Thalanga Zinc Project Re-Start Study – Revised

Following is a revised version of the ASX Announcement "Thalanga Zinc Project Re-Start Study" released to the ASX on 19 October 2015.

Shareholders and potential investors should be aware that the term 'Re-Start Study' is not a technical term as used in the JORC Code 2012. Specifically, the 'Re-Start Study' is an internal reference to a study that was prepared by RVR to assist it in assessing the viability of the restart of the Thalanga Zinc Project. Accordingly, readers should read the term 'Re-Start Study' as meaning "the internal study prepared by Red River to assess the potential re-start of the Thalanga Project".

This revision also removes all references to 'Mining Inventory' which is not a JORC compliant technical term.

On behalf of the Board

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Thalanga Zinc Project Re-Start Study

HIGHLIGHTS

- **Highly attractive Project with low operating risk, capital cost and operating cost**
- **Pre-production capital cost of $17.7 million**
- **Estimated life of mine average C1 cash cost of US$0.18/lb payable Zn (after by-product credits)**
- **Short timeline to re-start of production (6 months)**
- **Annual average production of 21,400 tonnes of zinc, 3,600 tonnes of copper, 5,000 tonnes of lead, 2,000 ounces of gold and 370,000 ounces of silver in concentrate**
- **Production Target of 1.7Mt @ 1.4% Cu, 2.1% Pb, 7.5%Zn, 0.5g/t Au & 54g/t Ag (15.2% ZnEq)**
- **LOM revenue of $628 million, NPV(8% real) of $84m, IRR of 61% and with strong LOM average free cash flow of $25 million per annum**
- **Initial project life in excess of 5 years, with outstanding extension potential**
- **Project parameters may be greatly enhanced by exploration success at the Far West Deposit**
- **Substantial upside exists for extended mine life and/or increased production rate from known exploration potential – high impact exploration program planned**

Red River Resources Limited (ASX:RVR) ("**Red River**" or the "**Company**") is pleased to announce that it has completed the Re-Start Study ("**Study**") for its 100% owned Thalanga Zinc Project ("**Project**") in Queensland.

The Study contemplates the restart of production at the 650ktpa Thalanga Processing Plant ("Thalanga Plant") which is located near Townsville in Queensland. The Thalanga Plant is currently on care and maintenance.

The Project landholding is extensive and highly prospective and is host to a number of known high-grade base metal deposits and historical mines, including Thalanga and Highway-Reward. The Study focusses on a re-start of the Thalanga Plant by processing ore from the high-grade West 45, Far West and Waterloo deposits at a rate of 300-450ktpa.

The Study highlights a number of outstanding Project qualities, and confirms the economic viability and the low risk of the proposed mining operation.

Cautionary Statement

The Study referred to in this announcement is based on production from three deposits – West 45, Far West and Waterloo. The 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 Study will be realised.

The Study results, production targets and forecast financial information set out in this announcement should be read subject to the cautionary statements included in Section 1 and elsewhere in this announcement.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target will itself be realised.

Low Pre-Production Capital Cost

The low pre-production capital cost is driven by the combination of the Thalanga Plant currently being on care & maintenance and the access decline at the proposed West 45 underground mine is complete. Red River estimates that pre-production capital of $17.7 million is required prior to the commencement of commercial production.

Low C1 Cash Cost

The Project has a forecast C1 cash cost of US$0.18/per lb payable zinc (after by-product credits). The low C1 cash cost is a function of the high-grade polymetallic nature of the deposits in the Study combined with competitive operating costs.

Low Processing Risk

The Thalanga Plant successfully treated over 10Mt of copper-lead-zinc ore before it was placed on care and maintenance in 2012. Based on historical experience, the likely metallurgical performance of the Thalanga Zinc Project ore is well understood as is the quality of the concentrates produced.

Strong Cash Generation

The Project is forecast to generate strong life of mine revenue of $628 million, for life of mine free cash flow of $131 million (pre-tax). The Project generates an average annual free cash flow of $25 million (pre-tax).

