



DIGGERS & DEALERS MINING FORUM  
7-9 AUGUST 2017



# DISCLAIMER & COMPLIANCE STATEMENTS

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The information contained in this presentation should be read in conjunction with and subject to the cautionary statements contained on this page and the statements contained in and referred to elsewhere in this presentation, including the competent persons statements referred to on slide 25 and the ASX announcements to which this presentation refers.

## **Forward Looking Statements**

This presentation may contain forward looking statements that are subject to risk factors associated with the mining and resources industry. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, geotechnical factors, drilling and exploration results, gas commercialisation, development progress, operating results, engineering estimates, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial markets conditions in various countries, approvals and cost estimates.

## **Thalanga Zinc Project**

This presentation includes references to a Restart Study (the internal study prepared by Red River to assess the potential restart of the Thalanga Zinc Project) released to the ASX on 12 November 2015, which include a production target for

## **The Thalanga Project**

Please refer to ASX release dated 12 November 2015 for further details on the Thalanga Zinc Project Restart Study. Red River confirms that all material assumptions underpinning the production target in the ASX release dated 12 November 2015 continue to apply and have not materially changed.

The Thalanga Zinc Project Restart Study is based on production from three deposits – West 45, Far West and Waterloo. The Thalanga Zinc Project Restart Study is based on low level technical and economic assessments and there is insufficient data to support the estimation of Ore Reserves at Far West and Waterloo, provide assurance of an economic development case at this stage, or provide certainty that the results from the Thalanga Zinc Project Restart Study will be realised. Further, as the production target that forms the basis of the Thalanga Zinc Project Restart Study includes Mineral Resources that are in the Inferred Category and there is a low level of geological confidence associated with Inferred Mineral Resources, there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

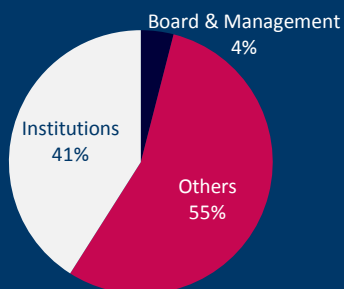
# CORPORATE OVERVIEW

## CAPITAL STRUCTURE

Current Share Price	A\$	\$0.24
Shares on Issue	#	472.2 million
Options on Issue <sup>1</sup>	#	20.7 million
Market Capitalisation	A\$	\$113.3 million
Cash <sup>2</sup>	A\$	\$27.4 million
Debt	A\$	Nil

20.7 million options on issue with a volume weighted average exercise price of 14.2cps  
Cash balance as at 30 June 2017

## SHARE OWNERSHIP



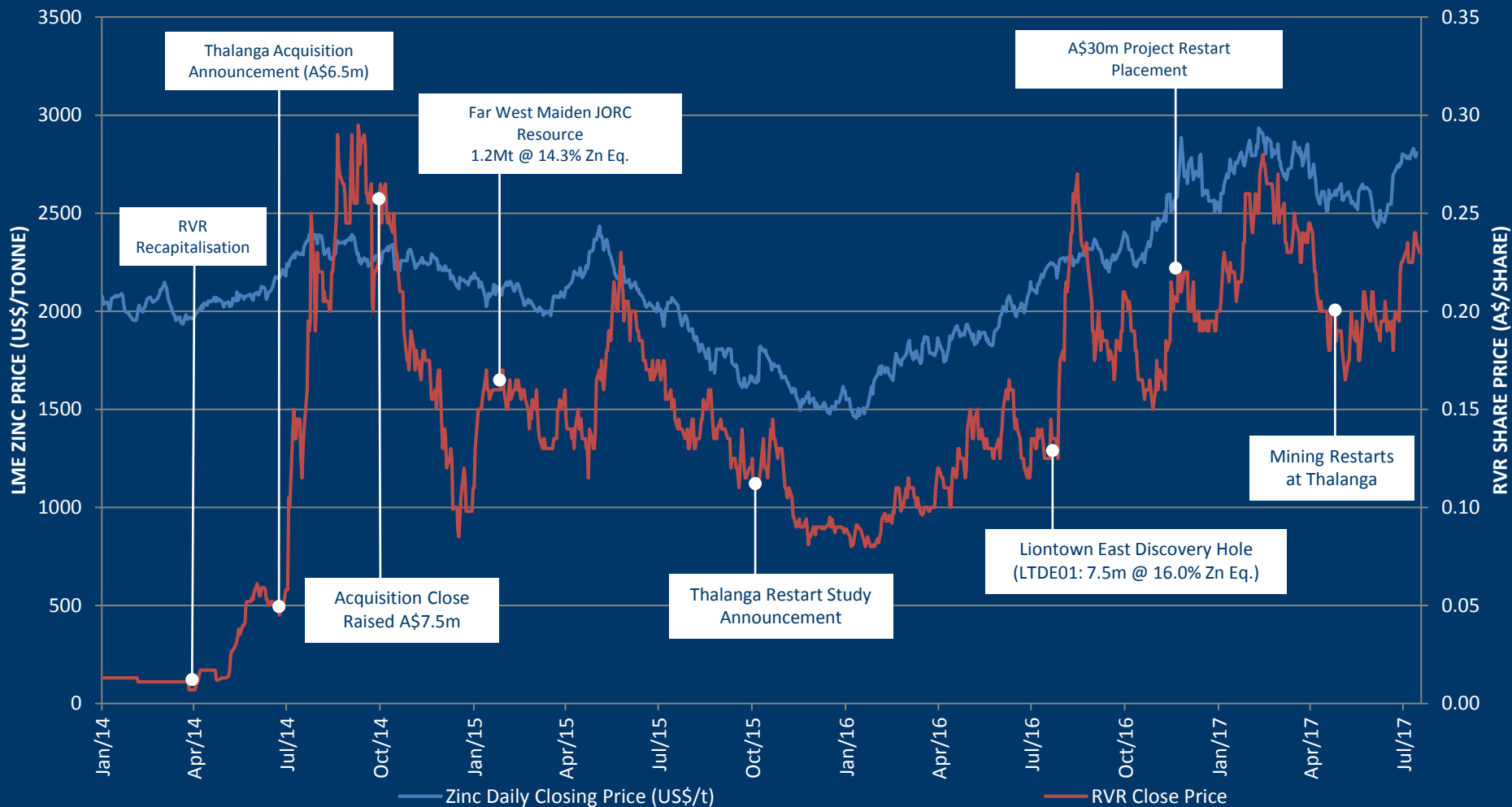
### Substantial Shareholders

Ausbil Investment Management	6.9%
Contango Funds Management	6.8%
Tribeca Investment Partners	6.4%
Acorn Capital	5.5%

