ABN 46 006 045 790

## QUARTERLY REPORT for the period ended 30 September 2013

23 October 2013

www.cullenresources.com.au ASX Symbol: CUL

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## **HIGHLIGHTS**

Cullen is exploring in highly prospective terrains, focused in Australia, and has multiple projects with drill-ready targets for gold, nickel and tungsten. Cullen also has two Joint Ventures for iron ore in the West Pilbara managed by key players. These projects provide an excellent platform of projects for future growth.

## Gold and Nickel - Mt Eureka Project, North Eastern Goldfields, W.A. (Cullen 100%)

During the Quarter, target identification and drill testing for **nickel** and **gold** included:

- Reverse Circulation (RC) drilling to test three EM conductors and one geological/geochemical target for nickel sulphides. The key "Silverbark North" EM/nickel sulphide target remains untested because of drilling difficulties and will be tested later by diamond drilling.
- ➤ Heritage surveying (completed in early October) to allow first-pass RC drilling for nickel at **Doyles prospect** beneath **11m** @ **0.86%** Ni in historic RAB hole.
- ➤ One RC drill hole completed at the **Southern gold prospect** intersected a thick (~30m) sulphidic (mainly pyrite, ~1-10%) mineralized zone, which returned a **best interval of 8m** @ **1.71** g/t Au, based on 4m composite samples. Assays for one-metre splits for this 8m intersection due by the end of October.
- A further 5 RC holes have now been completed at Southern gold prospect and all intersected sulphide zones associated with quartz veining all assays for these holes are pending.

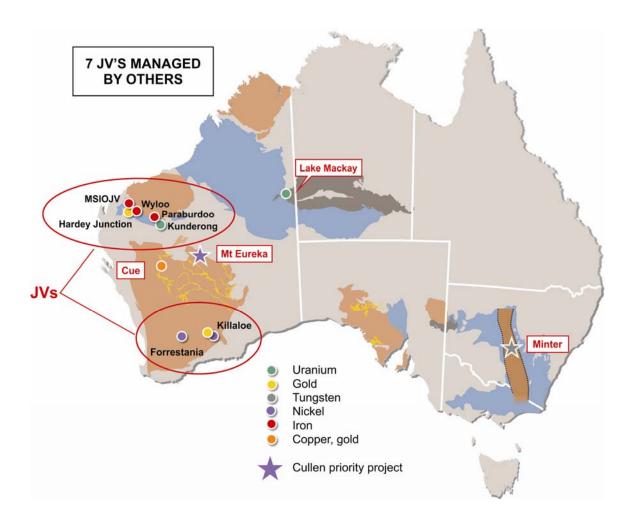
# **!** <u>Iron Ore</u> - Wyloo Joint Venture − Fortescue 51%, earning 80%; Cullen 49% iron ore rights

JV Manager, <u>Fortescue Metals Group Ltd (Fortescue)</u>, has reported drill intersections of: <u>37m at 63.4% Fe</u>, 3.19% Si, 2.19% Al; and <u>54m at 61.9% Fe</u>, 3.86% Si, 3% Al. This supergene mineralisation is interpreted to be in northerly-dipping, Brockman Iron Formation and is open along strike and up dip.

## **HIGHLIGHTS**

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

Cullen is contributing funds and maintaining its 30% participating interest in the MSIOJV with on-going work to obtain approval of Mining Lease applications and drilling planned for budget/financial year 2013-2014.



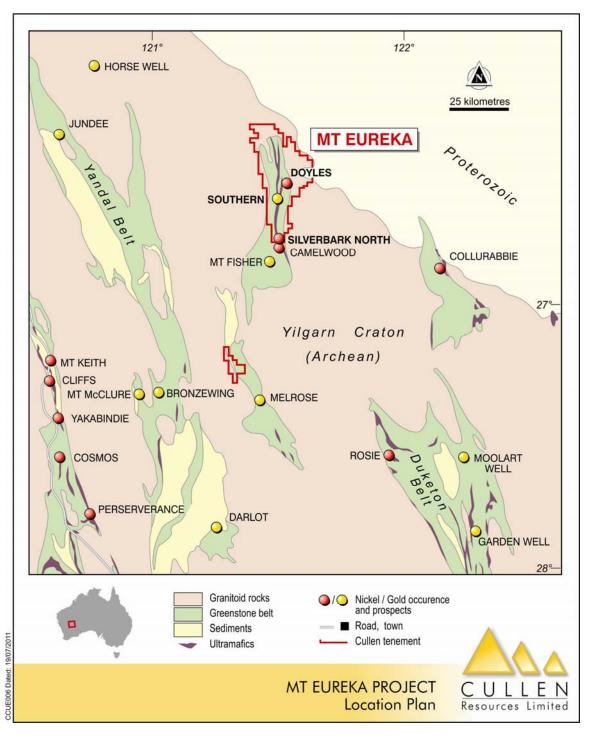
## **★** <u>Tungsten</u> - Minter Project, N.S.W. (Cullen 100%)

