Further gravity data driven breakthroughs at Big Springs

HIGHLIGHTS:

- **Structural detection algorithm applied to 2020 ground gravity data at Big Springs.**
- **Enhanced structural detail delineated with this automated approach, including detection of key smaller structures that present close relationships with existing gold mineralisation.**
- **Further affirmation that gold mineralisation at Big Springs commonly occurs at intersections between NNE-SSW and E-W faults.**
- **Delivers particularly valuable targeting insight over those areas of Big Springs with minimal or no drilling to date.**
- **Sharper structural delineations being incorporated into the comprehensive targeting study that is set to guide exploration activities in 2021 and beyond.**
- **Overview of 2021 field program expected to be released in the next two weeks incorporating results from the 2020 field program.**

Anova Metals Limited (ASX: AWV) (**Anova** or the **Company**) is pleased to announce that significantly enhanced detail on various structures that control gold mineralisation has been extracted from enhanced gravity data processing at its 100% owned Big Springs Gold Project in Nevada (**Big Springs**).

The raw data the subject of this further study is the comprehensive gravity data survey completed in 2020 (see AWV announcement, 12 October 2020). This gravity data is comprised of 1,540 unique stations including 94 remote stations designed to provide larger scale data (see Figure 1).

Fathom Geophysics was contracted to undertake the enhanced gravity data filtering and processing (see Figure 2). The Bouguer anomaly grid was used as input to the data processing and structure detection routine. Three base wavelengths were used (50m, 100m, and 200m) for the purpose of detecting different scales of structure. The applied structure detection algorithm used a unique, cutting edge grid based method. In contrast with traditional data processing, this automated approach has the advantage of eliminating any subjectivity introduced by human bias.

As shown in Figure 3 and 4, greater structural detail is detected using the Fathom algorithmic approach. Structures of interests are extracted, including fundamental faults (potentially pathways for fluids conduits) and, of particular interest, the secondary/ subtle faults (presenting close relations with gold mineralisation).

Key structural controls on gold mineralisation have been affirmed, with gold mineralisation commonly occurring at the location of intersections between NNE-SSW and E-W faults. This study has provided highly valuable insight for the current overarching targeting study, in particular with respect to areas with minimal or no existing drill hole information.

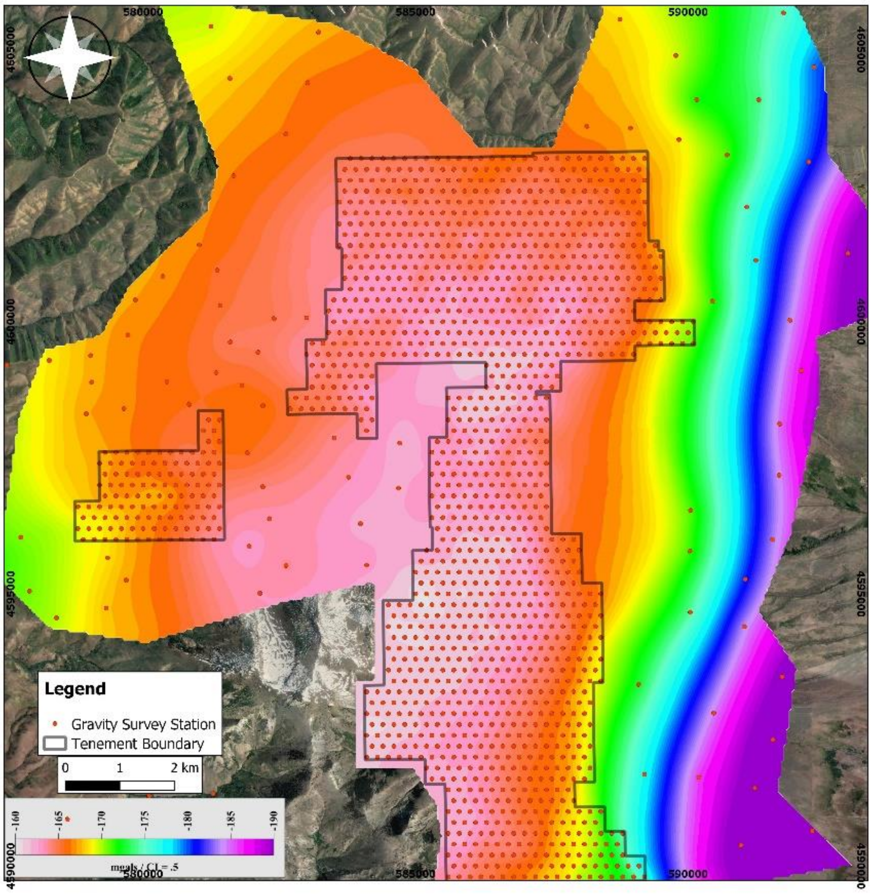

Figure 1: Completed Bouguer (CBA) Gravity map with completed ground gravity stations on top.

