



**QUARTERLY REPORT** for the period ended 30 June 2014

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**ASX Symbol: CUL**

30 July 2014

## HIGHLIGHTS

### **Mt Stuart Iron Ore Joint Venture (MSIOJV), West Pilbara - Cullen 30% iron ore rights**

- The MSIOJV owns the Catho Well channel iron ore deposit (CID) – one of four starter pits for the proposed West Pilbara Iron Ore Project - Stage 1 (WPIOP), a 30 Mtpa project to be developed by the APIJV (based upon a 2010 Feasibility Study). Cullen Exploration Pty Limited, a wholly-owned subsidiary of Cullen Resources Limited (Cullen), is contributing funds and maintaining its 30% participating interest in the Mt Stuart Iron Ore Joint Venture (MSIOJV). The participants in the APIJV are: Aquila Steel Pty Ltd (a subsidiary of Aquila Resources Limited) 50%, and AMCI (IO) Pty Ltd 50%.
- Cullen's ownership of iron ore produced from Catho Well, under one scenario, is ~1.5Mtpa for a 14 year mine life derived from the Catho Well Ore Reserve of 70Mt @ 54.81% Fe (JORC 2004 compliant) – see Cullen's ASX announcements of 14 December 2010; and 7 June 2012.
- Cullen anticipates new momentum towards a development decision for the proposed West Pilbara Iron Ore Project, to include mining of Cullen's ore in the Catho Well CID, in the wake of the successful takeover of Aquila Resources Limited by Baosteel Resources Australia Pty Ltd (Baosteel) and Aurizon Operations Limited (Aurizon).

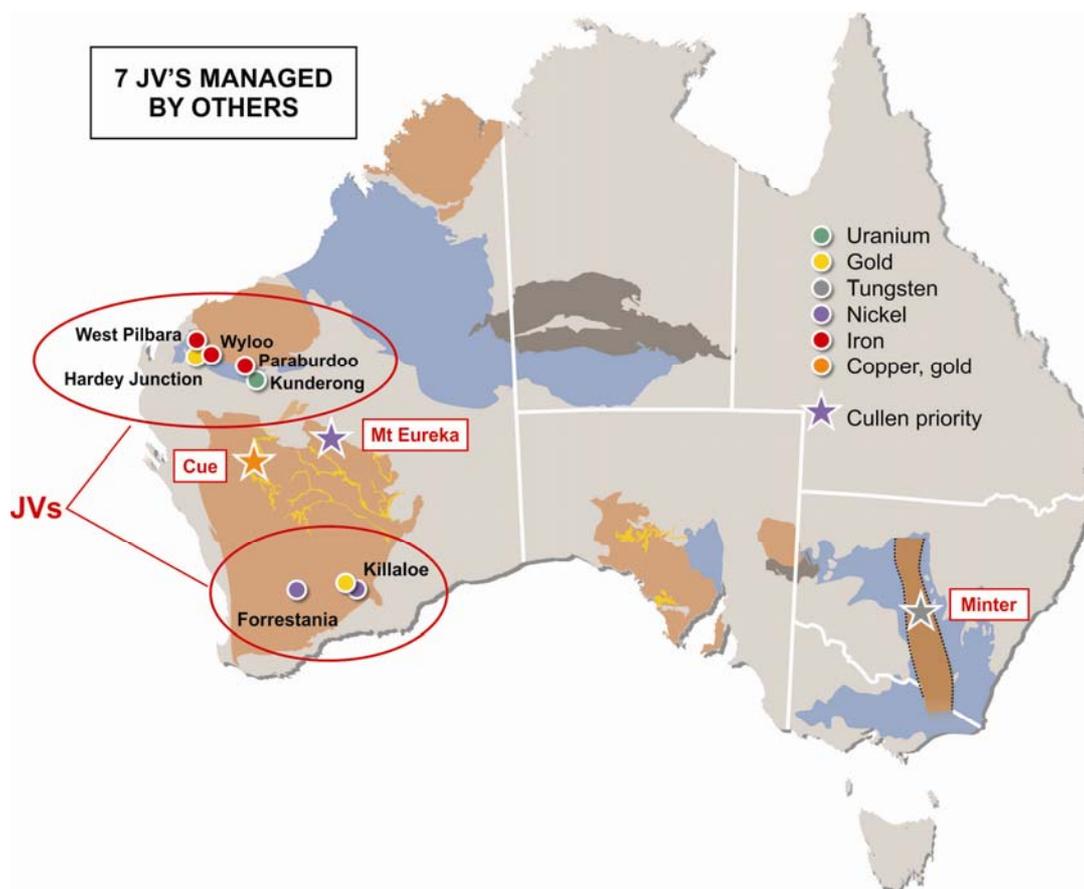
### **Wyloo Iron Ore Joint Venture, West Pilbara - Cullen 49% of iron ore rights**

- Drilling is planned for the coming Quarter at the **Wyloo North** and **Wyloo South prospects** (Fortescue Mining Group Ltd, Manager, earning 80% in iron ore rights)

