

25<sup>th</sup> July 2011

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#### **Company Information**

ASX Code	ERL
Share Price A\$	0.08
Ord Shares	127.3m
Options	10.9m
Market Cap A\$	10.8m
Cash A\$	1.6m
Total Debt	-

Source: Empire Resources

#### Directors

Chairman	Tom Revy
Managing Director	David Sargeant
Executive Director	Adrian Jessup

Source: Empire Resources

# **Substantial Share Holders**

Westoria Resource Inv	2.9%
RJB Nom PL S/F A/C	2.6%
Kirkdale Holdings	2.6%
Meekal Pty Ltd	2.4%
Blamno Trading	2.4%

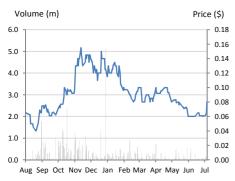
Source: Empire Resources

# **Company Details**

Address	53 Canning Highway Victoria Park WA 6100
Phone	+618 9361 3100
Web	www.resourcesempire.com.au

Source: Empire Resources

#### 1 Year Price Chart



Source: Bloomberg

# **Empire Resources (ERL)**

Advanced exploration for base and precious metals

Recommendation: Speculative **BUY** 

# **Key Points**

- Advanced copper, zinc, gold and PGM exploration projects
- Current resource of 1.07Mt @ 1.82% copper and 0.78g/t gold
- Resource expansion drilling underway at Yuinmery
- Strong potential for nearby PGM and nickel resource at Constantine
- Government co-funding grants received for Constantine and Wynne
- Well positioned to rapidly grow resource base

Empire Resources is a base and precious metals explorer with exposure to a number of projects within WA. The company currently has an active drilling campaign underway at the flagship Yuinmery project where an Indicated and Inferred copper-gold resource has already been identified at the Just Desserts prospect. Further potential exists at the nearby A Zone prospect where new zones of zinc and copper mineralisation have recently been discovered. The Constantine deposit also shows strong potential with the company identifying large widths of low grade PGM+Ni mineralisation

Further drilling success at Yuinmery could have a major impact on the overall economic viability of the project and as such, on the company's valuation.

# **Company Overview**

Empire Resources (ASX: ERL) is a base and precious metals exploration company with projects principally focused in Western Australia.

The flagship Yuinmery project is located 80km southwest of Sandstone and is prospective for volcanic massive sulphide mineralisation, as well as PGM and nickel mineralisation within ultramafic units. The company has delineated an Indicated and Inferred resource totalling 1.07Mt @ 1.82% Cu and 0.78g/t Au at the Just Desserts prospect and has also identified a number of other nearby copper-gold targets which have significant potential to add to the existing resource. Of particular interest is 'A Zone' where recent drilling intersected significant mineralisation including 5m @ 2.6%Cu, 0.4g/t Au and 4m @ 8.1% Zn

Empire also has an 80% (and appreciating) interest in a nearby prospect called Constantine. Recent drilling interested large widths of low grade PGM (Platinum Group Metal) mineralisation including 80m @ 0.49 g/t Pt + Pd and 0.22% Ni. The PGM's at Constantine are associated with disseminated sulphide mineralisation in at least two horizons. Metallurgical test work on drill samples indicates a relatively simple beneficiation process can upgrade the PGM's and as such, Constantine may evolve as a separate major prospect in its own right.

Drilling of the nearby high priority targets at Yuinmery provide the company with near term potential to significantly add to current resources. Success in delineating further resources in either PGM's, copper-gold or zinc could dramatically impact the overall economics of the project.

