

# ASX ANNOUNCEMENT

13 July 2020

## ABOUT CALIDUS RESOURCES

Calidus Resources is an ASX listed gold development company that controls the Warrawoona Gold Project in the East Pilbara district of the Pilbara Goldfield in Western Australia.

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# Drilling to commence at the Otways Gold-Copper Project in the Pilbara

**Additional drilling planned at Warrawoona Gold Project to increase Reserves**

## HIGHLIGHTS

- Five RC holes and 1 diamond hole to be drilled at the Otways (Doherty) prospect where substantial copper intercepts were obtained in historic percussion holes from surface.
- These drill holes were never assayed for gold and are along strike from trenches assaying up to 13g/t Au.
- Six reconnaissance RC holes to be drilled at the Malachite Flats prospect targeting anomalous and high-grade gold rock-chip samples of up to 15.8g/t Au over a 600m diameter anomaly.
- Additional geotechnical and metallurgical drilling planned at Warrawoona to finalise maiden Ore Reserves at Fieldings Gully and Coronation

Calidus Resources Limited (ASX:CAI) is pleased to announce that drilling is about to commence at its recently acquired Otways project in the Pilbara.

A multi-purpose drill rig is about to commence the initial reconnaissance drilling of two targets (refer Figure One).

Calidus recently entered into a Heads of Agreement with Rugby Mining to earn up to 70% interest in the project north-east of Nullagine<sup>1</sup>. The same rig will also be used to drill geotechnical and metallurgical holes and diamond tails on recently completed pre-collars at the Warrawoona Gold Project.

Calidus Managing Director Dave Reeves said the drilling campaign was part of the Company's two-pronged strategy of growing mine life and undertaking regional exploration.

He said Otways had numerous enticing targets with large gold and copper prospects.

*"With the robust economics recently highlighted in the updated pre-feasibility study, we are rapidly heading towards development of the 1.5Moz Warrawoona Gold Project". Mr Reeves said.*

*"With this in mind, we are targeting the addition of further reserves at the nearby satellite deposits of Fieldings Gully and Coronation.*

*"We are also very excited to be commencing drilling at the Otways prospect, where historic drilling and rock chips have identified both gold and copper anomalies that demand further testing".*

## Otways prospect

In the late 1960s, shallow (<60m depth) percussion drilling of coincident soil and IP anomalies by Conwest identified copper mineralisation in metabasalts at or near surface<sup>2</sup> (refer Figure Two). In addition, several holes contain Cu mineralisation that is open at depth. Historic drilling was never assayed for gold but nearby costean samples returned values of up to **13g/t Au<sup>3</sup>**.

A programme of five RC holes is planned to verify, and extend at depth, shallow Cu intercepts in historic drilling at the Otways prospect. One diamond drill hole is also planned to better define the structures hosting mineralisation and the style of mineralisation. Core samples will be taken for petrophysical testing to determine the best geophysical methods to be used for further exploration across the project.

## Malachite Flats

Broad copper and gold anomalies in soils have been identified at Malachite Flats, about 1.5km SW of Otways, coincident with a large SE-trending HoistEM anomaly that was defined by Hazelwood Resources<sup>4</sup>. Subsequent rock-chip sampling returned anomalous Au values up to **15.8g/t Au** from an array of quartz veins with several orientations along a NE-trending zone over 550m (refer Figures Three and Four). An initial reconnaissance program of 6 RC holes is being drilled to test the depth extent of these veins. The area over the HoistEM anomaly comprises shallow cover with scattered exposures of weathered bedrock. The HoistEM data will be reinterpreted to better define targets for drilling possibly later in the field season.