Short Time Frame to Concentrate Production

Once a final investment decision has been made, it is estimated that it would take approximately 6 months for the Project to commence concentrate production.

Highly Prospective Landholding

Red River holds (wholly owned and through joint ventures) over 400km^2 in the highly prospective Mt Windsor Belt. A high impact exploration program to test a number of exceptional targets is planned. The Company believes that this program, combined with resource definition drilling at existing deposits, will enable the Project to operate for many years into the future.

Additional Resources

Significant additional resources of 2.6Mt @ 0.6% Cu, 1.6% Pb, 5.3% Zn, 0.7 g/t Au & 29 g/t Ag (9.5% ZnEq) at Red River's Liontown and Orient deposits are currently not included in the planned Production Target. Red River considers there to be strong potential increase the Production Target, particularly at Liontown, given the recent interpretation of a high grade core of mineralisation that could represent attractive, high-grade feed for the Thalanga Plant.

Increase Mill Utilisation

The Thalanga Plant has a nominal design throughput of 650ktpa, and the Study envisages that the Thalanga Plant will be operated at between 300-450ktpa during the initial project life. There is significant excess processing capacity within the current project plan, and the Company is examining a number of options to utilise this capacity.

Key Project Metrics	
Initial Mine Life	5.25 years
Total LOM Zinc produced (in concentrate)	112kt
Total LOM Copper produced (in concentrate)	19kt
Total LOM Lead produced (in concentrate)	26kt
Total LOM Gold produced (in concentrate)	10koz
Total LOM Silver produced (in concentrate)	1.9Moz
LOM average C1 Cash cost (per lb Zn payable after by-product credits)	US$0.18/lb
LOM average C3 Cash cost (per lb Zn payable after by-product credits)	US$0.73/lb
Project Life of Mine Revenue	A$628 million
Project Life of Mine Free Cash Flow (pre-tax)	A$131 million
LOM Average Annual Free Cash Flow (pre-tax)	A$25 million
Pre-Production Capex	A$17.7 million
NPV_8	A$84 million
IRR*	61%

* *Based on broker consensus commodity pricing for the anticipated life of the mine, and consensus A$/US$ exchange rate profile.*

Managing Director's Comment

Red River's Managing Director, Mel Palancian said:

"We are exceptionally pleased with the outcomes of the Study, which clearly demonstrates that the Project will become an outstanding zinc and base metals mine. In this macroeconomic environment, the low risk, low cost nature of the Project is a significant competitive advantage for Red River.

It's important to note the very significant upside from the potential delineation of further resources at Far West as well as a number of other deposits and high grade exploration targets. We look forward to the further advancement of the Project and to the realisation of our vision of building a leading zinc and base metals production company".

1. Cautionary Statements

Reserves and Resources

The Re-Start Study referred to in this announcement is based on production from three deposits – West 45, Far West and Waterloo. The Re-Start Study has defined Ore Reserves at West 45, however there is currently 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 Study will be realised.

The Production Target that forms the basis for the Study, the production target and forecast financial information set out in this announcement includes Mineral Resources in the Inferred category. Accordingly, Red River advises that the Study results, the production target and forecast financial information set out in this announcement are preliminary in nature. Of the total Production Target used, approximately 34% by tonnes and 22% by contained metal (copper plus lead plus zinc) is classified as an Inferred Mineral Resource.

In Year 1 and 2 of the Project, the Production Target included in the mine plan does not contain any Inferred Resources. The overall proportion of Inferred Resources included in the forecast financial information is not the determining factor for the Projects viability.

There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the conversion of Inferred Mineral Resources to Indicated Mineral Resources, or that production targets will be realised.

Production and Financial Targets

Red River believes that the production target, forecast financial information derived from that target and other forward looking statements included in this announcement are based on reasonable grounds. The detailed reasons for this belief are outlined in the following announcement. However, neither Red River nor any person makes or gives any representation, assurance or guarantee that the production target or expected outcomes reflected in this announcement will be ultimately achieved.

