

12 October 2020

# **BIG SPRINGS GRAVITY SURVEY OUTLINES NEW TARGETS**

- Detailed gravity survey covering entire Big Springs tenement package completed.
- Includes 94 remote stations providing valuable larger scale data.
- Gold mineralization control structures readily identified.
- Three key groups of targets outlined from the initial interpretation.
- Consistency of preliminary targets across gravity and recent hyperspectral study.
- Detailed interpretation of the gravity data, in parallel with existing and upcoming studies, to generate a high-priority list of targets for drilling in 2021.

Anova Metals Limited (ASX:AWV) (**Anova** or the **Company**) is pleased to advise that a ground gravity survey covering its 100%-owned Big Springs Gold Project in Nevada (**Big Springs**) has been completed. The survey covers the entire tenement base of Big Springs and was undertaken by McGee Geophysical Services. It is comprised of 1,540 unique stations, including 94 remote stations designed to provide valuable larger scale data (see Figure 1).

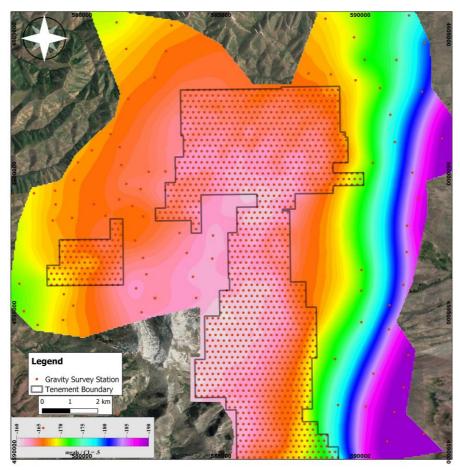


Figure 1: Completed Bouguer (CBA) Gravity map with completed ground gravity stations on top.

## **Key gravity survey outcomes**

Residual gravity removes long wavelength features in the gravity data to reveal detail essential for identification of elements such as contacts, structures and alteration. Figure 2 below presents the residual gravity map with overlain structural interpretations.

The Schoonover and Beadles faults (both north-north-easterly (**NNE**) direction) have been previously well recognised as the control of gold mineralisation at North Sammy, South Sammy, and Beadles Creek. Intersections between NNE and WNW structures controlling gold mineralisation is more typical at Mac Ridge and the south end ore body at South Sammy.

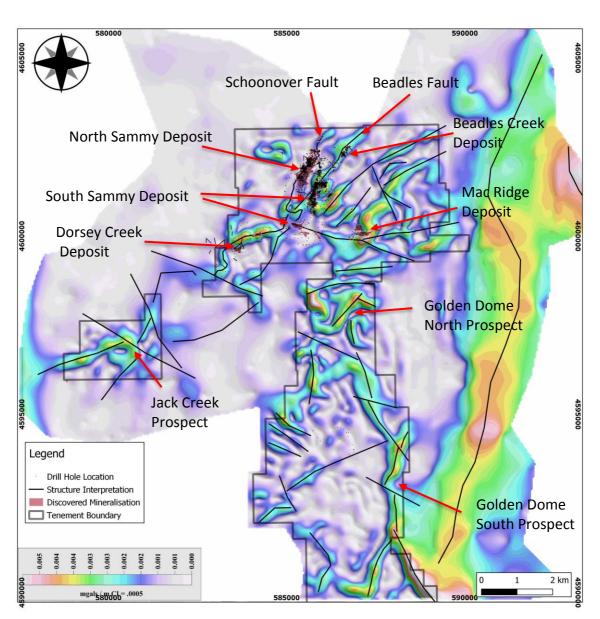


Figure 2: Residual Horizontal Gradient Gravity map with structural interpretation.

Initial interpretation of the gravity survey results has identified three major groups of targets (see Figure 3). These key target groups comprise:

1. Extension to both directions of the Schoonover and Beadles faults, such as the north extension of North Sammy and Beadles Creek deposits, and Dorsey Creek deposit South extension (Targets 1, 4 and 5 in Figure 3).



- 2. Parallel structures of Beadles fault toward east, such as Mac Ridge North prospect (Targets 2 and 3).
- 3. Intersections between NNE and WNW structures, such as Jacks Creek and Golden Dome prospects (Targets 6, 7 and 8).