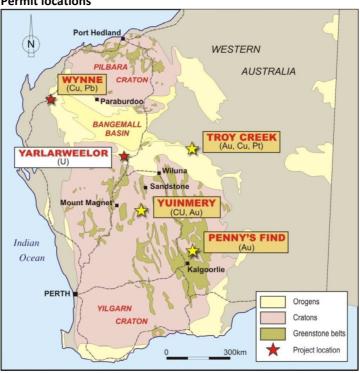


#### **Investment Review**

Drilling underway aimed at expanding current resource

Empire Resources is a well-positioned base and precious metals explorer with large tenure over highly prospective regions within WA. The company has already defined a **1.07Mt @ 1.82% Cu and 0.78g/t Au** Indicated and Inferred resource named 'Just Desserts' at the flagship Yuinmery Project. Further drilling currently underway within the Yuinmery project area is expected to increase the total resource as the company drill tests a number of high priority targets already identified.

#### **Permit locations**



Source: Empire Resources

The Yuinmery project is also highly prospective for PGM (Platinum Group Metals). Recent drilling intercepted large widths of low grade PGM mineralisation with intersections up to 80m @ 0.49g/t Pt + Pd and 0.22% Ni at the Constantine prospect. The mineralisation is associated with disseminated sulphides in at least two horizons of a major layered mafic-ultramafic intrusive complex. Further drilling will test the extent of this mineralisation whilst also attempting to better understand the geological structure, allowing the company to target higher grade sections.

Empire is also the recipient of two separate funding grants from the WA Government for a total of A\$125,000. The Government will match dollar-for-dollar on all direct drilling costs incurred at both Constantine (within Yuinmery) and at Wynne.

- Constantine: A\$50,000 used to drill 1 deep diamond hole (PGM+Ni)
- Wynne: A\$75,000 used to test widespread outcropping gossans (Cu+Pb)

Empire also recently entered into an agreement with Brimstone Resources Ltd whereby Brimstone have the right to purchase the 'Penny's Find' gold project for staged payments of A\$ 2 million plus a royalty.

Breakaway is encouraged with the level of activity within the Empire portfolio. Breakaway believe that if drilling of the high priority targets at Yuinmery is successful, it would significantly enhance the overall economic robustness of the project and would trigger a significant rerating in the company valuation.

PGM potential - Large low grade widths intersected

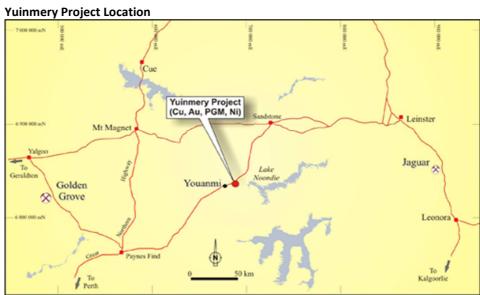
Government cofunding for Wynne and Constantine

Penny's find to be sold for \$2m + royalty

# **Yuinmery Project** Copper-Gold, Zinc, Platinum Group Metals, Nickel

Flagship Yuinmery project is prospective for VMS style mineralisation

The Yuinmery project is situated 475km north east of Perth, WA and lies within the Archaean Youanmi Greenstone Belt. The project area is prospective for both Volcanogenic Massive Sulphide (VMS) style mineralisation, as well as nickel and PGM mineralisation within mafic and ultramafic sequences.



Source: Empire Resources

#### Copper-Gold-Zinc

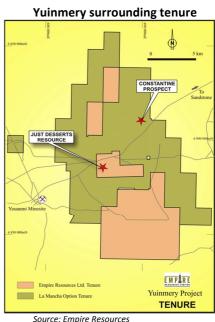
Empire Resources holds a 100% interest in a central group of tenements which contain several occurrences of VMS mineralisation including the already defined 'Just Desserts' deposit which hosts a 1.07Mt resource @ 1.82% Cu and 0.78g/t Au. In September 2010, Empire sought to increase its exposure to the surrounding tenure and entered into an option agreement to purchase an interest in the adjoining tenements held by La Mancha Resources.

Empire entered into option agreement to purchase La Mancha's 80% interest in surrounding tenure

The adjoining tenements are subject to a Joint Venture (JV) between La Mancha (80% interest) and Giralia Resources (20% interest). On exercising of the option agreement, Empire will take over La Mancha's full 80% interest.

Under terms of the agreement, Empire is required to spend a minimum of \$150k p.a. for three years followed by a \$750k exercise price.