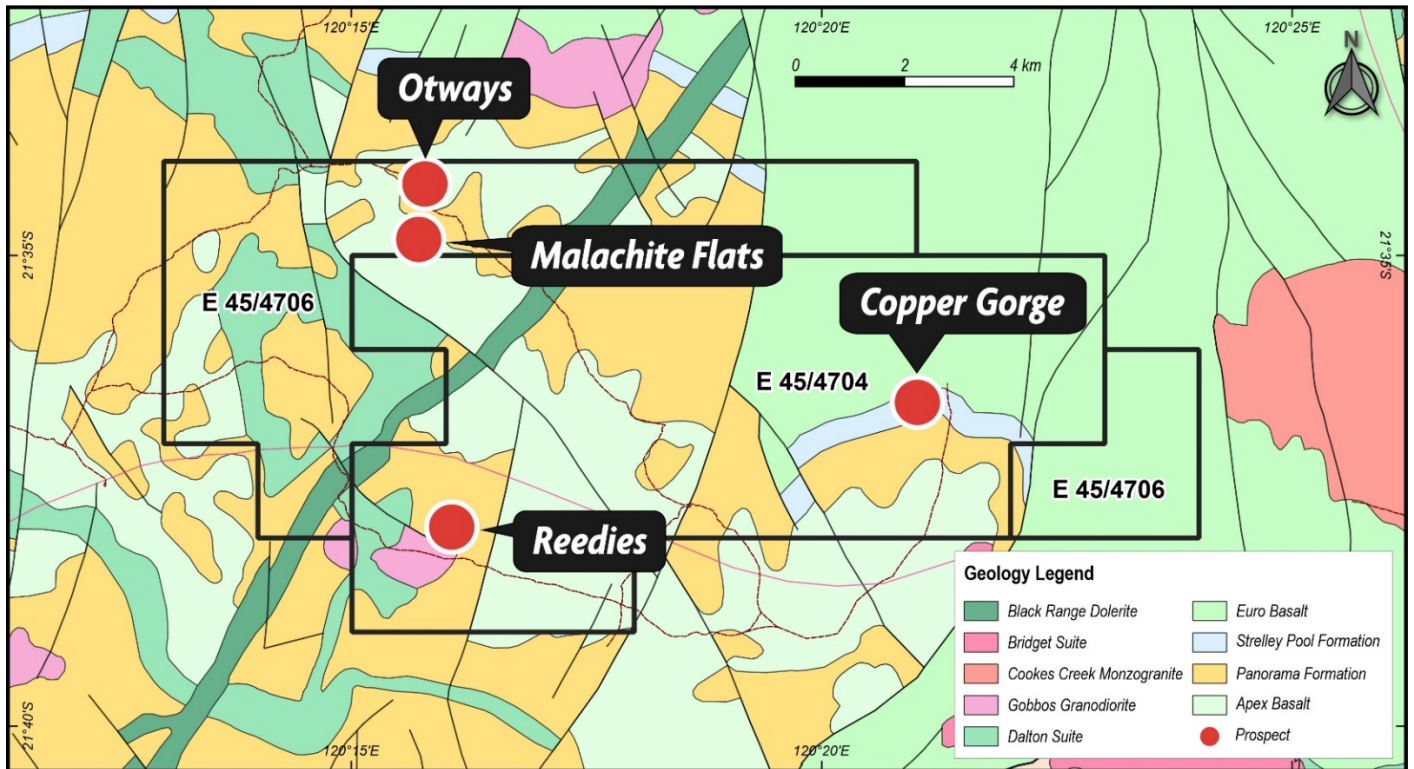
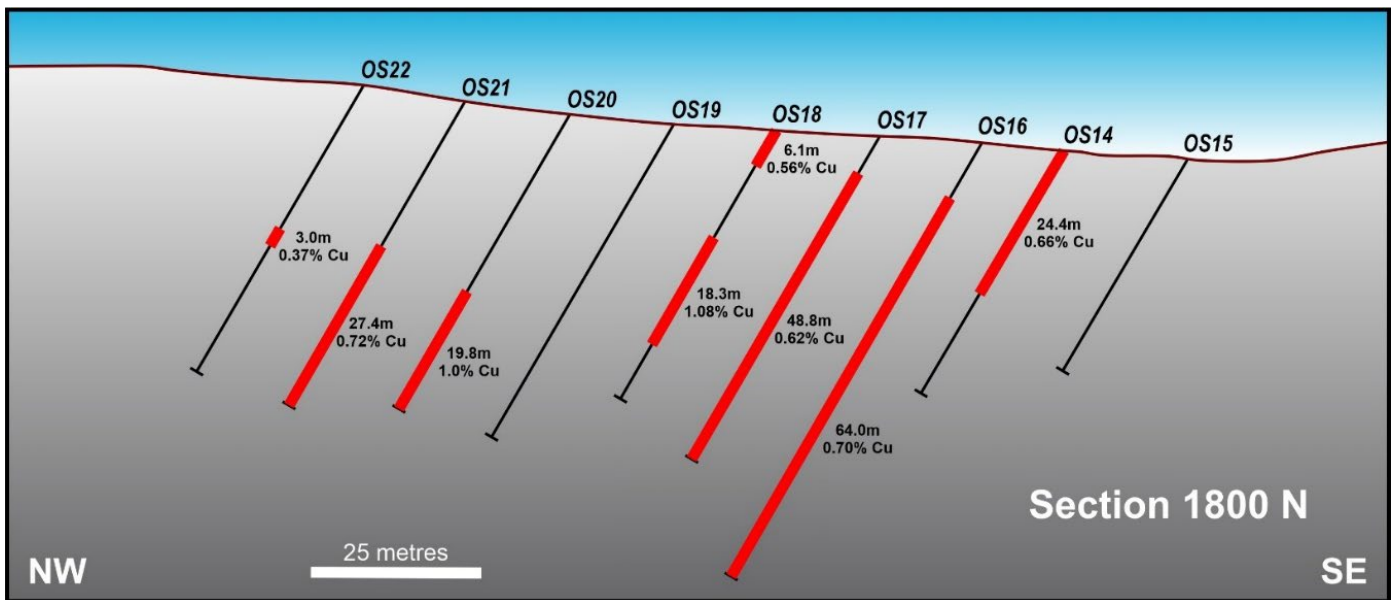
