

## Rockford Project Exploration Update, Fraser Range

- Two new conductors identified at Areas E and F
- EM field crew demobilised for Christmas break

Legend Mining Limited ("Legend") is pleased to provide an update on exploration activities at its Rockford Project in the Fraser Range district of Western Australia, see Figure 1. Recently completed moving loop electromagnetic ("MLEM") surveying at Areas E and F in the far northwestern portion of the Project has identified a further two conductors. The feature at Area F is a moderate conductor at shallow depth (<125m), while the feature at Area E is a larger weaker conductor at a depth of >600m. EM surveying has now been completed for the 2015 season and the geophysical field crews demobilised back to Perth.

Legend Managing Director Mark Wilson said, "It is very pleasing to go to the Christmas break having achieved the key objective of the 2015 exploration activities, i.e. identifying conductors for RC drill testing. It is an added bonus that most of the conductors are relatively shallow meaning the drill cost to test is low and the very high conductance readings at several of the conductors is promising."

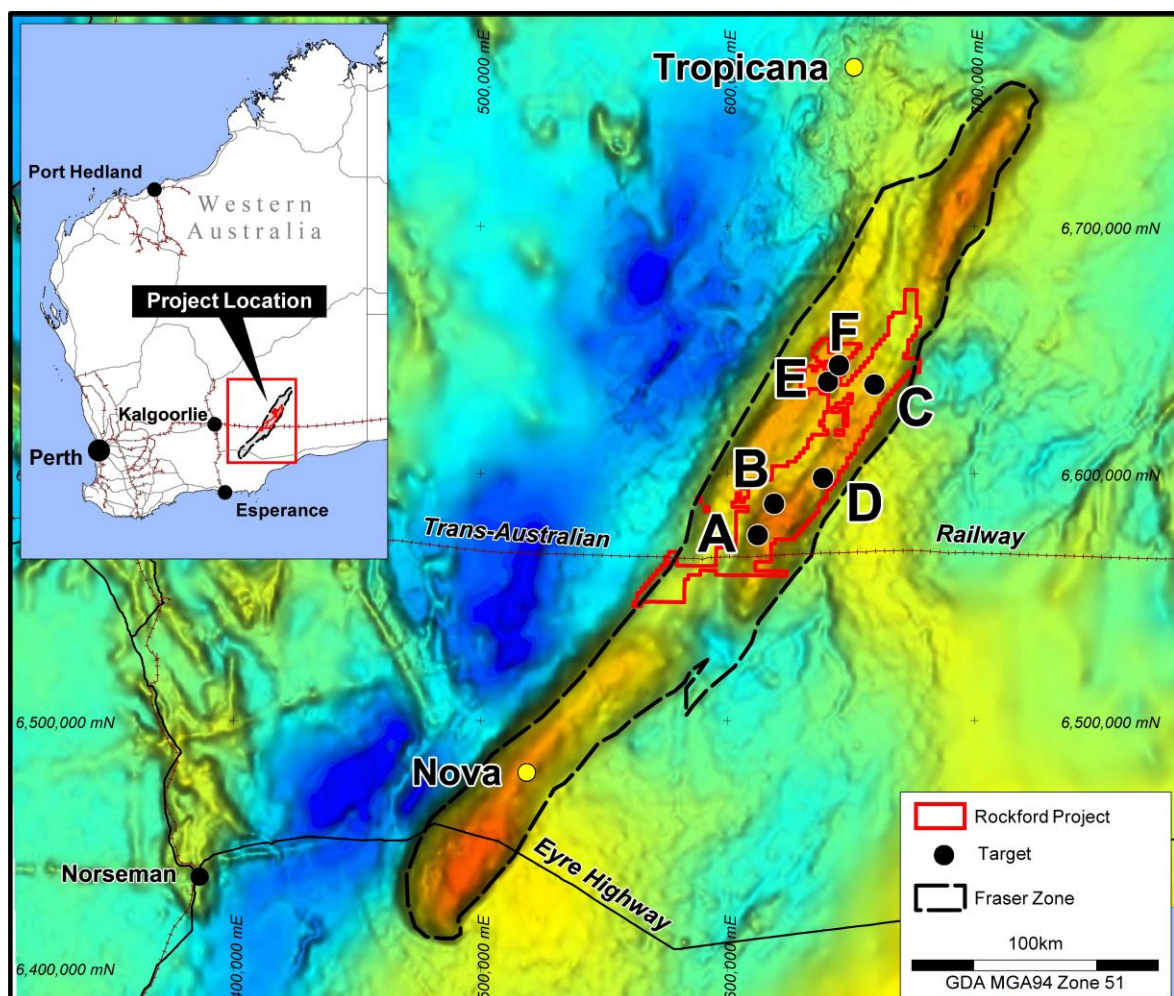
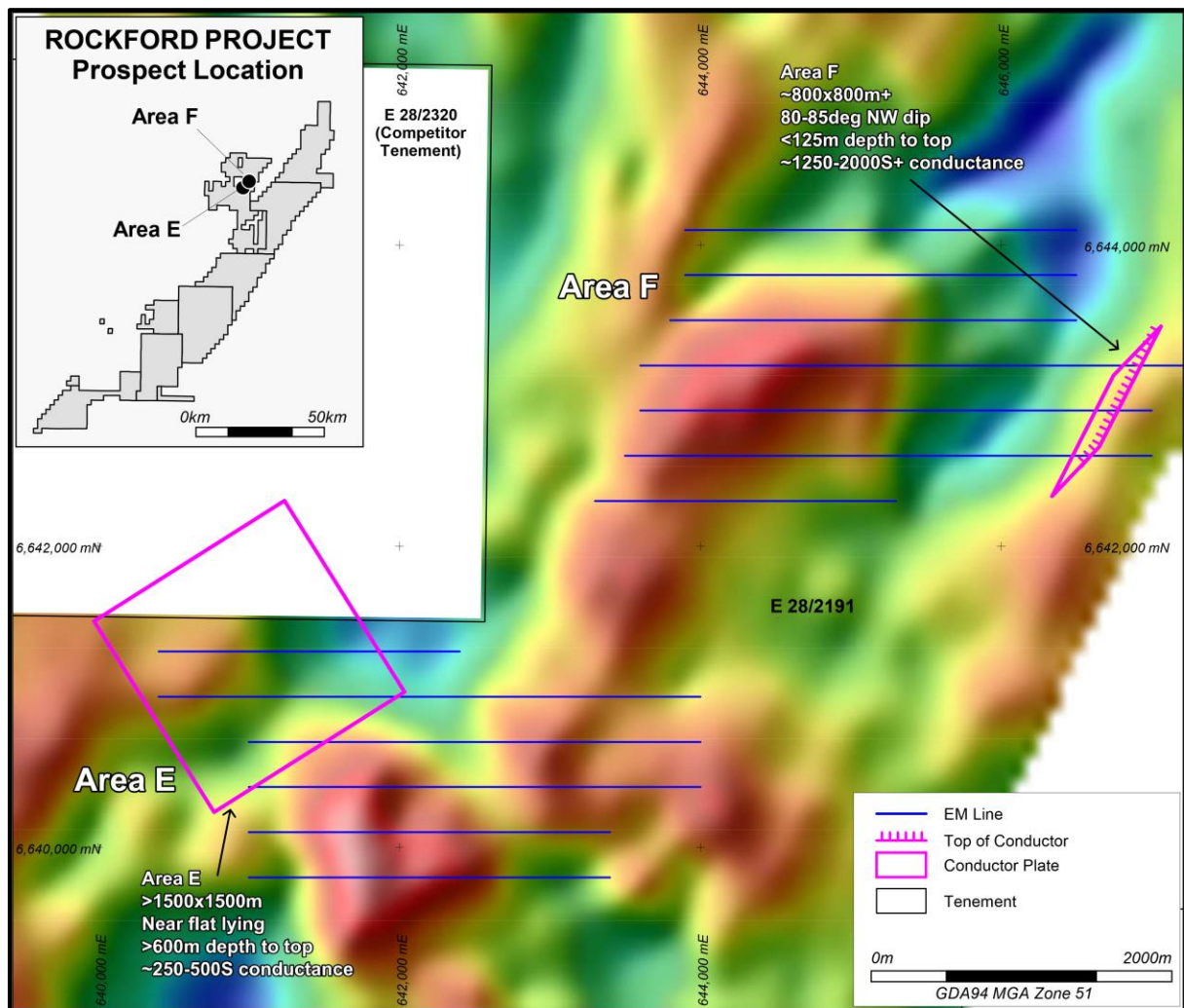