Investors should note that Red River believes the consensus commodity prices, the A$:US$ exchange rate and other variables that have been assumed in the Study to estimate potential revenues, cash flows and other financial information for the Project are based on reasonable grounds as at the date of this announcement. However, actual commodity prices, exchange rates and other variables may differ materially over the contemplated initial mine life and, accordingly, the potential revenue, cash flow figures and other financial information provided in the Study and set out in this announcement should be considered as an estimate only that may differ materially from actual results. Accordingly, Red River cautions investors from relying on the forecast financial information in this announcement.

A number of key steps need to be completed to bring the Project into production. Many of those steps are referred to in this announcement. Investors should note that if there are any delays associated with completing those steps or the completion of the steps does not yield the expected results, the estimated revenue and cash flow figures in this announcement may differ materially from actual results

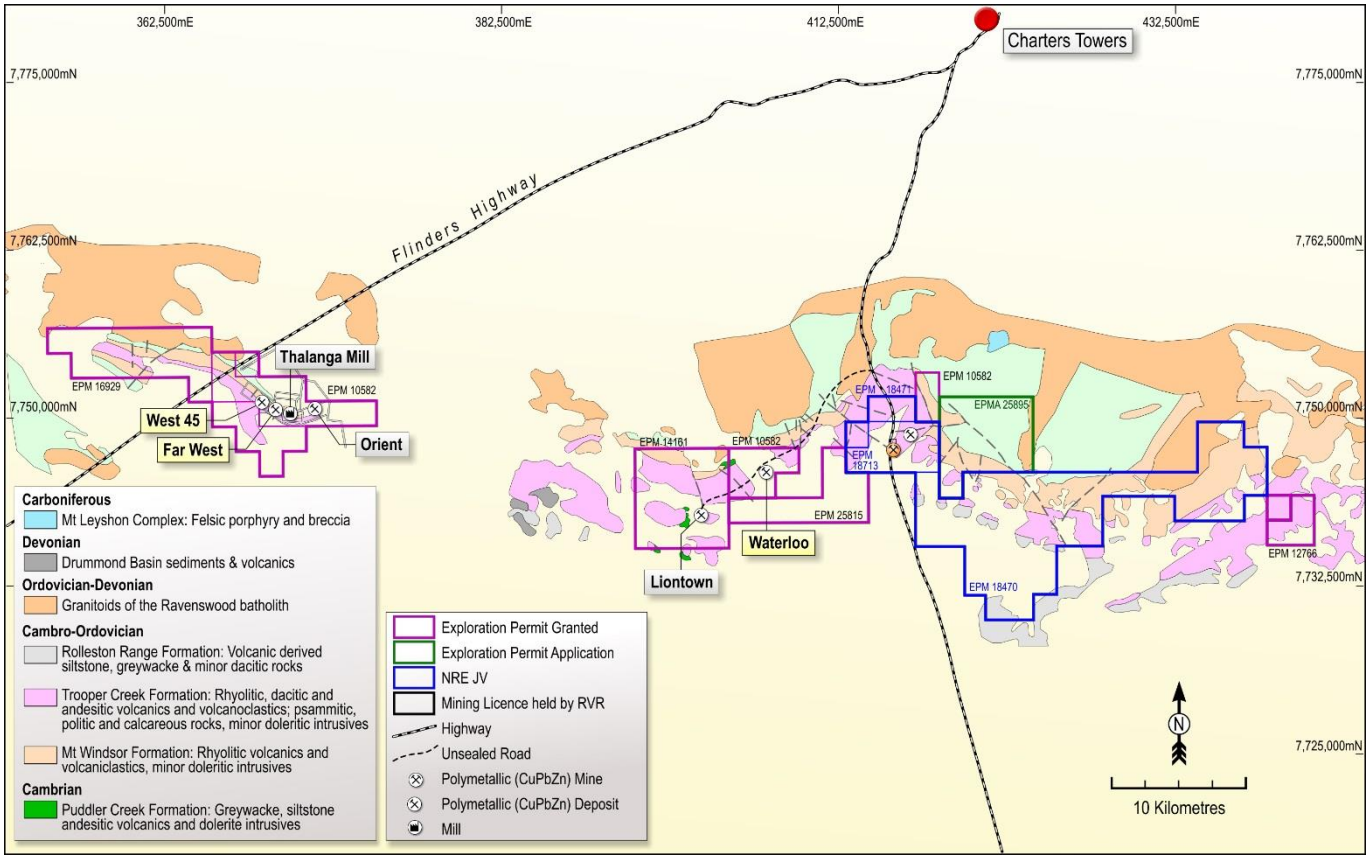
2. Project Overview

The Project is located in Central Queensland, Australia, approximately 60km SW of Charters Towers, and 200km SW of Townsville (Figure 1). Charters Towers has a population of approximately 8,200 and is the major regional centre, providing a range of government and commercial services. Mining and agriculture dominate the local and regional economy.

Outcropping gossan above the Central Thalanga deposit was discovered by Pennaroya Australia Pty Ltd in 1975. Open pit mining commenced in 1989 and underground mining commenced in 1991 and continued until 1998. The Thalanga mine closed in 1998 (from 1989 to 1998, 4.7Mt @ 1.9% Cu, 2.6% Pb and 8.3% Zn from Thalanga was processed), and the Thalanga Plant was converted from a polymetallic (Cu-Pb-Zn) circuit to a Cu only circuit to treat the copper sulphide ore from Highway-Reward. Between 1998 and 2005, 3.8Mt @ 6.2% Cu and 1g/t Au of ore from Highway Reward was processed at the Thalanga Plant.