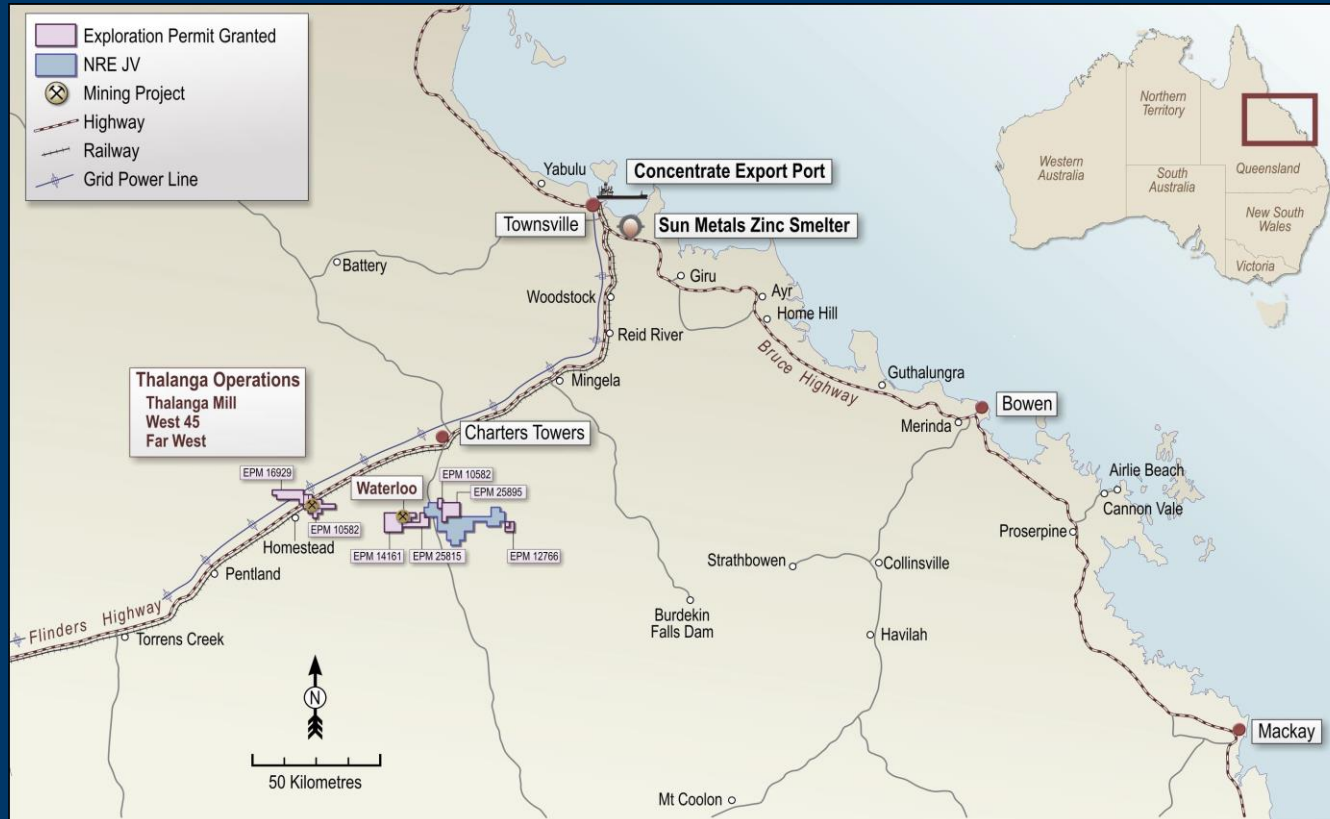
## BOARD & SENIOR MANAGEMENT

BRETT FLETCHER	Non Executive Chairman (Mining Engineer)
MEL PALANCIAN	Managing Director (Mining Engineer)
DONALD GARNER	Executive Director (Geologist/Corporate Finance)
JIM BLACK	Non-Executive Director (Project Management)
PAUL HART	Non-Executive Director (Corporate Finance)
MARK HANLON	Non-Executive Director (Corporate Finance)
CAMERON BODLEY	Company Secretary (Corporate Finance)
KARL SPALECK	Thalanga GM (Metallurgist)

# POSITIONED TO TAKE ADVANTAGE OF ZINC CYCLE



# THALANGA ZINC PROJECT – PRODUCTION IN Q4 CY2017



- 200km by sealed road from Townsville
- Port of Townsville is Australia's #1 base metal concentrate export port
- Process plant & infrastructure in place; 650ktpa capacity & fully permitted – commissioning in Q3 CY2017
- Mining restarted at West 45 underground
- Residential operation; ~100 people on site majority from Charters Towers
- Initial 5+ year mine life based on the (1) West 45, (2) Far West and (3) Waterloo deposits
- Fully funded & no debt

# THALANGA ZINC PROJECT – PRODUCTION IN Q4 CY17

THALANGA ZINC PROJECT OPERATING METRICS <sup>(1)(2)</sup>	
<b>Production Target</b>	1.7Mt @ 7.5% Zn, 1.4% Cu, 2.1% Pb, 0.5g/t Au and 54g/t Ag (15.2% Zn Eq.)
<b>Initial Mine Life</b>	5.25 years
<b>Annual average production</b>	Annual average metal production of 21.4kt Zn, 3.6kt Cu, 5.0kt Pb, 365koz Ag and 2,000oz Au in concentrate (34.2ktpa Zn Eq.)
<b>LOM average C1 Cash Cost</b>	US\$0.18/lb payable Zn (after credits)
<b>Pre-production capex</b>	A\$17.2m

(1) Restart Study refers to the internal study prepared by Red River Resources to assess the potential restart of the Thalanga Zinc Project. Please refer to ASX release dated 12 November 2015 “Thalanga Zinc Project Restart Study – Revised” for further details

(2) As the production target that forms the basis of the Thalanga Zinc Project Restart Study includes Mineral Resources that are in the Inferred Category and there is a low level of geological confidence associated with Inferred Mineral Resources, there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised. Please refer to ASX release dated 12 November 2015 “Thalanga Zinc Project Restart Study – Revised” for further details.