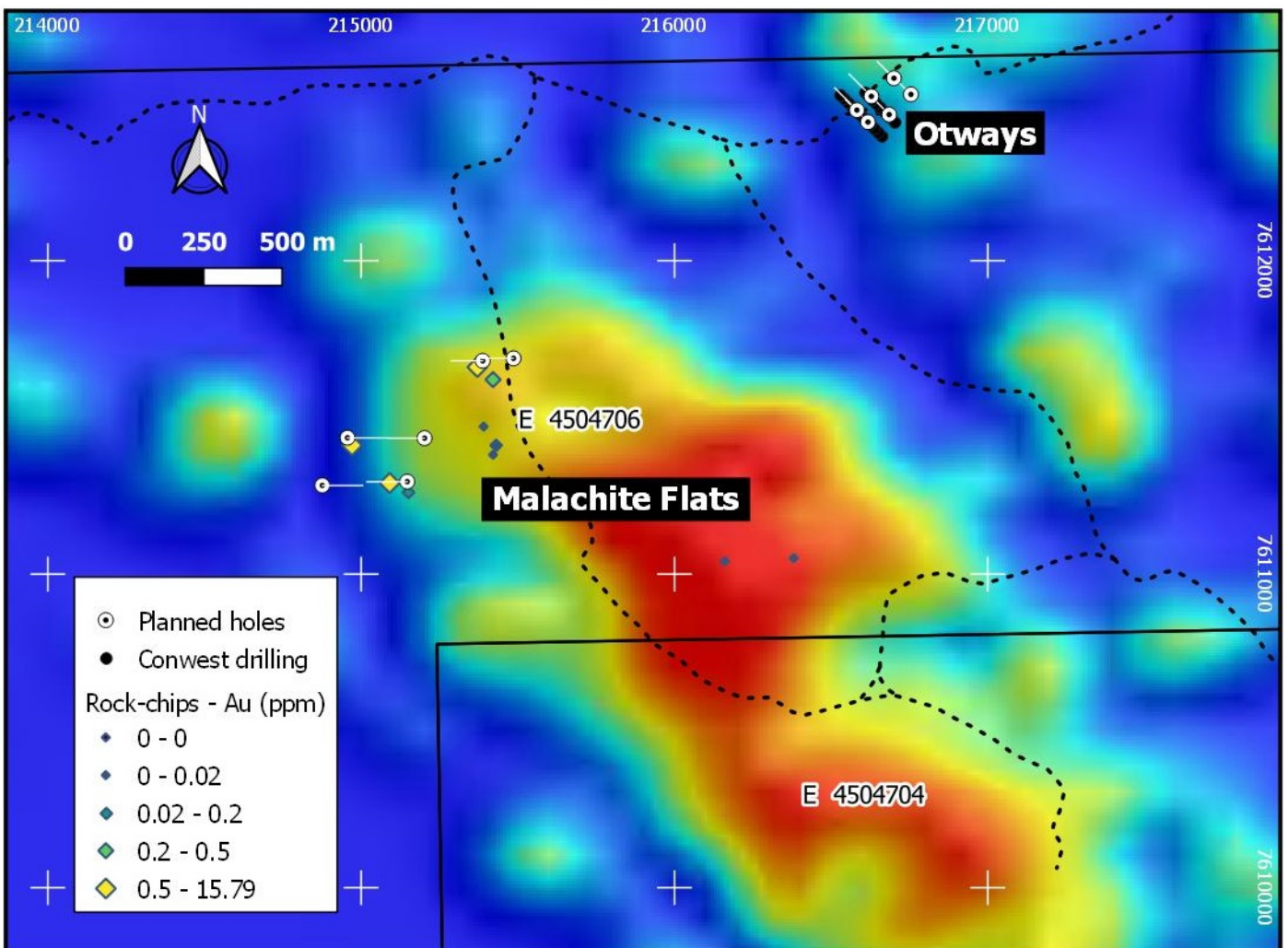