Kagara Limited (formerly Kagara Zinc Limited) acquired Thalanga in 2006, and processed 1.5Mt @ 3.3% Cu from the Balcooma deposit (330km by road north of Thalanga), and in 2010, the Thalanga Plant was refurbished and converted back to a polymetallic circuit to process Vomacka (0.6Mt @ 1.6% Cu, 1.6% Pb and 5% Zn) and planned to process the West 45 deposit. In 2012, the Thalanga Plant was placed on care and maintenance when mining activities at Vomacka ceased. In July 2014 Red River acquired the Project from the administrator of Kagara Limited, FTI Consulting (Australia) Pty Ltd ("**FTI**"), and the acquisition completed in October 2014.

Figure 1 Thalanga Project Tenement Holdings & Deposits



The Project contains five known deposits, West 45, Far West, Orient, Liontown and Waterloo, of which, only three, West 45, Far West and Waterloo are proposed to be mined in the Study. Further work is commencing on Orient and Liontown deposits to examine the potential for these deposits to be mined in due course.

3. Mineral Resources & Ore Reserves

The Study is based on the Thalanga Project JORC Resource, announced on 24 June 2015 and a maiden Ore Reserve estimate for West 45 which were both completed in accordance with the guidelines of the JORC Code (2012 edition). The Mineral Resource estimate was completed by independent mining consultants Mining One Consultants Pty Ltd ("**Mining One**").

Table 1 Thalanga Operations Mineral Resource by Deposit

Prospect	Classification	Tonnes kt	Cu %	Pb %	Zn %	Au g/t	Ag g/t	ZnEq %
West 45[(1)]	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%
	Total	**591**	**0.6%**	**3.5%**	**8.3%**	**0.3**	**69**	**15.2%**
Far West[(2)]	Measured	73	1.8%	1.6%	5.3%	0.2	41	13.7%
	Indicated	494	1.6%	1.6%	5.3%	0.2	40	13.0%
	Inferred	591	1.7%	2.1%	6.3%	0.3	57	15.2%
	Total	**1,158**	**1.7%**	**1.9%**	**5.8%**	**0.2**	**49**	**14.4%**
Waterloo[(3)]	Measured	-	-	-	-	-	-	-
	Indicated	406	2.7%	2.1%	13.4%	1.4	68	24.6%
	Inferred	301	0.9%	0.9%	7.9%	0.4	27	11.8%
	Total	**707**	**1.9%**	**1.6%**	**11.0%**	**0.9**	**50**	**19.1%**
Study Resources	Measured	73	1.8%	1.6%	5.3%	0.2	41	13.7%
	Indicated	1,485	1.5%	2.5%	8.7%	0.6	60	17.1%
	Inferred	898	1.4%	1.7%	6.8%	0.3	47	14.0%
	Total	**2,456**	**1.5%**	**2.2%**	**7.9%**	**0.4**	**54**	**16.0%**

