



ASX Announcement

www.cullenresources.com.au

ASX:CUL

22 August 2022

Encouraging Air Core drilling results

NORTH TUCKABIANNA PROJECT, W.A., E20/714 (Cullen 100%), centered ~30km east of Cue, in the Murchison Region, gold and base metals

Results have been received for **25 Air Core holes (TNAC121-145 for 1630m)** completed in July mainly testing portions of three stratigraphic-structural gold targets located along the “Tuckabianna Gold Trend”. These Air Core holes tested bedrock below air core /RAB first refusal depth in some historical drilling (**Figs. 1 and 2, Tables 1-3**).

Highlights

- Results included two significant intersections on two traverses ~1km apart of: **5m @ 4.58 g/t (from 70 - 75 m) and 5m at 1.12 g/t Au (from 75 - 80m).**
- Several low-grade gold anomalies in the range of 0.1 - 0.7 g/t Au (in 5m composite samples) were also intersected mainly at the bedrock interface, across these higher grades.
- Broad areas of strain, shearing and quartz veining in mafics were associated with each of these two mineralised positions with the strongest strain zones including quartz flooding +/- trace pyrite in foliation-parallel laminae.
- These results strongly indicate potential for gold mineralisation along the ~10km of stratigraphic-structural trends identified within E20/714, where previous drilling has been generally very sparse or too shallow.
- Follow-up RC drilling is proposed.

REGISTERED OFFICE: Unit 4, 7 Hardy Street, South Perth WA 6151.

Telephone: +61 8 9474 5511 Facsimile: +61 8 9474 5588

CONTACT: Dr. Chris Ringrose, Managing Director.

E-mail: cringrose@cullenresources.com.au / www.cullenresources.com.au

Discussion

Drilling at Target 1 (Table 1, Figs. 1 and 2) tested below a previous RAB hole TNAR37 reporting 3m @ 0.34 g/t Au from 56-59m (End of Hole). The recent air core traverse across this anomaly returned **5m @ 4.58 g/t Au from 70 - 75m** (TNAC 133) along the traverse that included TNAR37 (Table 2).

Several of the holes along the TNAC131-137 traverse reported low-grade gold anomalies at the weathered/fresh rock interface forming a broad anomaly over the intersection in TNAC133 with quartz veining +/- trace pyrite (Fig.3, x-section).

Traverse drilling at Target 2 (Table 1, Figs. 1 and 2) across previous intersection in TNAC08, returned an intersection of **5m @ 1.12 g/t Au from 75 - 80m** (TNAC138). A group of low-grade gold anomalies, from current and some historical drilling, occurs over about 100m along the traverse, at the weathered/fresh rock interface around TNAC138 (Fig.4).

The two holes at Target 3 (TNAC142-143) did not return any intersections, > 0.1 g/t Au in any 5m composites, nor did the two isolated holes which targeted structures (TNAC144-145).

Drill holes TNAC121-130 tested a BIF/mafic contact along strike of Target 2, but did not return any gold anomalies >0.1 g/t Au in any 5m composite samples.

Conclusion

- Cullen's recent air core drilling results are encouraging and shows potential for higher grade gold mineralisation below the bedrock interface along prospective structures and lithological contacts, marked by weak gold anomalies in historical drilling.
- Such sparse drilling has been too shallow to penetrate beneath transported cover or limited by first drill refusal depth.
- Cullen's key gold targets (Fig. 1 and Table 1) are those directly along strike of the "Tuckabianna gold field" (White Well, Comet, Tuckabianna, Sherwood etc.).
- The new intersections reported herein, underline the potential of the extensive shear zone systems trending over some 10km NE-SW through E20/714.
- Further drilling at depth and along strike of recent intersections is clearly warranted to test for gold lodes, especially as plunging shoots at the intersection of structures. This would include overlapping deep RC drilling to test the lode(s) on the TNAC 131-137 traverse and along strike. The next historical drill traverse is 200m to the north east.