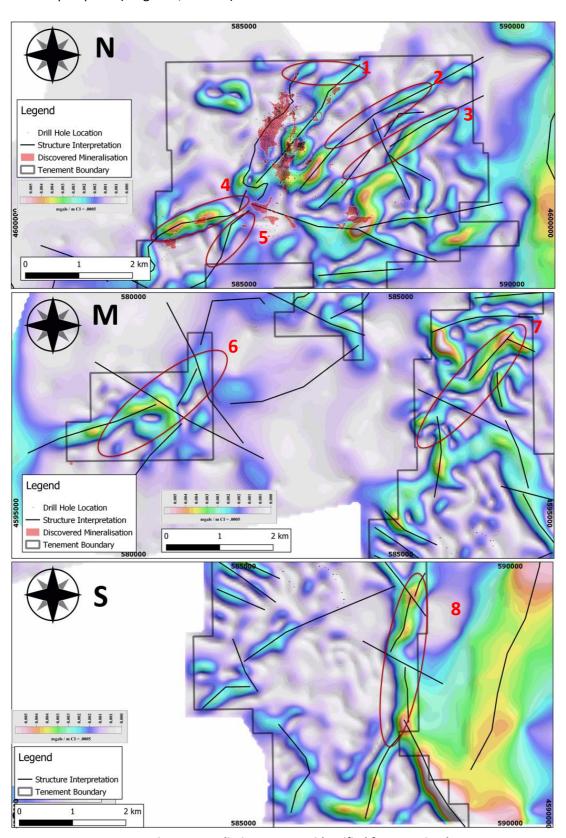


Figure 3: Preliminary targets identified from gravity data.



Identified targets in Figure 3 comprise:

- Target 1: north extension of the North Sammy and Beadles Creek deposits along Beadles and Schoonover faults;
- Targets 2 and 3: regional parallel structure to Schoonover and Beadles faults, particularly for the intersection with WN-WNW faults;
- Targets 4 and 5: southern extension of Beadles and Schoonover faults;
- Target 6: intersection between NNE and WNW structures at Jacks Creek prospect;
- Target 7: intersection between NNE and WNW structures at Golden Dome North prospect;
- Target 8: intersection between NNE and WNW structures at Golden Dome South prospect.

Further potential targets have also been identified at Golden Dome North and Mac Ridge along embayment in the Hanson Creek formation, which hosts the majority of gold mineralisation at the proximate Jerritt Canyon operation.

## **Next steps**

Strong consistency has been observed between the targets identified from the ground gravity study and the recent satellite hyperspectral imaging results (see Anova ASX release dated 9 October 2020).

Anova is set to undertake further detailed interpretation of both the gravity and hyperspectral data. This is to be completed in parallel with further historical data review and the results of the current magnetic survey work, which is nearing completion. The combined data review and interpretation is planned to deliver a high-priority list of targets at Big Springs to be aggressively tested during 2021.

## **Gravity survey detail**

Gravity survey data was acquired on a 200m staggered square grid. Surrounding remote stations were spaced between 500-1,000m. Gravity stations were surveyed using the Real Time Kinematic GPS method or, where it was not possible to receive GPS base information via radio modem, data processing was performed with the Xcelleration Gravity module of Oasis montaj.

The gravity data was processed to Complete Bouguer Gravity over a range of densities from 2.00g/cc through 3.00 g/cc, at steps of 0.05g/cc, using standard procedures and formulas. In addition to the gravity survey, district scale topography and geology are included in the Figures to provide supporting data for the gravity interpretation.

This announcement was authorised for release by the Board of Directors.

# **About the Big Springs Gold Project**

The Big Springs Gold Project is a Carlin style gold deposit located 80km north of Elko in NE Nevada, USA that produced 386,000 ounces of gold between 1987 and 1993, ceasing production due to low gold prices. The Project 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. The Project has Measured, Indicated and Inferred Resources of 16 Mt at 2.0 g/t Au for 1.03 Moz (refer table 1 and ASX release 26 June 2014), over 50sq km of highly prospective ground. The high-grade portion of the Mineral Resource, reported at a cut-off grade of 2.5 g/t gold, contains 3.1 Mt @ 4.2 g/t for 415 Koz. Big Springs is fully permitted for Stage 1 mining operations.





#### **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

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 geophysics survey for the Big Springs Project is based on information compiled by Mr James Wright, Principal Consultant Geophysicist – J. L. WRIGHT GEOPHYSICS and consultant to Anova. Mr Wright is a member of the Society of Exploration Geophysicists 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 Wright 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 III tilis sec	tion apply to all succeeding sections.)  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.	<ul> <li>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.</li> <li>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</li> <li>Gravity data were processed to complete Bouguer anomaly at first.</li> <li>LaCoste &amp; Romberg (L&amp;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.</li> <li>Terrain Corrections were calculated to a distance of 167 km for each station.</li> <li>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.</li> <li>The gravity survey is tied to the International Gravity Standardization Network of 1971 gravity base station in Elko (DOD#3899-2) and designated ELKO.</li> </ul>
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	Not Applicable