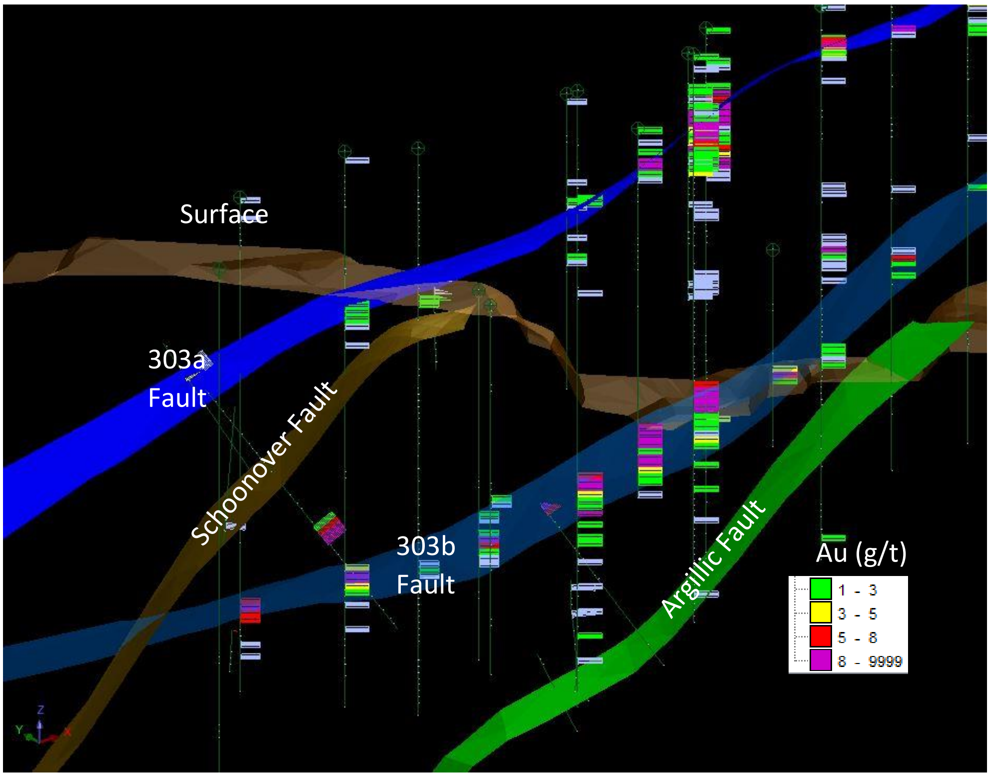

Figure 2: Gold mineralisation at North Sammy, Big Springs, has a close relationship with faults. 303a and 303b have direction of E-W, and Schoonover and Argillic faults are NNE-SSW. Looking north east.