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## Mt Eureka, nickel and gold project, North Eastern Goldfields - Cullen 100%

- A further phase of RC drilling (9 holes for 1502m, MERC 126-134, and deepening of MERC121, Table 1, page 10) was completed in July, testing various targets at the Doyles and Silverbark North nickel sulphide prospects and elsewhere. Ni, Cu and Au assays for 5-metre composite samples are pending. Geological logging indicates no significant Ni sulphide mineralisation associated with the ultramafics intersected. Of the four EM anomalies tested: two were explained as black shale/pyritic sediments; two were pyritic-pyrrhotitic-quartz veined structures in basalt and possibly prospective for gold mineralisation. Other holes tested ultramafics and below anomalous geochemistry in ultramafics, and a magnetic anomaly.
- On-going geological mapping and prospecting of nickel sulphide targets at Mt Eureka has underlined the AK47 prospect area, the Central Ultramafics basal contact, and the Silverbark North BIF contacts – both east and west – as the priorities for further exploration and drill testing



### Project generation

- Cullen has two exploration licence applications for ground in the Fraser Range region in southern W.A. - one in the Dundas Region (ELA 63/1673) and one near Zanthus (ELA 28/2470) - which are progressing towards grant. In early July, Cullen applied for two exploration licences in the Gascoyne Region of W.A. (ELAs 09/2108, 2109) - positioned along strike from the Yalbra graphite project of Buxton Resources Limited (BUX:ASX).

## WEST PILBARA, W. A. – Iron

**MT STUART IRON ORE JOINT VENTURE (MSIOJV)** – ELs 08/1135, 1292, 1330, 1341, API JV 70% (Manager), Cullen 30%, and contributing. Cullen retains 100% of Other Mineral Rights

The **MSIOJV** is between Cullen Exploration Pty Ltd - 30%, and API Management Pty Ltd (“API”) - 70%. The shareholders of API are the parties to the unincorporated joint venture known as the Australian Premium Iron Joint Venture (APIJV). The participants in the APIJV, are: Aquila Steel Pty Ltd (a subsidiary of Aquila Resources Limited) 50%, and AMCI (IO) Pty Ltd 50%. The Manager provided the following information in relation to activities for the June Quarter:

- There were no significant safety incidents reported during the quarter;
- KM Native Title Agreement was executed (*see CUL:ASX announcement, 12 June 2014*);
- PKKP Native Title Agreement execution process commenced;
- Compliance activities were carried out in respect of mine environmental approval and licence conditions; and,
- A programme and budget for FY2014-15 was approved.

RC drilling programmes are scheduled to commence in the September Quarter at the Catho Well deposit and Cardo Bore prospect.

## WEST PILBARA, W.A. – Iron

**WYLOO JV** – Iron Ore Rights JV with Fortescue Metals Group Ltd (Fortescue) - Fortescue has earned 51% and may earn 80%, Cullen 20% (FCI to DTM). Cullen retains 100% of Other Mineral Rights - EL08/1393, ELs 47/1154, 1649, 1650 and MLA 47/1490.

The Wyloo JV project lies just south east of the MSIOJV’s Catho Well Channel Iron Deposit. Fortescue has previously provided a maiden Resource Estimate of **16.9 Mt @ 57.11% Fe**, for the Wyloo South Bedded Iron deposit, classified as Inferred and JORC 2004 Compliant. No exploration undertaken for the quarter.

The Joint Venture Manager has reported that earthworks were completed on E47/1154 and E47/1650 at Wyloo North and E47/1649 at Wyloo South in preparation for a drilling program. This program, and drilling on E47/1650 and E47/1649, is planned to be undertaken in the September quarter.