Table 1. Targets and drill holes completed July 2022

ID	Target Trend	Nature of Prospectivity	Target/Anomaly
1	South West - 1 <u>TNAC 131-137, 144</u>	Historical RAB/Air core anomalies + recent air core results	High Mg Basalt/Ultramafic contact
2	South West - 2 <u>TNAC 138-141, 121-130</u>	Historical RAB/Air core anomalies + recent air core results	Possible traversing shear (?Riedel) in mafic/ultramafics
3	Central <u>TNAC 142-143</u>	Magnetics data interpretation	De-magnetised High Mg Basalt unit (?alteration zone/intrusive)
4	North East (~4km of strike)	Magnetic-Structural anomaly	Includes major flexure along stratigraphy
5	North East of Hollandaire <u>TNAC145</u>	Structural Trend	NE trending Interpreted fault zone

References

WAMEX A32404: Fogarty, J.M., 1991, Robin Outcamp, E20/62, Annual report 1990, Nord Resources.

WAMEX A92083: Chellew, J, and Cornelius, M., 2011, Annual Technical Report, E20/714, Cue Project, Cullen Exploration.

WAMEX A59512: Dunbar, P., 1999, Combined Surrender Report, Tuckabianna Project, Westgold Resources NL.

WAMEX A59513: Bleakley, P., 1999, Combined Surrender Report, Eelya Hill Project, Westgold Resources NL.

WAMEX A119766: Blundell, K., 2019, Final Report, Cue Project, Musgrave Limited.