# THALANGA DEVELOPMENT TIMETABLE

DESCRIPTION	Q1 CY17			Q2 CY17			Q3 CY17			Q4 CY17		
Mill Rehabilitation	<div></div>											
Mill Commissioning	<div></div>											
West 45 Development	<div></div>											
West 45 Ore Production	<div></div>											
Mill Production	<div></div>											
Concentrate Shipment	<div></div>											

**On time & budget to  
commence production of zinc  
concentrates in early Q4  
CY17**



West 45 UG  
development activities  
commenced



West 45 development  
ore production has  
commenced



Stoping to  
commence in  
late Q3 CY17



Mill refurbishment  
completed and  
commissioning to  
commence in Q3 CY17



# THALANGA MILL – FULL COMMISSIONING IMMINENT

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650ktpa capacity  
Fully permitted  
Fully energised – grid power  
Can produce separate Cu, Pb &  
Zn concentrates

Commissioning  
70% complete as at  
30 June 2017

Crusher commissioned  
and test run (end July)

West 45 development ore being  
stockpiled on ROM pad in  
preparation for mill commissioning

Full commissioning  
to commence end of  
August



# WEST 45 – PRODUCTION COMMENCED

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High grade orebody  
– Reserve of 421kt  
@ 15% Zn Eq.

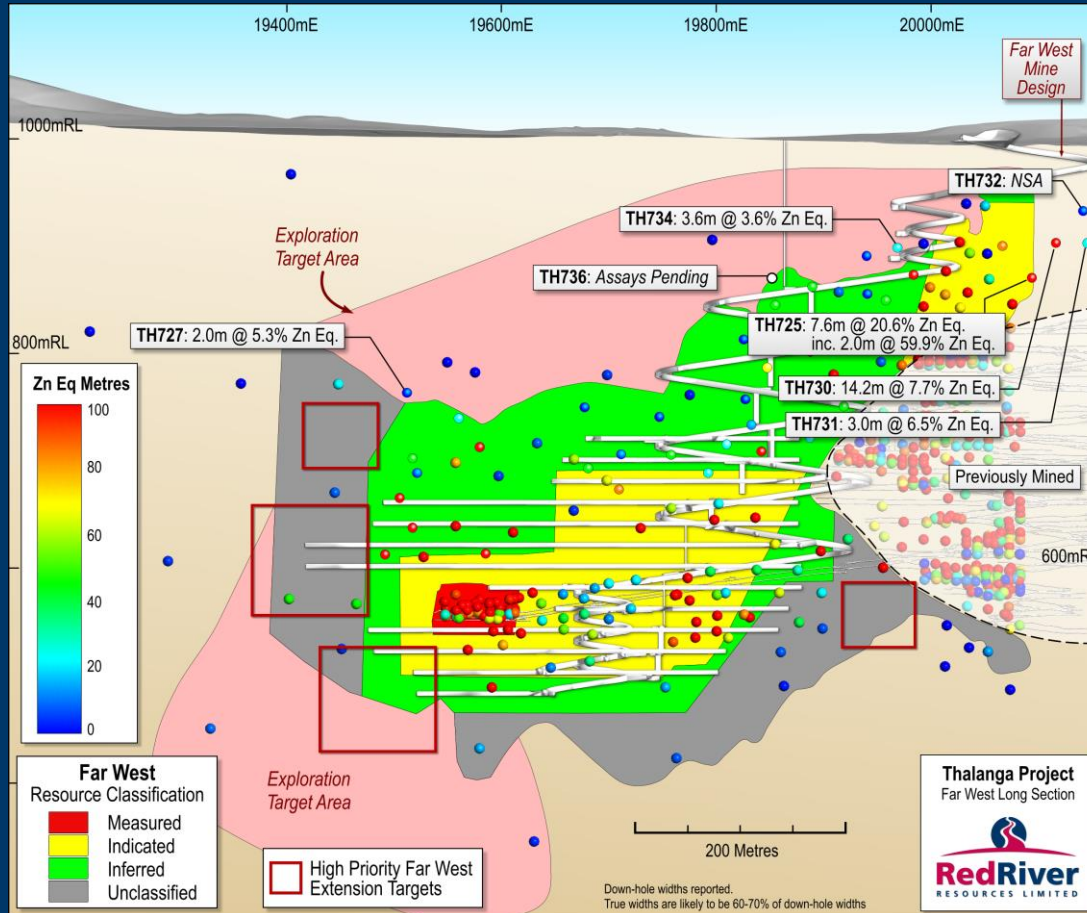
PYBAR engaged as mining  
contractor - mobilised on site &  
UG mining activities  
commenced

West 45 development  
ore being stockpiled  
on ROM pad in  
preparation for mill  
commissioning

Ramp up to  
production in  
Q3 CY17

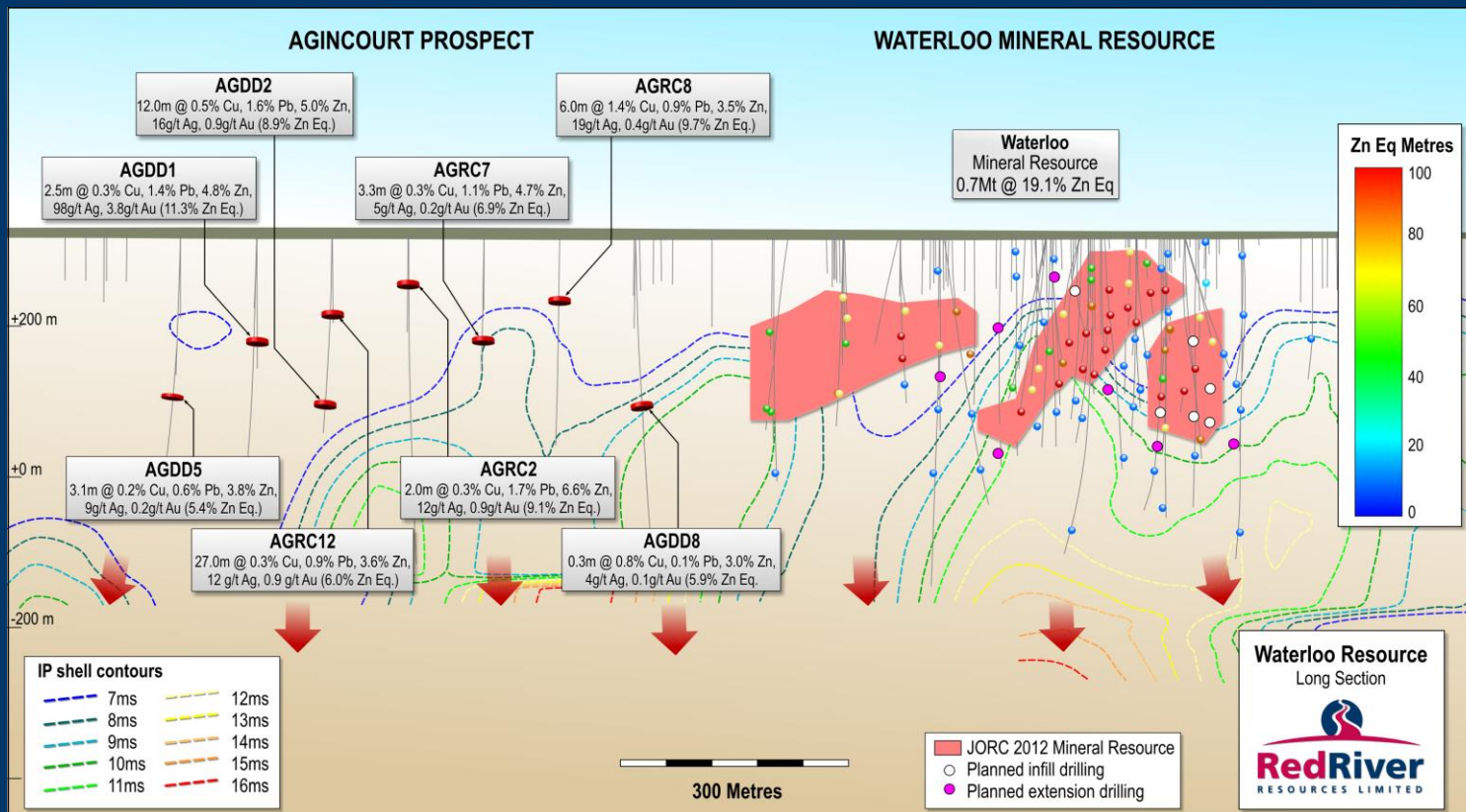
Resource  
extension drill  
program  
underway