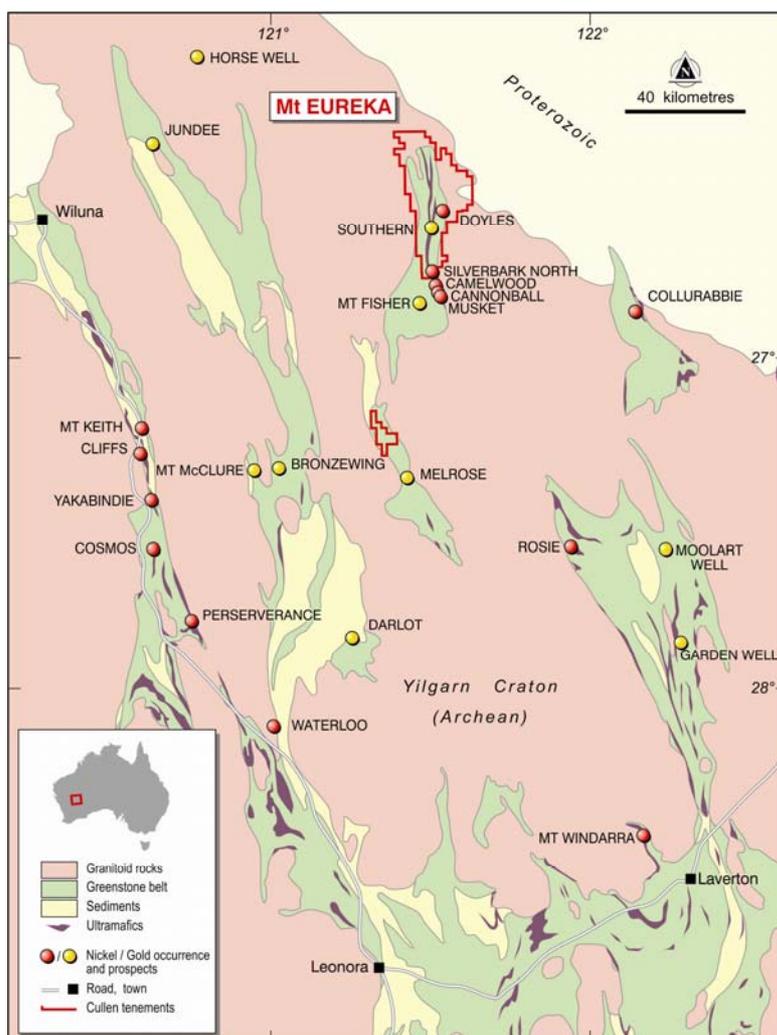
**PARABURDOO JV** – Iron Ore Rights JV with Fortescue Metals Group Ltd (Fortescue), Cullen retains 100% of Other Mineral Rights - EL52/1667

Fortescue can earn up to an 80% interest in the iron ore rights on Cullen’s E52/1667 (Snowy Mountain), located ~25km south east of Paraburdoo in the Pilbara Region of Western Australia. The tenement includes potential for bedded iron deposits within the Brockman Iron Formation, along strike from the Paraburdoo and Channar Groups of iron deposits. Further work is planned to follow up this drilling over the next 2 years. No exploration undertaken for the quarter.

## MT EUREKA, NORTH EASTERN GOLDFIELDS, W.A. – Gold and Nickel

Cullen holds 100% of approximately 650km<sup>2</sup> of approved tenure\* in the Mt Eureka Greenstone Belt in the North Eastern Goldfields of Western Australia which includes multiple targets for nickel sulphides and gold. The high nickel prospectivity of Cullen's ground is confirmed by the discovery of nickel sulphides by Rox Resources Limited (Rox) at Camelwood and Cannonball – Musket (Fisher East Project), located a few kilometres along strike to the south of Cullen's tenement boundary (Rox ASX release, ASX: RXL of 3/10/2013 describes the maiden mineral resource for Camelwood and ASX release of 10/1/2014 describes discoveries at Cannonball and Musket).

In early July 2014, Cullen commenced a further program of RC drilling, which had been suspended in early May due to heavy rain, and completed on the 14 July (9 holes for 1502 m, including deepening of MERC121). This drilling continued Cullen's systematic exploration and evaluation of various EM targets and ultramafic trends for nickel sulphides, focused on targets in the stratigraphic corridor along strike of and commencing ~3km north of the Camelwood nickel mineralisation. The program also included reconnaissance drill testing of EM targets on the western margin of the greenstone belt, which intersected pyritic metasediments (MERC129 and 130) at modelled EM plate positions downhole, and MERC133 which intersected meta-sediments and mafic rocks at the Doyles east prospect (see Figures).



Mt EUREKA PROJECT - Location Plan

\* Mt Eureka Project – ELs 53/1299,1300,1209,1630,1635,1637,1611 - Cullen 100%

## DOYLES NICKEL PROSPECT

This “Doyles ultramafic trend” is coincident with a trend of “weak” bedrock conductors interpreted from Cullen’s ground EM, but not modeled, which are generally untested both along strike and in fresh rock. Recent drilling (MERC134 and MERC121 deepened) tested below shallow, anomalous nickel sections of ultramafic but did not intersect any visible Ni sulphide mineralisation. Drilling of the magnetic anomaly under cover east of the main Doyles ultramafic trend, interpreted to be an ultramafic close to the greenstone-granite contact, indicates the magnetic signature is most likely related to meta-sediments and meta-basalts (MERC133).

## SILVERBARK NORTH NICKEL PROSPECT

This prospect comprises a series of VTEM and ground EM modeled conductors stretching over 1km in Cullen’s ground (E1637). Cullen has only completed an effective test of one of the modeled conductor plates at Silverbark North; in a previous RC programme (MERC107). However, the VTEM and ground EM anomalous responses are multiple both along strike and across the metasediment stratigraphy and the western contact (hanging wall) of the mixed BIF/black shale package remains largely untested. This contact may host massive nickel sulphides where intersected by any overlying ultramafic. There are two VTEM anomalies coincident with this stratigraphic position which warrants drill testing (see figures).

