



## Far West Development Commences

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### Highlights:

- Red River has commenced development of the Thalanga Far West underground mine – portal site has been cleared and box cut drilling has commenced
  - Underground development expected to commence shortly after the completion of the box cut
  - Far West has a current JORC Reserve of 1.5Mt @ 12.0% Zinc Equivalent and a minimum mine life of five years
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Zinc producer Red River Resources Limited (ASX: RVR) (“Red River” or the “Company”) is pleased to announce that development activities have commenced at Far West - Red River’s second underground mine.

The Far West surface development contract has been awarded to PYBAR Mining Services (PYBAR) who are currently undertaking underground mining operations at Red River’s West 45 underground mine.

The Far West portal site has been cleared, and drilling has commenced with the main blast expected this week. Underground development is expected to commence shortly after the completion of the box cut. The Company is going through the contractor selection process for the UG development.

Figure 1 Far West Portal Development Site



Figure 2 Blast hole pattern being drilled at Far West Portal



Table 1 Far West Ore Reserve (>6 % Zn Eq.)

Reserve Class	Tonnage (kt)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq. (%)
Proved	48	1.3	1.0	4.4	0.0	27	10.1
Probable	1,486	1.3	1.6	5.0	0.2	46	12.1
<b>Total</b>	<b>1,534</b>	<b>1.3</b>	<b>1.6</b>	<b>5.0</b>	<b>0.2</b>	<b>45</b>	<b>12.0</b>

Source: Far West Ore Reserve and Mineral Resource Update Extends Thalanga Mine Life (RVR ASX Release, 21 November 2017)

Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

Zinc equivalent (Zn Eq.) has been calculated using the metal selling prices, recoveries and other assumptions contained in Appendices of this announcement. It is Red River's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold. Proved and Probable Reserves are included within (and not in addition to) the Thalanga Far West Mineral Resource estimate

Table 2 Far West Mineral Resource (>5% Zn Eq.)

Resource Class	Tonnage (kt)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq. (%)
Measured	52	1.4	1.3	5.3	0.0	32	12.0
Indicated	1,491	1.7	2.2	6.6	0.2	61	15.7
<i>Measured + Indicated</i>	<i>1,543</i>	<i>1.7</i>	<i>2.1</i>	<i>6.6</i>	<i>0.2</i>	<i>60</i>	<i>15.6</i>
Inferred	150	1.4	2.3	6.5	0.1	53	14.6
<b>Total</b>	<b>1,693</b>	<b>1.6</b>	<b>2.1</b>	<b>6.5</b>	<b>0.2</b>	<b>59</b>	<b>15.5</b>

Source: Updated Resource Estimation of the Thalanga Far West Deposit (Mining One Consultants, 9 November 2017).

Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

Zinc equivalent (Zn Eq.) has been calculated using the metal selling prices, recoveries and other assumptions contained in Appendices of this announcement. It is Red River's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.

## **About Red River Resources (ASX: RVR)**

RVR is the leading ASX pure play zinc producer, with its key asset being the high quality Thalanga Zinc Project in Central Queensland. RVR commenced concentrate production at the Thalanga Zinc Project in September 2017 and RVR is focused on maximising returns from the Project by increasing plant throughput and extending mine life through increasing Mineral Resources and Ore Reserves at deposits currently in the mine plan (West 45, Thalanga Far West and Waterloo), by converting Mineral Resources into Ore Reserves at Liontown and Orient and by continuing to aggressively explore our growing pipeline of high quality targets within the surrounding area.

On behalf of the Board,

**Mel Palancian**  
**Managing Director**  
Red River Resources Limited

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## COMPETENT PERSONS STATEMENT

### Far West Mineral Resource

The information in this report that relates to the estimation and reporting of the Thalanga Far West Mineral Resource is based on and fairly represents, information and supporting documentation compiled by Mr Stuart Hutchin who is a Member of The Australasian Institute of Mining and Metallurgy, Member of the Australian Institute of Geoscientists and a full time employee of Mining One Consultants Pty Ltd.

