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## **ASX:CUL**

13 March 2023

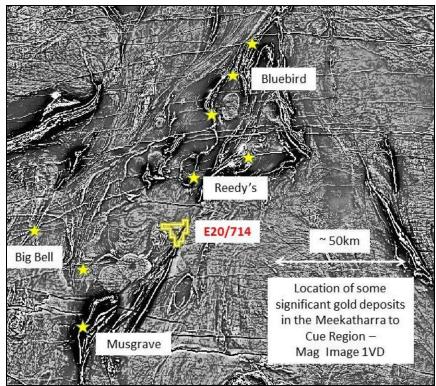
# EXPLORATION UPDATE

NORTH TUCKABIANNA PROJECT, CUE, W.A. - E20/714, targeting gold (Cullen 100%)

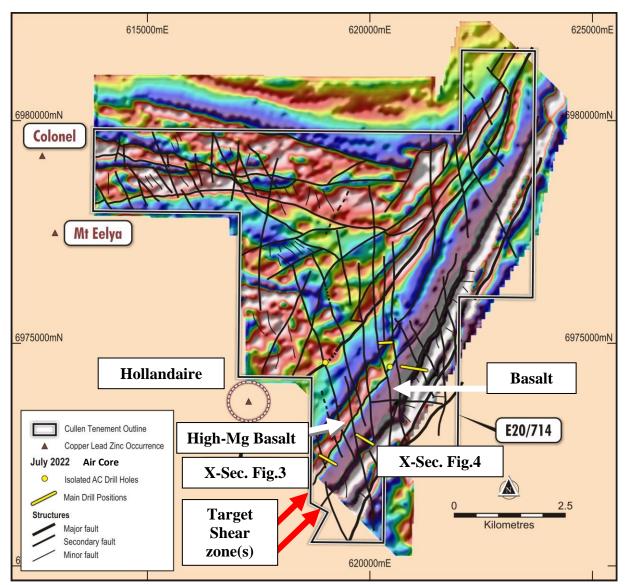
Five, slim line RC drill holes (TNRC021-025, for 492m) were completed in January 2023 to test below July 2022 air core anomalies (up to 5m @ 4.58g/t Au from 70m). The RC drilling targeted interpreted shear zones/lode(s), on two air core traverses (Figs.1 and 2).

- Correlation of RC drill assays for TNRC021-024 confirm the presence of a high angle shear zone at a major lithological contact on one of the previous air core traverses, with thin, low-grade gold intersections at the position and depth tested, as follows:
  - 1m @ 1.09 g/t Au from 87-88m downhole (TNRC021)
  - 4m @ 0.38 g/t Au from 101-105m downhole (TNRC024) Fig.3
- Another hole on a second air core traverse returned 1m @ 0.11 g/t Au from 70m, and may correlate with a thin low angle shear (-40° Fig. 4).
- Assay data for certain pathfinder elements remains pending.
- Follow-up RC drilling is planned to commence next month and will include:
  - deepening of TNRC023; and,
  - deeper air core drilling along strike of TNRC023 (the next drill traverse is historical, shallow air core, 200m to the north east (Figs. 2,3).

**Conclusion**: This first-pass RC program tested for gold-bearing lodes beneath air core gold anomalies at the regolith-bedrock interface occurring over some 200m across strike. Although the results reported herein are of low grade, they are inconclusive for the +10km target trend. Further drilling is warranted given the very sparse, shallow drilling below regolith along strike, and the multiple, prospective intersecting, shears and faults.



**Fig. 1** 



**Fig. 2. E20/714** - Key structures overlain on magnetics image, with position and interpreted control to gold mineralisation shown (see Table 1 and Figs. 3 and 4).

Table.1: Gold assay data, RC holes completed, January 2023, E20/714.

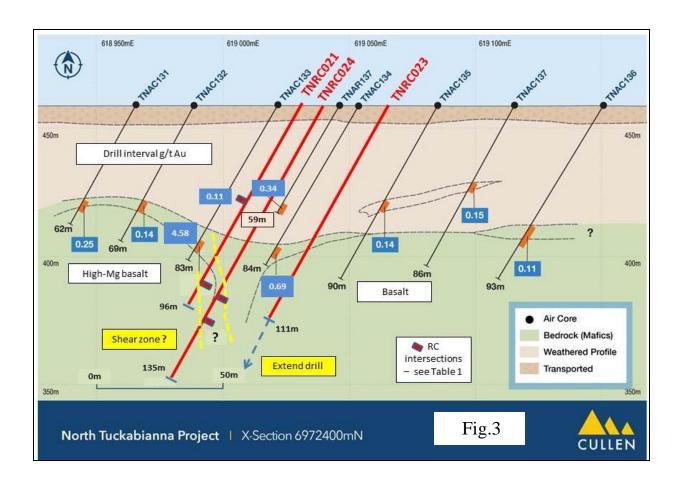
RL ~475m for all holes; \* abandoned hole; TNRC024 is 20m off strike to north