# FAR WEST – SECOND MINE TO BE DEVELOPED



- Located ~400m from Thalanga Mill
- Red River has grown Far West Mineral Resource from zero to 1.6Mt @ 14.9% Zn Eq.(1) since Jan 2015
- Mining One Consultants engaged to update Mineral Resource, define Maiden Ore Reserve and update mine schedule
- Far West still open down dip and along strike – further potential to materially grow resource

# WATERLOO- THIRD MINE TO BE DEVELOPED



- Resource of 0.7Mt @ 1.9% Cu, 1.6% Pb, 11.0% Zn, 0.9 g/t Au & 50 g/t Ag (19.1% Zn Eq.)
- Preliminary mine design & schedule complete
- Commencing infill / extension drilling program shortly
- System open and depth and along strike



# OPTIMISING THALANGA- FIND MORE ORE

## Unique Value Creation Opportunity

- Mill capacity of 650ktpa
- Planned utilisation rates of 300-400ktpa
- Opportunity to process additional tonnage at incremental processing costs
- Take advantage of forecast high Zn price and historically low treatment charges

### Short Term

Build on extension drilling success at West 45 & Far West

High zinc prices will turn known marginal ore (currently not in mining inventory) into highly profitable feed

### Medium Term

Bring Mineral Resources at Lontown (2Mt @ 8.4% Zn Eq.) into mine plan

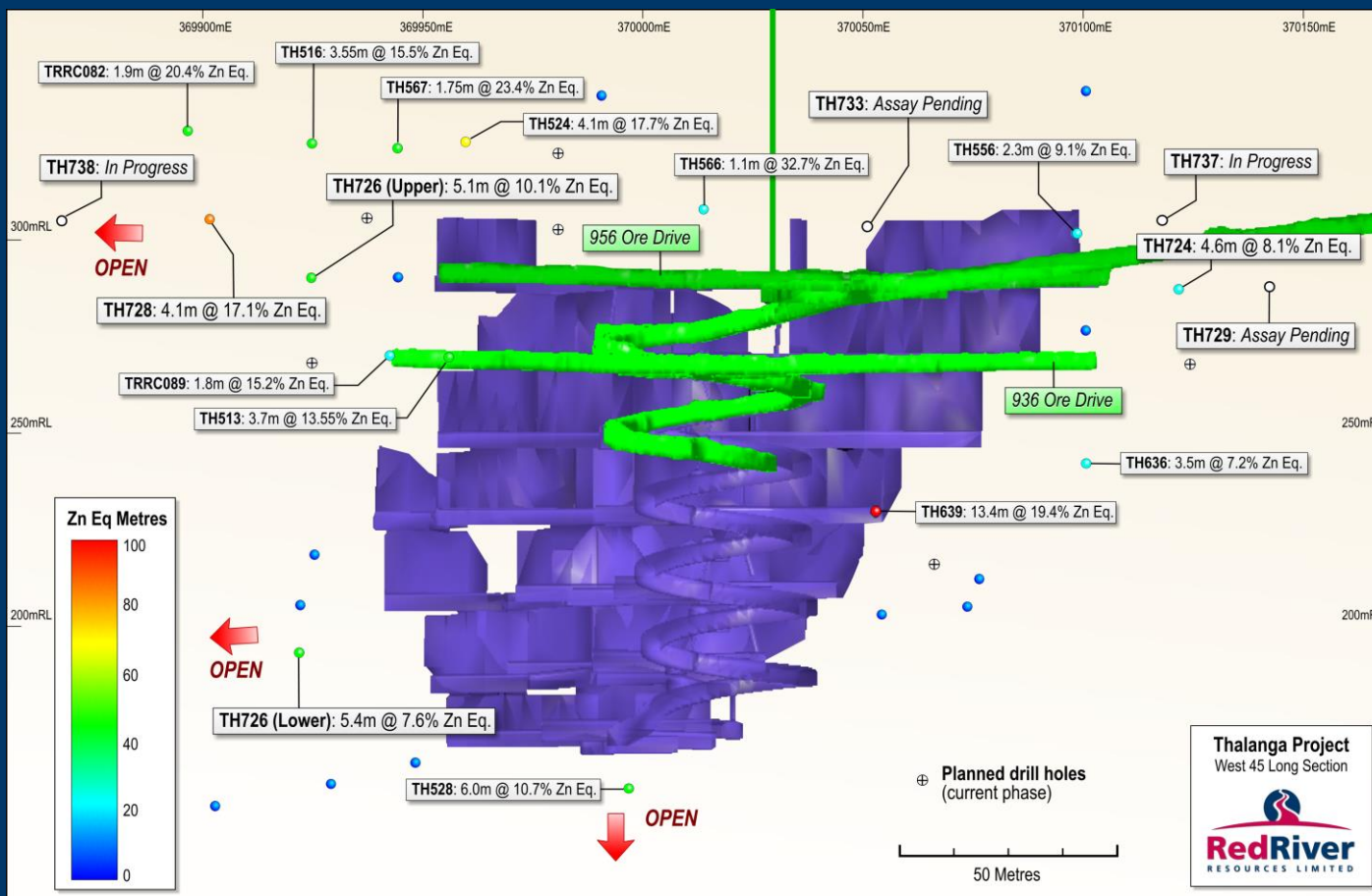
Define Maiden JORC Resource at Lontown East