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

(1) Refer to RVR ASX release dated 11 February 2015 for JORC Code (2012) Table 1 Parameters and zinc equivalent calculation

(2) Refer to RVR ASX release dated 27 January 2015 for JORC Code (2012) Table 1 Parameters and zinc equivalent calculation

(3) Refer to RVR ASX release dated 24 April 2015 for JORC Code (2012) Table 1 Parameters and zinc equivalent calculation

RVR is not aware of any new information or data that materially affects the information included in this announcement that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

A maiden Ore Reserve estimate for the West 45 deposit has been completed as part of the Study. The Reserve estimate was determined using the mining, geotechnical, metallurgical and economic factors provided in Appendix 1 of this release. The West 45 Probable Ore Reserve was estimated using a cut-off grade of 9% ZnEq based on commodity pricing shown in Table 11 and metallurgical recoveries stated in Table 6. The selected mining method is bench stoping based on 20m sublevels and stope strike lengths of between 20m and 25m. The average stope width is approximately 9m with a minimum stope mining width of 2m. Hangingwall and footwall dilution of 0.5m wide each (1m in total) was included for all stopes. A recovery factor of 95% was applied to all diluted stope tonnages. No unplanned dilution and a recovery factor of 100% were applied to development inventory.

Table 2 West 45 Ore Reserve

	Classification	Tonnes kt	Cu %	Pb %	Zn %	Au g/t	Ag g/t	ZnEq %
West 45	Proved	421	0.5%	3.6%	8.3%	0.3	72	15.0
	Probable	-	-	-	-	-	-	-
	Total	**421**	**0.5%**	**3.6%**	**8.3%**	**0.3**	**72**	**15.0**

JORC (2012) Table Checklist of Assessment and Reporting Criteria is attached in Appendix 1 of this release. The Competent Persons statement is provided under the Competent Persons section at the end of this release.

4. Mining & Scheduling

The Study assumes that Red River will sequentially mine the West 45, Far West and Waterloo deposits. The planned mine designs and schedules for West 45, Far West and Waterloo are based on industry standard Australasian mechanised underground mining techniques. The mine designs and schedules for West 45, Far West and Waterloo deposits were prepared by Mining One using Enhanced Production Scheduler software in conjunction with Mine24D mine planning software with contributions from other consultants and Company employees. The table below summarises the mine schedule relative to Indicated and Inferred Resources comprising the estimated Production Target for the Project.