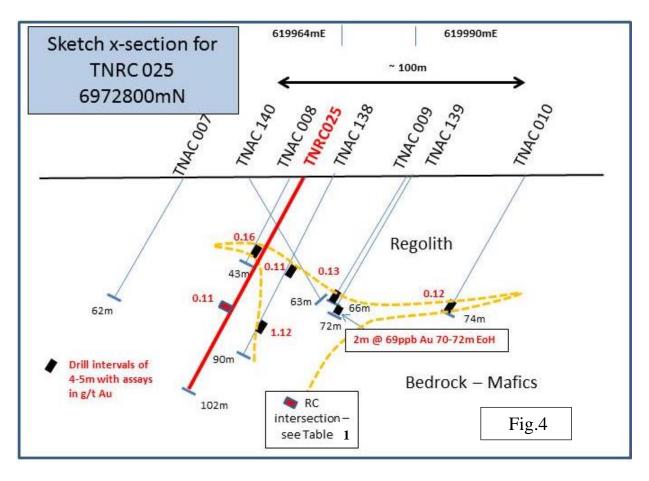
			Depth					Au
Hole ID	East	North	(m)	Dip°°	Azi°	From(m)	To(m)	(ppm)
TNRC021	619028	6972402	96	-60	300	54	55	0.11
						81	82	0.12
						86	87	0.43
						87	88	1.09
TNRC022	619044	6972398	48	-60	300	NSA		
TNRC023	619071	6972389	111	-60	300	NSA		
TNRC024	619047	6972416	135	-60	300	92	93	0.22
						93	94	0.20
						101	102	0.76
						102	103	0.41
						103	104	0.08
_				_		104	105	0.26
TNRC025	619934	6972798	102	-60	300	70	75	0.11

NSA = No significant gold anomalies for any 1m or 5m composite >100ppb Au

Location of RC holes completed, January 2023, E20/714.

Hole	Hole	Easting	Northing	Elevation	Depth
	Type				
TNRC021	RC	619028	6972402	478	96
TNRC022	RC	619044	6972398	473	48
TNRC023	RC	619071	6972389	478	111
TNRC024	RC	619047	6972416	476	135
TNRC025	RC	619934	6972798	477	102





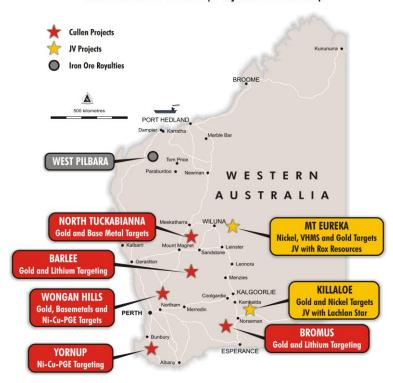
### **Further Information – Cullen 2022 ASX Releases**

- 1. 28-1-2022: Quarterly Report, December 2021
- 2. 09-2-2022: Air core drill results, E20/714, Cue
- 3. 16-2-2022: Positive Ni-Co from drilling at Wongan Hills
- 4. 01-3-2022: Exploration Update Finland
- 5. 14-3-2022: Ground EM to commence this week at Wongan Hills
- 6. 31-3-2022: New ground EM conductors at Wongan Hills
- 7. 06-4-2022: RC drilling to test EM conductors, Wongan Hills
- 8. 27-4-2022: Outstanding gold grades at Mt Fisher- Mt Eureka project
- 9. 28-4-2022: Quarterly Activities Report
- 10. 18-5-2022: Exploration Update Finland
- **11. 03-6-2022: Exploration Update**
- **12. 08-7-2022: Exploration Update**
- 13. 22-8-2022: Encouraging Air Core Drilling Results
- 14. 24-8-2022: Pegmatite Rock Chip Assays Barlee Project
- 15. 13-9-2022: New Lithium Reservation Finland
- 16. 30-9-2022 : Annual Report Cullen Resources Limited

### **Further Information – Cullen 2023 ASX Releases**

- 1. 18-1-2023: Soil sampling outlines new targets, Yornup, W.A.
- 2. 23-1-2023: Soil sampling enhances lithium prospectivity, Bromus South
- 3. 31-1-2023: Quarterly Report for the period ending 312 December 2022
- 4. 3-2-2023: Soil and rock assays highlight lithium prospectivity, Barlee.