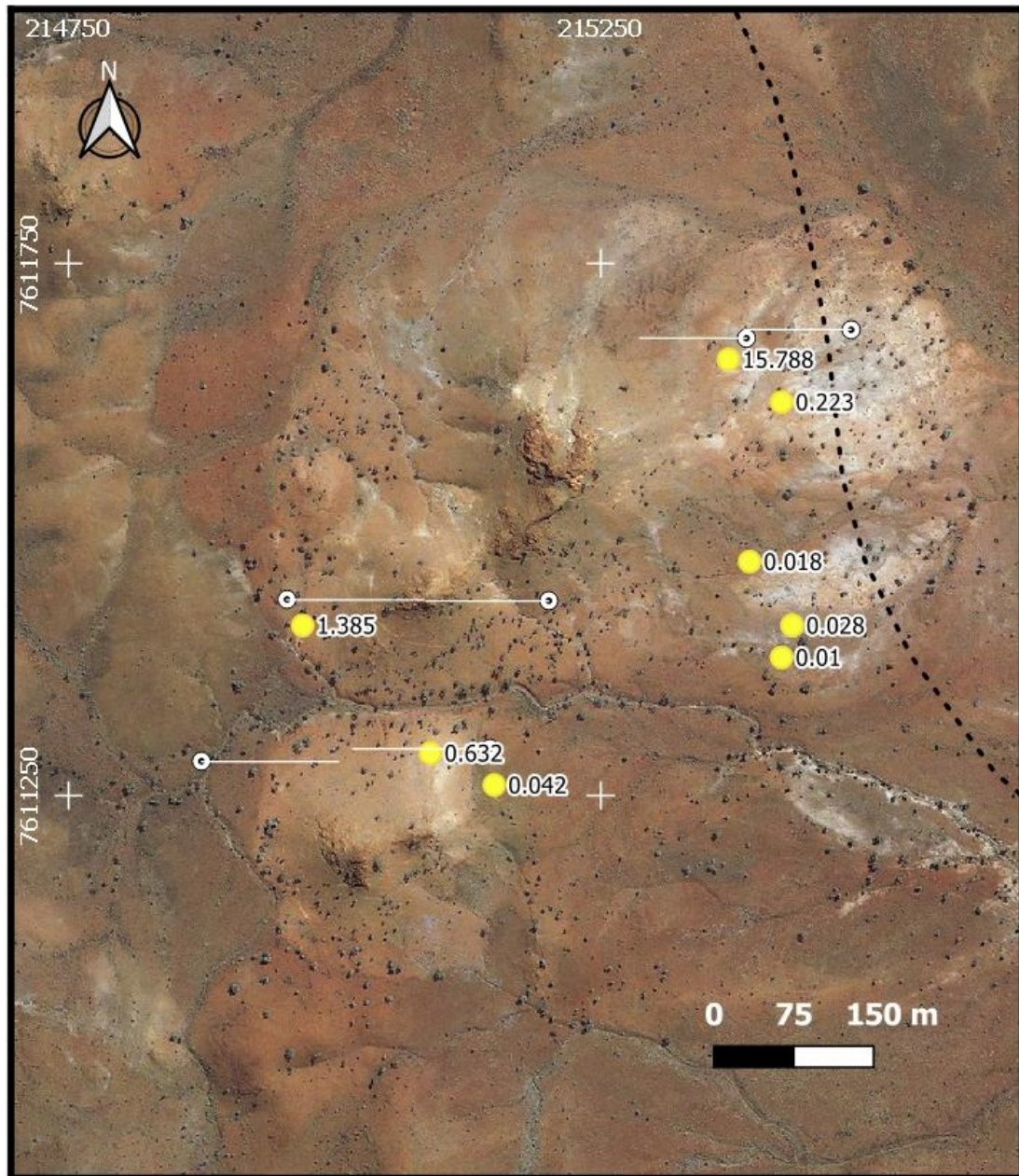
Figure One: Tenements at the Otways Project with the GSWA 500k geology and prospect locations