Table 3 Production Target for Project

	Units	Totals	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Production Target – Probable Reserves	Kt	421	151	270				
Copper grade	%	0.5%	0.5%	0.5%				
Lead grade	%	3.6%	3.8%	3.5%				
Zinc grade	%	8.3%	8.6%	8.2%				
Gold grade	g/t	0.3	0.3	0.3				
Silver grade	g/t	72	80	67				
Production Target - Measured	Kt	13			11	2		
Copper grade	%	1.6%			1.6%	2.0%		
Lead grade	%	1.3%			1.4%	0.8%		
Zinc grade	%	4.5%			4.6%	3.8%		
Gold grade	g/t	0.2			0.2	0.2		
Silver grade	g/t	34			36	26		
Production Target - Indicated	Kt	703		2	110	299	230	62
Copper grade	%	2.1%		1.1%	1.9%	2.1%	2.0%	3.0%
Lead grade	%	1.8%		1.3%	1.9%	1.7%	1.8%	2.1%
Zinc grade	%	9.4%		4.6%	8.0%	9.0%	9.4%	14.5%
Gold grade	g/t	0.8		0.1	0.6	0.8	0.8	1.4
Silver grade	g/t	53		31	51	54	48	75
Production Target - Inferred	Kt	574		41	196	180	142	14
Copper grade	%	1.2%		1.3%	1.3%	1.2%	1.0%	0.2%
Lead grade	%	1.5%		1.5%	1.8%	1.5%	1.1%	0.2%
Zinc grade	%	4.5%		5.0%	5.1%	4.5%	3.8%	1.5%
Gold grade	g/t	0.3		0.3	0.2	0.3	0.3	0.2
Silver grade	g/t	41		52	47	41	33	8
Production Target - Total	Kt	1,710	151	313	317	481	372	76
Copper grade	%	1.4%	0.5%	0.6%	1.6%	1.8%	1.6%	2.5%
Lead grade	%	2.1%	3.8%	3.2%	1.8%	1.6%	1.6%	1.8%
Zinc grade	%	7.5%	8.6%	7.7%	6.1%	7.3%	7.3%	12.1%
Gold grade	g/t	0.5	0.3	0.3	0.4	0.6	0.6	1.2
Silver grade	g/t	54	80	65	48	49	42	62
Reserves (% of total)		**25%**	**100%**	**86%**	**0%**	**0%**	**0%**	**0%**
Measured (% of total)		**1%**	**0%**	**0%**	**3%**	**0%**	**0%**	**0%**
Indicated (% of total)		**41%**	**0%**	**1%**	**35%**	**62%**	**62%**	**81%**
Inferred (% of total)		**34%**	**0%**	**13%**	**62%**	**37%**	**38%**	**19%**
Reserves (% of total metal)		**28%**	**100%**	**91%**	**0%**	**0%**	**0%**	**0%**
Measured (% of total metal)		**0%**	**0%**	**0%**	**3%**	**0%**	**0%**	**0%**
Indicated (% of total metal)		**50%**	**0%**	**0%**	**43%**	**75%**	**78%**	**98%**
Inferred (% of total metal)		**22%**	**0%**	**9%**	**54%**	**25%**	**22%**	**2%**

Approximately 67% of the tonnes and 78% of the contained metal (zinc plus copper plus lead) included in this Production Target are in an Indicated or higher category. As such, the dependence of the outcomes of the Study and guidance provided in this announcement on the proportion of lower confidence Inferred category Production Target material is minimal**.**

The Thalanga Far West Production Target was estimated using a cut-off grade of 9% ZnEq based on commodity pricing shown in Table 11 and Metallurgical recoveries stated in Table 6. The selected mining method is bench stoping based on 20m sublevels and stope strike lengths of 20m. The average stope width is approximately 5m with a minimum stope mining width of 2m. Hangingwall and footwall dilution of 0.5m wide each (1m in total) was included and an additional 10% tonnage at 0% grade was applied to all stopes. A recovery factor of 95% was applied to all diluted stope tonnages. No unplanned dilution and a recovery factor of 100% were applied to development inventory.

The Waterloo Production Target was estimated using a cut-off grade of 9% ZnEq based on commodity pricing shown in Table 11 and Metallurgical recoveries stated in Table 6. The selected mining method is bench stoping based on 15m sublevels and stope strike lengths of 20m. The average stope width is approximately 3.5m to 5m with a minimum stope mining width of 2m. Hangingwall and footwall dilution of 0.5m wide each (1m in total) was included and an additional 10% tonnage at 0% grade was applied to all stopes. A recovery factor of 95% was applied to all diluted stope tonnages. No unplanned dilution and a recovery factor of 100% were applied to development inventory.

For further information on the mine designs, mining methods and schedules, please refer to the following: West 45 (Section 4.1 and Appendix 1), Far West (Section 4.2 and Appendix 2) and Waterloo (Section 4.3 and Appendix 3).

4.1. West 45

The West 45 deposit is located 1.7km west of the Thalanga Plant and it is ~1.4km by unsealed road from the portal to the run of mine (ROM) ore pad. The box cut for the portal was commenced in August 2011 by Kagara and underground development commenced in September 2011. Underground operations ceased in March 2012 when Kagara was placed into administration.