### Long Term

Invest in regional exploration program to find the next generation of deposits in the region

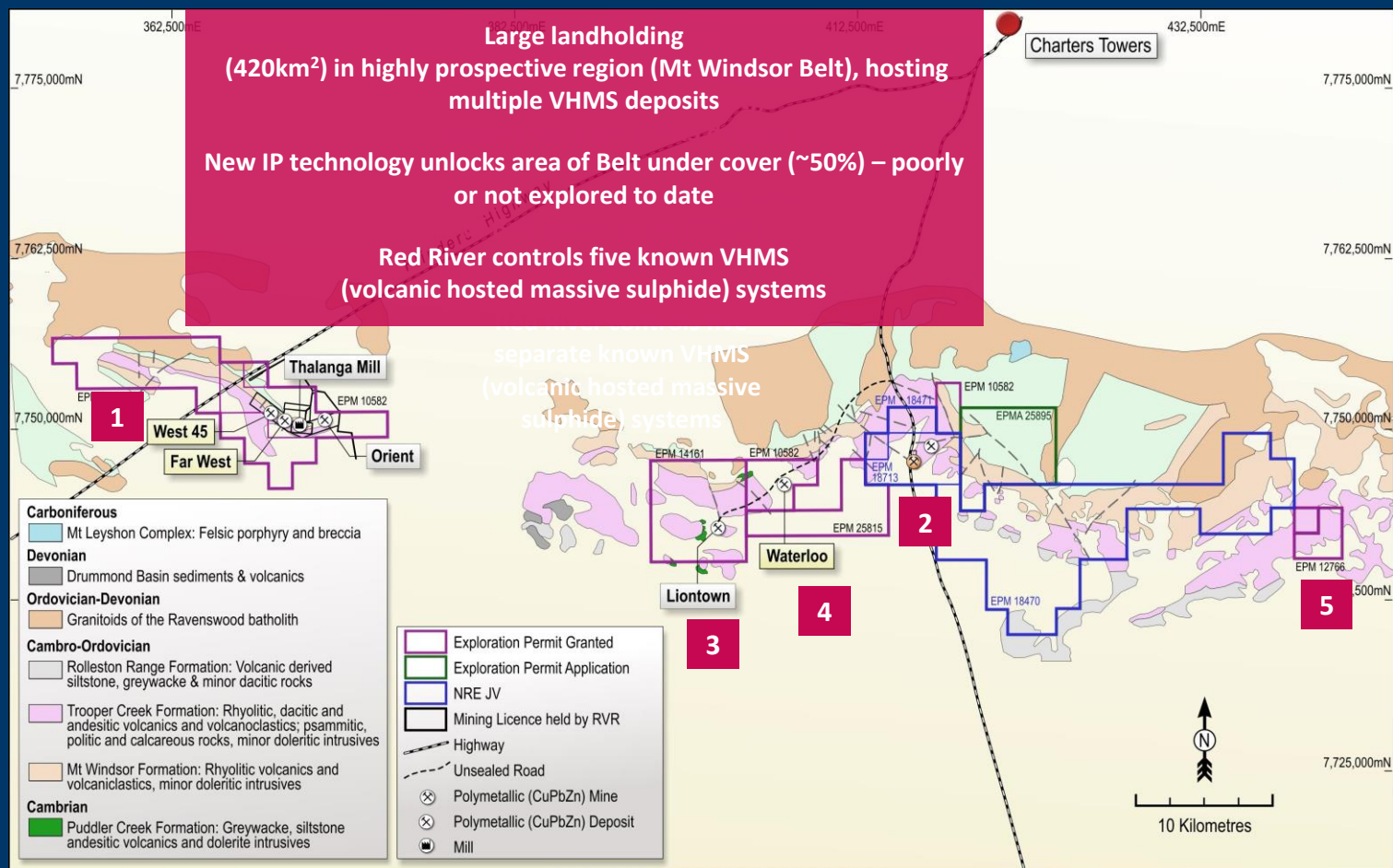
Ensure Thalanga is viable through the cycle

# WEST 45– EXTENSION DRILLING UNDERWAY



- Extension drilling program underway – initial target to extend mineralisation on 916, 936 and 956 levels
- Target additional mill feed in next 6-12 months
- 936 Ore Drive already extended beyond design in response to mineralisation extensions
- West 45 – still open at depth and strike – program to target additional lenses to extend mine life

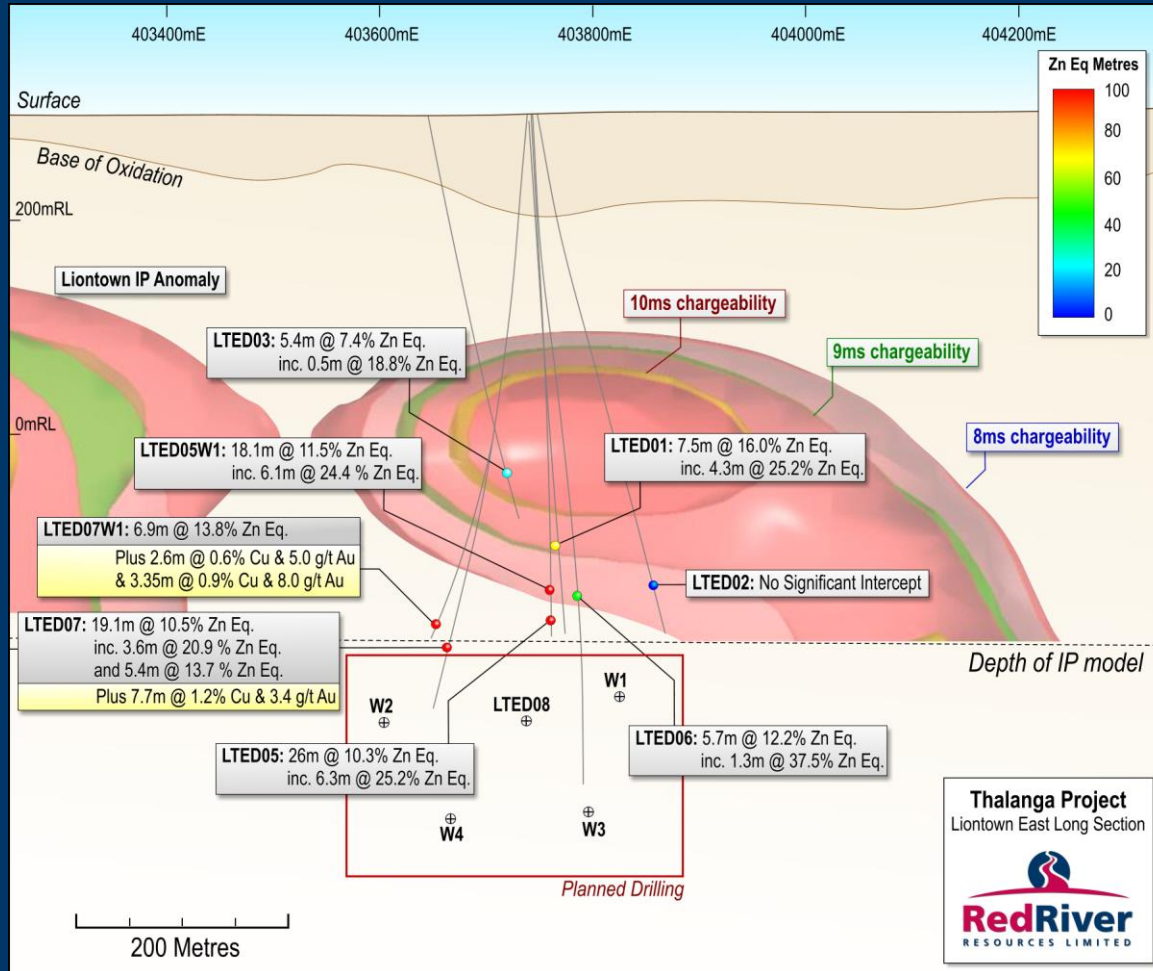
# OUTSTANDING HIGH GRADE VHMS REGIONAL POTENTIAL



