

#### **Quarterly Report for the period ending 30 September 2019**

www.cullenresources.com.au

ASX:CUL

29 October 2019

# HIGHLIGHTS

• RC drilling and downhole EM surveying is planned to test beneath **newlydiscovered sulphide mineralisation** at Wongan Hills Project (drilling to commence in the current Quarter, subject to completion of wheat harvesting). Best intersections from shallow air core drilling to date include:

1m @ 3.72% Cu with 0.3 g/t Au, 28 ppm Ag (19WAC64, 36-37m) 1m @ 3.40% Cu with 1.5 g/t Au, 32 ppm Ag (19WAC48, 55-56m) (ASX: CUL; 18-7-2019)

Cullen Resources Limited ("Cullen" or "the Company") is targeting **Volcanic-Hosted Massive Sulphides** (VHMS) base metal mineralisation and has submitted an application for Exploration Incentive Scheme (EIS) funding to support drilling in 2020.

- Cullen has signed a **Binding Term Sheet with Rox Resources Limited** (ASX: RXL "Rox") under which Rox has been granted the right to earn up to a 75% interest in Cullen's Mt Eureka Project tenements and applications (ASX:RXL, 21-8-2019).
- Cullen has made application for two contiguous tenements totaling ~350sq km (Barlee Project W.A.) which stretch from 10 55 km SSE of the Penny West Gold deposit. The applications cover significant strike lengths of interpreted shear zones, which include numerous elongate and/or folded aeromagnetic anomalies (highs) interpreted to be amphibolite or other greenstone bodies intercalated in granitoids (ASX:CUL, 26-8-2019).
- Cullen has made an application for an Exploration Permit ("Katajavaara"), in the Central Lapland Greenstone Belt of northern Finland. Cullen's application, estimated to be processed over the coming 6-12 months, adjoins S2 Resources Ltd's (S2R) Aakenusvaara Exploration Permit to the east along strike, from where S2R has reported a potential gold discovery (ASX:S2R, 19-8-2019).

WONGAN HILLS PROJECT, E's 70/4882, 5162 and 5201, (Cullen 90% - Tregor Pty Ltd 10%): ~180 km north-east of Perth, base metals and gold project

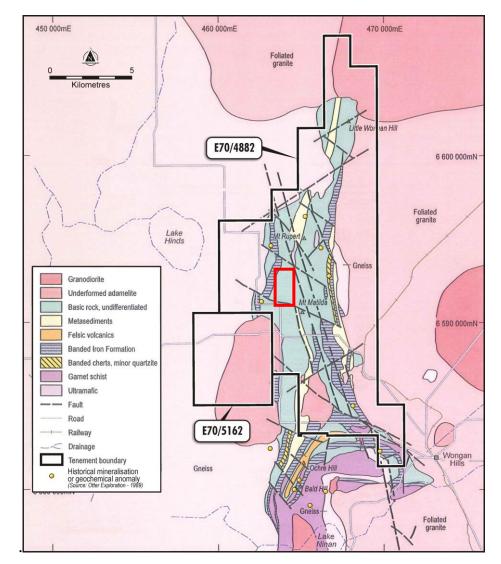
## Background

Cullen has completed three phases of air core drilling to date and in summary has concluded (Figs 1-3):

- Copper-gold mineralisation (veinlets and/or disseminations of pyrite chalcopyrite + gold) been intersected in air core holes 800m apart along strike in bedrock within a Prospective Corridor;
- ▶ Best intersections to date (max 87m depth, angled downhole) include:
  - 1m @ 3.72% Cu with 0.3 g/t Au, 28 ppm Ag from 36m (Hole 19WAC64)
  - 1m @ 3.40% Cu with 1.5 g/t Au, 32 ppm Ag from 55m (Hole 19WAC48) with 937ppm Bi, 45 ppm Mo and 1669 ppm Zn
  - 5m @ 1996 ppm Cu from 45m (Hole 19WAC66)
- The Prospective Corridor, as defined by bedrock copper and VTEM anomalies, now stretches for approximately 2.5km along strike;
- Associated hydrothermal alteration assemblages intersected include epidote /diopside/quartz/pyrite; pyrite/pyrrhotite +/- chalcopyrite; and magnetite, hosted predominantly by mafic amphibolite;
- There are coincident magnetic/VTEM anomalies beneath the three strong, interpreted, west dipping drilled zones of copper anomalies and pyrite chalcopyrite +/- gold mineralisation around hole 19WAC48 (Figs.4 and 5);
- In Cullen's opinion, the newly-discovered sulphide mineralisation, hydrothermal alteration and geological characteristics along the Prospective Corridor enhance the prospectivity of the Wongan Hills Project to host VHMS base metal mineralisation.