The decline was developed 552m (at a 1:7 gradient) down to its current position at the 941RL, approximately 100m below surface. A cross-cut into the top of the orebody was developed and 48m of ore development completed. 2,835t of ore was extracted and processed by Kagara through the Thalanga Plant prior to operations being placed on care & maintenance. The boxcut and portal collar have been mined and supported to a high standard. No serious defects are evident. Ground conditions are considered to be good. The water level in the decline was ~200m from the portal just below Stockpile 1 when Red River acquired the Project. Red River has commenced dewatering of the UG development at West 45.

Figure 2 West 45 Portal

Figure 3 UG Development at West 45

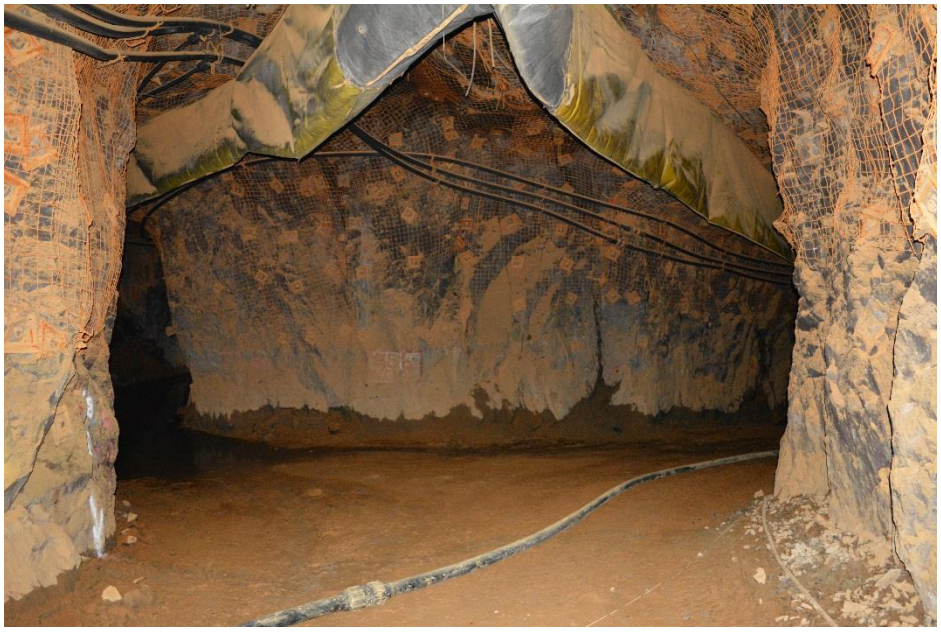
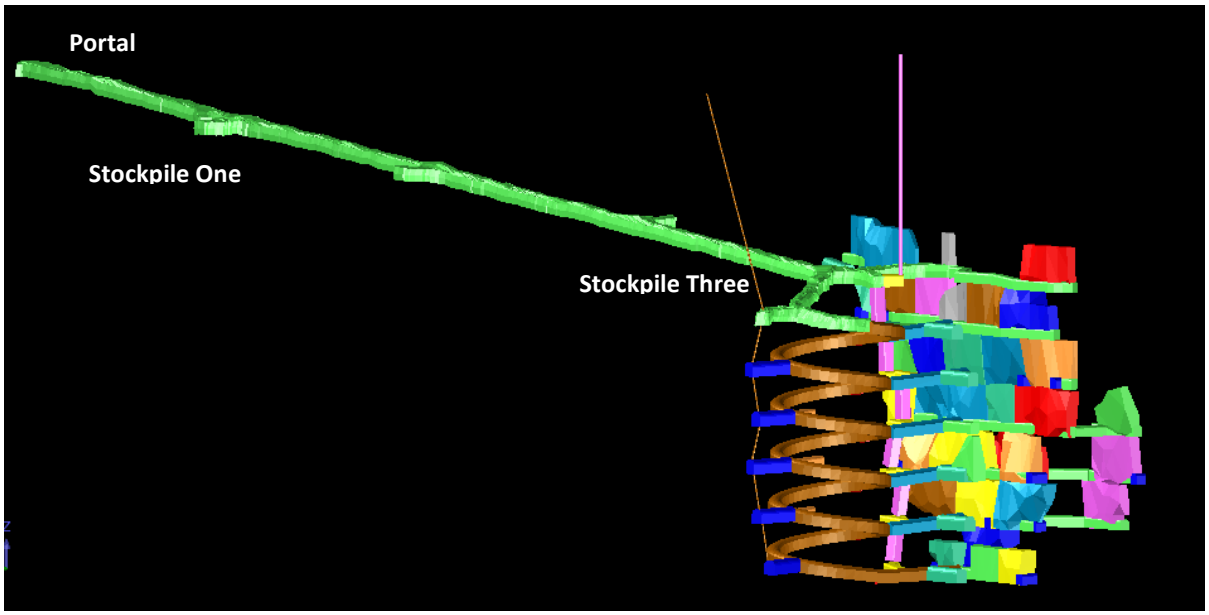


