian in age (30Ma to 360Ma), with structure and host stratigraphy being the primary controls on gold mineralisation. Mineralisation at North Sammy is typically hosted within black, highly carbonaceous siltstone and calcareous sandy siltstone. These units are generally located between the Argillic thrust of the footwall and the Schoonover thrust in the hangingwall. Individual high-grade ore shoots at North Sammy generally plunge moderately to the NNW and are controlled by intersections of E-W-striking faults with the NE-SW-striking Argillic thrust. The South Sammy Creek deposit is more complex with a series of controlling structures, in particular the Briens fault along the western margin. On the eastern side of the Briens fault, the thick, tabular South Sammy ore deposit forms a largely continuous zone that is semi-concordant with the permeable and brittle host rocks of the Overlap Assemblage.</li> <li>The Mac Ridge East Prospect is believed to be located in the Hanson Creek formation – the main host to gold mineralization at Jerritt Canyon.</li> </ul>
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the	<ul style="list-style-type: none"> <li>ZBF003 and ZBF001 are proposed holes to test the mineralisation extension at South</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>following information for all Material drill holes, including easting and northing of the drill hole collar, elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar, dip and azimuth of the hole, down hole length and interception depth plus 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.</p>	<p>Sammy. Relevant information can be found in Table 1 in the announcement.</p>
<p><b>Data aggregation methods</b></p>	<p>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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<ul style="list-style-type: none"> <li>• All reported assays have been length weighted if appropriate. No top cuts have been applied. A nominal 1.0 ppm Au lower cut off has been applied, with only intersections &gt;1.0 g/t considered significant.</li> <li>• No metal equivalent values are used.</li> </ul>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<p>These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</p>	<ul style="list-style-type: none"> <li>• Modelled ore zones have been intersected in multiple orientations by the different generations and types of drilling (e.g. RC vs. diamond core) and as such, there is high confidence in both the geological and mineralised zone.</li> <li>•</li> </ul>
<p><b>Diagrams</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>• See figures and maps provided in the text of the announcement.</li> </ul>
<p><b>Balanced reporting</b></p>	<p>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.</p>	<ul style="list-style-type: none"> <li>• The CP believes this report to be a balanced representation of exploration undertaken.</li> </ul>
<p><b>Other substantive exploration data</b></p>	<p>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</p>	<ul style="list-style-type: none"> <li>• All meaningful &amp; material exploration data has been reported.</li> </ul>

For personal use only



Criteria	JORC Code explanation	Commentary
	method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	<ul style="list-style-type: none"> <li>Further work planned includes comprehensive data interpretation, field mapping, and exploration drilling.</li> </ul>

For personal use only