

# ASX ANNOUNCEMENT

8 November 2021

## ABOUT CALIDUS RESOURCES

Calidus Resources is an ASX listed gold company that is developing the 1.5Moz Warrawoona Gold Project in the East Pilbara district of Western Australia.

## DIRECTORS AND MANAGEMENT

Mr Mark Connelly  
NON-EXECUTIVE CHAIRMAN

Mr David Reeves  
MANAGING DIRECTOR

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## Warrawoona Gold Project, WA

# Results of up to 101 g/t Au confirms high grade nature of Blue Spec

**Exceptional high-grade results drilled as part of Definitive Feasibility Study to expand Warrawoona to 130,000oz per annum**

## HIGHLIGHTS

- Multiple occurrences of visible gold identified
- Assay results to form part of Mineral Resource update for DFS
- Geotechnical, metallurgy test work and mining studies underway
- Environmental base line studies underway
- Further drilling along strike at Blue Spec East prospect planned for the December Quarter 2021

Calidus Resources Limited (**Calidus or the Company**) (ASX:CAI) is pleased to report assay results from the recently-completed Definitive Feasibility Study (DFS) drilling program at the Blue Spec Project in WA's Pilbara.

Results include:

- **4.1m @ 33.6g/t Au** from 194.9m (21BSDD005) incl. **2.2m @ 60.4g/t Au** and incl. **1.1m @ 100.7g/t Au** from 196m;
- **2.55m @ 44.1g/t Au** from 413.25m (21BSDD002) incl. **1.9m @ 58.5g/t Au**; and
- **3.1m @ 20.4g/t Au** from 449.9m (BSDD001) incl. **2.1m @ 28.4 g/t Au**.

Blue Spec is 75km from Calidus' Warrawoona project, where construction is well advanced and first gold production is expected in the June quarter of next year.

Calidus aims to start development of Blue Spec once steady-state production is achieved at Warrawoona. Blue Spec is anticipated to increase annual production at Warrawoona to 130,000oz when in full production<sup>1</sup>.

Calidus Managing Director Dave Reeves said the four diamond holes would form an important part of the Blue Spec Feasibility Study.

"These are the first holes Calidus has drilled at Blue Spec and it is significant that we have already validated the very high-grade nature of the deposit." Mr Reeves said.

"The results will form part of the DFS Resource upgrade, and the core will also be used in the metallurgical testwork and geotechnical studies now underway."