- Deeper drilling (RC/diamond, ~1000m) is planned to test the following targets and complete downhole EM surveying:
  - On-section of the interpreted, west dipping copper zones in drillholes (package true thickness ~75m) around **19WAC48** (**Fig.4**)
  - The **VTEM/Mag anomalies** interpreted to be at depth further to the west (**Fig.5**) VTEM model at ~150m depth; magnetic model steeply dipping, east or west, from ~30m depth
  - The chert horizon and nearby VTEM anomaly, at **19WAC65 and 68**
  - The area of high-grade copper and on-strike hydrothermal alteration around drill hole **19WAC64**.

An application has been made for EIS funding to support this drilling in part.



**Fig .1** Geology of the Wongan Hills greenstone belt and location of drilling to date (red box) targeting the" Prospective Corridor".

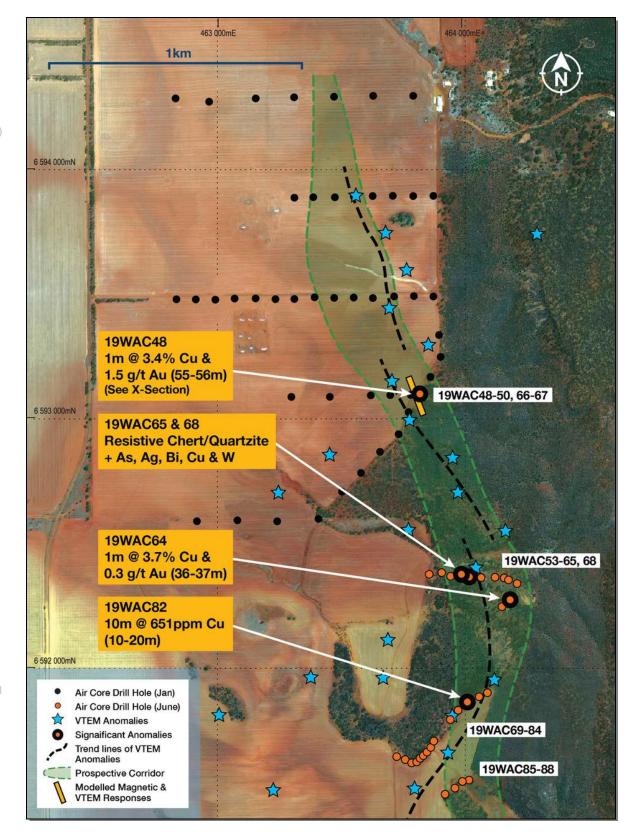
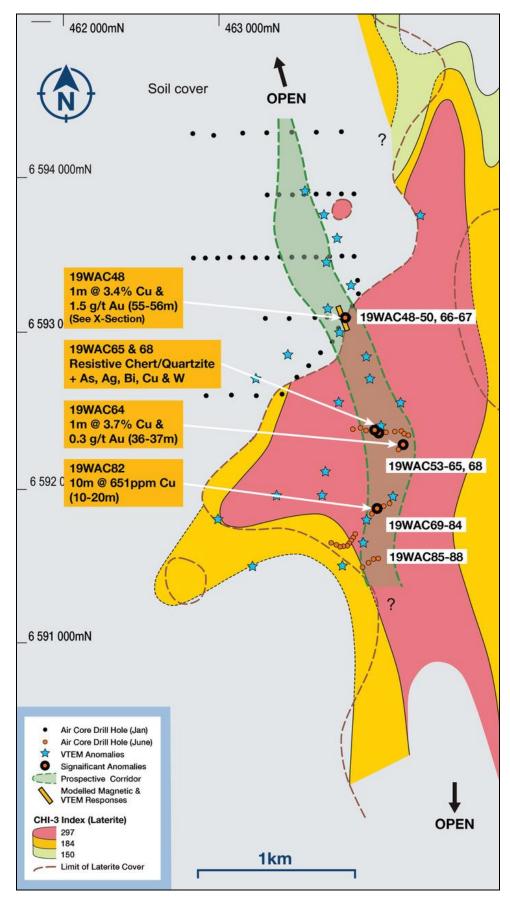