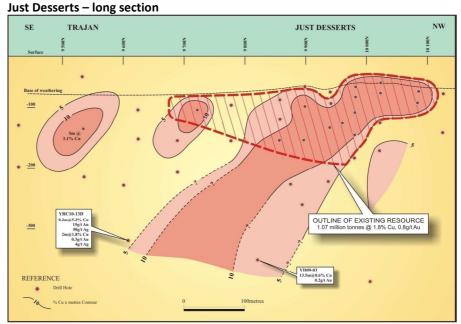
The inclusion of the surrounding tenure has increased the total project area to 227km<sup>2</sup> within the Greenstone Belt.



Source: Empire Resources



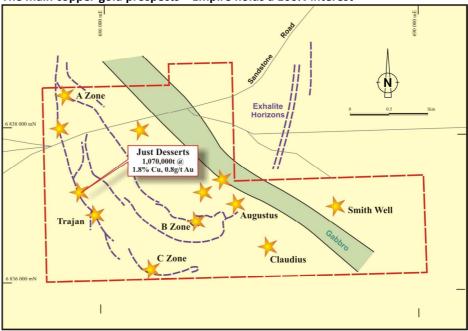
Mineralisation starts at ~50m below surface and appears open at depth



Source: Empire Resources

VMS deposits often occur in clusters and the company has a clear strategy to drill a number of the other nearby targets to test the potential for additional shallow, high grade deposits.

The main copper-gold prospects – Empire holds a 100% interest



Many nearby targets demonstrate similar characteristics to Just Desserts.

Source: Empire Resources

An initial 3,000m RC drilling program has recently commenced focusing on 'A-Zone', 'Lorne Gossan' (just north of A-Zone), 'Fourteen' (which lies just south of C-Zone) and a number of other identified gossans.

A Zone of particular interest

Of particular interest to Empire is 'A-Zone'. Previous drilling carried out by the company identified encouraging intercepts of mineralisation. Assays include:

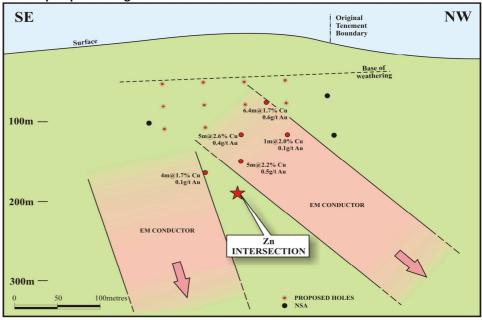
- 6.4m @ 1.7% Cu and 0.6g/t Au
- 4m @ 1.7% Cu and 0.1g/t Au
- 5m @ 2.2% Cu and 0.5g/t Au



Further A-Zone drilling intercepts high grade Cu

Empire recently completed further RC holes aimed at testing the continuity of the mineralisation. Results included a *high grade intercept of 5m @ 2.6% Cu and 0.4g/t Au and 4m @ 8.1% Zn.* 

A-Zone prospect - long section



Source: Empire Resources

The sulphide mineralisation remains open at depth with down hole geophysics suggesting the high grade Cu intercept (mentioned above) lies at the top of a large north westerly plunging sulphide conductor zone.

To date, Empire has been reluctant to carry out a full drill program over this target area as the mineralisation was interpreted to plunge into the neighbouring tenement owned by the La Mancha/Giralia JV. Empire has since secured an option agreement over the tenure for an ~80% interest and now intends to continue drill testing the target with the aim of outlining a second copper-gold resource, complementing the existing Just Desserts deposit. Initially drilling will test the shallower parts of the mineralisation to be followed by testing of the depth extent.