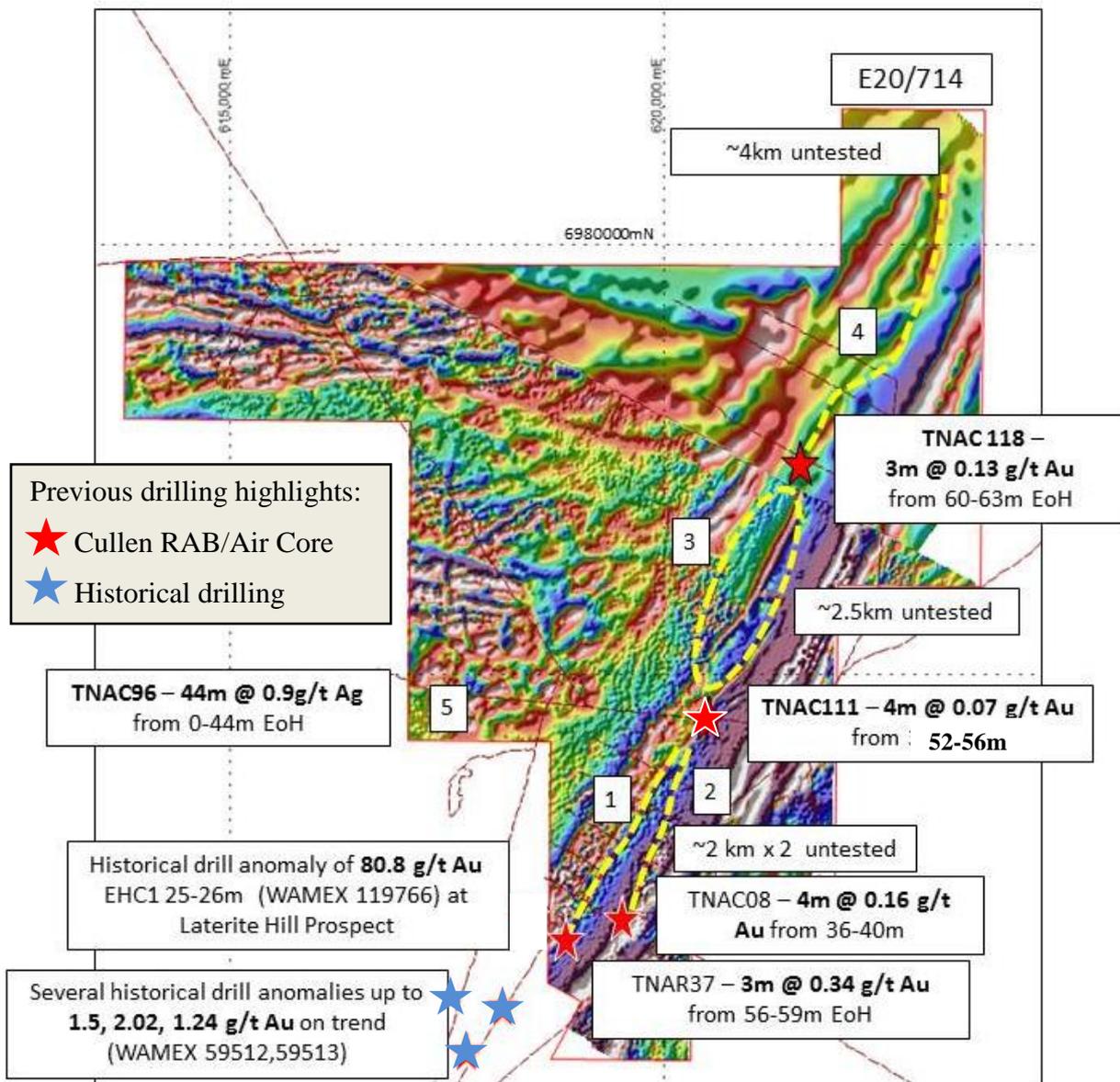


Fig. 1: Target Trends prioritised from air magnetics interpretation and, both historical and Cullen’s pre - July 2022 drilling.

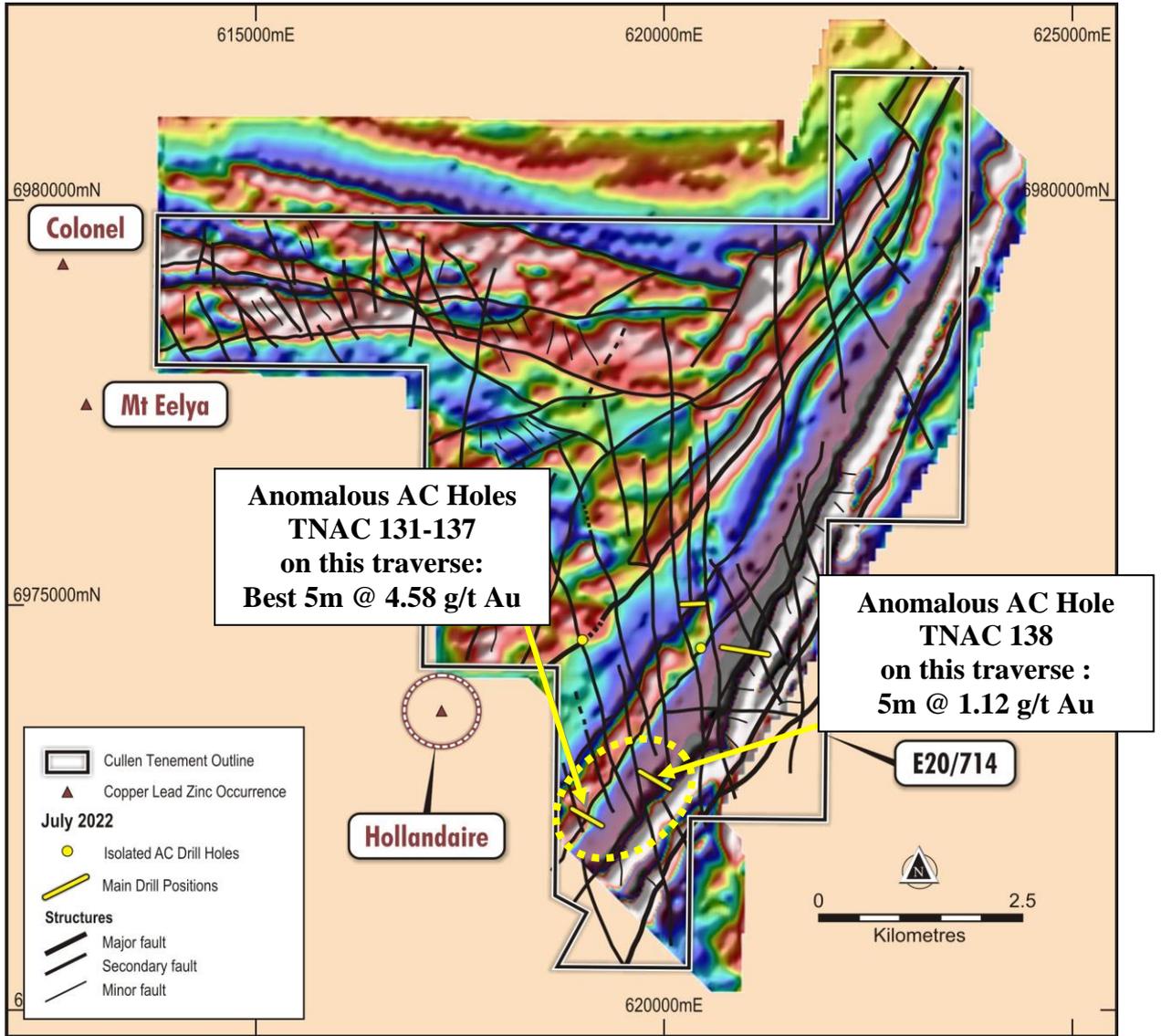


Fig. 2 Key structural lineaments overlain on magnetic image, position and summary of results July drilling (see Tables 2 and 3).