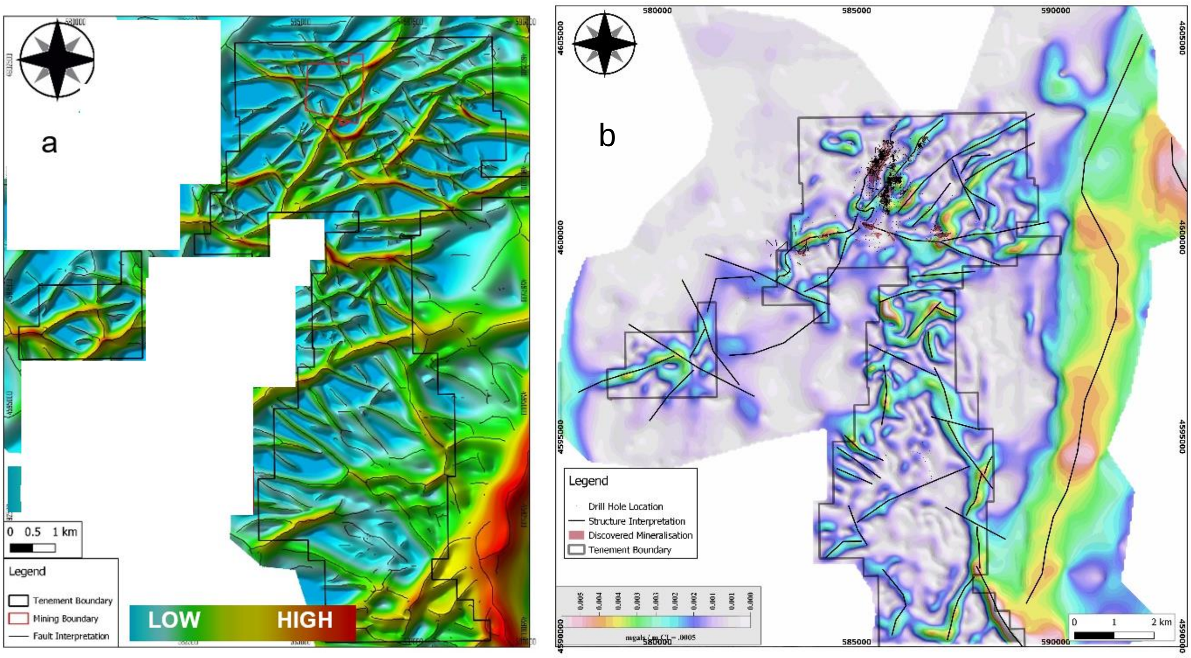

Figure 3: a) Total structure extracted using Fathom structure detection algorithm with wavelength of 50 metres; b) Traditional method of gravity data processing for structure detection (Residual Horizontal Gradient Gravity map).

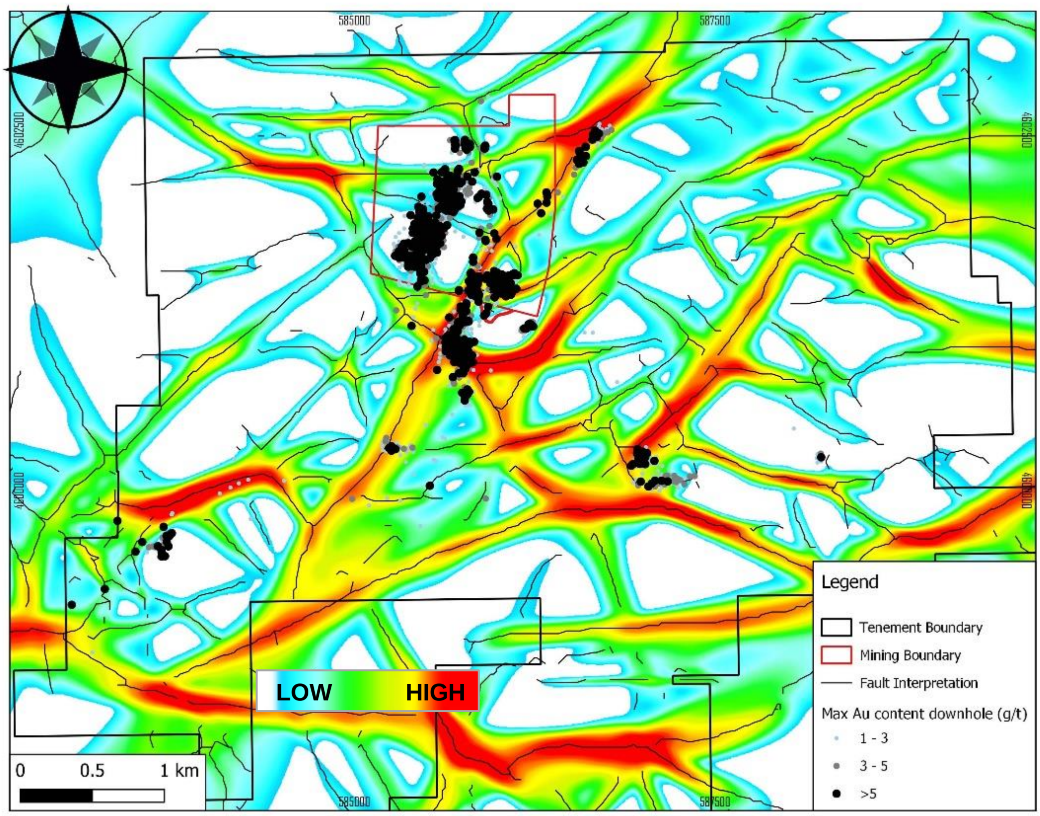

Figure 4: Total structure extracted using Fathom structure detection algorithm with wavelength of 50 metres with maximum gold content from historical drill hole. Close relationship between gold mineralisation and structures is affirmed, particularly for intersections between various sets of faults.