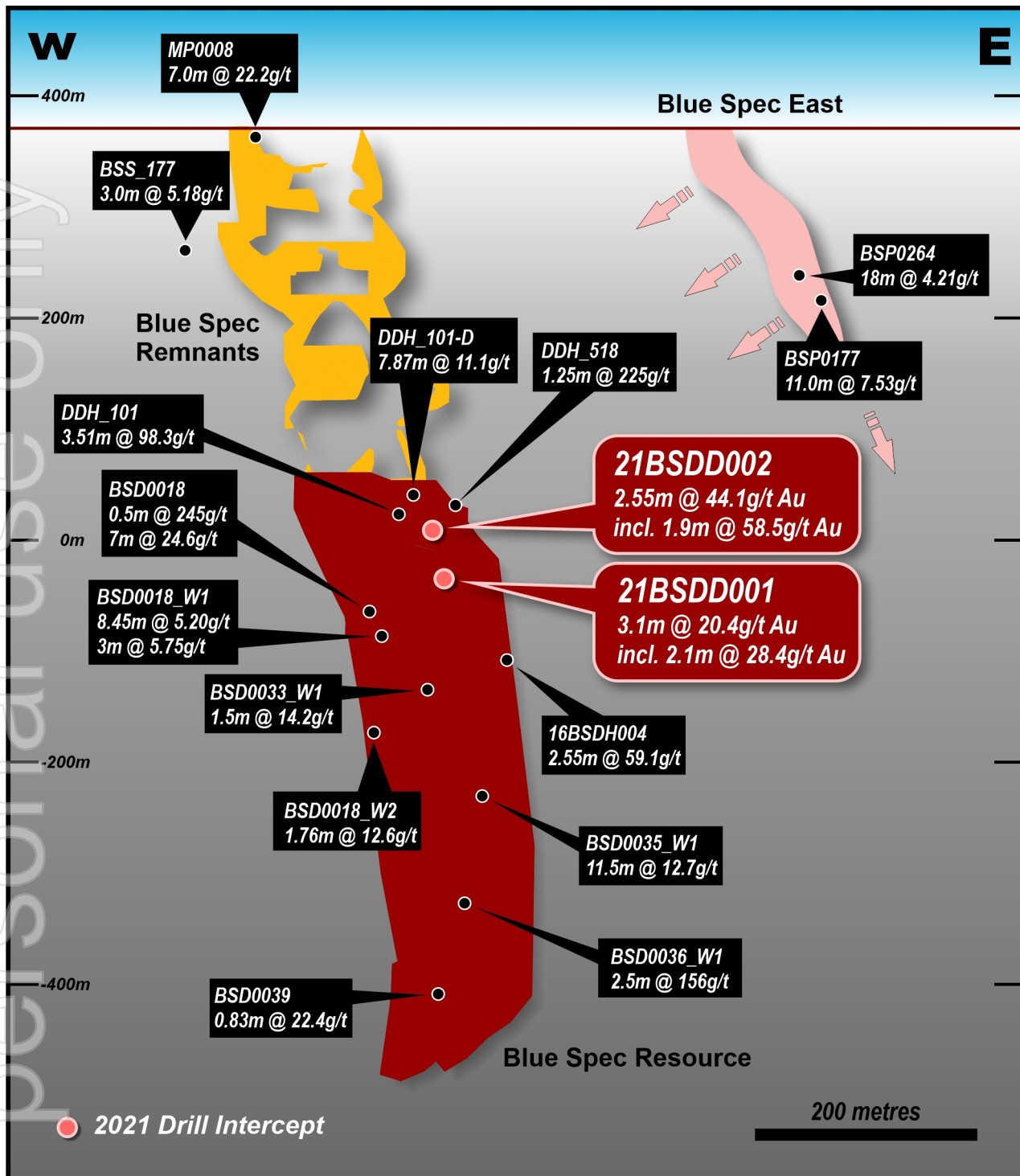
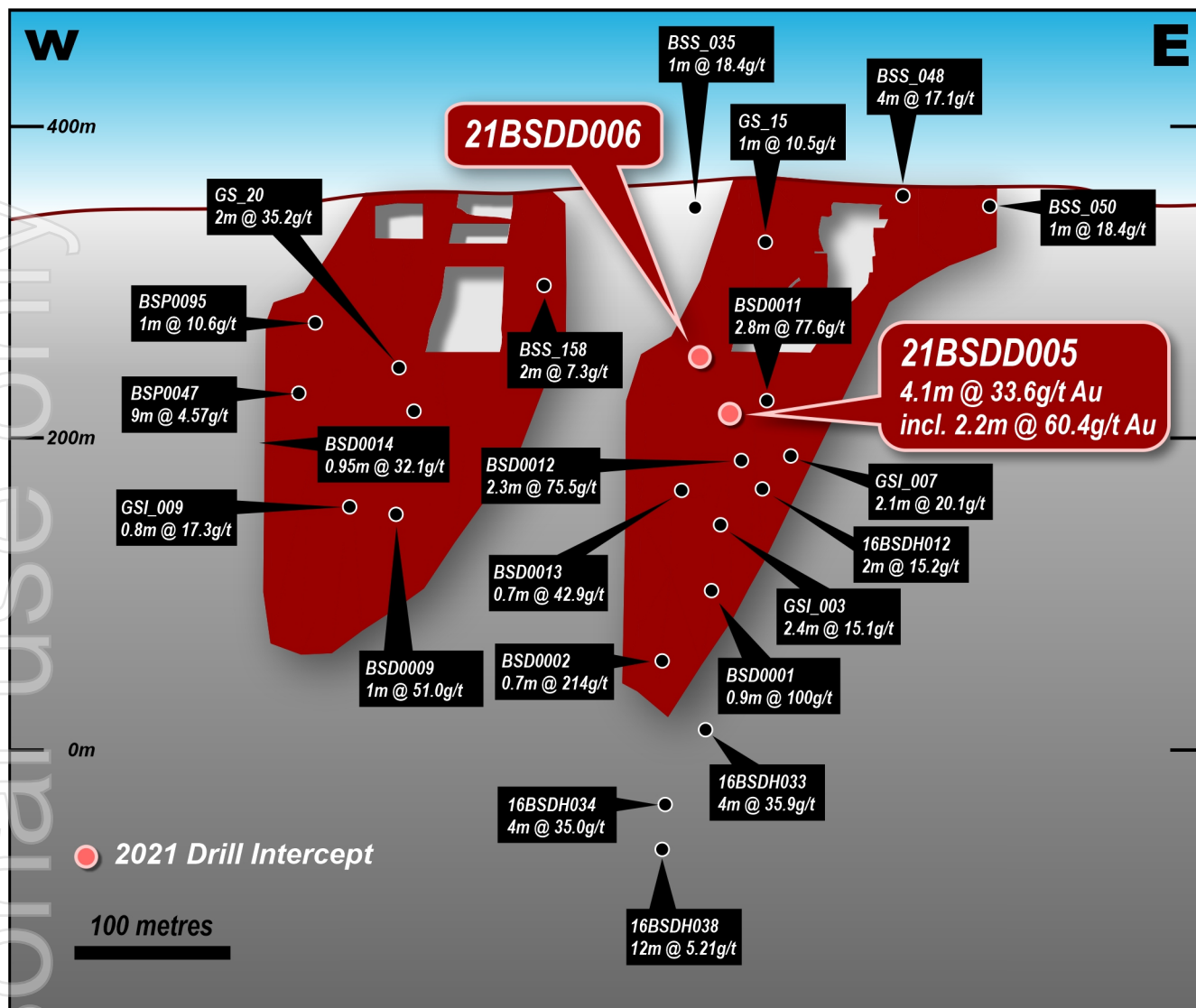