Assays for rock-chip sample of an east-west striking set of quartz veins at the **Doyenwae Prospect** include values of <u>0.24 – 0.81% WO<sub>3</sub></u>. These results and prospect mapping have been reviewed; a program of trenching, channel sampling and follow-up drilling is planned to test this vein set.

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

### Background

Cullen Resources Limited (Cullen) holds 100% of ~650km² 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 (Fisher East Project) which is located ~3km on strike to the south of Cullen's tenement boundary (ASX release by Rox: RXL of 3/10/2013 describes Maiden Resource for Camelwood).



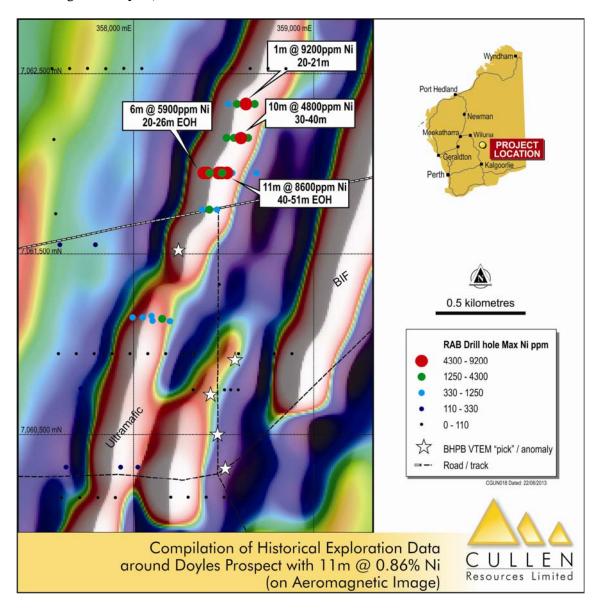
<sup>\*</sup> Mt Eureka Project – ELs 53/1299, 1300, 1209, 1630, 1635, 1637, 1611 - Cullen 100%

#### PRIORITY DRILL TARGETS for NICKEL

Cullen completed reconnaissance RC drilling to test three EM conductors and one geological/geochemical target for nickel sulphide mineralisation (4 holes for 730m) as previously reported (CUL:ASX announcement of 28 August 2013). However, the EM conductor at Target Area 1 ("Silverbark North" prospect) remains untested given that RC holes MERC105 and 106 were both abandoned above (in the planned hole) the modeled ground EM conductor plate. Cullen will test this target by a future diamond drill hole.

#### ON-GOING EVALUATION OF 15 OTHER NICKEL SULPHIDE TARGETS

The Mt Eureka project area includes a wide variety of targets for massive nickel sulphide deposits. Some targets have been drill-tested by WMC/BHPB Limited in joint venture with Cullen in 2002-2006, generally by 1 or 2 diamond drill holes. However, several targets have received very limited follow-up, with no ground EM and/or deeper drill testing. These targets include unresolved down hole EM (DHEM) and/or ground EM anomalies, as well as geochemical and lithological targets along strike of known mineralisation for further evaluation. Heritage surveying was completed in early October to allow drill-testing of one of these targets at **Doyles**, beneath 11m @ 0.86% Ni in a historic RAB hole.



#### RC DRILLING AT THE SOUTHERN GOLD PROSPECT

Cullen completed one vertical hole to a depth of 234m (MERC110) at the Southern gold prospect, which intersected a thick (~30m) sulphidic (visually estimated: pyrite, pyrrhotite, arsenopyrite at ~1-10%) zone (ASX announcement of 28 August 2013). Assays from this hole included a best intersection of **8m** @ **1.71** g/t Au in 4m composite samples from 184m, within a 20m thick zone with anomalous arsenic averaging 1360ppm; analyses of individual onemetre samples are pending.