Criteria	JORC Code explanation	Commentary
	Mineral 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	If core, whether cut or sawn and whether	Not Applicable
techniques	quarter, half or all core taken.	Not ripplicable
and sample	If non-core, whether riffled, tube sampled,	
preparation	rotary split, etc and whether sampled wet	
preparation	or dry. For all sample types, the nature,	
	quality and appropriateness of the sample	
	preparation technique.	
	Quality control procedures adopted for all	Not Applicable
	sub-sampling stages to maximise	• Not Applicable
		/
Ouglity of	representivity of samples.  Measures taken to ensure that the	
Quality of assay data and		
	sampling is representative of the in situ	
laboratory	material collected, including for instance	
tests	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,	All gravity data processing was
	handheld XRF instruments, etc, the	permored with the Xceleration Gravity
	parameters used in determining the	module of Oasis montaj. The gravity
	analysis including instrument make and	data was processed to Complete
	model, reading times, calibrations factors	Bounguer Gravity over a range of
	applied and their derivation, etc.	densities from 2.00g/cc through
		3.00g/cc at steps of 0.05g/cc using
		standard procedures and formulas.
	Nature of quality control nessed	Not Applical-1-
	Nature of quality control procedures	Not Applicable
	adopted (eg standards, blanks, duplicates,	
	external laboratory checks) and whether acceptable levels of accuracy (ie lack of	
	bias) and precision have been established.	
Verification of	The verification of significant	Not Applicable
sampling and	intersections by either independent or	Not Applicable
assaying	alternative company personnel. The use	
ussuying	of twinned holes.	
	Documentation of primary data, data	
	entry procedures, data verification, data	
	storage (physical and electronic)	
	protocols.	
I a serii C	Discuss any adjustment to assay data.	AN 1
Location of	Accuracy and quality of surveys used to	All data are conform to the NAD
data points	locate drill holes (collar and down-hole	83/UTM 11N metric coordinate
	surveys), trenches, mine workings and	system.
	other locations used in Mineral Resource	
	estimation.	



Criteria	JORC Code explanation	Commentary
	Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>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.</li> <li>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.</li> </ul>
Data spacing and distribution	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> <li>For stations within the tenement boundary, data were acquired on a 200 m staggered squire grid.</li> <li>As for remote stations outside of the tenement boundary, space between stations is 500-1000 m.</li> </ul>
Orientation of data in relation to geological structure		Ground station data record. Station space is 200 m square.
Sample	The measures taken to ensure sample	All data are digitally stored by the
security	security.	Contractor and relayed to Anova.
Audits or	The results of any audits or reviews of	All data were initially processed and
reviews	sampling techniques and data.	interpreted by a qualified person.



# **Section 2 Reporting of Exploration Results**

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

`	IOPC Code explanation	,,,,	Commontory
Criteria	JORC Code explanation		Commentary
Mineral	Type, reference name/number, location	•	The Big Springs project tenements,
tenement and	and ownership including agreements or		comprising a total of 710 unpatented
land tenure	material issues with third parties such as		Lode Mining Claims (14,149 acres or
status	joint ventures, partnerships, overriding		5,726 ha) are all owned by Anova. Claims
	royalties, native title interests, historical		are subject to a Net Smelter Return
	sites		
	sites		ranging from zero 3% payable to various
			parties. There are no known adverse
			surface rights.
	The security of the tenure held at the	•	There are no known impediments. All
′	time of reporting along with any known		liabilities with respect to the
	impediments to obtaining a licence to		decommissioning of the open pit mines
	operate in the area.		=
\	operate in the area.		are the responsibility of AngloGold
			Ashanti N.A Inc.
Exploration done	Acknowledgment and appraisal of	•	Not Applicable
by other parties	exploration by other parties.		
Geology	Deposit type, geological setting and style	•	The Project's disseminated, sediment-
1	of mineralisation.		hosted gold deposits have been classified
)			by several authors as typical Carlin-type
′			· · · · · · · · · · · · · · · · · · ·
			deposits. The Big Springs deposits are
			hosted predominantly within the flaser
1			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.
1			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	A summary of all information material to	_	
	- I	•	Not Applicable
Information	the understanding of the exploration		
	results including a tabulation of the		



Criteria	JORC Code explanation	Commentary
	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.	
Data aggregation	In reporting Exploration Results,	<ul> <li>Not Applicable</li> </ul>
methods	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.	
Relationship	These relationships are particularly	Not Applicable
between	important in the reporting of Exploration	1 Not Applicable
mineralisation	Results. If the geometry of the	
widths and	mineralisation with respect to the drill	
intercept lengths	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').	
Diagrams	Appropriate maps and sections (with	<ul> <li>See figures and maps provided in the text</li> </ul>
	scales) and tabulations of intercepts	of the announcement.
	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	
D-I	appropriate sectional views.	
Balanced	Where comprehensive reporting of all	The CP believes this report to be a
reporting	Exploration Results is not practicable,	balanced representation of exploration
	representative reporting of both low and	undertaken.
	high grades and/or widths should be practiced to avoid misleading reporting of	
	Exploration Results.	
Other	Other exploration data, if meaningful and	All meaningful & material exploration
substantive	material, should be reported including	data has been reported.
exploration data	(but not limited to): geological	data nas been reported.
exploration data	(Sac not minica to). Scological	



Criteria  JORC Code explanation  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.  Further work  The nature and scale of planned further  • Further work planned includes	
- size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
contaminating substances.	
Further work   The nature and scale of planned further   • Further work planned includes	
work (eg tests for lateral extensions or comprehensive data interpretation,	field
depth extensions or large-scale step-out mapping, and exploration drilling.	iiciu
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.	