Figure 1: Blue Spec Long Section (showing Blue Spec East) and significant drill intercepts



**Figure 2: Gold Spec Long Section and significant drill intercepts**

### Metallurgy Test Work and Processing Plant Design

The four diamond holes drilled at Blue Spec will be utilised for confirmatory Metallurgy test work which is underway. This test work will complement the extensive metallurgical testwork completed on the Project by previous owners. Calidus intends on pursuing an extraction strategy of flotation and then using cyanidation of the flotation tails through the main 2.4Mtpa CIL Processing Plant to maximise recovery.

GR Engineering Services Ltd (GRES) and Bureau Veritas (BV) are being used for the engineering and laboratory test work respectively, who are the same groups utilised for the Warrawoona Gold Project DFS.

Calidus is contemplating a small modular standalone sulphide float plant located at Warrawoona which can be utilised to treat Blue Spec as well as the high-grade Copenhagen deposit at Warrawoona. The sulphide float plant was included in the DFS for the Warrawoona Gold Project and is separate to the 2.4Mtpa CIL plant currently under construction. The rationale for installing the sulphide float at Warrawoona is that it will enable the opportunity to recover additional gold by cyanide leaching of the floatation tailings through the main CIL plant as well as leveraging off the infrastructure and personnel based at Warrawoona. A central regional production hub at Warrawoona also provides further opportunity with regards to other potentially stranded assets in the region that do not have the scale to justify a standalone plant.

Calidus plans to produce a high-grade Antimony-Gold Concentrate from Blue Spec. Calidus has received indicative non-binding terms from a number of groups for the Antimony-Gold Concentrate. The terms were in line with previous Net

Smelter Return (NSR) assumptions used for the Blue Spec Integration Study released to the ASX in March 2021<sup>1</sup>.

### Mineral Resource Estimate and Mining Studies

The results from the four diamond holes will be used to update the Mineral Resource Estimate (MRE) for Blue Spec. Geotechnical logging of the holes was also completed with preliminary advice received from the Geotechnical Consultant which was also in line with expectations. Cut-off grades are calculated using a NSR of the Antimony-Gold Concentrate.

A key driver for the Blue Spec Project is to fund its development out of operating cash flow from Warrawoona operations. As such, Calidus will consider options to de-risk the execution such as the incorporation of underground dedicated diamond drill drives to drill out the inferred portion of the resource at depth and factoring this into the life of mine schedule.

### Project Permitting

Calidus has commissioned all base line environmental studies required for Project Permitting. These will be completed in the December and March Quarter of 2021 and 2022 respectively and will allow for timely submission of the Mining Proposal and Mine Closure Plan by the end of the March Quarter in 2022.