- 1 Thalanga Group**
  - Thalanga Deeps
  - West 45
  - Far West
  - Orient
  - Jasper Flats
- 2 Highway-Reward Group**
  - Truncheon
  - Snake Oil
  - NRE JV
- 3 Lontown Group**
  - Lontown
  - Lontown East
- 4 Waterloo Group**
  - Waterloo
  - Esso's Waterloo
- 5 Ermine Group**
  - Ermine
  - Ermine North
  - Echidna

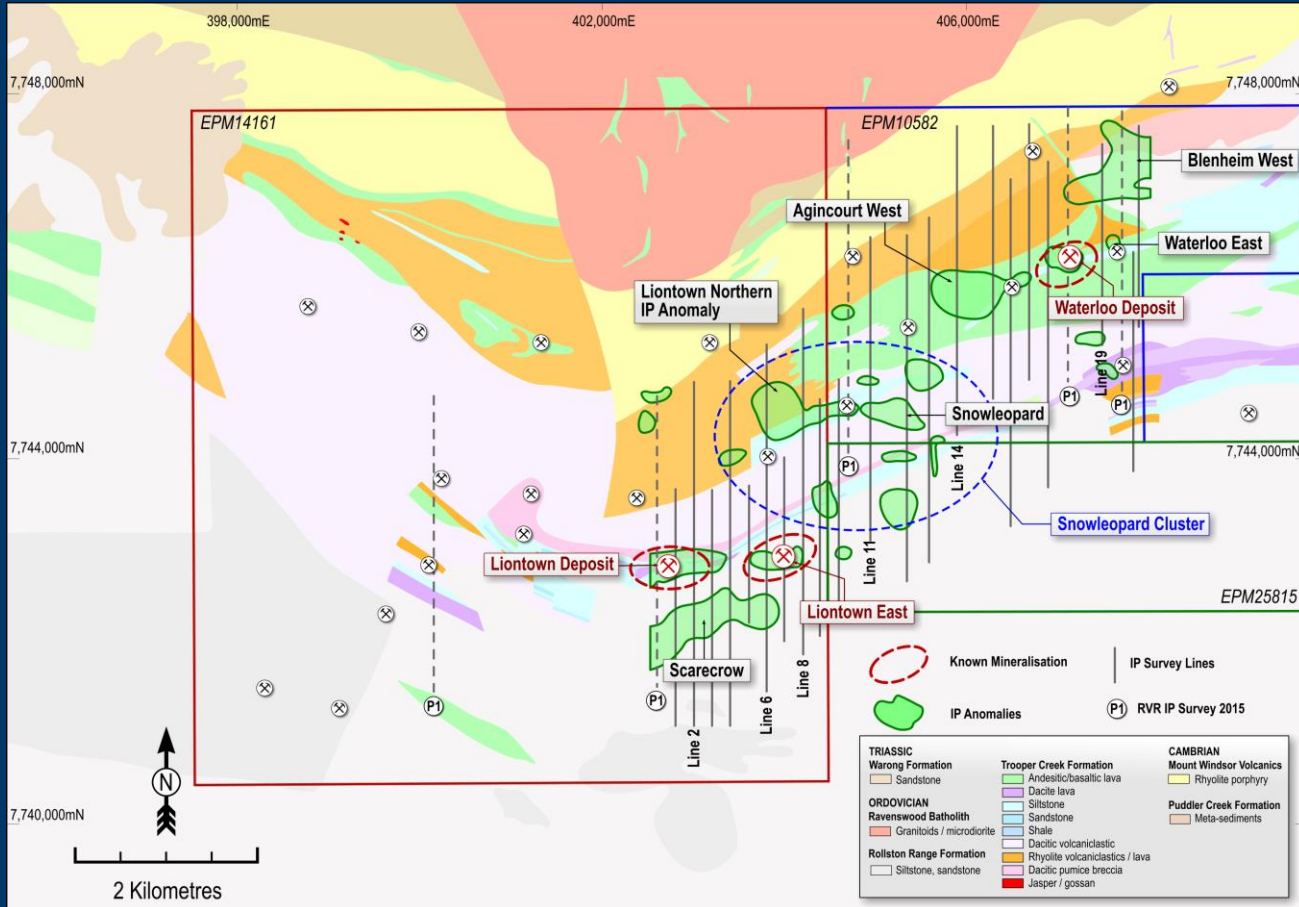


# LIONTOWN EAST- HIGH GRADE ZINC DISCOVERY



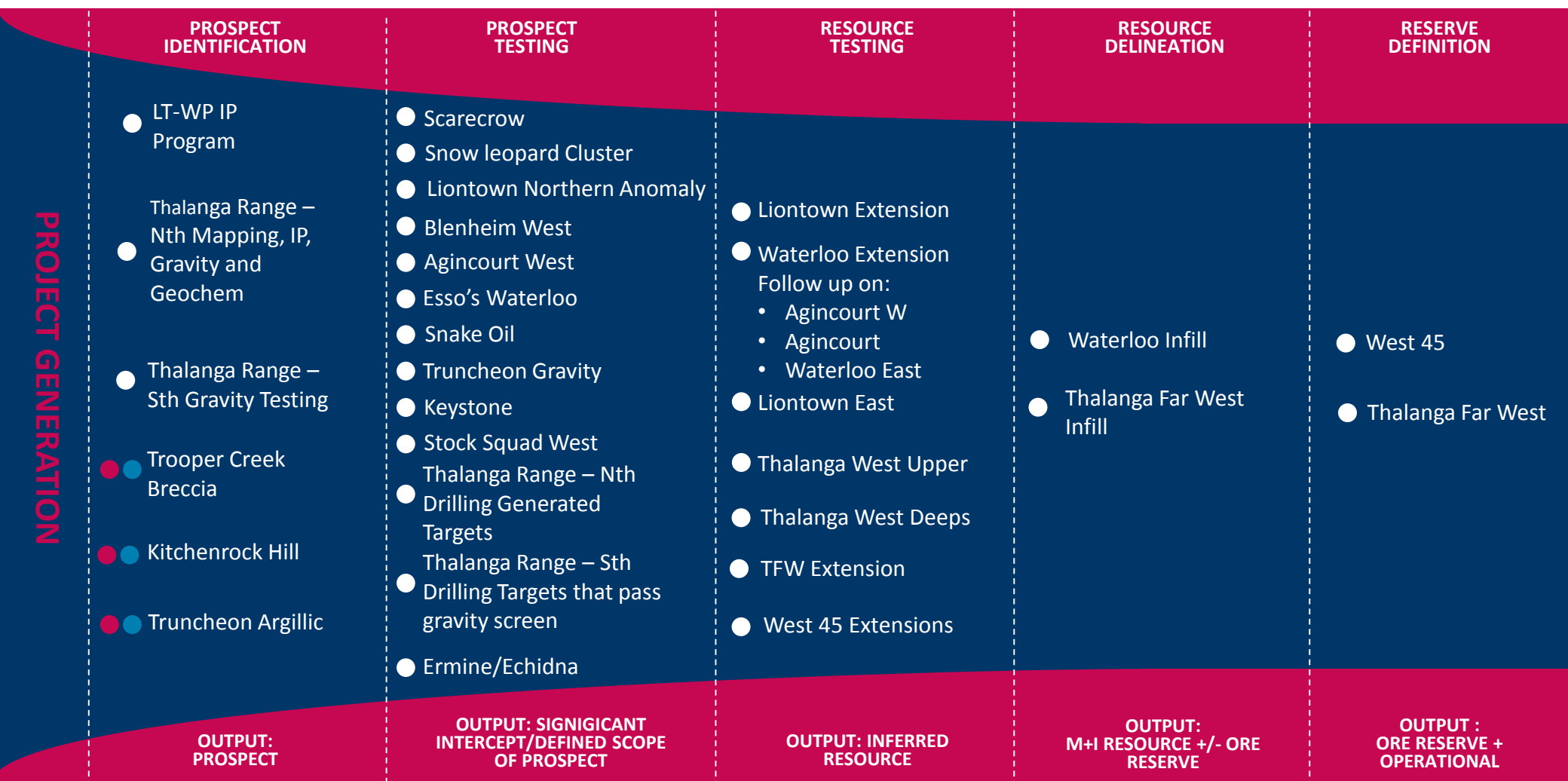
- Exciting high grade zinc discovery made by RVR in 2016
- Recent drilling has indicated presence of additional high grade copper-gold mineralisation
- Currently drilling LTED08 and associated wedge holes – designed to test depth extensions
- Lontown East part of Lontown System – significantly higher grade than existing Lontown Mineral Resource (2Mt @ 8.4% Zn Eq.)
- Focus on defining Maiden Mineral Resource at Lontown East to unlock Lontown Mineral Resource
- Potential source of feed to Thalanga allowing RVR to increase plant utilisation and/or extend life

# LIONTOWN / WATERLOO REGIONAL POTENTIAL



- High powered Induced Polarisation survey completed in Liontown/Waterloo area
- Multiple high priority targets defined in close proximity to known mineralisation at both Liontown/Liontown East and Waterloo
- Most VHMS deposits are known to occur in clusters defining major mining camps

# PROJECT PIPELINE





# THE EMERGING ASX ZINC PRODUCER

- |   |  |   |
|---|--|---|
| 1 | <b>Unique Investment Case</b>                    | Sole pure play ASX listed zinc producer<br>On budget and schedule to commence production in Q4 CY2017<br>Fully funded & debt free   |
| 2 | <b>Resource Development and Optimisation</b>     | Mineral Resource of 5.5Mt @ 12.8% Zn Eq.<br>All Mineral Resources are open at depth and/or along strike   |