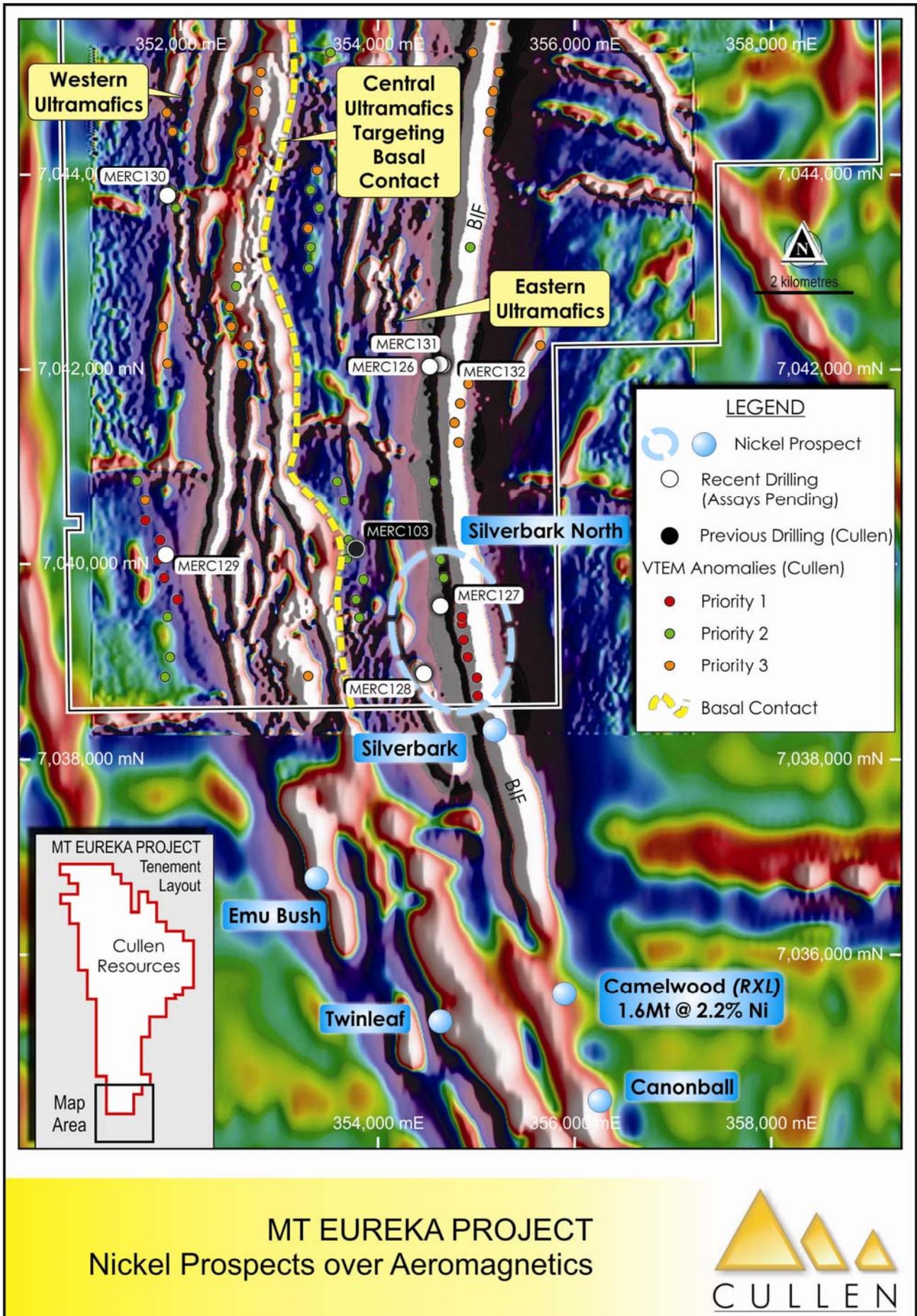
Drilling completed in the most recent programme targeted modelled EM conductor plates located further to the west of the Silverbark North VTEM/ground EM trend mentioned above (see Figures). This drilling intersected: quartz-pyrite-pyrrhotite zones in meta-basalts at modelled EM plate positions down hole (MERC 126, 127); meta-basalt (MERC 131 and 132); and ultramafic without visible sulphide (MERC 128).

Assay data is pending for all drillholes - MERC 126-134, and the deepened section of MERC121.

## FOLLOW-UP PROGRAMMES FOR NICKEL

Cullen’s next round of exploration at Mt Eureka is planned to include (see Figures):

- follow-up RC drilling of VTEM anomalies on the western margin of the **Silverbark North** BIF/black shale – possibly coincident with an ultramafic contact;
- Prospecting of the interpreted basal contact of the **Central ultramafic sequence**, and an RC drill hole designed to intersect the base of these ultramafic strata on section to the west of MERC 103 – interpreted to be a prospective shale/ultramafic contact;
- ground EM surveying around the **AK47 prospect**; and,
- first pass drill testing, of ground EM anomalies at the **Wonganoo Prospect (E53/1611)**.



## MINTER, N.S.W – Tungsten

**MINTER** - EL6572 - Cullen 100%

The company has applied for co-funding, budget assistance from the N.S.W. government which is providing support for selected exploration drilling programmes through its : “New Frontiers Cooperative Drilling” initiative.

