

# **ASX** Release

30 September 2015

Great Western Exploration Limited ABN 53 123 631 470

ASX Code: GTE

Success starts with Opportunity

GTE is an experienced exploration company focussed on the discovery of high value base metal, nickel and gold deposits.

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#### **Board of Directors**

Kevin Somes – Chairman

Jordan Luckett – Managing Director

Craig Mathieson – Non-Executive

Terry Grammer – Non-Executive

Justin Barton – Company Secretary

# **Quarterly Report**

## September 2015

- The company continued to focus on identifying drill targets along the "Monty" trend at Doolgunna.
- The Company completed field checks of some areas of interest that the Company has interpreted to be prospective for massive copper sulphide similar to Monty
- The General Meeting held during the quarter approved the issue of 70 million shares at 1 cent to raise \$700,000.
- The funds will be used to continue exploration at Doolgunna which includes drilling during the next quarter.

#### Introduction

During the quarter Great Western Exploration Limited ("The Company"; "GTE") continued to focus on its Yerrida projects (fig 1) in the Doolgunna region predominantly targeting the "Monty" trend for massive copper sulphide mineralisation.

The company has identified several areas of interest along this trend and is planning to drill test some of these areas in the December quarter.

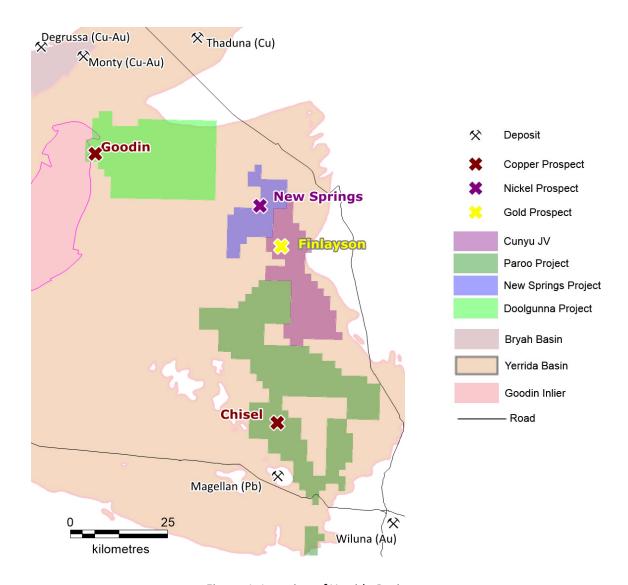


Figure 1. Location of Yerrida Projects

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### Doolgunna Project (100% GTE)

The Doolgunna project is located just 25km and 17km south east of Degrussa and Monty respectively. The company has 8 remaining untested EM anomalies at the Goodin prospect along the "Degrussa" trend which occur at or near the Johnson Cairn – mafic volcanic contact.

The company also recently recognized a second Monty trend in both the aeromagnetic and regional soils dataset and has so far identified two high priority structural targets with copper & gold enrichment in soils co-incident with gravity anomalies along this trend (fig 2).

The next phase of exploration will be to carry out EM surveys to cover the Monty trend and then drilling to test the remaining targets at the Goodin prospect and any new targets identified along the Monty trend following the EM survey.

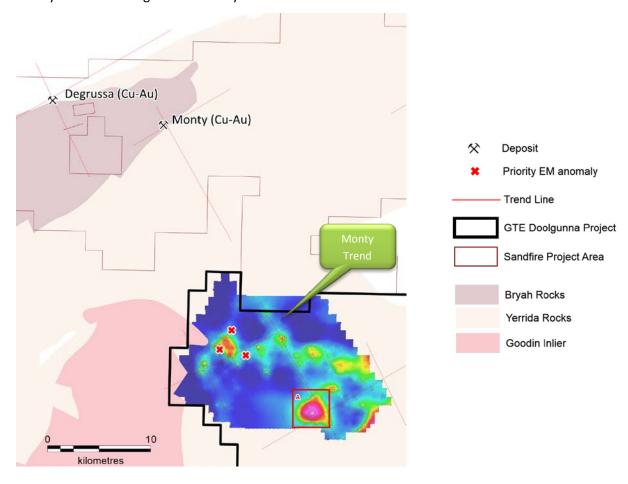


Figure 2. Map showing copper enrichment mapping a fault that is trending towards Monty located 16km along strike to the northwest. Area A is high priority target structural target coincident with copper in soil enrichment located 30km along strike from Monty.