| 3 | <b>Building the Exploration Project Pipeline</b> | Control of 420km <sup>2</sup> of a highly productive and prospective VHMS District<br>Smarter exploration: IP can see through cover sequence in District – unlocks significant potential<br>Multiple high priority targets identified and scheduled for follow-up |
| 4 | <b>Find More Ore</b>                             | Multiple options to extend LoM and/or increase processing rates<br>Resource extension drilling commenced at West 45<br>Updating Far West Mineral Resource and delivering Maiden Far West Ore Reserve<br>Delineating Maiden Mineral Resource at Lione town East    |
| 5 | <b>Outlook for 2017</b>                          | Concentrate production in 4Q CY17<br>Increase resources & reserves<br>Increasing level of exploration activity (3 drill rigs on site)   |



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# COMPETENT PERSONS STATEMENTS

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## **Competent Person's Statement – Resources and Exploration Targets**

The information in this report that relates to the estimation and reporting of the Far West, West 45, Orient and Waterloo Resources 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'.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

## **Competent Person's Statement - Reserves and Production Targets**

The information in this report that relates to the estimation and reporting of the West 45 Ore Reserves and Production Targets for Thalanga Far West and Waterloo are 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'.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

## **Competent Person's Statement - Exploration Results**

The information in this report that relates to Exploration Results is based on information compiled by Mr Alex Nichol who is a member of the Australasian Institute Geoscientists, and was a full time employee of Red River Resources Ltd., and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Nichol consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.