**Figure Two:** Cross section at the Otways Project showing the results of shallow percussion drilling by Conwest in the 1960s



**Figure Three:** Map of the Otways–Malachite Flats area showing the locations of the planned drill holes on a horizontal conductivity slice at 100m depth from a HoistEM survey flown by Hazelwood Resources.



**Figure Four:** Map of the Malachite Flats area showing historic rock-chip sample locations and Au assays.

*Notes*

1. Calidus Resources Limited ASX Release 27 May 2020 "Calidus to acquire Otways Project near Warrawoona".
2. Burrill, G.H.R., 1968, Progress report on Reedy Creek copper prospects near Nullagine, Western Australia: Conwest Australia NL: DMIRS Statutory Report A1696.
3. Concord Mining NL, 1988, E45/656 – Bridget Prospect: DMIRS Statutory Report A24511.
4. Butler-Blaxell, T., 2007, Partial Surrender Report E 46/562, Bonney Downs, For the Period Ending 15 February 2007: Hazelwood Resources Ltd: DMIRS Statutory Report A74996.

## COMPETENT PERSON STATEMENT

The information in this announcement that relates to exploration results is based on and fairly represents information compiled by Steve Sheppard a competent person who is a member of the AIG. Steve Sheppard is employed by Calidus Resources Limited and holds shares in the Company. Steve 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. Steve Sheppard consents to the inclusion in this announcement of the matters based on his work in the form and context in which it appears.

For the purpose of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.