Fig. 2 Air core traverses completed to date along the "Prospective Corridor"

Note: The VTEM and Mag responses around 19WAC48 modelled by Southern Geoscience Consultants (SGC) are parallel to the strike of the Prospective Corridor, with the magnetic model slightly displaced from the VTEM model (Fig.5).



**Fig. 3** June Air core traverses targeted the" Prospective Corridor" and the core of the major laterite geochemical anomaly. CHI-3 = As+3Sb+10Bi+10Cd+10In+3Mo+30Ag+30Sn

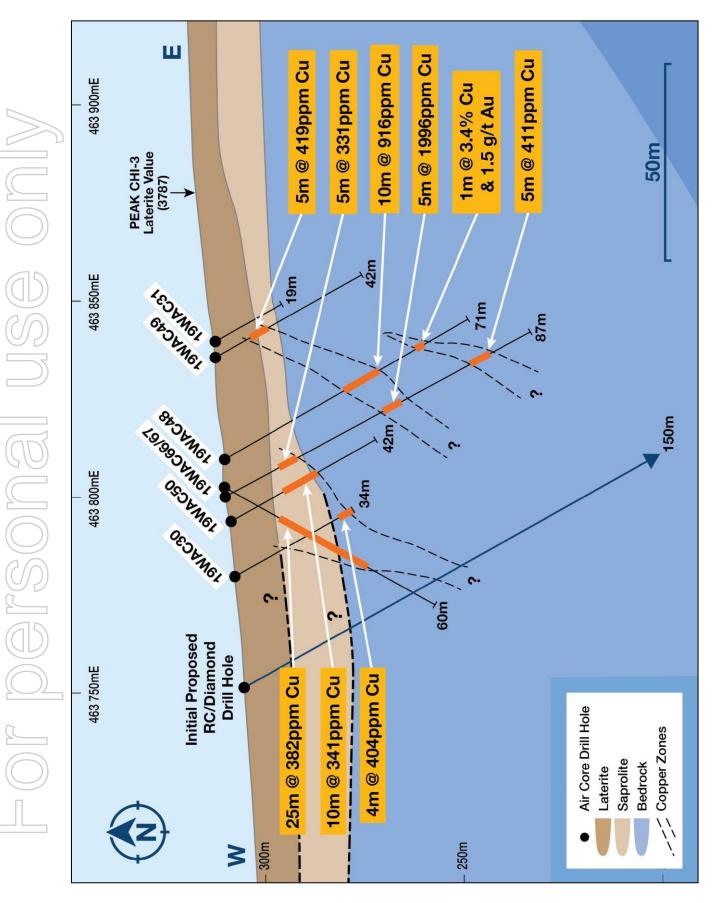
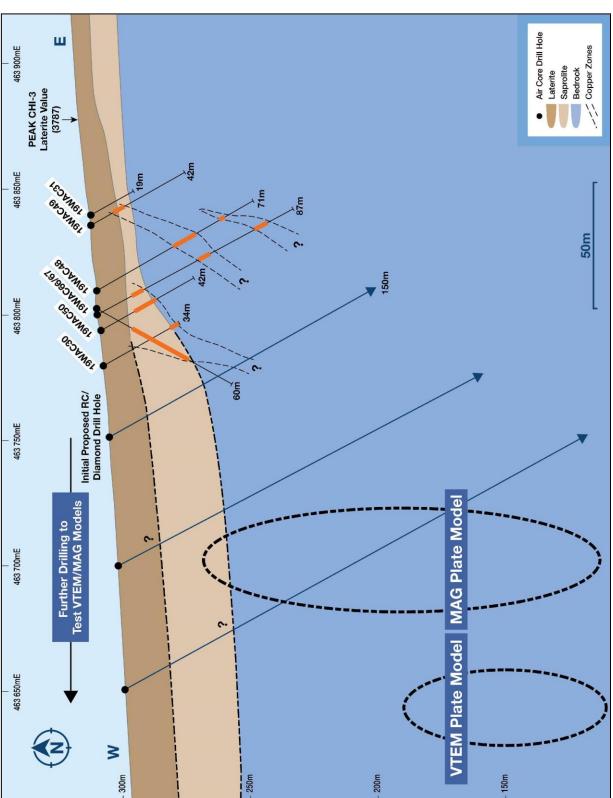