Table 2. Drill holes July 2022, anomalies >0/1 g/t Au in 5m composite samples

Hole ID	East	North	From(m)	To(m)	Au(ppm)	Au(ppm)	Au(ppm)
TNAC131	618967	6972439	50	55	0.25		
TNAC132	618990	6972424	50	55	0.14		
TNAC133	619028	6972414	65	70	0.15		
			70	75	>UD	4.58	5.71
TNAC134	619063	6972399	75	80	0.69		
TNAC135	619092	6972374	50	55	0.14		
TNAC136	619153	6972325	65	70	0.12		
			70	75	0.11		
TNAC137	619122	6872347	40	45	0.15		
TNAC138	619964	6972800	45	50	0.11		
			75	80	1.12		
					AR	FA	FA R1

AR – Aqua Regia digest, with 4000ppb as upper detection limit (UD), FA - Fire assay and repeat

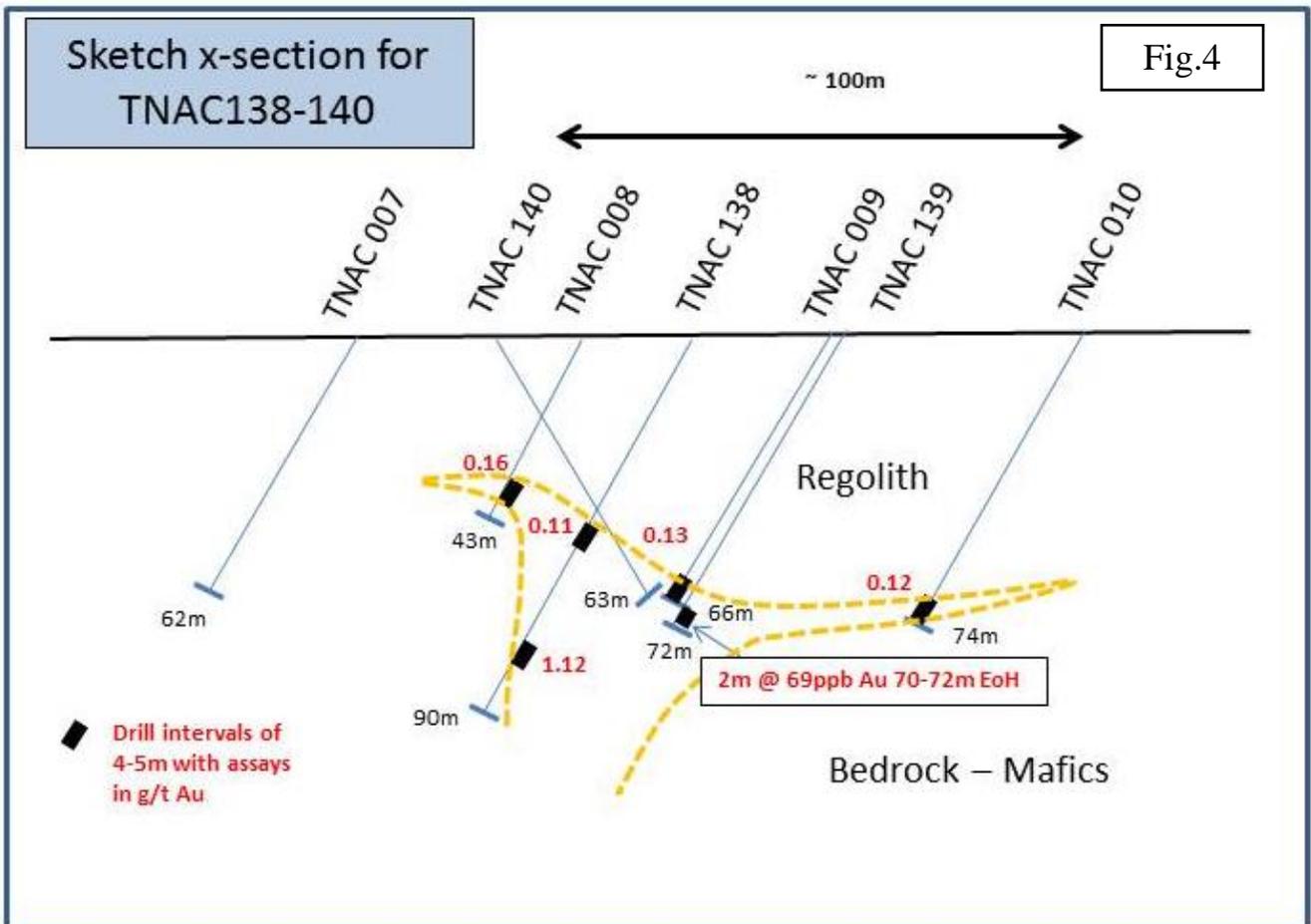
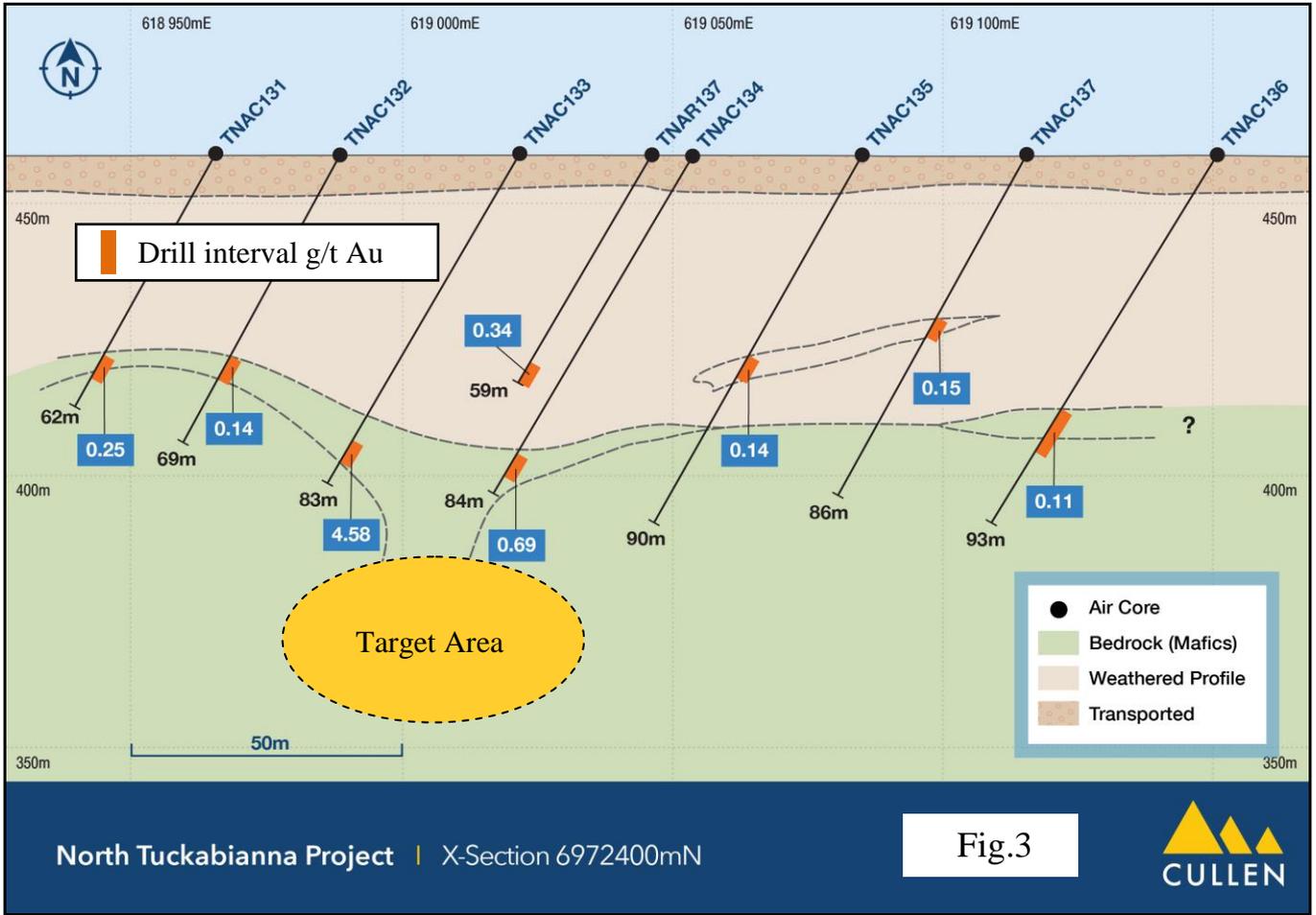


Table. 3: Location of Air Core holes, (AC), completed, July 2022, E20/714.