For further information please contact:

**Dave Reeves**

Managing Director

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### Refer announcements:

ASX – 04 Jun 2020 – Exploration Update

ASX – 27 May 2020 – Calidus to acquire Otways Project near Warrawoona

**Table One:** Rock-chip results from the Malachite Flats prospect

Sample_ID	Easting	Northing	Au (ppm)	Ag (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)
212228	215420	7611380	0.01	-0.5	38	345	10
212229	215430	7611410	0.028	-0.5	66	153	458
212230	215430	7611410	0.004	0.9	49	347	21
212231	215390	7611470	0.018	-0.5	34	64	28
212232	215420	7611620	0.223	13	1443	142	1394
212233	215370	7611660	15.788	18.6	414	439	3711
212234	215150	7611260	0.042	-0.5	42	52	17
212235	215090	7611290	0.632	2.4	1038	125	788
212236	214970	7611410	1.385	6.2	411	328	3019

## JORC Code, 2012 Edition – Table 1 – Otways Project

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>	Techniques referred to in the text comprise reconnaissance rock-chip sampling.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Each rock-chip sample weighed about 1kg and comprised 15 to 20 rock fragments of outcrop or float taken over area of about 10 x 10m.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	Rock-chip samples were taken from veins in varying orientations.
<b>Drilling techniques</b>	<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>	No drilling is referred to in this release.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No drilling is referred to in this release.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	No drilling is referred to in this release.
	<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>	No drilling is referred to in this release.
<b>Logging</b>	<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>	The rock types, presence of sulphides or their weathering products, and the presence of absence of alteration minerals was recorded at each site. Photographs were taken of each sample.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of the samples was qualitative in nature.
	<i>The total length and percentage of the relevant intersections logged.</i>	All the rock-chip samples were logged.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No drilling is referred to in this release.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	No drilling is referred to in this release.

Criteria	JORC Code explanation	Commentary
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Rock-chip samples were submitted to Intertek Genalysis' Perth laboratory, an ISO 9001-certified laboratory. The samples were oven dried at 105°C for eight hours, crushed to a nominal topsize of 2mm, and pulverized so that at least 85% of material was finer than 75µm. A low-Cr steel mill was used for pulverizing to minimize contamination.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	No sub-sampling was undertaken.
	<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>	No duplicate samples were taken as these are reconnaissance samples.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Each of the rock-chip samples weighed approximately 1kg and are considered to be suitable given the fine- to medium-grained nature of the veins.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Gold was determined by lead collection fire assay in new pots and analysed by ICP-MS (code FA50/MS). The samples were also assayed for a suite of 33 elements by 4 acid digestion, and ICP-OES determination (method code 4A/OE).
	<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>	A HoistEM survey was flown in 2007 at 80 m line spacing for Hazlewood Resources by GPX Airborne. The data and report were lodged with DMIRS (MAGIX Registered Number 76014). A summary of the flight plan, system specifications and geometry, sampling frequency and data processing is contained in DMIRS Statutory Report A74996..
	<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>	Three different certified reference materials (CRMs) of suitable grade from OREAS were inserted into the batch of samples submitted to monitor the accuracy of the results. Precision was monitored by several duplicate assays. The results of internal laboratory CRMs and blanks were also reported. Both accuracy and precision were satisfactory.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Several sampling localities have been verified by Calidus personnel.
	<i>The use of twinned holes.</i>	No drilling is referred to in this release.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Descriptions of samples were recorded in a notebook and transferred to Excel spreadsheets. Sample localities were recorded using a Garmin GPSmap 60CSx unit. Field data were backed up on an external hard drive. Assays were emailed from the laboratory and then entered into a database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments have been made to the assay data.