Fig. 4 East – West X-section, 6,593,100mN.

Notes – "Laterite" includes transported and in-situ layers; and, early diamond drilling is planned to provide key structural information.

Cullen Resources Limited Quarterly Report – September 2019



**Fig. 5** East - West X-section, 6,593,100mN showing approximate position of Mag and VTEM responses, VTEM dip is uncertain, Mag steep dip.

# Mt EUREKA PROJECT, NE GOLDFIELDS, W.A.

Cullen Resources Limited has signed a Binding Term Sheet with Rox Resources Limited (ASX: RXL – "Rox") under which Rox has been granted the right to earn up to a 75% interest in Cullen's Mt Eureka Project tenements and applications (Fig.6). The key terms are:

- Rox may earn a 51% interest by spending \$1m on exploration expenditure within a three year period from satisfaction of certain Conditions Precedent (Stage 1 Earn In).
- Cullen will receive \$40,000 cash upon satisfaction of one of the Conditions Precedent.
- If Rox earns the 51% interest, it can elect to earn a further 24% interest by expending a further \$1m on exploration expenditure over a three year period, commencing at the end of the Stage 1 Earn In.
- Rox must spend a minimum of \$333,334 and ensure the Cullen tenements are in good standing on a daily pro rata basis before it may withdraw from the Binding Term Sheet.
- Upon Rox earning 51% or, if it earns the additional 24%, upon Rox earning 75%, the parties will be associated in an unincorporated Joint Venture in relation to the **Joint Venture Tenements**, which will include certain Rox tenements and applications (Fig.6).
- If Rox earns 75%, Cullen will be free-carried, with no liability for any Joint Venture costs, until completion of a **Pre-Feasibility Study**.
- If Rox only earns 51%, or earns 75% and completes a **Pre-Feasibility**, **Study**, thereafter Cullen must contribute to Joint Venture costs or dilute under a standard dilution formula.
- If a Participant's interest falls to 10% or less, that Participant's interest will be converted to a **Net Smelter Return Royalty of 1%** on those Cullen tenements already subject to a royalty, and **2.5%** on the balance of the Joint Venture Tenements.