Mr Hutchin has sufficient experience 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 Hutchin consents to the inclusion in the report of the matters based on the information in the form and context in which it appears. The information in this report that relates to database compilation, geological interpretation and mineralisation wireframing, project parameters and costs and overall supervision and direction of the Thalanga Far West Mineral Resource estimation is based on and fairly represents, information and supporting documentation compiled under the overall supervision and direction of Mr Hutchin.

### Far West Ore Reserve

The information in this report that relates to the estimation and reporting of the Far West Ore Reserve is based on and fairly represents, information and supporting documentation compiled by Mr Mel Palancian who is a Member of The Australasian Institute of Mining and Metallurgy and a full time employee of Red River Resources.

Mr Palancian has sufficient experience 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 Palancian consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

## Zinc Equivalent Calculation

The net smelter return zinc equivalent (Zn Eq.) calculation adjusts individual grades for all metals included in the metal equivalent calculation applying the following modifying factors: metallurgical recoveries, payability factors (concentrate treatment charges, refining charges, metal payment terms, net smelter return royalties and logistic costs) and metal prices in generating a zinc equivalent value for copper (Cu), lead (Pb), zinc (Zn), gold (Au) and silver (Ag).

Red River has selected to report on a zinc equivalent basis, as zinc is the metal that contributes the most to the net smelter return zinc equivalent (Zn Eq.) calculation. It is the view of Red River Resources that all the metals used in the Zn Eq. formula are expected to be recovered and sold.

Where:

**Metallurgical Recoveries** are derived from historical metallurgical recoveries from test work carried out the Thalanga deposit. The Far West deposit is related to and of a similar style of mineralisation to the Thalanga Operations and it is appropriate to apply similar recoveries. The Metallurgical Recovery for each metal is shown below in Table 1.

**Metal Prices and Foreign Exchange** assumptions are set as per internal Red River price forecasts and are shown below in Table 1.

Table 1 Metallurgical Recoveries and Metal Prices

Metal	Metallurgical Recoveries	Price
Copper	80%	US\$3.00/lb
Lead	75%	US\$0.90/lb
Zinc	89%	US\$1.00/lb
Gold	47%	US\$1,200/oz
Silver	65%	US\$17.00/oz
FX Rate: A\$0.75:US\$1		

**Payable Metal Factors** are calculated for each metal and make allowance for concentrate treatment charges, transport losses, refining charges, metal payment terms and logistic costs. It is the view of Red River that three separate saleable base metal concentrates will be produced at Thalanga. Payable metal factors are detailed below in Table 2.

Table 2 Payable Metal Factors

Metal	Payable Metal Factor
Copper	Copper concentrate treatment charges, copper metal refining charges copper metal payment terms (in copper concentrate), logistic costs and net smelter return royalties
Lead	Lead concentrate treatment charges, lead metal payment terms (in lead concentrate), logistic costs and net smelter return royalties
Zinc	Zinc concentrate treatment charges, zinc metal payment terms (in zinc concentrate), logistic costs and net smelter return royalties
Gold	Gold metal payment terms (in copper and lead concentrates), gold refining charges and net smelter return royalties
Silver	Silver metal payment terms (in copper, lead and zinc concentrates), silver refining charges and net smelter return royalties

The zinc equivalent grade is calculated as per the following formula:

$$\text{Zn Eq.} = (\text{Zn}\% \times 1.0) + (\text{Cu}\% \times 3.3) + (\text{Pb}\% \times 0.9) + (\text{Au ppm} \times 0.5) + (\text{Ag ppm} \times 0.025)$$

The following metal equivalent factors used in the zinc equivalent grade calculation has been derived from metal price x Metallurgical Recovery x Payable Metal Factor, and have then been adjusted relative to zinc (where zinc metal equivalent factor = 1).

Table 3 Metal Equivalent Factors

Metal	Copper	Lead	Zinc	Gold	Silver
Metal Equivalent Factor	3.3	0.9	1.0	0.5	0.025