Mineralisation is interpreted to plunge NW into neighbouring, 80% owned tenure



# Constantine - 80% interest

#### Platinum, Palladium, Nickel

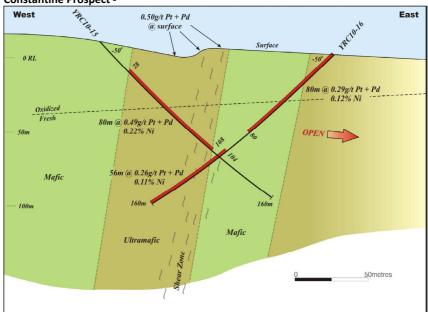
In December 2010, Empire announced the discovery of large widths of low grade PGM-nickel mineralisation at the Constantine prospect which lies ~7km north east of Just Desserts.

Large low grade widths of PGM mineralisation intercepted at Constantine

Highlights from just 3 RC holes drilled include:

- 80m @ 0.49g/t Pt + Pd and 0.22% Ni (Hole YRC10-15)
- 80m @ 0.29g/t Pt + Pd and 0.12%Ni (Hole YRC10-16)
- 48m @ 0.34g/t Pt + Pd and 0.13%Ni (Hole YRC10-17)

**Constantine Prospect -**



Source: Empire Resources

Magnetic horizon can be traced undercover for 13km along strike

Average grades can be upgraded to 6 times original values

Mineralisation can be beneficiated through simple flotation

process

The mineralisation is hosted in a mafic-ultramafic intrusive complex and is associated with a prominent magnetic horizon. This magnetic horizon can be traced under cover for at least 13km along strike and has had no previous drilling for PGM's.

Preliminary metallurgical studies have been undertaken by Perth based 'Independent Metallurgical Operations Limited' (IMO). Studies have shown the average Pt + Pd grades can be upgraded to 6 times the original value through a flotation process. Recovery rates on the samples indicate 65% for platinum and 52% for palladium.

Empire recently announced they had been successful in applying for a grant from the Western Australian Government's Exploration Incentive Scheme whereby the Government will match direct drill costs dollar-for-dollar, to a maximum of A\$50,000. Empire has allocated these funds to co-fund a single deep diamond hole at Constantine.

Breakaway has been encouraged by the preliminary metallurgical studies as it confirms that a high percentage of the mineralisation is hosted in sulphide minerals which are amenable to simple flotation separation. Nickel recoveries, on the other hand, were ~15% which indicates the mineralisation is not predominantly sulphide associated.

Metallurgical test work on the Constantine mineralisation is ongoing as the company seeks to further improve recoveries.



Additional PGM target 3.5km south along strike

# **Further potential around Constantine**

The exploration potential around the Constantine prospect should not be underestimated. 3.5km to the south of Constantine, on the same magnetic horizon, the company has identified further ironstones over a 500m strike, containing highly anomalous platinum, palladium, nickel and copper values.

Source: Empire Resources

Previous owners of the tenement, Western Mining, drilled a RC hole in the area and intersected 42m @ 0.16% Ni, however the drill samples were never assayed for PGM's.

Empire have undertaken a trial IP (Induced Polarisation) survey at the Constantine prospect to determine if the PGM mineralisation can be detected using this geophysical technique.

Encouragingly, the IP survey was successful in outlining the two known zones of mineralisation although it is thought this response is due to disseminated magnetite present in the host rocks.

Initial RAB drilling 160m north of RC holes YRC10-15 and 16 intersected the two zones of PGM mineralisation. Highlights include:

- 28m @ 0.43g/t Pt+Pd and
- 28m @ 0.42g/t Pt+Pd

Further RAB drilling along the PGM horizon has also been completed along a strike length of 4.5km with assays pending.

IP survey successful in identifying known mineralisation



# **Additional Projects**

#### Penny's Find - 60% interest (Gold)

Penny's Find sold to Brimstone for \$2m

Penny's Find is a small gold project situated 50km north-east of Kalgoorlie. Empire discovered a resource of 314,000t @ 5.2g/t Au for a total of 52,313 contained ounces.

In late 2010, Empire entered into an option agreement with Brimstone Resources Ltd for the sale of the project. At the election of Brimstone, the sale is for either:

- A 100% interest of the Penny's find project for a total of A\$2million plus a royalty on gold produced in excess of the current JORC resource, or
- An 80% interest of the Penny's find gold project for \$500,000 together with exploration and development expenditure of up to \$3 and a loan for any additional development costs associated with ERL's remaining 20% interest.