### Blue Spec East Drilling

Blue Spec East is approximately 300m along strike of the main Blue Spec resource. Historic Blue Spec East drill results including 11m @ 7.53 g/t and 18m @ 4.21 g/t<sup>1</sup> (Figure 1) are outside of the current Mineral Resource Estimate. Follow up drilling is planned at Blue Spec East in the December Quarter. If high-grade results are returned at Blue Spec East, this may warrant a strategic review for the Blue Spec Project with more of a camp scale exploration focus.

**Table 1: Significant Intercept tables**

Hole ID	Depth (m)	Northing	Easting	RL	Dip	Azimuth	From (m)	To (m)	Width (m)	Au Grade (g/t)	Comments
21BSDD001	521.8	7584708.373	218264.220	345.514	-60.6	152.6	449.90	453.00	3.10	20.4	incl 2.1m @ 28.4g/t Au from 449.9m
21BSDD002	480.4	7584698.088	218247.465	345.373	-56.6	150.0	401.30 413.25 418.00	402.08 415.80 420.00	0.78 2.55 2.00	5.59 44.1 2.73	incl 1.9m @ 58.5g/t Au from 413.9m
21BSDD005	235.35	7584128.357	217119.523	382.816	-58.9	0.8	194.90	199.00	4.10	33.6	incl 2.2m @ 60.4g/t from 194.9m incl 1.1m @ 100.7g/t Au from 196m
21BSDD006	232	7584128.359	217120.004	382.852	-54.9	351.3	164.00	165.00	1.00	2.50	

This announcement has been authorised for release by the Board.

**For further information please contact:**

**Dave Reeves**  
Managing Director

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<sup>1</sup> Refer ASX Announcement 23 March 2021 "Blue Spec Integration Study". The Company confirms that it is not aware of any information or data that materially affects the information included in the market announcement, and that all material assumptions and technical parameters underpinning the estimates continue to apply.

## **COMPETENT PERSON STATEMENT**

The information in this announcement that relates to exploration results is based on and fairly represents information compiled by Ben Playford, a competent person who is a member of the AIG. Mr Playford is employed by Calidus Resources Limited and holds shares in the Company. Mr Playford has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Playford consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

### **Forward Looking Statements**

This announcement includes certain “forward looking statements”. All statements, other than statements of historical fact, are forward looking statements that involve risks and uncertainties. There can be no assurances that such statements will prove accurate, and actual results and future events could differ materially from those anticipated in such statements. Such information contained herein represents management’s best judgement as of the date hereof based on information currently available. The Company does not assume any obligation to update forward looking statements.

## JORC Code, 2012 Edition – Table 1 – Blue Spec Deposit

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. 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.</i>	Diamond core samples had a minimum sample length of 0.35m, a maximum of 1.4m, with a 1m default length. Sample intervals were defined by geological boundaries, considering rock types, alteration, veining, and sulphide abundance. After logging and photographing, drill core was shipped to Bureau Veritas laboratories in Perth, where it was quarter cut. The quarter core was sent for assay at Bureau Veritas followed by MinAnalytical, with the remainder sent to for further analysis.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p>The Blue Spec parent holes were drilled at -60° and -56° toward an azimuth of approximately 150°. The Gold Spec holes were drilled at -59° and -55° toward an azimuth of approximately 350°. All drill holes lifted with depth.</p> <p>The dip of the holes at the ore zone was roughly -55° and, as the mineralised zone dips at approximately 80°, the angle of intercept was at around 45°.</p> <p>Core was sampled to marked geological contacts and to nominal 1m intervals within geological domains. Where possible, the same side of the core was sampled throughout the holes.</p>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	<p>Samples of quarter NQ or HQ core were taken at specified intervals (not completely sampled) according to geological boundaries selected by a geologist. Sample weights were typically between 1 to 3kg.</p> <p>Drill core samples were dried, crushed and pulverised by Bureau Veritas with a 50g split analysed by Fire Assay. The remaining bulk reject was sent to MinAnalytical Laboratories in Perth, for a 500g split analysis by Photon Assay technique.</p>
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).</i>	Diamond drill core was collected using a CoreTech YDX-3L diamond drill rig operated by Topdrive Drilling Australia.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Core recovery was measured by Calidus staff based on the run lengths provided by the drillers. Recoveries averaged greater than 95%.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Diamond drill samples were collected from competent, fresh rock and >95% of sample intervals had excellent recovery.