In September, Cullen completed a further 5 RC holes on two drill fences 150m apart (MERC111-115). These holes tested the down plunge/dip, deeper portions of the gold mineralisation in the regolith at Southern, seeking to demonstrate continuity and higher grade.

The latest drilling confirmed the geological model based on a gas-in-soil anomaly and structural interpretation, which predicts that gold mineralised structures (low-angle faults/thrusts/shears) strike east-west and dip to the north where drill-tested to date. Mineralisation was intersected in all five holes drilled and comprises disseminated and semi-massive pyrite (visually estimated 30-40% over 1m), and arsenopyrite associated with quartz veining. The host rocks are mafic volcanics, felsic intrusives and meta-sediments, variably affected by alteration and metasomatism. The intersected quartz-sulphide mineralisation correlates well with previously intersected high-grade gold mineralisation in the regolith (2m @ 10.0 g/t Au from 50m and 7m @ 9 g/t Au from 116m in MERC 74; and 9m @ 6 g/t Au from 98m in MERC 75) and shows excellent continuity between individual drill holes and the two drill fences completed (see Figure). Drillhole assays pending.

#### OTHER TARGETS FOR GOLD

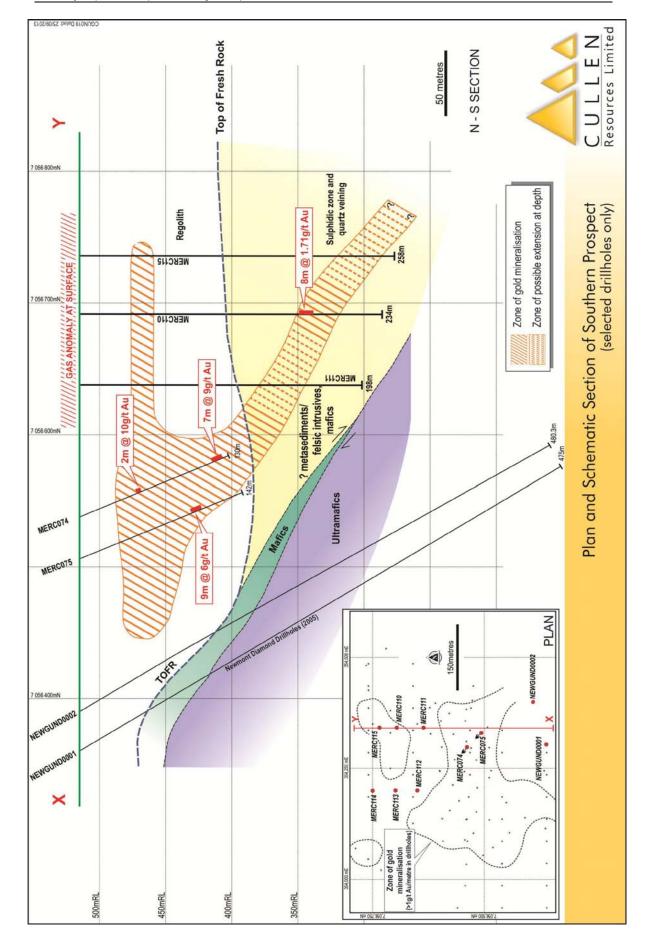
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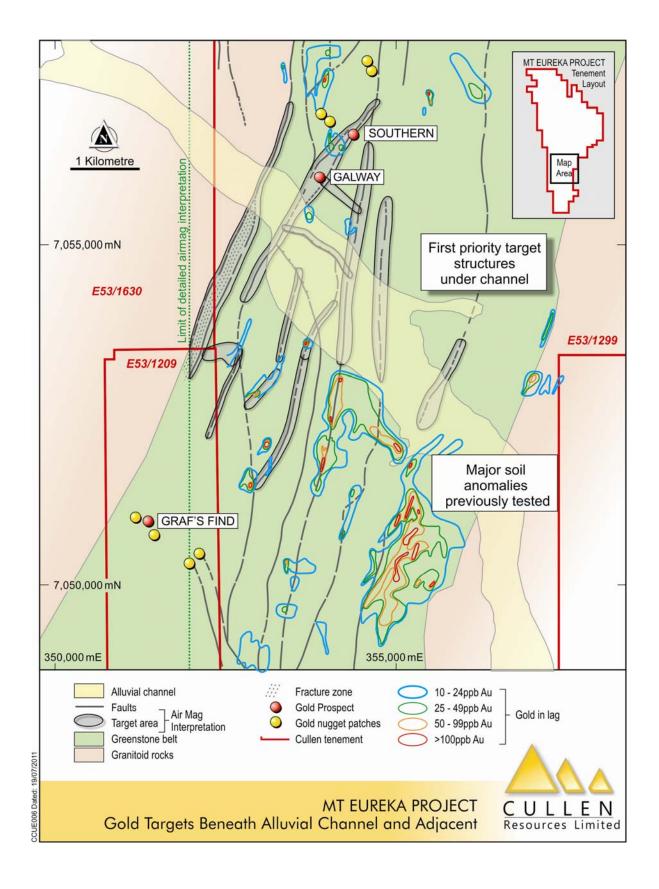
The Southern gold prospect was discovered by RAB/air core drilling across a gold-in-lag geochemical anomaly. A review of the tenor and position of this anomaly on Cullen's aeromagnetic interpretation and regolith maps shows a major NW-SE alluvial channel lying south of Southern (see Figure) which overlies a number of interpreted intersecting structures. It is notable that a number of gold-in-lag gold anomalies sit at the margin of this channel and are controlled by structures, suggesting that other geochemical anomalies may have been "stripped out" (see Figure).