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

CONTACT:

Investors
+61 8 9481 0389
info@anovametals.com.au

Media
Michael Vaughan (Fivemark Partners)
+61 422 602 720

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 3). 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^2 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.

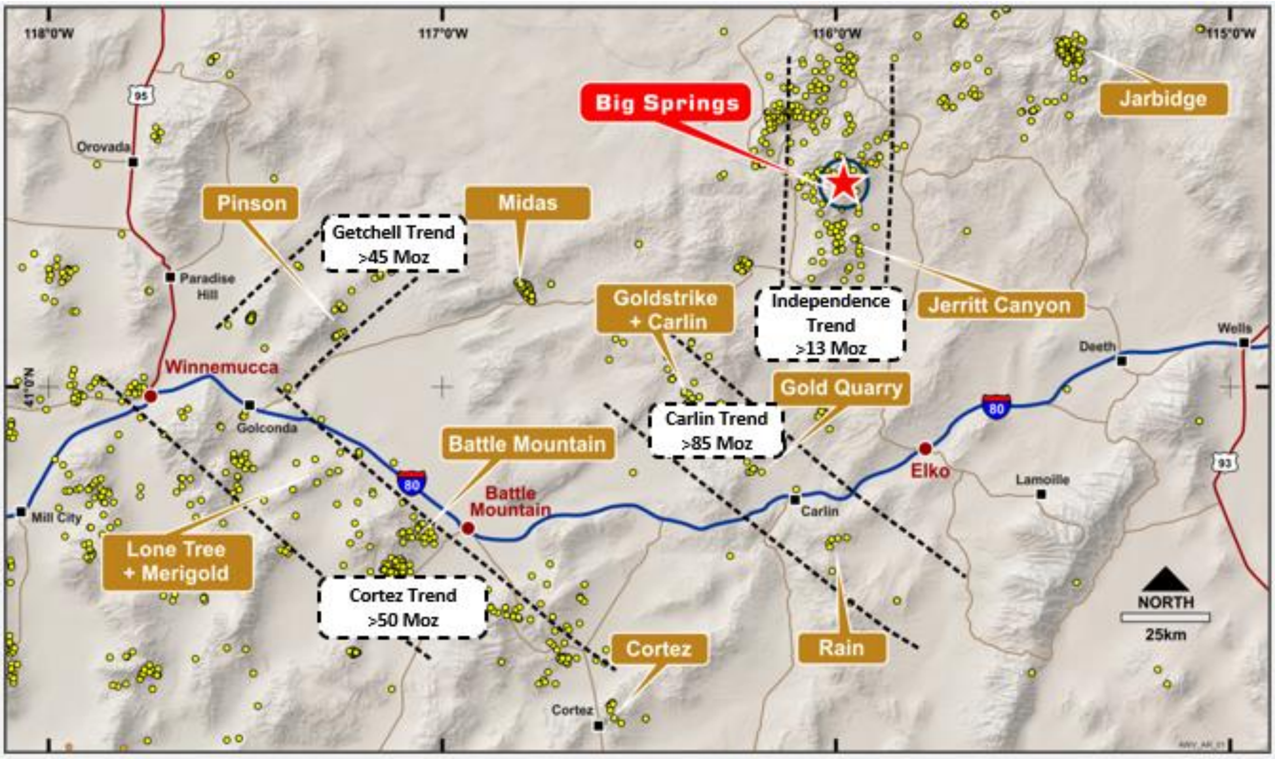

Figure 5: Location of Big Springs Project, Nevada USA

Table 1: Mineral Resources

	Measured			Indicated			Inferred			Combined		
Project	**kT**	**Grade**	**Koz**	**kT**	**Grade**	**Koz**	**kT**	**Grade**	**Koz**	**kT**	**Grade**	**Koz**
Big Springs (JORC 2012)												
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
Big Springs Sub-Total	**641**	**5.6**	**116.1**	**4,762**	**2.2**	**343.3**	**10,630**	**1.7**	**570.4**	**16,032**	**2.0**	**1,029.9**

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 geophysics data processing for the Big Springs Project is based on information provided by Dr. Amanda Buckingham, Principal Geophysicist – Fathom Geophysics and consultant to Anova. Dr. Amanda Buckingham is 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. Amanda Buckingham consents to the inclusion in this report of the matters based on her information in the form and context in which they appear.