Figure 1: Rockford Project Target Areas on Regional Gravity

## Technical Discussion

Legend's 2015 field season concluded on 20 December with the demobilisation of the MLEM crew for the Christmas break. Surveying will recommence early in 2016 and complete all unfinished work from the 2015 programme, namely Areas A North and A South.

Recent MLEM surveying at Areas E and F has identified two new conductors, which are shown below on Figure 2 and summarised in Table 1. This brings the total number of conductors defined to date at the Rockford Project to seven, with five conductors reported previously at Area D (LEG:ASX 11 December 2015).



**Figure 2: Areas E & F Conductor Plates on Residual Gravity Image**

**Table 1: Areas E & F Conductor Description**

Conductor	Conductance	Dimensions	Depth to Top	Plate Orientation
Area E	~250-500S	>1,500m x 1,500m	>600m	Near flat lying
Area F	~1,250-2,000S+	~800m x 800m+	<125m	80-85° N dip

### Area E

Area E has a discrete 1.5km x 1.3km residual gravity high with associated strong magnetic response representing a complex fold closure. A major NW trending cross structure is also interpreted to bound the gravity feature to the northeast and north.



Modelling of the MLEM data identified a large >1,500m x 1,500m late channel bedrock conductor with low conductance (~250-500S), an estimated depth to top of source of >600m and is near flat lying. This is a low priority feature, however further modelling is required to better define its parameters and determine whether it warrants drill testing.