#### **New Springs Project (100% GTE)**

During the quarter the Company split the New Springs project from the Doolgunna project to better reflect the local geological setting and the target mineralisation. The Doolgunna project covers predominantly Yerrida basin stratigraphy the Company's believes is prospective for stratabound massive copper sulphide mineralisation whereas at the New Springs project the company is targeting magmatic nickel sulphide mineralisation within the "Cunyu" sill which is a layered mafic intrusion located along the major Perseverance/Bardoc fault zone.

The Company initially acquired the area as part of its Doolgunna project targeting massive copper sulphide similar to Degrussa. However it soon became apparent that the New Springs project was also prospective for magmatic nickel sulphides after GSWA and Rio Tinto reports completed in the late 1990s and 2000s identified the Cunyu sill as a prospective for Norilsk style massive nickel sulphide mineralisation based on whole rock geochemistry. This was before discovery of either Nova or Nebo nickel deposits in WA.

There was further encouragement about the projects nickel prospectivity after the release of the United States Geological Survey ("USGS") report on this style of mineralisation to determine a deposit model to facilitate the assessment for undiscovered, potentially economic magmatic Ni-Cu±PGE sulfide deposits following a worldwide review in large volume of mafic volcanic sequences (layered intrusions) with evidence of primitive Mg-rich melts and large volumes of tholeiltic magmatic rocks occurring on or near the edges of ancient cratons. It was serendipitous that not long after the report was released that the Nova nickel mine was discovered which adhered closely to the USGS model.

The USGS concluded the regional geological guide for magmatic nickel mineralisation are as follows:

- Province boundaries, rifts, and deeply penetrating faults that can allow for efficient transport of magma through the crust.
- Small- to medium-sized differentiated mafic and (or) ultramafic dykes and sills,
- Deposits are generally not hosted in thick, large-layered intrusions.
- Sulfur-bearing crustal rocks into which the layered mafic rocks are intruded.

All of these criteria are either directly observed or can be reasonably interpreted to occur at New Springs where the GSWA has interpreted sulphur bearing crustal rocks, province boundaries, rifts within the Yerrida basin

The project is also strongly anomalous (> 20 times background) in nickel, copper, cobalt, gold and PGEs with the peak nickel values of 574 ppm and 221 ppm and maps out a broad area that is enriched in nickel, copper, cobalt, Gold and PGEs co-incident with the layered mafic – ultramafic sequence (Fig 3).

This compares well with the Nova nickel deposit which is also hosted in gabbro-pyroxenite sequence where a similar regional geochemical survey was completed over the Fraser Range that identified a nickel anomaly with a peak value of 271ppm that ultimately led to the discovery of Nova.

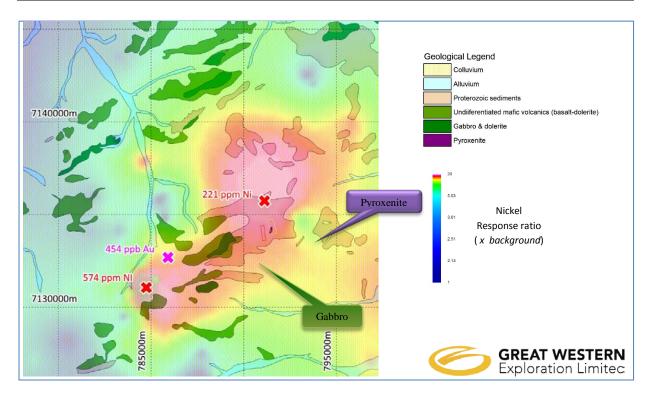


Figure 3. GSWA regional geology overlain by the regional gridded nickel response ratios. Also shown is the location of the two maximum nickel and the maximum gold assay at the New Springs prospect from the regional geochemistry database in relation to the gabbro and pyroxenite outcrops