The position of Southern and other truncated geochemical anomalies suggests that shear zones and thrusts mapped beneath the alluvial channel are prime targets for gold. Although there have been some previous RAB and aircore traverses drilled in the channel, most holes are too shallow and too widely spaced to have effectively tested this area.

It is notable that the Garden Well gold deposit in the Duketon greenstone belt sits on the margin of a Tertiary palaeochannel, and that the Bronzewing gold deposit in the Yandal greenstone belt was discovered beneath thick, transported overburden.

Cullen proposes to prioritise its targets from the multiple structural settings by using its gas-in-soil geochemical technique, which it believes will indicate sulphide-bearing zones at depth, followed by reconnaissance drilling (see Figure).





## MINTER, N.S.W - Tungsten

### MINTER (E6572) - Cullen 100%

The Minter project in Central Lachlan Fold Belt, NSW, covers extensive intrusive-related vein/stockwork-type tungsten mineralisation along the 12km Doyenwae-Orr Trig Trend of hornfelsed sediments. Quartz veining and anomalous tungsten in soil and rock may be coincident with centres of inferred, cupola-related, hydrothermal mineralisation.

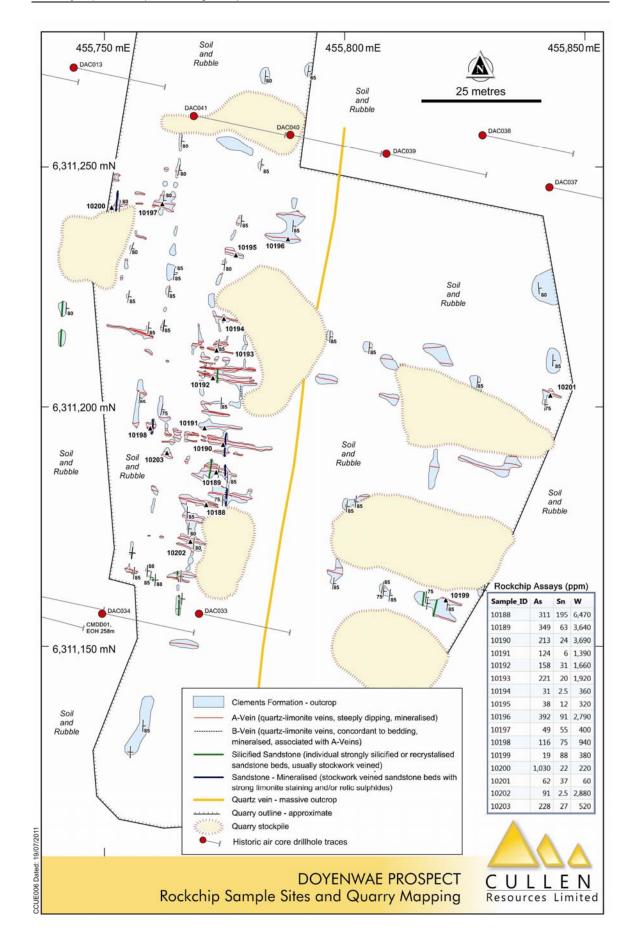
Encouraging drill assays have been received from selective sampling of core from Cullen's hole CMD001 at the Doyenwae prospect. **This hole intersected multiple scheelite-bearing quartz veins in sandstone and siltstone host rocks over the 258m drilled** (see Cullen's Quarterly Report announcement of 31 July, 2012). In addition, disseminated to blebby scheelite occurs in silicified coarse sandstone units adjacent to the mineralized veins. Initial sampling focused on core with visible scheelite and returned numerous 0.5 to 4.1 m intervals assaying > 0.1% tungsten. Higher grade zones include:

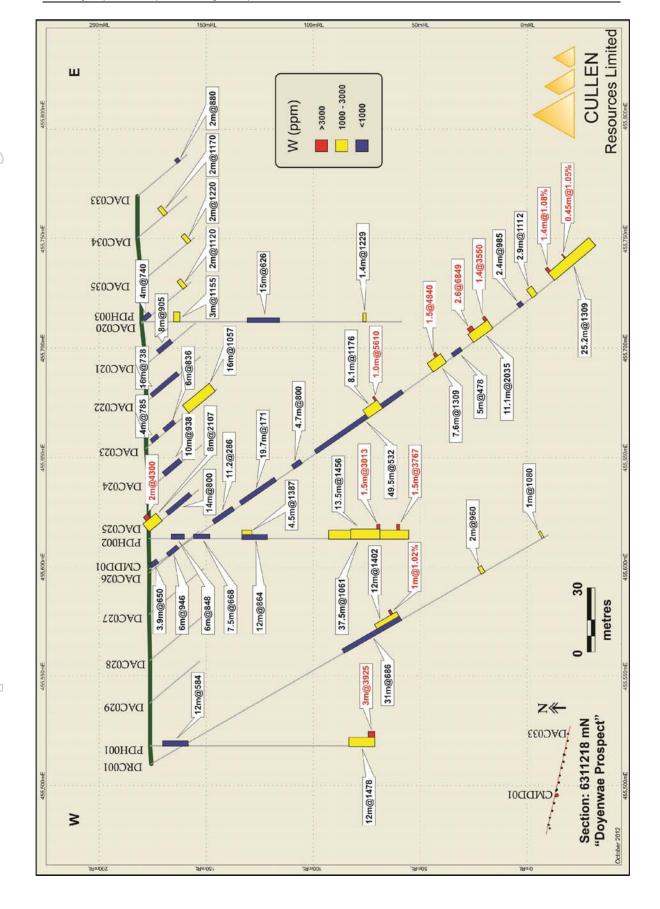
- 1m @ 0.56% W (**0.70% WO**<sub>3</sub>) from 131.5m;
- 1.5m @ 0.48% W (**0.60% WO**<sub>3</sub>) from 166.4m;
- 1.4m @ 1.08% W (1.36% WO<sub>3</sub>) from 232.7m and
- 0.45m @ 1.05% W (**1.32% WO**<sub>3</sub>) from 243.0m.

Importantly, geological logging of oriented core from CMDD01 indicated that many mineralized veins appear to be oriented in a WNW direction – approximately parallel to the direction of the is hole and most previous drill holes. Detailed mapping in a small quarry near the Doyenwae prospect confirmed this observation by identifying a set of near east-west oriented, variably-mineralised quartz veins with tungsten assays of 320-6470 ppm W (0.24 – 0.81% WO<sub>3</sub>) over intervals of 1 - 4m. These samples included sandstone wallrock and quartz vein material with veins of 40-250mm thickness.

Cullen is planning to undertake more systematic channel sampling in the Doyenwae quarry and backhoe trenching over nearby zones of anomalous soil geochemistry to expose bedrock and possible veining with further drilling testing to follow.