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	Diamond drill recoveries were regularly monitored during drilling.  No correlation has been demonstrated between sample weights as measured by the laboratories and grade.
Logging	<i>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.</i>	In the drill core, rock types, alteration mineralogy and intensity, vein types, and percentages of sulphides were recorded for each geological interval throughout the hole.  The drillholes were geotechnically logged by Peter O'Bryan and Associates to support ongoing mining studies.  The detail of logging is sufficient to support any future Mineral Resource estimations.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging drill core was predominately qualitative in nature, although vein and sulphide percentages were estimated visually. All core trays were photographed after logging.
	<i>The total length and percentage of the relevant intersections logged.</i>	All recovered intervals were geologically logged.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	All drill core was sawn in quarter and where possible, the same quarter throughout each hole was submitted to the laboratory for analysis.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	All drilling was core.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples submitted to Bureau Veritas (NATA accredited for compliance with ISO/IEC17025:2017) for Fire Assay were dried at 105°C, and crushed to a nominal top size of 3mm, (samples >3kg were riffle split), pulverised to 85% passing 75 microns, and a 50g split for Fire Assay and AAS finish.  Samples submitted for photon assay to MinAnalytical Laboratory Services Australia Pty Ltd (NATA accredited for compliance with ISO/IEC17025:2005) were oven dried and crushed to a nominal top size of 3mm, (samples >3kg were riffle split), and 500g linear split (PAP3512R) placed into a jar for photon assay (PAAU2).  The larger sample size used for photon assay (compared with 50g for Fire Assay) ensures a more representative assay in systems characterised by coarse gold, as identified in the core from Blue Spec.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	No independent QAQC was utilised. QAQC practices adopted were those of the analysing laboratories comprising Certified Reference Material and blanks at a rate of

Criteria	JORC Code explanation	Commentary
		2 for every 25 samples submitted.
	<i>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.</i>	As all drilling was core no field duplicates were taken, but bulk reject from the primary Fire Assay was sent for confirmatory Photon Assay analysis.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Drill core of NQ or HQ diameter is considered industry standard and appropriate for sample collection. Quarter core is the minimum sample volume for core of this diameter.
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Photon assays were carried out by MinAnalytical. Gold can be measured even if it has not been liberated from the sample material. Photon assay for a ~500g sample has a nominal lower detection limit of 0.03g/t Au which is considered to be appropriate for this style of mineralisation and a total analysis.
	<i>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.</i>	No such tools were used in the preparation of this release.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	QAQC comprised the laboratories own internal standards and external laboratory checks with the use of both Bureau Veritas and MinAnalytical. The repeatability between laboratories has established acceptable levels of precision.
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	On receipt of assay results from the laboratory the results are verified by the Geological Database Manager and by the Regional Exploration Manager who compare the results with geological logging. Significant intercepts have been reviewed in the available data by senior geological staff at Calidus.
	<i>The use of twinned holes.</i>	No twinned holes were drilled.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Geological data is logged into Excel spreadsheets on a Toughbook computer at the core preparation facility for transfer into the drill hole database. DataShed is used as the database storage and management software and incorporated numerous data validation and integrity checks using a series of predefined relationships. All original planned data is retained in DataShed for validation purposes.
	<i>Discuss any adjustment to assay data.</i>	Adjustments made to the assay data were limited to the replacement of below detection results with a negative value.