No exploration undertaken for the quarter.

## ASHBURTON, W.A. – Gold

**WYLOO DOME AREA** – EL08/1341, Cullen 100% of mineral rights other than iron ore; E08/2145, E2227 - Cullen 100%

No exploration undertaken for the quarter.

## OTHER JOINT VENTURES MANAGED BY PARTNERS

### ASHBURTON, W.A. – Gold and Uranium

**KUNDERONG/SALTWATER POOL JV:** ELs 52/1890, 1892, Thundelarra and Lion One Metals Limited (ASX: LLO) - can earn 70%, Cullen 100%

No exploration undertaken for the quarter.

### ASHBURTON, W.A. - Gold

**HARDEY JUNCTION JV** – ELs 08/1166, 1189, 1763, 1145; PL 08/546 Northern Star Resources Limited 80%, Cullen 20% free carried interest

No exploration undertaken for the quarter. Regional targeting work, which included acquisition of airborne multispectral images and a University of WA/Centre for Exploration Targeting study, was completed over a large area including the Hardey Junction JV tenements.

### FORRESTANIA, W.A. – Gold / Nickel / Iron

**STORMBREAKER AND NORTH IRONCAP JV** – ELS 77/1327, 1354, 1406, ML 77/544 and PLs Hannans Reward Limited 80% and Manager, Cullen 20% free carried interest

Despite a long campaign of promotion by the Manager, the Joint Venture was unable to attract support from any third party for further nickel exploration, and no divestment was achieved. Subsequently the Joint Venture agreed to surrender a number of tenements, but retains the gold rights on M77/544.

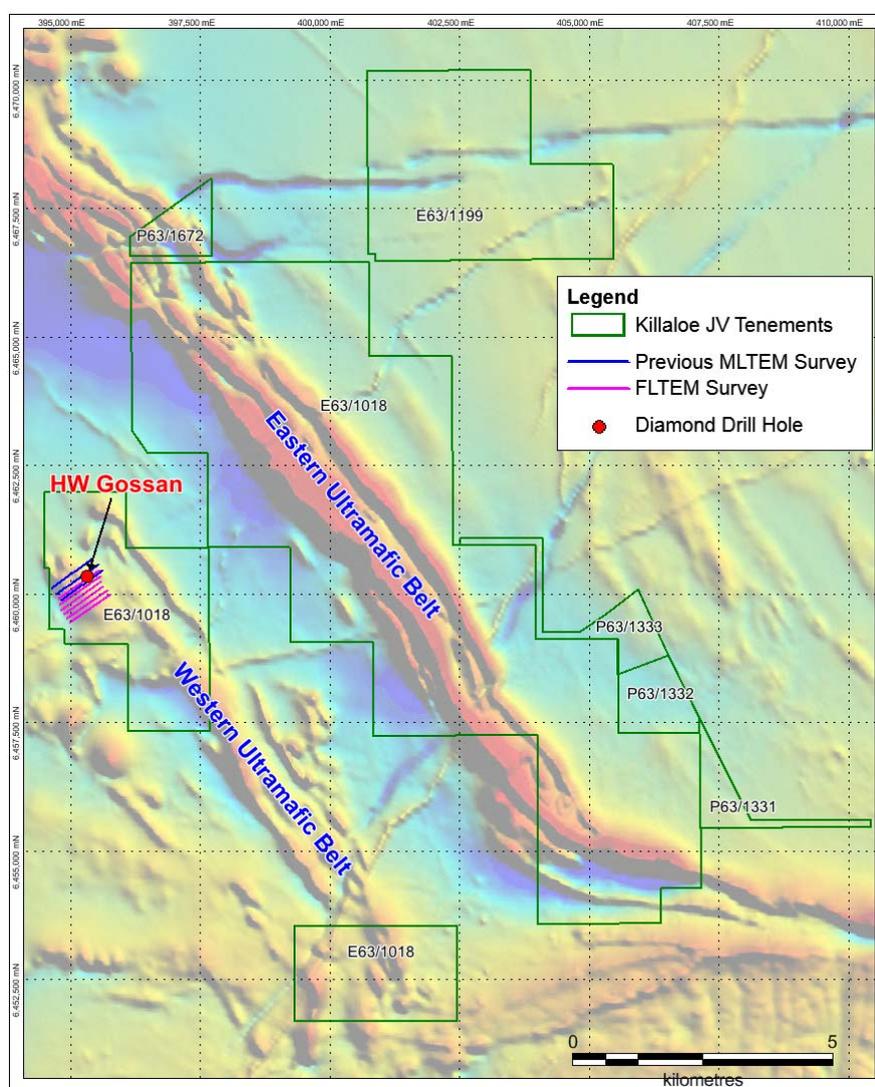
No exploration undertaken for the quarter.