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## **JOINT VENTURES MANAGED BY PARTNERS**

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

**KILLALOE JV– EL63/1018, 1199 and PLs** <u>Matsa Resources Limited</u> 80%; Cullen 20% free carried interest. Matsa has provided the following summary report:

"Field activities and results during the quarter comprised:

#### **Ground EM surveys**

MLEM and FLEM completed out at Gossan C, D, E & F, Anomaly 58, KC37, Beetroot E, KC50, Hanging Wall Gossan, Anomaly 64. Conductors were recommended for drilling at Hanging wall gossan, Anomaly 58 and Beetroot East.

#### Aircore Drilling

20 Aircore Drill Holes for 623m completed over Target KLGT01. Weakly elevated silver (to 4.1g/t Ag) and zinc (to 0.12% Zn) values in metasediments open to the north and east.

35 Aircore Drill Holes for 741m completed over Target KLGT02 using specialised Lake Rig. Results include anomalous gold values (to 0.63g/t Au), Nickel (0.4% Ni) and Zinc (to 0.11% Zn) values in ultramafics, subordinate black shales and greywackes. Gold values are located close to Sirius Polar Bear project, significance of gold in ultramafic host yet to be determined.

#### RC Drilling (Gold Target)

3 RC drill holes for 360m completed over Gossan E / Felsic Porphyry gold target. Each hole intersected anomalous gold with best composite (4m samples) intercept of 48m @ 0.28 g/t Au hosted in a fractured and weakly quartz veined porphyry sill. Split 1m sample results yet to be assessed.

Significant assays:

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- KLRC001, 48m of 0.28 g/t Au from 4m including 4m of 1.22 g/t Au from 48m
- KLRC004, 4m of 0.15 g/t Au from 0m and 4m of 0.51 g/t Au from 56m
- KLRC005, 20m of 0.16 g/t Au from 8m

#### RC Drilling (EM Conductors for Nickel Sulphides)

5 RC drillholes for 875m completed to test for Ni sulphides on Conductor Targets KC26, KC31, KC50, Anomaly 58 and Beetroot East. Possible magmatic sulphide related EM conductors in KC26 and KC31. EM conductor visually identified as graphitic shales in KC50, Anomaly 58 and Beetroot East. Downhole EM survey planned for KC31 and Beetroot East only because PVC insertion unsuccessful on other three holes. Significant assays:

- 13RCKC50, 18m of 1.05% Zn from 96m including 4m of 4.2% Zn, from 108m in graphitic and sulphidic black shales.
- 13KC026a 28m of 0.26% Ni, 0.027% Cu, 0.039% Co from 24m includes 8m of 0.42% Ni, 0.088 Cu, 0.106% Co from 24m mostly in weathered ultramafic rocks suggesting lateritic enrichment. "

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

**KUNDERONG/SALTWATER POOL JV:** ELs 52/1890, 1892, <u>Thundelarra and Avocet</u> – Avocet now merged with Lion One Metals Limited (ASX: LLO) - can earn 70%, Cullen 100%

Nineteen RC holes were drilled at the Monster Project in the Ashburton Basin between 4th July and 18th July 2013, to test a quartz vein (trending roughly E-W) that had previously returned anomalous Au, Ag, Sb, As, Cu, Pb, Zn and Mo in grab samples. Of these, 12 holes were drilled on the Saltwater Pool Joint Venture project area for an advance of 1110m, whilst the remainder was drilled on adjacent properties. There were no significant results from the Saltwater Pool Joint Venture.

The intersections of significant thicknesses of graphitic shale in several drill holes, especially MORC001 and MORC005, provide an explanation for the airborne EM anomaly.

## ASHBURTON, W.A. - Gold

**HARDEY JUNCTION JV** – ELs 08/1166, 1189, 1763, <u>Northern Star Resources Limited</u> 80%, Cullen 20% and Free Carried to DTM

On Cullen JV tenements, soil sampling has defined several geochemical anomalies over prospective geological targets. Compilation and interpretation of geochemical results is ongoing. Heritage surveys have been completed over several areas targeted for first pass drilling.

## 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 - 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, Aquila Steel Pty Ltd (a subsidiary of Aquila Resources Limited, ASX: AQA) 50%, and AMCI (IO) Pty Ltd 50%.

The Manager provided the following information in relation to activities for the September Quarter:

- "There were no significant safety incidents reported during the September quarter;
- Drill hole and winze rehabilitation was completed at Catho Well;
- Native Title negotiation meetings were held during September; community authorisation meetings are now being planned;
- Exploration work focused on the preparation, approvals and implementation of access for infill RC drilling programmes at Yanks Bore, Catho Well, Mt Stuart and Cardo Bore;
- The programme and budget for FY2013-14 was approved."