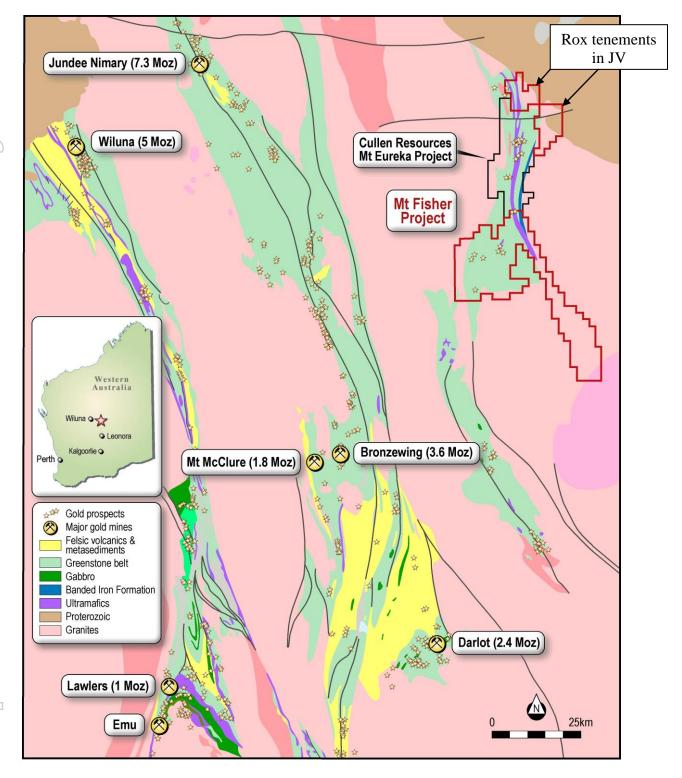


Fig. 6. Location of the Mt Fisher (Rox) and Mt Eureka (Cullen) project tenements

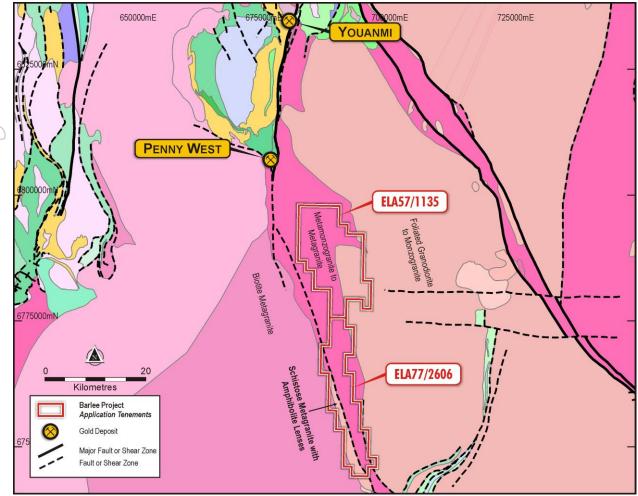
### BARLEE PROJECT - ELA's 77/2606, 57/1135 (Cullen 100%)

Cullen has made application for two contiguous tenements totaling ~350sq km which stretch from 10 - 55 km south south east of the Penny West Gold deposit and the Youanmi greenstone belt, towards the northwest tip of the Marda-Diemals greenstone belt (Fig. 7).

Cullen contends that these applications cover significant strike lengths of interpreted shear zones, which although they appear to be mainly within granite, include numerous elongate and/or folded aeromagnetic anomalies (highs) interpreted to be intercalated amphibolite or other greenstone bodies. Published geological maps and aeromagnetics images ("Geoview") confirm that Cullen's application E77/2606 includes amphibolite lenses in schistose metagranite, within host metamonzogranite to metagranodiorite. These remnant bodies of greenstone, up to ~5km in length, appear as elongate, lensoidal magnetic highs, which are strike parallel to the shear zones (Figs. 8 and 9). These interpreted greenstone/amphibolite bodies and their sheared contacts, which occur within both ELAs, are the primary targets for Penny West-type high-grade gold lodes.

### https://geoview.dmp.wa.gov.au/GeoViews/?Viewer=GeoVIEW

Prospecting and soil sampling are proposed as the first stage of exploration. Pathfinder element geochemistry (As, Ag, Cu, Pb, Zn, Bi and Sb) will be useful indicators from first pass sampling, given that Penny West-style quartz sulphide veins include pyrite-pyrrhotite-galena-sphalerite-chalcopyrite (see ASX:SPX 15-7-2019). Preliminary exploration will also include compilation of any previous field data, believed to be limited, and compilation and detailed interpretation of aeromagnetics data to map prospective shear zones. Reconnaissance ground work along existing tracks can be initiated prior to tenement grant – anticipated to be early in 2020.