There are number of EM anomalies where the airborne surveys have covered areas within the dolerite-gabbro-pyroxenite sequences that are of interest to the Company. Three of these anomalies were selected for detailed plate modelling on the basis of the proximity to the pyroxenite outcrop and elevated nickel, copper and gold in the regional soil sampling along strike of these anomalies (fig 4 & Fig 5).

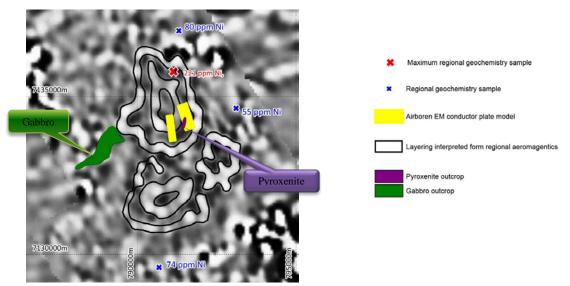
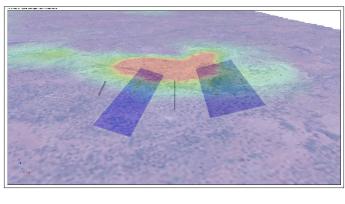


Figure 4. Some features of interest in the regional aeromagnetic data may represent smaller distinct layers or intrusions within a larger intrusive body



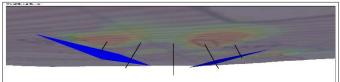


Figure 5. Two of the airborne EM Plate models in 3d (yellow plates in figure 4) with proposed drilling overlain by gold in regional soil sampling (800m line spacing). The plate models are also coincident with elevated nickel and copper in regional soils.

## Cunyu JV (GTE earning 70%)

The Cunyu JV is JV between the Company and Glencore whereby the Company is earning 70%. The project was initially acquired by Jubilee Resources Limited for potential Norilsk style magmatic nickel sulphide mineralisation.

Drilling has confirmed the presence mafic –ultramafic sequences with traces of nickel sulphides along strike to the north west of some WA's largest nickel deposits near Wiluna. Furthermore a number of regional interpretations show the extension of the Bardoc and/or Perseverance faults through the project area.

Work completed by the company by the company identified the exciting Finlayson gold prospect where drilling intersected a large mineralised shear that is likely forms part of the Bardoc/Perserverance shear zone which hosts many major gold mines along strike including the Plutonic gold mine (~5 million ounces) to the 70km to north west and the Wiluna gold mine (~5 million ounces) approximately 70km to the south east.

The drilling was successful in demonstrating that the critical elements required for gold mineralisation and furthermore the Company's structural interpretation based on the drilling and regional aeromagnetic data indicates that the gold is occurring within what could be an extensive hydrothermal system.