Widespread outcropping target horizons

Brimstone has made an initial payment of \$500,000 cash which has earned a 40% interest and is proceeding to sole fund the project.

# Wynne - 100% interest (Copper Lead)

Government cofunding exploration The Wynne prospect consists of an exploration licence covering an area of 90km<sup>2</sup> in the northern Gascoyne region of WA. The licence is prospective for copper and lead with three anomalous gossan horizons identified.

Through the 'Western Australian Government's Exploration Incentive Scheme' Empire was successful in applying for a funding grant. Through this scheme, the Government will match dollar-for-dollar on all direct drill spending to a maximum of A\$75,000. The contribution will be used to evaluate the outcropping gossan horizons, which occur over a strike length of 5km.

# Troy Creek - 45% interest (Copper Gold PGM)

Troy Creek is situated 900km northeast of Perth where the Company holds tenements covering an area of 270km<sup>2</sup>.

Empire free carried through exploration

Exploration in 2008/9 identified high grade copper sulphide intersections from 2 holes 50m apart along strike. Results included:

- 2m @ 4.65% Cu from 91m
- 8m @ 1.47% Cu from 76m
- 4m @ 3.04% Cu from 104m

Recently Empire finalised an agreement with unlisted Sydney based company, Zodiac Resources Ltd, whereby Zodiac may earn a 55% interest by spending \$3 million on exploration within three years and a 75% interest by spending an additional \$4 million on exploration and development within 5 years. Zodiac will have the option to acquire a 100% interest in the Troy Creek project within five years of commencement of the joint venture for a purchase price of \$5 million – this amount being separate to the joint venture commitments.

# Yalarweelor - 28% indirect investment (Uranium)

The Yarlarweelor uranium project is located 125km north of Meekatharra in Western Australia. Empire holds an indirect 28% interest in the project through its shareholding in FYI Resources Ltd.

# Directors

Chairman

**Tom Revy** is a mining professional with in excess of 25 years' experience in the industry to date including operations, process design and commissioning, technical and general management, business development, project and company evaluation and corporate management. Countries where extensive work has been undertaken include Australia, PNG, Southern and Central Africa, Central and South America and China.

**Managing Director** 

**David Sargeant** is a member of the AusIMM and holds a Bachelor of Science degree in economic geology from the University of Sydney and has more than 40 years' experience as a geologist, consultant and company director.

Mr Sargeants' experience encompasses a range of senior positions, including that of senior geologist with Newmont Pty Ltd and senior supervisory geologist with Esso Australia Ltd at the time of the Harbour Lights Gold Mine discovery and development. Mr Sargeant was also the first chief geologist at Telfer Gold Mine during exploration, development and production. In addition, Mr Sargent was exploration manager for the Adelaide Petroleum NL group of companies, manager of resources development for Sabminco NL and a technical director of Western Reefs Limited during the period in which the company became a successful producer at the Dalgaranga Gold Project.

**Executive Director** 

**Adrian Jessup** is a member of the AusIMM and holds a Bachelor of Science degree (with honours) in economic geology from the University of Sydney. Mr Jessup has more than 40 years' continuous experience as a geologist, company director and consultant involved in mineral exploration, ore deposit evaluation and mining.

For the past 11 years, Mr Jessup has operated a geological consulting company. During that time, he was a founding director of Sylvania Resources Limited and remained on the board of that company for two years. Prior to that, Mr Jessup was managing director of Giralia Resources NL for eight years, from the company's inception in 1987. Previously, he worked for AMAX Exploration Inc. as a senior geologist and as regional manager in charge of the company's mineral exploration in Western Australia



#### **Analyst Verification**

We, Gavin Wendt and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

#### Disclosure

Breakaway Investment Group (AFSL 290093) may receive consultancy fees and commissions on sale and purchase of the shares of Empire Resources and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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