**Fig .7** Locations and geological setting of Cullen's two new Exploration Licence applications (ELAs) south east of the Youanmi greenstone belt (base map and geological descriptions from "Geoview")

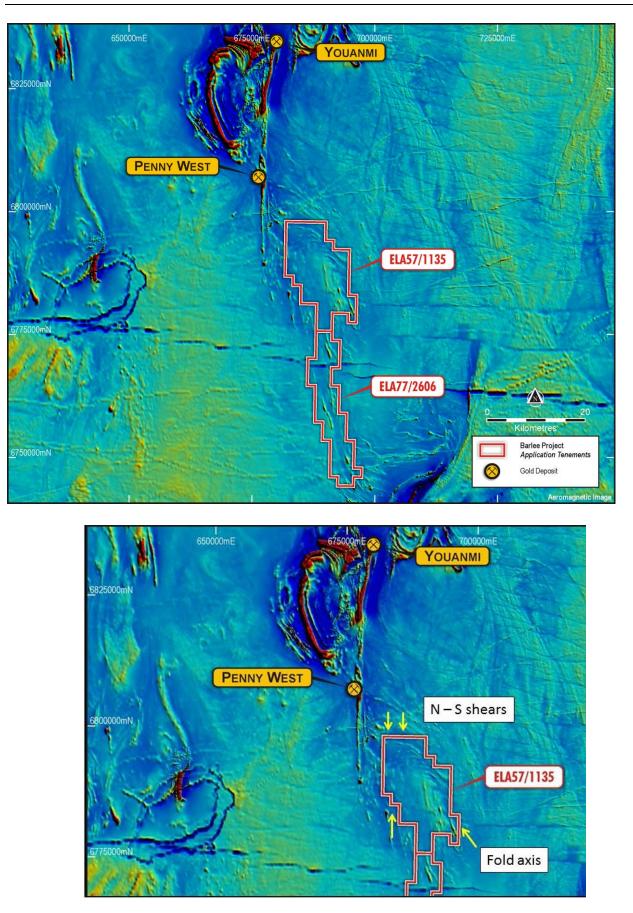


Fig.8 Locations of Cullen's ELAs shown on regional aeromagnetics image (from "Geoview")

Note the possible fold indicated by the magnetics in ELA 57/1135 - the interpreted fold is cut off to the west by a set of interpreted North - South faults or shears.

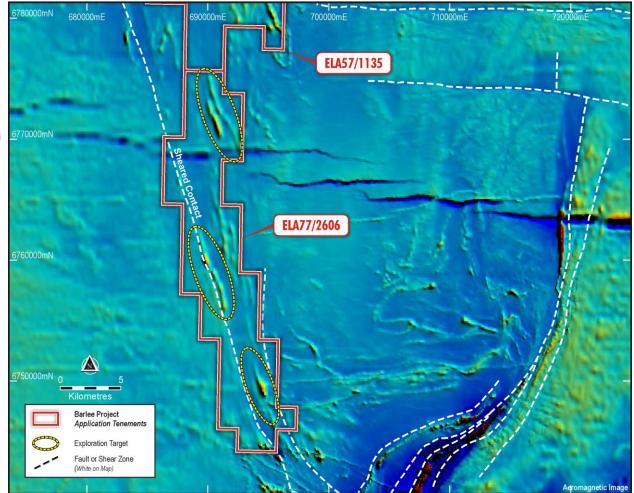


Fig.9 Location of Cullen ELA 77/2606 shown on regional aeromagnetic image (from "Geoview")

Note target aeromagnetic highs interpreted as bodies of greenstone intercalated in shear zones.

#### PLACEMENT

Subsequent to the end of the Quarter, Cullen has raised \$300,000 (before costs) from sophisticated and professional investors by the issue of 20,000,000 new fully paid ordinary shares in the capital of the Company ("Shares") at 1.5c (\$0.015) per Share ("Placement"). The Placement was completed under the Company's existing placement capacity under ASX Listing Rule 7.1 and Listing Rule 7.1A.