## WEST PILBARA, W.A. - Iron

**WYLOO JV** – Iron Ore Rights JV with <u>Fortescue Metals Group Ltd (Fortescue)</u> - 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.

The Wyloo Project lies within Fortescue's proposed "Western Hub" mining centre, and 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.

Six holes were drilled in E47/1650 in 2013 at the **Wyloo North** Prospect. Three holes were located in an area of mapped Brockman Iron Formation mineralisation with no previous drilling. The southernmost hole was collared in Dales Formation and returned 8m of mineralisation at an average of **57.2% Fe**, 5.19% Si and 2.89% Al. The two northern holes collared in Joffre Member returned: **37m** (from 0-41m) and 54m (from 0-73m) of mineralisation at 63.4% Fe, 3.19% Si, 2.19% Al and 61.9% Fe, 3.86% Si, 3% Al respectively, with some internal waste. The mineralisation is interpreted to be supergene mineralisation located in the northerly dipping Brockman Iron Formation and is open along strike and up dip.

The other three holes drilled for 2013 were located near a fault between Brockman Iron Formation and Marra Mamba Formation. Previous holes in this area had shown up to 35m of bedded iron mineralisation. Holes drilled in 2013 have helped to define the extent of the mineralisation, with a 12m intersect drilled. Two of these holes were into the Mt Newman Member and the other was into the Dales Gorge Member.

The holes drilled this year show that there is potential for further mineralisation and tonnage to be added on E47/1650.

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

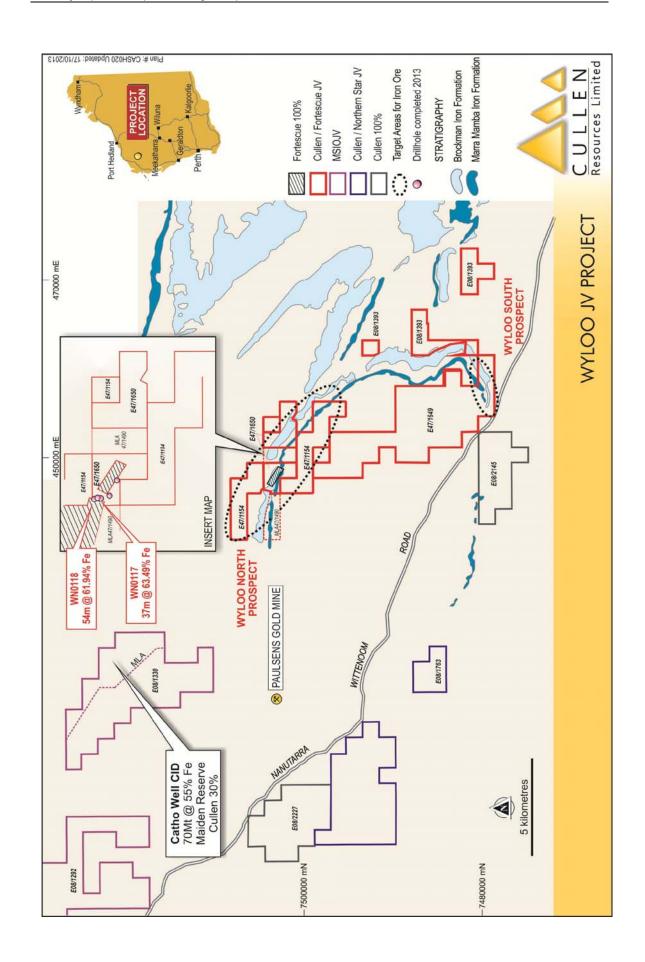
Fortescue can earn up to an 80% interest in the iron ore rights on Cullen's EL52/1667 (Snowy Mountain), located ~25km south east of Paraburdoo in the Pilbara Region of Western Australia. The tenement includes potential for bedded iron deposits within the Brockman Iron Formation, along strike from the Paraburdoo and Channar Groups of iron deposits. Further work is planned to follow up this drilling over the next 2 years.

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

**STORMBREAKER AND NORTH IRONCAP JV** – ELS 77/1327, 1354, 1406 and PLs <u>Hannans</u> Reward Limited 80%, Cullen 20%

No exploration completed.