#### **WESTERN AUSTRALIA | Project Location Map**



Data description as required by the 2012 JORC Code - Section 1 and Section 2 of Table 1  $AC\ Drilling - E\ 20/714$ , Cue Project

	AC Drilling – E 20/714, Cue Project Section 1 Sampling techniques and data				
Criteria	JORC Code explanation	Comments			
Sampling technique	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 XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Drill sampling was by slim line reverse circulation (RC) testing bedrock and interpreted geological and/or geophysical targets for gold, and base metals - 5 holes for 492m at Cue, E714.			
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	The collar positions and soils sites were located using handheld GPS units with an approximate accuracy of +/- 3m. Drill rig cyclone and sampling tools cleaned regularly during drilling.			
	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 (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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.	Mineralisation determined qualitatively from rock type, alteration, structure and veining observations.  RC drilling was used to obtain one metre samples delivered through a cyclone with a ~400g sample collected using a scoop and five of such 1m samples combined into one 5m composite sample. 1m samples were collected from selected sections. The samples (between 1- 2kg) were sent to Perth laboratory SGS for analysis – fire assay gold and pathfinder elements analysis.			
Drilling technique	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.).	RC Drilling using a standard bit (102mm).			
Drill Sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Sample recovery was assessed visually and adverse recovery recorded. The samples were generally dry, a few were damp.			
	Measurements taken to maximise sample recovery and ensure representative nature of the samples.	The samples were visually checked for recovery, contamination and water content; the results were recorded on log sheets. Cyclone and buckets were cleaned regularly and thoroughly (between rod changes as required and after completion).			
	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.	The holes were generally kept dry and there was no significant loss/gain of material introducing a sample bias.			
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining and metallurgical studies.	All drill samples were qualitatively logged by a geologist in order to provide a geological framework for the interpretation of the analytical data.			

	Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.	Logging of drill chips was qualitative (lithology, type of mineralisation) and semi-quantitative (visual estimation of sulphide content, quartz veining, alteration etc.).
	The total length and percentage of the relevant intersections logged	Drill holes logged in full.
Sub- sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	N/A
	If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.	One-metre samples were collected from a cyclone attached to the drill rig into buckets, then emptied on to the ground in rows. Composite and 1m samples were taken using a sampling scoop.
	For all sample types, quality and appropriateness of the sample preparation technique.	All drill samples pulverised to produce a homogenous representative sub-sample for analysis. A grind quality target of 85% passing 75µm is established and is relative to sample size, type and hardness.
		Analysis of all drill samples for gold by fire assay – 50g charge. Pathfinders by aqua regia digest and ICP-MS.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Duplicates certified reference materials and blanks are inserted by the laboratory and reported in the final assay report. Check analyses to be undertaken by the laboratory.
	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.	No field duplicate samples were taken – one metre sampling completed in target sections and/or follow-up drilling was anticipated for any mineralised drill intersections.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Considered appropriate for the purpose of these drilling programs, which are reconnaissance only, primarily aimed at establishing transported depth and type, bedrock geology, and presence of favourable shear structures for gold and base metals.
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.	Technique partial or fire assay, but considered adequate for this phase of drilling.
	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.	N/A.
	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.	International standards, blanks and duplicates to be inserted by the laboratory.

Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Managing Director geologist on site for drilling program, no verification by alternatives as yet.
assaying	The use of twinned holes	N/A
	Documentation of primary data, data entry procedures, data verification, data storage (physically and electronic) protocols.	All primary geological data are recorded manually on log sheets and transferred into digital format.
	Discuss any adjustment to assay data.	N/A
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resources estimation.	Drill collar survey by handheld GPS. Several measurements (2-3) at different times are averaged; the estimated error is +/-3 m. RL was measured by GPS. Soil samples located by GPS.
	Specification of the grid system used.	The grids are in UTM grid GDA94, Zone50
	Quality and adequacy of topographic control.	There is currently no topographic control and the RL is GPS (+/-5m).
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The drilling was reconnaissance only and tested stratigraphy, and/or interpreted structures.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Reserve and Ore Re4serve estimation procedure(s) and classifications applied.	The drilling was reconnaissance and not designed to satisfy requirements for mineral reserve estimations.
	Whether sample compositing has been applied.	The drill spoil generated was composited into 5m samples or sampled at 1m intervals.
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.	The drilling is reconnaissance level and designed to test geophysical and geological targets, to assist in mapping, and to test for mineralisation below regolith.
	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.	N/A
Sample security	The measures taken to ensure sample security.	All drilling and other samples are handled, transported and delivered to the laboratory by Cullen or its contractors. All samples were accounted for.
Audits or reviews	The results of and audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques and data have been conducted to date.
	Section 2 Reporting	g of exploration results
Mineral tenements 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 interest, historical sites, wilderness or national park and environmental settings.	At Cue, drilling on E20/714 – Cullen 100%.