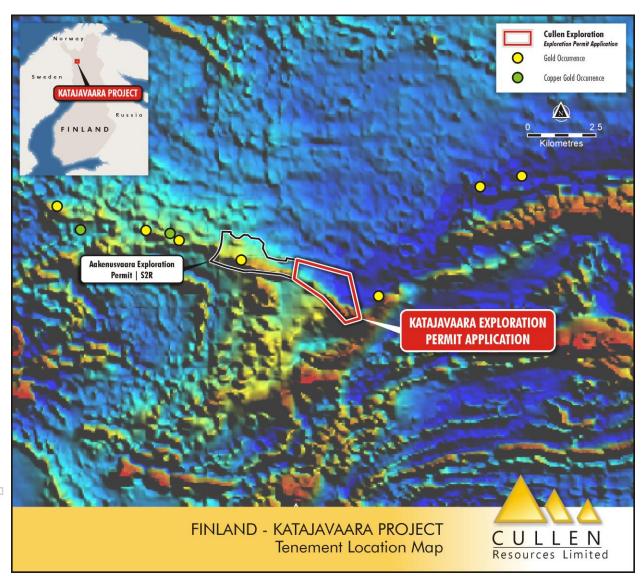
The funds raised under the Placement will be used to advance exploration at Wongan Hills (targeting gold and base metals); and for project generation and working capital purposes.

Following the Placement the Company's issued capital is as follows:

- 189,464,828 fully paid ordinary shares
- 909,090 unlisted options exercisable at 6.6 cents and an expiry date of 30 November 2020
- 454,545 unlisted options exercisable at 6.6 cents and an expiry date of 1 November 2021

## FINLAND

Cullen has made an application for an Exploration Permit ("Katajavaara"), in the Central Lapland Greenstone Belt of northern Finland. Cullen's application, estimated to be processed over the coming 6-12 months, adjoins S2 Resources Ltd's (S2R) Aakenusvaara Exploration Permit to the east along strike, from where S2R has reported a potential gold discovery (ASX:S2R, 19-8-2019) and an intersection of 2.11m @ 86 g/t Au from its drilling (ASX:S2R, 26-9-2019).



**Fig. 10.** Location of Cullen's Exploration Permit application in the Central Lapland greenstone belt shown on regional aeromagnetic image (<u>www.gtk.fi</u>).

Note the clear line of gold prospects and copper-gold occurrences – one a former Outukumpu Mine at Saattopora.

# SCHEDULE OF TENEMENTS (as at 30 September 2019)

REGION/ PROJECT	TENEMENTS	TENEMENT APPLICATIONS	CULLEN INTEREST	COMMENTS
		WESTERN A	USTRALI	Α
PILBARA				
Paraburdoo JV	E52/1667		100%	Fortescue can earn up to 80% of iron or rights; Cullen 100% other mineral rights
North Pilbara		E45/5540	100%	
NE GOLDFIELDS	- Mt Eureka			
Gunbarrel	E53/1299, <sup>+/*</sup> 1893, 1957 -1959, 1961	E53/2052 E53/2063 E53/2101	100%	+2.5% NPI Royalty to Pegasus on Cullen interest (parts of E1299); *1.5% NSR Royalt to Aurora (other parts of E1299, E1893 E1957, E1958, E1959 and E1961).
Irwin Well	E53/1637		100%	
Irwin Bore	E53/1209		100%	
MURCHISON	E20/714	E77/2606 E57/1135	100%	
WONGAN HILLS	E's 70/4882, 5162, 5201		90%	
GREENBUSHES		E70/4802		
EASTERN GOLDH	FIELDS			
Killaloe	E63/1018		20%	Sale of Matsa's 80% interest to Liontow Resources Limited announced, 20 Augus 2018 – Cullen retains 20% FCI to DTM.
Bromus	E63/1894		100%	
		FINL	AND	I
	Katajavaara	Exploration permit application		
TENEMENTS RE	ELINQUISHED, SOL	D and APPLICATION	NS WITHDRA	WN DURING THE QUARTER
	Korvenkylä			100% - Registered Reservation Reservation lapsed

#### 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 (Fortescue and Liontown), 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 -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 tenements - E08/1135, E08/1330, E08/1341, E08/1292, ML08/481, and ML08/482 (former Mt Stuart Iron Ore Joint Venture Baosteel/Aurizon/Posco/AMCI) 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 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.