## EASTERN GOLDFIELDS, W.A. – Gold / Nickel

**KILLALOE JV**– EL63/1018, 1199 and PLs Matsa Resources Limited 80%; Cullen 20% free carried interest

During the Quarter, Cullen reported to the ASX in relation to the exploration activities completed by Matsa Resources Limited (Matsa), the JV Manager. These announcements described the intersection of narrow zones of semi-massive, and disseminated sulphides in komatiite at the “Hanging Wall Gossan” nickel prospect (diamond drill-hole 14KLDH01 – see CUL: ASX, 17 June 2014). Down hole surveying of this hole identified two strong off-hole conductors (CUL: ASX, 20 June ASX).

Thereafter, Matsa reported that ground EM surveying and full assessment of all existing exploration data for the prospect would be undertaken to allow for the design of a follow-up drill programme at the Hanging Wall Gossan prospect (MAT: ASX, 23 June 2014).



In addition, Cullen suggests there is significant nickel sulphide prospectivity along the western contact of the Eastern Ultramafic Belt (see Figure above). Cullen interprets this contact is the southern strike extent of the basal contact of ultramafics which host the Taipan nickel sulphide discovery of Sirius Resources Limited (SIR: ASX announcement of 16 July, 2014) in their Polar Bear Project.

## CORPORATE

### SHARE CAPITAL INFORMATION

The issued capital of the company is as follows:

- 1,038,472,843 fully paid shares
- 6m unlisted options on issue

Baosteel Resources Australia Pty Ltd and Aurizon Operations Limited completed a successful takeover of Aquila Resources Limited in July 2014. The substantial shareholders of Cullen are:

- Baosteel together with Aurizon own 9.86% via their takeover of Aquila Resources Limited;
- companies associated with AMCI (IO) Pty Ltd own 4.90% ; and,
- Wythenshawe Pty Ltd, own 16.48% of Cullen.

Cash at the end of the quarter was: **\$1.01M**.

**Dr Chris Ringrose, Managing Director**

30 July 2014

**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, APIJV (Aquila-AMCI), Hannans Reward, Northern Star, Matsa and Thundelarra/Lion One), 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 (particularly geochemistry). Projects are sought for most commodities mainly in Australia but with selected consideration of overseas opportunities in Scandinavia. A number of Cullen's projects are at the target drill-testing stage.

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.

**ATTRIBUTION: Competent Person Statements**

*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.*

TABLE 1: RC Drilling completed in July 2014, Mt Eureka nickel and gold project.

| Hole Id | Easting | Northing | RL (m)<br>nominal | Azimuth<br>(degree) | Dip<br>(degree) | Depth<br>(m) |
|---------|---------|----------|-------------------|---------------------|-----------------|--------------|
| MERC121 | 358627  | 7062297  | 500               | 270                 | -60             | 58-111       |
| MERC126 | 354520  | 7042029  | 500               | 257                 | -60             | 279          |
| MERC127 | 354631  | 7039581  | 500               | 257                 | -60             | 253          |
| MERC128 | 354465  | 7038886  | 500               | 257                 | -60             | 198          |
| MERC129 | 351843  | 7040102  | 500               | 77                  | -60             | 123          |
| MERC130 | 351865  | 7043785  | 500               | 270                 | -60             | 113          |
| MERC131 | 354601  | 7042051  | 500               | 257                 | -60             | 123          |
| MERC132 | 354624  | 7042055  | 500               | 257                 | -60             | 58           |
| MERC133 | 359170  | 7061504  | 500               | 0                   | -90             | 161          |
| MERC134 | 358700  | 7062301  | 500               | 270                 | -60             | 141          |

Note: MERC121 was drilled during a previous programme to a depth of 58m and has been deepened to 111m as part of this programme.

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## SCHEDULE OF TENEMENTS (as at 30 June 2014)