Hole ID	East	North	Depth (m)	Dip°	Azi°
TNAC121	620887	6974450	63	-60	279
TNAC122	620926	6974449	64	-60	279
TNAC123	620960	6974417	77	-60	279
TNAC124	621000	6974425	60	-60	279
TNAC125	621042	6974416	44	-60	279
TNAC126	621078	6974419	39	-60	279
TNAC127	621120	6974404	34	-60	279
TNAC128	621160	6974408	31	-60	279
TNAC129	620822	6974463	93	-60	279
TNAC130	620867	6974458	32	-60	279
TNAC131	618967	6972439	62	-60	300
TNAC132	618990	6972424	69	-60	300
TNAC133	619028	6972414	83	-60	300
TNAC134	619063	6972399	84	-60	300
TNAC135	619092	6972374	90	-60	300
TNAC136	619153	6972325	93	-60	300
TNAC137	619122	6872347	86	-60	300
TNAC138	619964	6972800	90	-60	300
TNAC139	619990	6972780	72	-60	300
TNAC140	619922	6972809	63	-60	120
TNAC141	619785	6972894	84	-60	300
TNAC142	620396	6975015	35	-60	270
TNAC143	620311	6975011	63	-60	270
TNAC144	620450	6974470	53	-60	279
TNAC145	619000	6974570	66	-60	300
25			1630		

RL ~465m for all holes

**Data description as required by the 2012 JORC Code - Section 1 and Section 2 of Table 1
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.	Sampling was by air core (AC) drilling +/- with hammer, testing bedrock and interpreted geological and/or geophysical targets for gold, and base metals - 25 holes for 1630m 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 were located using handheld GPS units with an approximate accuracy of +/- 5 m. 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. AC drilling was used to obtain one metre samples delivered through a cyclone with a ~500g sample collected using a scoop and five of such 1m samples combined into one 5m composite sample. The composite samples (2-3kg) were sent to Perth laboratory Minanalytical for 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.).	AC Drilling using a standard bit (3.5) with hammer.
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 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 samples were taken using a sampling scoop.
	For all sample types, quality and appropriateness of the sample preparation technique.	All 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. <i>Analysis of all drill samples for Gold by Aqua Regia digest with ICP-MS finish – 25g charge. Above detection by this method repeated with fire assay, 50g charge with AAS finish.</i>
	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 resampling and duplicating 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, 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, no verification by alternatives as yet.
	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 down-hole 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 +/-5 m. RL was measured 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 Reserve 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.
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 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.
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:	
	· <i>Easting and northing of the drill hole collar</i>	See included table, and figures for drill position parameters.
	· <i>Elevation or RL (Reduced level-elevation above sea level in metres)and the drill hole collar</i>	
	· <i>Dip and azimuth of the hole</i>	
	· <i>Down hole length and interception depth</i>	
	· <i>Hole length</i>	
	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 aggregation methods	In reporting Exploration results, 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	N/A
	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 (Tables 2 and 3).
	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 hole lengths are reported, there should be a clear statement to this effect (e.g. ‘down hole length, true width not known’)	N/A
Diagrams	Appropriate maps and sections (with 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.	See included figures.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	N/A
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations, geophysical survey results, geochemical survey results, bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or containing substances.	N/A – reported previously and/or referenced.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work is planned – likely to include follow-up air core and RC drilling.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, providing this information is not commercially sensitive.	See included figures.