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.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	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. 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.	• 1,540 unique gravity stations were acquired, including 94 remote stations. Data were acquired on a 200 m staggered squire grid. Also, 500-1000 m spaced stations were gathered on surrounding public roads. • Total number of readings is 1709; number of repeat readings:169; maximum repeat error: 0.049gmal; mean repeat error: 0.014mgal; RMS error: 0.022 mgal • Gravity data were processed to complete Bouguer anomaly at first. • LaCoste & Romberg (L&R) Model -G gravity meters, serial numbers G-018, G-392, G-406, G-603, G-735 and Scintrex CG-5 serial number 1210 were used on the survey. • Terrain Corrections were calculated to a distance of 167 km for each station. • Model -G gravity meters measure relative gravity changes with a resolution of 0.01 mGal. Scintrex CG-5 gravity meters measure relative gravity changes with a resolution of 0.001 mGal. • The gravity survey is tied to the International Gravity Standardization Network of 1971 gravity base station in Elko (DOD#3899-2) and designated ELKO.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	• Not Applicable
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	• Not Applicable
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral	• Not Applicable

Criteria	JORC Code explanation	Commentary
	Resource estimation, mining studies and metallurgical studies.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	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.	• Not Applicable
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Not Applicable
	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.	
Quality of assay data and laboratory tests	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.	• The gravity data was processed to Complete Bounguer Gravity of density 2.5g/cc using standard procedures and formulas. A single data point considered for removal but no compelling reason in database. Both Minimum curvature and krigging tralled. Minimum curvature selected. • Input grid retained buffer to optimise Fourier filtering. • The Bouguer anomaly grid was filtered to generate a shallow and deeper residual using differential upward continuation. Horizontal gradient magnitude calculated using both residuals as input, Girds and Images provided. • The Bouguer anomaly grid was used as input to the Fathom structure detection routine. Three base wavelengths were sued (50m, 100m, and 200m). Total structures were extracted. • The first vertical derivative of the CBA was used as an input using wavelength of 50 meters to maximise the detection of subtle high frequency edges. •
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external	• Not Applicable

Criteria	JORC Code explanation	Commentary
	laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	• Not Applicable
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	
	Discuss any adjustment to assay data.	
Location of data points	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.	• All data are conform to the NAD 83/UTM 11N metric coordinate system. • All gravity stations were surveyed using the Real Time Kinamatic (RTK) GPS method, or where it was not possible to receive GPS base information via radio modem. The Fast-Static or Post Processed Kinematic (PPK) method was used. • Four GPS base stations designed BS1 to BS4 were used on the project. The coordinates and elevation of these base station locations were determined by making simultaneous GPS occupations in the Fast Static model with Continuously Operating Reference Stations. Topographic surveying was performed simultaneously with gravity data acquisition.
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	• For stations within the tenement boundary, data were acquired on a 200 m staggered squire grid. • As for remote stations outside of the tenement boundary, space between stations is 500-1000 m. •
	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.	
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	• Ground station data record. Station space is 200 m square.
	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.	
Sample security	The measures taken to ensure sample security.	• All data are digitally stored by the Contractor and relayed to Anova.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	• All data were initially processed and interpreted by a qualified person.

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	• 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.
	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.	• 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.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• Not Applicable
Geology	Deposit type, geological setting and style of mineralisation.	• 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. • The Mac Ridge East Prospect is believed to be located in the Hanson Creek formation – the main host to gold mineralization at Jerritt Canyon.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill	• Not Applicable

Criteria	JORC Code explanation	Commentary
	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.	
Data aggregation methods	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.	• Not Applicable
Relationship between mineralisation widths and intercept lengths	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').	• Not Applicable
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.	• See figures and maps provided in the text of the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• The CP believes this report to be a balanced representation of exploration undertaken.
Other substantive exploration data	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	• All meaningful & material exploration data has been reported.

Criteria	JORC Code explanation	Commentary
	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.	• Further work planned includes comprehensive data interpretation, field mapping, and exploration drilling.