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<i>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.</i>	Drill hole collar locations were captured by DGPS by Calidus Resources surveyors. Readings have an estimated uncertainty of less than 0.02m for the Easting and Northing relative to the base station at Blue Spec.  Downhole surveys for dip and azimuth of the hole were taken every 20-30m by the drillers using a north-seeking REFLEX EZ-GYRO™ in multi-shot mode during the drilling.
	<i>Specification of the grid system used.</i>	The grid system used is MGA94 Zone 51. All coordinates in this release refer to this grid system.
	<i>Quality and adequacy of topographic control.</i>	Topographic control provided by UAV photogrammetry using a DJI Phantom 4 RTK drone with a 2cm vertical and 1.25cm horizontal accuracy.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	See Table 1 for hole positions.
	<i>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.</i>	This drilling does not form the basis of or change the classification of the Mineral Resource estimation but has increased data density in existing classified Mineral Resources.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been applied during data collection.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The gold/antimony mineralisation identified to date consists of a main mineralised shear at each project area, and smaller footwall and hangingwall lodes, all striking approximately 260° and dipping steeply (80°–85°) to the south.  The drilling at Blue Spec and Gold Spec was oriented approximately perpendicular to the strike of mineralisation and at as high an angle as possible to the dip of the main mineralised lodes, given the limited drilling positions resulting from the high topographic relief and target depths required, in an attempt to achieve unbiased samples.
	<i>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.</i>	No sampling bias has been identified in the relationship between drilling orientation and orientation of key structures.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	All core was strapped to pallets with a lid covering the top trays. The pallets were picked up from the Blue Spec core processing area and transported to Bureau Veritas in Perth using a reputable freight company.  Bureau Veritas received and placed the core trays on racks within their facility which was then inspected by representatives from Calidus Resources. The samples at Bureau

Criteria	JORC Code explanation	Commentary
		Veritas in Perth are kept in a secured building with restricted entry. Bureau Veritas operates an audit trail for every sample whilst in their custody.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The program and data were reviewed by senior company personnel.

## Section 2 Reporting of Exploration Results

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, wilderness or national park and environmental settings.	The Klondyke deposit is situated in the East Pilbara District of the Pilbara Goldfield of Western Australia, approximately 20km ENE of the town of Nullagine. The Project comprises mining licence M45/115 which is beneficially held 100% by Calidus Blue Spec Pty Ltd a wholly owned subsidiary of Calidus Resources Limited.				
	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.	The tenements are in good standing and no known impediments exist.				
		Tenement ID	Holder	Size (ha)	Renewal	Ownership/Interest
		M46/115	Calidus Blue Spec Pty Ltd	113.10	3/2/2033	100%
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Modern exploration has been undertaken by several companies from the mid-1970s to the present day. During this period Anglo-American, Mulga Mines, Metramar Metals, Australian Consolidated Minerals Ltd, MinProc, Chase Minerals, Fimiston Mining and NorthWest Resources all conducted exploration in the Blue Spec area. Exploration included drilling, geological mapping, bulk sampling, underground sampling, soil sampling, aeromagnetic surveys, aerial photography, resource modelling/calculations and petrology.				
Geology	Deposit type, geological setting and style of mineralisation.	The Blue Spec Shear Gold-Antimony deposits is interpreted to be epizonal orogenic gold deposits hosted within the Mesoarchaeon Mosquito Creek Formation, a thick sequence of siliclastic metasediments comprising dominantly quartz rich arenites and shales that has undergone multiple periods of deformation.				
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 holes:  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  hole length.	Refer to Table One.				

Criteria	JORC Code explanation	Commentary
<i>Data aggregation methods</i>	<i>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.</i>	No data aggregation methods have been applied to these exploration results.
	<i>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.</i>	High-grade gold intercepts within broader, lower grade intercepts are reported as included intervals.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents values are used for reporting of exploration results.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The mineralisation at Blue Spec and Gold Spec appears to be associated with shearing, veining and alteration and dips at approximately 80°. The drill holes have dips of close to 55° when piercing the mineralisation and should, therefore, intersect the mineralisation at a moderate angle. Reported downhole widths will be longer than the true widths.
<i>Diagrams</i>	<i>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.</i>	Suitable summary plans have been included in the body of the report.
<i>Balanced reporting</i>	<i>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.</i>	All intercepts using parameters described above are reported, together with locations of all drill holes reported in Table 1.  The report is considered balanced and provided in context.
<i>Other substantive exploration data</i>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	All meaningful and material data pertinent to this announcement are included in the body of the announcement.

Criteria	JORC Code explanation	Commentary
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further work will involve infill drilling to increase confidence in the Inferred Mineral Resource, testing of along strike and down-plunge continuation to the current mineralisation and the possible locations of higher-grade ore shoots and to test the extent of the remnant mineralisation around historic mining voids in the upper parts of the orebody.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Diagrams are contained in this announcement.