Further Information – Cullen 2021 ASX Releases

1. **28-1-2021: Quarterly Report, December 2020**
2. **18-2-2021: Exploration Update**
3. **2-3-2021: Exploration Update – Wongan Hills**
4. **8-3-2021: Exploration Update – Barlee**
5. **15-3-2021: Results of FLEM survey**
6. **29-4-2021: Quarterly Report, March 2021**
7. **14-5-2021: Exploration Update**
8. **30-7-2021: Quarterly Report, June 2021**
9. **24-8-2021: Farm-out of Finnish properties**
10. **16-9-2021: Nickel Sulphides at Wongan Hills**
11. **6-10-2021: Wongan Hills – Investor Update**
12. **21-10-2021: Quarterly Report, September 2021**
13. **8-11-2021: Exploration Update**
14. **25-11-2021: AGM Presentation**
15. **1-12-2021: RXL: Mt Fisher- Mt Eureka Gold Project Exploration Update**
16. **8-12-2021: Exploration Update – Finland**

Further Information – Cullen 2022 ASX Releases

17. **28-1-2022: Quarterly Report, December 2021**
18. **09-2-2022: Air core drill results, E20/714, Cue**
19. **16-2-2022: Positive Ni-Co from drilling at Wongan Hills**
20. **01-3-2022: Exploration Update - Finland**
21. **14-3-2022: Ground EM to commence this week at Wongan Hills**
22. **31-3-2022: New ground EM conductors at Wongan Hills**
23. **06-4-2022: RC drilling to test EM conductors, Wongan Hills**
24. **27-4-2022: Outstanding gold grades at Mt Fisher- Mt Eureka project**
25. **28-4-2022: Quarterly Activities Report**
26. **18-5-2022: Exploration Update – Finland**
27. **03-6-2022: Exploration Update**
28. **08-7-2022: Exploration Update**
29. **29 -7-2022: Quarterly Activities Report**

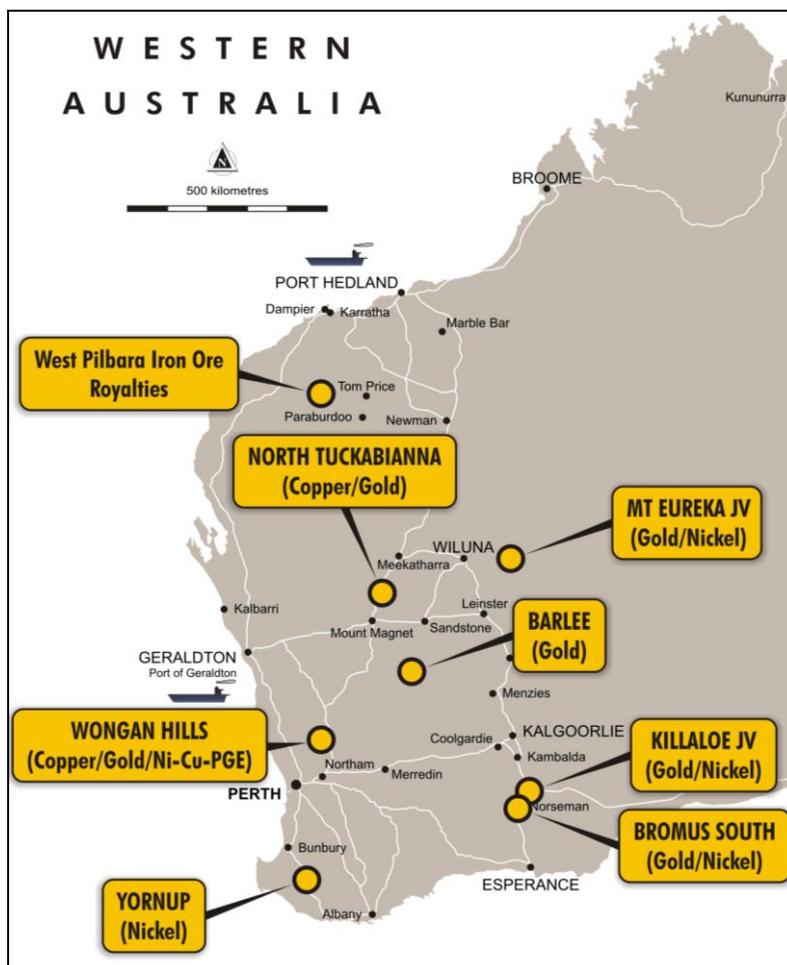
ATTRIBUTION: Competent Person Statement

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.

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 has 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.

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, Lachlan Star and Capella), 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 (Baosteel/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.



Authorised for release to the ASX by:

Chris Ringrose, Managing Director, Cullen Resources Limited

REGISTERED OFFICE: Unit 4, 7 Hardy Street, South Perth WA 6151.

Telephone: +61 8 9474 5511 Facsimile: +61 8 9474 5588

CONTACT: Dr. Chris Ringrose, Managing Director.

E-mail: cringrose@cullenresources.com.au / www.cullenresources.com.au