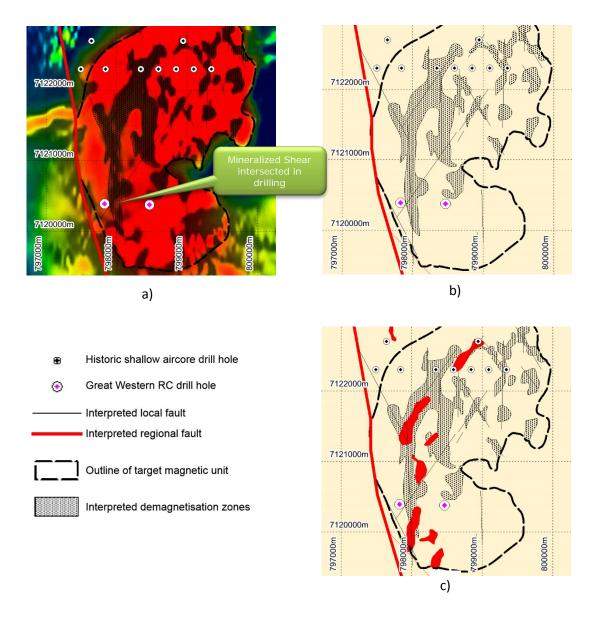


Figure 6. Finlayson gold prospect a) airborne magnetics image b) areas of demagnetisation c) the Wiluna gold pits (red) superimposed for size and geometry comparison

A simplified illustration of the structural interpretation at the Finlayson prospect is shown in figure 6 where there is demagnetisation within a 2 kilometres wide structural corridor comprising of primary north trending structures and secondary northwest and northeast trending structures.. This geological setting and dimensions compares well to the Wiluna gold miine.

The Finlayson prospect is a high priority with the potential for a major gold discovery. The Company is planning further work including geochemical & geophysical surveys and further drilling to be completed as soon as possible.

#### Paroo Project (GTE 100%)

The Paroo project is located 20km form Wiluna and adjacent to the Magellan lead mine. The company believes the project is prospective for massive copper sulphide and silver - lead -zinc style mineralisation and has historical base metal anomalies in historic drilling that have not been followed up

Most of the exploration in the region was completed by RSG in the early to mid-1990s that resulted in the discovery of the Magellan lead mine. In the mid-1990s RSG went through a period of corporate restructuring that resulted in the sale of the Magellan lead deposit and the surrounding area and little regional exploration has been carried out since. Furthermore the original exploration reports were kept on closed file and were only released to the public recently and therefore Great Western is the first company to have known about these regional base metal anomalies that were delineated by RSG at the time. The high level of base metal anomalism led RSG to refer to the region as base metal corner in their reports.

During the quarter the company commenced field checking some of the areas highlighted in these reports. The company has identified a high priority target at the Chisel prospect that it is planning to drill test during the next quarter and will release details of the drill target shortly.

#### Yerrida Nickel-Copper-Gold Exploration Strategy

The company is focused on the development of three highly prospective areas; the Finlayson (gold) Prospect, the New Springs (nickel-copper) Prospect, and the Goodin (copper-gold) Prospect.

The applied exploration strategy aims to develop multi commodity (copper, nickel, gold) drill ready targets to enable the Company flexibility in response to global market volatility.

The immediate priorities are:

- 1. Further work targeting the Monty and Degrussa trends (Goodin prospect) that includes EM surveys and further drilling.
- 2. Target generation in preparation for maiden drilling at the New Springs Nickel Prospect that includes the follow-up of the three EM plate models
- **3.** A follow-up detailed geochemical survey over the immediate area of interest defined by recent drilling at the Finlayson Gold Prospect and the drilling of defined structural targets.

The company believes that the first order control of the mineralisation seen on the eastern side of the Capricorn Orogeny where the majority of the copper and gold deposits occur that includes Degrussa, Monty, Thaduna, Plutonic, Magellan and Wiluna deposits occur are north west trending major Archaean fault zones that were reactivated during the formation of the Yerrida and Bryah basins.

The company also believes that the main fault zones are the Waroonga-Ida, Bardoc and Perseverance fault zones (fig 7). These are major terrain boundaries that penetrate deep into the Earth crust and tap

the mantle and are known to host many major gold, nickel and copper mines within the Yilgarn Craton.

These faults facilitate the rifting of the northern Yilgarn block and allow the emplacement of mafic volcanics, layered intrusions, granite intrusions and areas of high heat and fluid flow, all which are necessary to form the various type of deposits seen in the district.

The second order controls are north east trending faults that localise the mineralisation at or near the intersection of first order fault zones.