# THALANGA ZINC PROJECT RESERVE & RESOURCE STATEMENT

THALANGA ZINC PROJECT ORE RESERVES								
	Classification	Tonnage (kt)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq. (%) <sup>(6)</sup>
WEST 45 <sup>(1)</sup>	Proved	-	-	-	-	-	-	-
	Probable	421	0.5%	3.6%	8.3%	0.3	72	15.0
	<b>Total</b>	<b>421</b>	<b>0.5%</b>	<b>3.6%</b>	<b>8.3%</b>	<b>0.3</b>	<b>72</b>	<b>15.0</b>
THALANGA ZINC PROJECT MINERAL RESOURCES								
	Classification	Tonnage (kt)	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq. (%) <sup>(6)</sup>
WEST 45 <sup>(2)</sup>	Measured	-	-	-	-	-	-	-
	Indicated	585	0.6	3.6	8.3	0.3	70	15.3
	Inferred	6	0.9	0.8	3.7	0.1	15	7.8
	<b>Total</b>	<b>591</b>	<b>0.6</b>	<b>3.5</b>	<b>8.3</b>	<b>0.3</b>	<b>69</b>	<b>15.2</b>
THALANGA FAR WEST <sup>(3)</sup>	Measured	81	1.5	1.3	4.6	0.2	30	11.3
	Indicated	691	1.6	1.7	5.5	0.3	44	13.4
	Inferred	873	1.9	2.3	6.6	0.2	63	16.5
	<b>Total</b>	<b>1,645</b>	<b>1.7</b>	<b>2.0</b>	<b>6.0</b>	<b>0.2</b>	<b>53</b>	<b>14.9</b>
ORIENT <sup>(2)</sup>	Measured	-	-	-	-	-	-	-
	Indicated	496	0.9	1.8	7.7	0.2	44	13.4
	Inferred	44	0.8	1.8	10.9	0.2	46	16.2
	<b>Total</b>	<b>540</b>	<b>0.9</b>	<b>1.8</b>	<b>7.9</b>	<b>0.2</b>	<b>44</b>	<b>13.6</b>
WATERLOO <sup>(4)</sup>	Measured	-	-	-	-	-	-	-
	Indicated	406	2.7	2.1	13.4	1.4	68	24.6
	Inferred	301	0.9	0.9	7.9	0.4	20	8.8
	<b>Total</b>	<b>707</b>	<b>1.9</b>	<b>1.6</b>	<b>11.0</b>	<b>0.9</b>	<b>50</b>	<b>19.1</b>
LIONTOWN <sup>(5)</sup>	Measured	-	-	-	-	-	-	-
	Indicated	367	0.5	1.8	4.6	1.3	21	8.3
	Inferred	1,671	0.5	1.5	4.6	0.8	26	8.4
	<b>Total</b>	<b>2,038</b>	<b>0.5</b>	<b>1.6</b>	<b>4.6</b>	<b>0.8</b>	<b>25</b>	<b>8.4</b>
TOTAL MINERAL RESOURCES AT THE THALANGA ZINC PROJECT (WEST 45 + THALANGA FAR WEST + ORIENT + WATERLOO + LIONTOWN)								
THALANGA PROJECT	Measured	81	1.5	1.3	4.6	0.2	29.8	11.3
	Indicated	2,545	1.2	2.2	7.7	0.6	50	14.9
	Inferred	2,895	1.0	1.7	5.6	0.5	37	11.0
	<b>Total</b>	<b>5,521</b>	<b>1.1</b>	<b>1.9</b>	<b>6.6</b>	<b>0.5</b>	<b>43</b>	<b>12.9</b>

(1) Refer to ASX Announcement dated 12 November 2015 "Thalanga Zinc Project Re-Start Study – Revised"; (2) Refer to ASX Announcement dated 11 February 2015 "Thalanga Project – Updated Mineral Resource Estimate"; (3) Refer to ASX Announcement dated 16 May 2016 "Increase in Far West Mineral Resource of 42% to 1.6Mt"; (4) Refer to ASX Announcement dated 24 April 2015 "Waterloo Deposit – Updated Mineral Resource Estimate"; (5) Refer to ASX Announcement dated 24 June 2015 "Liontown Deposit JORC 2012 Resource Estimate"

(6) Zinc equivalent (Zn Eq) has been calculated using the metal selling prices, recoveries and other assumptions contained in Table 1 of the Reserve and Resources statement. It is Red River's opinion that all elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold. Table subject to rounding errors, Please refer to Competent Persons Statements for appropriate Competent Persons Statement

# ZINC EQUIVALENT CALCULATION FACTORS

## 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 at the respective deposits. 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**

FX Rate: A\$0.85:US\$1			West 45, Thalanga Far West, Orient & Liontown (Fresh Resource)	Waterloo (Fresh Resource)	Waterloo (Transition Resource)
METAL	PRICE	UNITS	RECOVERIES	RECOVERIES	RECOVERIES
Copper	US\$/lb	US\$3.00	80%	80%	58%
Lead	US\$/lb	US\$0.90	70%	70%	0%
Zinc	US\$/lb	US\$1.00	88%	88%	76%
Gold	US\$/oz	US\$1,200	15%	50%	30%
Silver	US\$/oz	US\$17.00	65%	65%	58%

**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.

# ZINC EQUIVALENT CALCULATION FACTORS

**TABLE 2 PAYABLE METAL FACTOR**

<b>Copper</b>	Copper concentrate treatment charges, copper metal refining charges, copper metal payment terms (in copper concentrate), logistic costs and net smelter return royalties
<b>Lead</b>	Lead concentrate treatment charges, lead metal payment terms (in lead concentrate), logistic costs and net smelter return royalties
<b>Zinc</b>	Zinc concentrate treatment charges, zinc metal payment terms (in zinc concentrate), logistic costs and net smelter return royalties
<b>Gold</b>	Gold metal payment terms (in copper and lead concentrates), gold refining charges and net smelter return royalties
<b>Silver</b>	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:

$$\text{Zn Eq.} = (\text{Zn\%} * \text{ZnMEF}) + (\text{Cu\%} * \text{CuMEF}) + (\text{Pb\%} * \text{PbMEF}) + (\text{Au ppm} * \text{AuMEF}) + (\text{Ag ppm} * \text{AgMEF})$$

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 FACTOR (MEF)**

Resource	Copper (CuMEF)	Lead (PbMEF)	Zinc (ZnMEF)	Gold (AuMEF)	Silver (AgMEF)
<b>West 45, Thalanga Far West, Orient &amp; Lontown (Fresh)</b>	3.3	0.9	1.0	0.5	0.025
<b>Waterloo (Fresh)</b>	3.4	0.75	1	0.5	0.025
<b>Waterloo (Transition)</b>	2.5	0.0	0.84	0.4	0.01