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## **OVERSEAS PROJECTS**

As previously reported, Cullen has investigated opportunities for copper, base metals and graphite in Namibia, Canada and Scandinavia with programmes of early–stage exploration and some reconnaissance drilling. None of the results received to date are considered sufficiently encouraging to prioritize them ahead of Cullen's Australian prospects and projects at present. An important factor is that in Australia, drilling costs may be partially funded by certain Australian state government incentive programmes and that the Australian federal government's R&D Tax Incentive Scheme may also provide exploration expenditure support. In Cullen's case, exploration activities testing some of the innovative geochemical programmes it is trialing in areas of thick regolith where deeper bedrock mineralization is targeted, qualify for R&D rebate.

At present therefore, Cullen's activities overseas are restricted to data base reviews and monitoring of competitor exploration in the vicinity of its tenure, which is under constant review and prioritization.

## **CORPORATE**

The **issued capital** of the company is as follows:

818,389,431 fully paid shares

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16,000,000 unlisted options exercisable at 7.5 cents expiring on 30 November 2013 6,000,000 unlisted options exercisable at 6.0 cents expiring on 13 March 2014

The substantial shareholders of the Company are:

- Aguila Resources Limited 12.81%
- Wythenshawe Pty Ltd and associates 11.52%
- Brisbane Investments I and II, Mende and Kundrun 6.22%

Cash at the end of the quarter was: \$1.43M.

Dr Chris Ringrose, Managing Director

23 October 2013

**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: <a href="mailto:cullen@cullenresources.com.au">cullen@cullenresources.com.au</a>

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 (FMG, APIJV (Aquila-AMCI), Hannans Reward, Northern Star, Matsa and Thundelarra/Avocet), 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 Namibia, Canada and Scandinavia. A number of Cullen's projects are at the target drill-testing stage.

MSIOJV - Mineral Resource estimate for the Catho Well Channel Iron Deposit

JORC Classification	Mt	Fe %	P %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	S %	Mn %	MgO %	LOI %
Measured	2.00	55.1	0.041	6.61	3.64	0.020	0.058	0.208	9.99
Indicated	73.00	55.1	0.037	6.91	3.16	0.016	0.079	0.178	10.26
Inferred	23.00	54.6	0.037	7.53	3.10	0.015	0.102	0.209	10.40
TOTAL	98.00	55.0	0.037	7.05	3.15	0.016	0.084	0.186	10.29

The Mineral Resource estimate is reported at a 53% Fe cut-off. The resource estimate has been compiled in accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition).

In December 2010, Cullen reported the maiden JORC Ore Reserve Estimate for the Catho Well Channel Iron Deposit based on the Resource Estimate (see Table below).

#### Mt Stuart Iron Ore Joint Venture Ore Reserve Estimate

Category	Tonnes Mt	Fe %	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	P %	LOI %
Proved	1	55.28	3.33	6.57	0.043	10.03
Probable	69	54.80	3.23	7.23	0.037	10.31
Total	70	54.81	3.23	7.22	0.037	10.30

#### ATTRIBUTION: Competent Person Statements

-Of personal use only

The information in this report that relates to Exploration Results and Exploration Targets 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 2004 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.

The information in this announcement, insofar as it relates to iron ore exploration activities for the Mt Stuart JV, is based on information compiled by Mr Stuart H Tuckey who is a member of the Australasian Institute of Mining and Metallurgy, and who has more than five years experience in the field of activity being reported on. Mr Tuckey is a full-time employee of API Management Pty Ltd. Mr. Tuckey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Tuckey consents to the inclusion in the report of the above matters, based on their information in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources for the Mt Stuart JV has been supervised by Mr Stuart Tuckey and Mr Richard Gaze who are members of the Australasian Institute of Mining and Metallurgy. Mr Tuckey is full-time employee of API Management Pty Ltd. Mr Gaze is a full-time employee of Golder Associates Pty Ltd. Messrs Tuckey and Gaze have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Tuckey and Mr Gaze consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this release that relates to Ore Reserves for the Mt Stuart JV is based on information compiled by Mr Steve Craig, Managing Director of ORElogy (Mining Consultants). Mr Craig is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Craig consents to the inclusion of the matters based on his information in the form and context in which it appears in this release.