	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 tenure is secure and in good standing at the time of writing.
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	There has been previous drilling by Cullen in the general area of the current program described, and historical drilling and historical exploration is referenced herein and previously.
Geology	Deposit type, geological settings and style of mineralisation.	The drilling targeted shear-hosted Au in greenstones.
Drill hole information	A summary of all information material for the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  • Easting and northing of the drill	See included table, and figures for drill position
	hole collar	parameters.
	· Elevation or RL (Reduced level- elevation above sea level in metres)and the drill hole collar	
	· Dip and azimuth of the hole	
	· Down hole length and interception depth	
	· Hole length	N/A
	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.	N/A
Data	In reporting Exploration results,	N/A
aggregation methods	weighing averaging techniques, maximum and/or minimum grade truncations (e.g. 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.	N/A
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	N/A
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Drilling at Cue, E714, -60, with high angle stratigraphy and foliation - Figs. 3 and 4 for interpretation.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	N/A

	If it is not known and only the down	N/A
	hole lengths are reported, there	
	should be a clear statement to this effect (e.g. 'down hole length, true	
	width not known')	
Diagrams	Appropriate maps and sections (with	See included figures.
	scales) and tabulations of intercepts	-
	would 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.	
Balanced	Where comprehensive reporting of	N/A
reporting	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	
Other	Results. Other exploration data, if meaningful	N/A – reported previously and/or referenced.
substantive	and material, should be reported	14/A – reported previously and/or referenced.
exploration	including (but not limited to):	
data	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 containing substances.	
Further work	The nature and scale of planned	Further work is planned – likely to include follow-up air
	further work (e.g. tests for lateral	core and RC drilling.
	extensions or depth extensions or	
	large-scale step-out drilling).	0 1 1 1 1 "
	Diagrams clearly highlighting the areas of possible extensions,	See included figures.
	areas of possible extensions, including the main geological	
	interpretations and future drilling	
	areas, providing this information is	
	not commercially sensitive.	

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### **ATTRIBUTION:** Competent Person Statement

The information in this report that relates to exploration activities is based on information compiled by Dr. Chris Ringrose, Managing Director, Cullen Resources Limited who is a Member of the Australasian Institute of Mining and Metallurgy. Dr. Ringrose is a full-time employee of Cullen Resources Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr. Ringrose consents to the report being issued in the form and context in which it appears. Information in this report may also reflect past exploration results, and Cullen's assessment of exploration completed by past explorers, which has not been updated to comply with the JORC 2012 Code. The Company confirms it is not aware of any new information or data which materially affects the information included in this announcement.

**ABOUT CULLEN:** Cullen is a Perth-based minerals explorer with a multi-commodity portfolio including projects managed through a number of JVs with key partners (Rox, Fortescue, Capella and Lachlan Star), and a number of projects in its own right. The Company's strategy is to identify and build targets based on data compilation, field reconnaissance and early-stage exploration, and to pursue further testing of targets itself or farm-out opportunities to larger companies. Projects are sought for most commodities mainly in Australia but with selected consideration of overseas opportunities. Cullen has a 1.5% F.O.B. royalty up to 15 Mt of iron ore production from the Wyloo project tenements, part of Fortescue's Western Hub/Eliwana project, and will receive \$900,000 cash if and when a decision is made to commence mining on a commercial basis – from former tenure including E47/1649, 1650, ML 47/1488-1490, and ML 08/502. Cullen has a 1% F.O.B. royalty on any iron ore production from the following former Mt Stuart Iron Ore Joint Venture (Baowu/MinRes/Posco/AMCI) tenements – E08/1135, E08/1330, E08/1341, E08/1292, ML08/481, and ML08/482 (and will receive \$1M cash upon any Final Investment Decision). The Catho Well Channel Iron Deposit (CID) has a published in situ Mineral Resources estimate of 161Mt @ 54.40% Fe (ML 08/481) as announced by Cullen to the ASX - 10 March 2015.

### FORWARD - LOOKING STATEMENTS

This document may contain certain forward-looking statements which have not been based solely on historical facts but rather on Cullen's expectations about future events and on a number of assumptions which are subject to significant risks, uncertainties and contingencies many of which are outside the control of Cullen and its directors, officers and advisers. Forward-looking statements include, but are not necessarily limited to, statements concerning Cullen's planned exploration program, strategies and objectives of management, anticipated dates and expected costs or outputs. When used in this document, words such as "could", "plan", "estimate" "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Due care and attention have been taken in the preparation of this document and although Cullen believes that its expectations reflected in any forward-looking statements made in this document are reasonable, no assurance can be given that actual results will be consistent with these forward-looking statements. This document should not be relied upon as providing any recommendation or forecast by Cullen or its directors, officers or advisers. To the fullest extent permitted by law, no liability, however arising, will be accepted by Cullen or its directors, officers or advisers, as a result of any reliance upon any forward-looking statement contained in this document.

> Authorised for release to the ASX by: Chris Ringrose, Managing Director, Cullen Resources Limited.