| REGION  | TENEMENTS  | TENEMENT APPLICATIONS | CULLEN INTEREST | COMMENTS  |
|---|--|-----------------------|-----------------|---|
| <b>WESTERN AUSTRALIA</b>  |  |                       |                 |   |
| <b>ASHBURTON / PILBARA</b>  |  |                       |                 |   |
| Mt Stuart JV  | E08/1135, E08/1330, E08/1341, E08/1292                             | MLA08/481, MLA08/482  | 30%             | API has earned 70% of iron ore rights; Cullen 100% other mineral rights   |
| Hardey Junction JV  | E08/1145, 1166, 1189, 1763, P08/546                                |                       | 20%             | Northern Star Resources Limited 80%   |
| Wyloo JV  | E08/1393, E47/1154 E47/1649, 1650 P08/556                          | MLA47/1490            | 49%             | Fortescue has earned 51%, can earn 80% of iron ore rights<br>Cullen 100% other mineral rights   |
| Paraburdoo JV   | E52/1667   |                       | 100%            | Fortescue can earn up to 80% of iron ore rights; Cullen 100% other mineral rights   |
| Tunnel Creek JV   | E52/1890, 1892   |                       | 100%            | Thundelarra Exploration/Lion One can earn up to 70%   |
| Mt Edith  | E08/2227   |                       | 100%            |   |
| Wyloo SE  | E08/2145   |                       | 100%            |   |
| <b>NE GOLDFIELDS</b>  |  |                       |                 |   |
| Gunbarrel   | E53/1299, 1300 +/- *<br>E53/1630, 1635                             |                       | 100%            | +2.5% NPI Royalty to Pegasus on Cullen's interest (parts of E1299);<br>*1.5% NSR Royalty to Aurora (other parts of E1299 and parts of 1300) |
| Irwin Well  | E53/1637   |                       | 100%            |   |
| Irwin Bore  | E53/1209   |                       | 100%            |   |
| Wonganoo  | E53/1611   |                       | 100%            |   |
| <b>DUNDAS</b>   |  | E63/1673              | 0%              |   |
| <b>FRASER RANGE</b>   |  | E28/2377              | 0%              | In ballot – competing applications  |
|   |  | E28/2470              | 0%              |   |
| <b>MURCHISON, Cue</b>   | E20/714, E20/808   |                       | 100%            |   |
| <b>EASTERN GOLDFIELDS</b>   |  |                       |                 |   |
| Killaloe  | E63/1018, E63/1199, P63/1672 P63/1331-1333                         |                       | 20%             | Matsa Resources Limited 80%   |
| <b>FORRESTANIA</b>  |  |                       |                 |   |
| Forrestania JV  | M77/544  |                       | 20%             | Hannans Reward Ltd 80%<br>Gold rights only  |
| <b>NEW SOUTH WALES</b>  |  |                       |                 |   |
| Minter  | EL6572   |                       | 100%            |   |
| <b>NORTHERN TERRITORY</b>   |  |                       |                 |   |
| Amadeus   |  | E25493, 25494,        | 0%              |   |
| <b>SWEDEN:</b> Holmajarvi 2; Lavasjakka – Exploration Permits 100% interest |  |                       |                 |   |
| <b>TENEMENTS RELINQUISHED DURING THE QUARTER – 100%</b>                     |  |                       |                 |   |
| NORTHERN FINLAND  | Claim Reservations - Central Rompas                                |                       | 0%              |   |
| FORRESTANIA JV  | E77/1406, E77/1327, E77/1354 P77/3607, 3613, 3762, 3763, 3582-3588 |                       | 0%              |   |
| LAKE MACKAY   | E80/4209   |                       | 0%              |   |

**Data description as required by the 2012 JORC Code - Section 1 and Section 2 of Table 1**

| <b>Section 1 Sampling techniques and data</b> |   |   |
|---|---|---|
| <b>Criteria</b>                               | <b>JORC Code explanation</b>  | <b>Comments re RC drilling programme</b>  |
| Sampling technique                            | Nature and quality of sampling (egg 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 reverse circulation (RC) drilling testing individual EM conductors and geological targets. Nine RC holes were drilled and one previously drilled hole was deepened for a total of 1502m.  |
|   | 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 a handheld GPS with an approximate accuracy of $\pm 3\text{m}$ ; down-hole surveys were completed.  |
|   | 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 (e.g. submarine nodules) may warrant disclosure of detailed information. | RC drilling was used to obtain one metre samples from which a 3-4kg sub-sample was taken using a cone splitter. The sub-sample together with the remainder of the 1-m sample was placed on the ground. From each drill spoil pile, a c. 400g sample was then collected using a scoop; five of such 1-m samples were combined into one composite sample. The composite samples (2-3kg) were sent to an accredited Perth laboratory 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.).   | Drilling was by reverse circulation using a 140mm diameter face-sampling hammer bit.  |
| Drill Sample recovery                         | Method of recording and assessing core and chip sample recoveries and results assessed  | Sample recovery was assessed visually and the recovery recorded. The samples were generally dry or damp, and showed little (<10%) variation in volume.  |
|   | 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 spreadsheets. Cyclone, splitter and buckets were cleaned regularly and thoroughly (between rod changes and after completion of each drill hole) to avoid cross contamination.   |
|   | 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 kept dry and within the targeted zones, 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 studies and metallurgical studies. | All samples were 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 rock chips was qualitative (lithology, type of mineralization) and semi-quantitative (visual estimation of sulphide content, quartz veining, alteration etc.).  |
|  | The total length and percentage of the relevant intersections logged  | All drill holes were logged in full.   |
| Sub-sampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken.   | Not applicable - no core taken   |
|  | If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.  | One-metre samples were split dry using a cone splitter attached to the drill rig. Composite samples were taken using a sampling scoop.   |
|  | For all sample types, quality and appropriateness of the sample preparation technique.  | All samples are pulverised using Essa LM1, LM2 or LM5 grinding mills determined by the size of the sample. Dry crushed or fine samples are pulverized to produce a homogenous and representative sub-sample for analysis. A grind quality target of 85% passing 75µm is established and is relative to sample size, type and hardness. However the nature (hardness) of some samples is such that this may not always be achievable using standard preparation protocols. In such case an additional 2nd stage grinding is applied where a sub split is taken and further ground to ensure the assay pulp passes QC. In extreme cases, 85% passing 75 micron may not be achievable and thus cannot be guaranteed for all samples. Low chrome steel bowls are used for pulverising which could impart trace levels of contaminants such as Cr, Fe and Mo. |
|  | 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.  |
|  | 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.                          | For quality control of the field sampling, duplicate samples of the 5-m composites are taken at the rate of 1 per 20.  |
|  | Whether sample sizes are appropriate to the grain size of the material being sampled.   | The sample size is considered appropriate for the purpose of this drilling programme, which is exploratory and primarily aimed at establishing the presence of mineralisation.   |
|  | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  | For all 5-m composite samples, a 10g aliquot is digested using aqua regia. Analysis for gold is by AAS; Cu and Ni are analysed using ICP-OES. The aqua regia digestion is considered partial depending on the host of the elements analyzed, but does provide an acceptable level of accuracy for an initial assessment of the contained target elements.  |