### **Area F**

Area F has an elongate ENE trending residual gravity high in the west and a more subtle gravity trend in the east, see Figure 2. The aeromagnetics indicates a large open Z-parasitic fold and a regional scale NW trending cross structure.

The MLEM survey identified a NE trending moderate bedrock conductor situated on the flank of the subtle eastern gravity trend. Modelling of the conductor indicates a depth to top of source of <125m, a steep NW dip of 80-85°, a moderate conductance of ~1,250-2,000S+) and a plate with dimensions of ~800m x 800m+. RC drill testing of this feature is required to determine the source of the conductor.

Since commencing exploration over the Rockford Project in late September, six target areas have been fully evaluated with MLEM (Areas A Central, B, C, D, E & F), comprising 82 traverses, 1,978 stations and covering 189.9 line km. The results from this surveying are considered highly encouraging with the identification of seven conductors across the Project. Planning for the 2016 field season has already begun and will involve a multi-discipline exploration approach including, RC drill testing of conductors, aircore drilling to assist target prioritisation and further MLEM evaluation of selected target areas.

### **Future Programmes**

- MLEM surveying will recommence early in 2016 to complete untested targets from the 2015 programme, i.e. Areas A North and South.
- Planning of RC/diamond drilling programmes to test the seven conductors at Areas D, E and F has commenced. Pending all required statutory approvals and favourable weather conditions, a start date in February/March is envisaged.
- A +10,000m aircore programme is planned to commence in early March, aimed at providing valuable geological and geochemical information and assisting with the prioritisation of areas for further work.



### **MLEM Survey Details**

Outer-Rim Exploration Services Pty Ltd were commissioned by Legend in late September to undertake high powered (~200amp) moving loop electromagnetic surveying over the Rockford Project. This surveying is part of a research and development programme designed to develop and advance current EM methods, aimed at identifying conductors associated with massive sulphide (i.e. Nova-Bollinger type) beneath extensive transported/conductive cover.

### **Survey Specifications:**

- Loop Size: 200m x 200m, single turn
- Line/Station Spacing: 300m spaced lines with 100m stations
- Transmitter: ORE HPTX (190-200 amps)
- Receiver: EMIT SMARTem24
- Sensor: EMIT Fluxgate 3 component B field sensor
- Time base/frequency: 0.125 - 1 Hz (250-2,000msec time base), ~0.475msec ramp

### **Competent Person Statement**

*The information in this report that relates to Exploration Results is based on information compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a full time employee of Legend Mining Limited. Mr Waterfield has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity being undertaken, 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" (JORC Code). Mr Waterfield consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

Visit [www.legendmining.com.au](http://www.legendmining.com.au) for further information and announcements.

### **For more information:**

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## Appendix 1: Legend Mining Limited - Fraser Range Project JORC Code Edition 2012: Table 1

### Section 1: Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Not applicable, as no geochemical sampling or drilling was undertaken or referred to in the report.</li> </ul>
<b>Drilling techniques</b>	
<b>Drill sample recovery</b>	
<b>Logging</b>	
<b>Sub-sampling techniques and sample preparation</b>	
<b>Quality of assay data and laboratory tests</b>	
<b>Verification of sampling and assaying</b>	
<b>Location of data points</b>	
<b>Data spacing and distribution</b>	
<b>Orientation of data in relation to geological structure</b>	
<b>Sample security</b>	
<b>Audits or reviews</b>	

### Section 2: Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>The Rockford Project comprises eight granted tenements; E28/2342 (100% Legend), E28/2188-2192 (70% Legend, 30% Rockford Minerals Pty Ltd JV), E28/1718 &amp; E28/1727 (70% Legend, 30% Ponton Minerals Pty Ltd JV).</li> <li>The Project is located 280km east of Kalgoorlie on vacant crown land.</li> <li>There are no Native Title Claims over tenements E28/2342, E28/2188-2192. Tenements E28/1718 &amp; E28/1727 are covered 90% and 20% respectively by the Ngadju Native Title Claim.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Not applicable, not referred to.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The primary target is Nova style nickel-copper mineralisation hosted in high grade mafic granulites within the Fraser Complex.</li> <li>A secondary target is Tropicana style structurally controlled gold mineralisation.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>Not applicable, not referred to.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>Not applicable, not referred to.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Not applicable, not referred to.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Project location and ground EM anomaly maps have been included in the body of the report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Not applicable, not referred to.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Outer-Rim Exploration Services Pty Ltd have undertaken high powered moving loop electromagnetic surveying over the Rockford Project.</li> <li>Loop Size: 200m x 200m, single turn</li> <li>Line/Station Spacing: 300m spaced lines with 100m stations</li> <li>Transmitter: ORE HPTX (190-200 amps)</li> <li>Receiver: EMIT SMARTem24</li> <li>Sensor: EMIT Fluxgate 3 component B field sensor</li> <li>Time base/frequency: 0.125 – 1 Hz (250-2,000msec time base), ~0.475msec ramp</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>RC/diamond drilling testing of conductors at Areas D, E &amp; F is planned.</li> </ul>