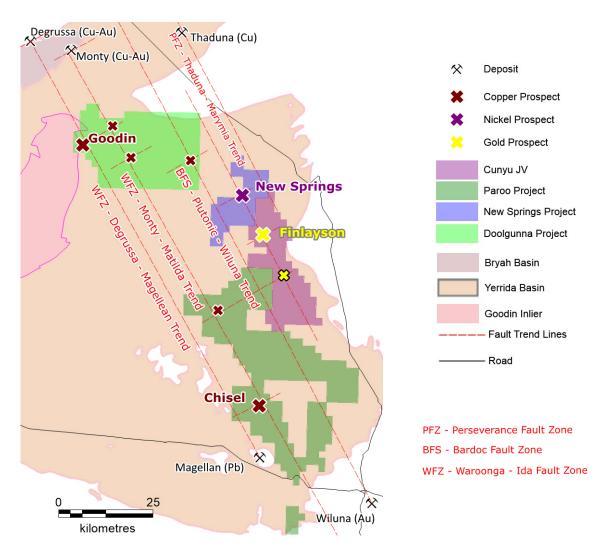


Figure 7. Regional Map showing the major faults zones that are interpreted to be the first order controls of mineralisation in the eastern area of the Capricorn Orogeny.

### Forrestania JV (10% free carried interest)

The company retains a 10% free carried interest in the Forrestania JV with Western Area NL ("Western Areas").

Western Areas reported no work was carried out during the quarter

As a consequence the company will have no further financial obligations until a BFS is completed at which point the company can either contribute 10% of the capital costs to retain its interest or elect to covert its interest to a net smelter royalty.

#### Millrose Project

During the quarter the company relinquished the Millrose tenements.

#### **ACQUISITION OPPORTUNITIES**

In view of the present challenging market conditions, particularly for mineral exploration companies with greenfield projects, GTE is also actively seeking 'advanced project' acquisition opportunities, predominantly focusing on copper, nickel, gold or zinc.

It was reported last quarter that the company entered into negotiations to acquire an advanced project with known resources and existing infrastructure but no agreement had been reached at that time.

An agreement has not been reached however both parties remain in contact and remain open for further negotiations if either party wishes to do so.

## J A Luckett Managing Director

#### **Competent Person Statement**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Jordan Luckett who is a member of the Australian Institute of Mining and Metallurgy. Mr Luckett is an employee of Great Western Exploration Limited and 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Luckett consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# **Tenement Schedule**

District	Project Name	Tenement No.	Status	Ownership
Forrestania JV Project	Mt Gibb South	E74/305	Live	10% free carried
	Hatters Hill	E74/368	Live	10% free carried
	Hatters Hill	E74/428	Live	10% free carried
	North Iron Cap	E74/446	Live	10% free carried
	North Iron Cap	E77/1545	Live	10% free carried
	North Iron Cap	E77/1546	Live	10% free carried
<u>Doolgunna Project</u>	Neds Creek	E51/1320	Expired	100%
	Neds Creek	E51/1321	Expired	100%
	Neds Creek	E51/1330	Live	100%
	Neds Creek	E51/1355	Expired	90%
	Doolgunna	E51/1322	Live	100%
	Doolgunna	E51/1323	Live	100%
	Doolgunna	E51/1324	Live	100%
	Paroo	E53/1712	Live	100%
	Paroo	E53/1713	Granted	100%
	Paroo	E51/1540	Live	100%
	Paroo	E51/1560	Live	100%
	Paroo	E53/1730	Live	100%
	Paroo	E53/1740	Live	100%
	Paroo	E53/1774	Live	100%
	Paroo	E53/1775	Live	100%
	Paroo	E53/1776	Live	100%
	Cunyu JV	E51/1234	Live	GTE earning 70%
	Cunyu JV	E51/1238	Live	GTE earning 70%
	Cunyu JV	E53/1341	Live	GTE earning 70%
Millrose Project	Millrose	E53/1666	Surrendered	100%