|   |   |   |
|---|---|---|
|   | 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. | Not applicable, no geophysical parameters reported.   |
| Quality of assay data and laboratory tests              | Nature of quality control procedures adopted (egg 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 are inserted by the laboratory.  |
| Verification of sampling and assaying                   | The verification of significant intersections by either independent or alternative company personnel.   | Cullen staff (Chief Geologist and Managing Director) has visually inspected the samples and sampling procedures.  |
|   | The use of twinned holes  | No twinned holes drilled to date  |
|   | 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.   | No adjustments are made to assay data other than the replacement of 'less than detection limit' with a value of half of the respective detection limit.   |
| 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.  | All drill collar surveys are by handheld GPS. Several measurements (2-3) at different times are averaged; the estimated error is $\pm 3m$ .   |
|   | Specification of the grid system used.  | The grid coordinates for the Silverbark North and Doyle's targets are in GDA94, Zone 51   |
|   | Quality and adequacy of topographic control.  | There is currently no topographic control and the RL is a nominal 500m for all drill holes.   |
| Data spacing and distribution                           | Data spacing for reporting of Exploration Results.  | The drilling tested geological and geophysical targets, several kilometers apart. Some of the targets were tested by a single hole others were drilled along a traverse with holes spaced 20-80m apart.   |
|   | 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 exploratory and not designed to satisfy requirements for mineral reserve estimations.  |
|   | Whether sample compositing has been applied.  | The drill spoil generated by the RC drilling was composited into one metre 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 exploratory only and designed to test geophysical and geological targets for the presence of nickel mineralisation at depth. The drill orientation was generally to the west (257 or 270 degrees) and at an angle of -60 degrees with the exception of MERC133 which targeted a magnetic high east of Doyles at a dip of -90 degrees. No visible Ni sulphide mineralisation has been encountered and hence it is unclear whether the sampling is unbiased or not. |

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|   | 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.  | The exact dip of the mineralization related to geophysical modeling has not been established yet (single holes only) but based on the geophysical modeled plates it is likely that the drilled intersections overestimate the true thickness of any intersected mineralisation.  |
| Sample security                                   | The measures taken to ensure sample security.   | All samples are handled, transported and delivered to the laboratory by Cullen staff or Cullen 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.  |
| <b>Section 2 Reporting of exploration results</b> |   |  |
| 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. | The drill targets are located on E53/1209 (Targets 1 & 4), E53/1299 (Doyles) and E53/1637 (Silverbark North Targets 2 & 3)) which are all 100% owned by Cullen Resources Limited. Cullen has signed an agreement with Central Desert on behalf of the Wiluna traditional owners who have native title over the respective areas. All drill sites and access tracks were cleared by the traditional owners prior to commencement of ground-disturbing activities. There are no particular environmental settings. |
|   | 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 no previous drilling at Silverbark North by other parties than Cullen and only limited historic drilling at the Doyles Prospect (Dominion Mining, 1994).  |
| Geology   | Deposit type, geological settings and style of mineralisation.  | The targeted mineralisation is komatiite-hosted and/or associated Archean nickel sulphide.   |
| 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 attached table   |
|   | · <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.                             | See attached table   |

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| 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.  | No analytical results reported - all assays pending.   |
|  | 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.   | No analytical results reported - all assays pending.   |
|  | The assumptions used for any reporting of metal equivalent values should be clearly stated.  | No metal equivalents used.   |
| Relationship between mineralisation widths and intercept lengths | These relationships are particularly important in the reporting of Exploration Results.  | Drilling was at 60-90 degree angles to test geophysical target plates derived from EM ground surveys and prospective geological settings. The stratigraphy encountered in drilling is variably dipping to the east and any mineralisation intercepts are likely to overstate the true width of mineralisation. |
|  | If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.  | The exact geometry of the mineralisation is not known yet.   |
|  | 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')   | No mineralized intervals reported in this release – all assays pending.  |
| 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 attached table/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.  | see attached table   |
| 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. | There are currently no other exploration data that appear meaningful in the context of the reported results.   |
| 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, including RC drilling, and ground and down hole geophysical surveys, is planned.   |
|  | 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 attached figures   |