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Location of data points</b>	<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>	Not applicable – referring to exploration results only.
	<i>Specification of the grid system used.</i>	The grid system used is MGA94 Zone 51. Any reported coordinates are referenced to this grid.
	<i>Quality and adequacy of topographic control.</i>	The RL of the rock-chip samples was not recorded but is not considered necessary for early reconnaissance work of this nature.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Reconnaissance mapping and sampling only was undertaken; therefore, data were not collected at a regular spacing.
	<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>	Not applicable – referring to exploration results only.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been applied.
<b>Orientation of data in relation to geological structure</b>	<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>	Quartz veins from several different orientations were sampled.
	<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 drilling is referred to in this release.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	The samples were collected and driven to Port Hedland by a Rugby Mining Ltd employee and dispatched to Intertek Genalysis in Perth.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No reviews or audits of the sampling data have been conducted other than to check the spatial integrity of samples.



## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	The Otway Project is situated in the East Pilbara District of the Pilbara Goldfield of Western Australia, approximately 25km ENE of the town of Nullagine. The Project comprises exploration licences E45/4704 and E45/4706, both of which are held 100% by Beckton Gledhill Pty Ltd. In 2017, Rugby Mining entered a farm-in/JV agreement with Beckton Gledhill Pty Ltd. Rugby is the manager and beneficiary of the project.
	<i>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.</i>	The tenements are in good standing and no known impediments exist.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Copper mineralisation at Copper Gorge and Reedies was reportedly discovered by a prospector, M. Doherty, in the early 1900s and relocated by a group of prospectors in the mid-1960s. At some stage two shafts were sunk at Otways (Doherty) and in about 1965, Bob Otway sank another shaft and produced several tonnes of ore at 12% copper.  Conwest was the first company to undertake more systematic exploration and sampling on the Project starting in 1966. Since then drilling, soil and rock-chip sampling, and various geophysical surveys have been undertaken by Kennecott, Concord Mining, CRA Exploration, Greater Pacific Gold, Giralia Resources and Hazelwood Resources.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Otways Project is located on the eastern flank of the McPhee Dome, which comprises gently dipping rocks of the Warrawoona Group intruded by several granite plutons.  The oldest rocks in the project area are metamorphosed basalt and komatiitic basalt of the 3460-3425 Ma Apex Basalt, which is conformably overlain by felsic volcanic rocks of the 3450-3420 Ma Panorama Formation that underlies much of the project area. The Panorama Formation is overlain disconformably by silicified carbonate rocks and chert of the Strelley Pool Formation, which is in turn overlain by the 3350-3335 Ma Euro Basalt. This succession is intruded by several granite plutons, including the Gobbos Granodiorite which is spatially associated with several porphyry-style Cu-Mo prospects.  Copper mineralization at Otways has been interpreted as disseminated stratabound in nature.
<b>Drill hole Information</b>	<i>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</i>	Refer to Table One for the rock-chip sample results and coordinates for sample locations.

Criteria	JORC Code explanation	Commentary
	<p>dip and azimuth of the hole</p> <p>down hole length and interception depth</p> <p>hole length.</p>	
<b>Data aggregation methods</b>	<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.</p>	No data aggregation methods have been applied to these exploration results.
	<p>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.</p>	No drilling is referred to, so no intercepts have been calculated.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No metal equivalents values are used for reporting of exploration results.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	No mineralisation widths or intercept lengths have been determined.
<b>Diagrams</b>	<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>	Appropriate summary plans and sections of previous work have been included in the body of the report.
<b>Balanced reporting</b>	<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>	All rock-chip assay results from the area, regardless of grade, have been reported.
<b>Other substantive exploration data</b>	<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 method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock</p>	All meaningful and material data are included in the body of the announcement.

Criteria	JORC Code explanation	Commentary
	<i>characteristics; potential deleterious or contaminating substances.</i>	
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Follow-up geological exploration is being planned and is expected to be undertaken over the next 12 months. This exploration may comprise detailed field mapping, niche sampling, reprocessing of historical airborne geophysics, and pXRF sample traverses. RC drilling is being planned twin historical copper intercepts at Otways and to test depth extensions to the intercepts, and to test gold and copper soil anomalies at Malachite Flats.
	<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.