Figure 4 West 45 Development and Stope Design (Mining One)

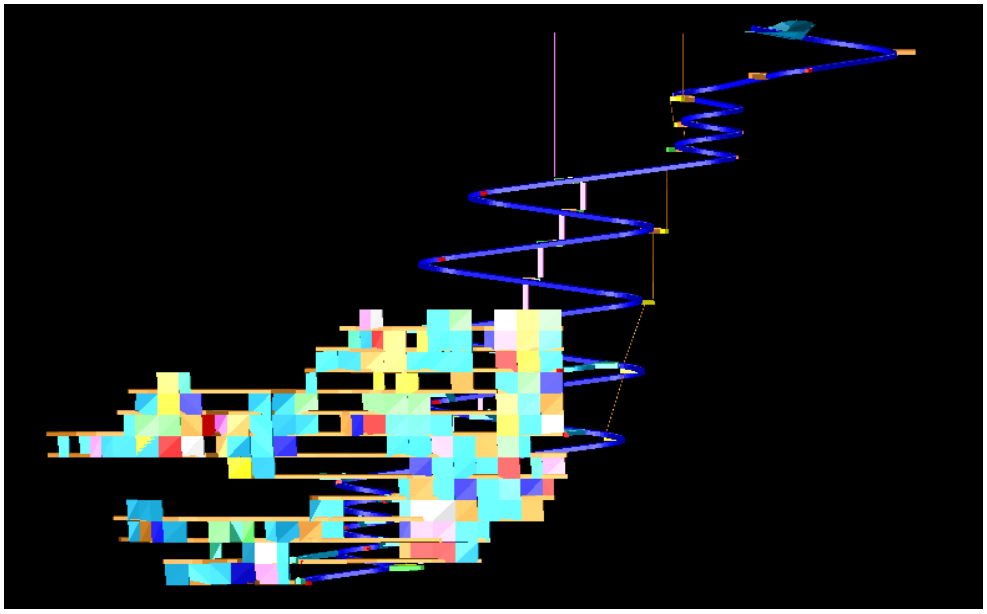


4.2. Far West

The Far West deposit is located ~500m from the ROM pad at the Plant, to the west of and directly adjacent to the historically mined Thalanga West deposit. Far West sits within existing mining leases. Much like West 45, Far West is a VHMS deposit which is of polymetallic nature and contains zinc, lead, copper, gold and silver.

As per West 45, Far West will be mined using long hole stoping (LHS), based on the advice provided by the independent technical consultant, Mining One. This method is well suited to a resource with the dip, width and desired production rate of Far West. Stope backfill will be a combination of cemented rock fill (CRF) and unconsolidated waste rock fill, which enables a high recovery of ore, removing the need to leave pillars within the orebody, and also utilising the waste rock. Importantly, the Far West mine will use infrastructure and facilities used for West 45 given that they are only about 1km apart, and both within 2km of the ROM pad at the Plant.

Figure 5 Far West Development and Stope Design (Mining One)

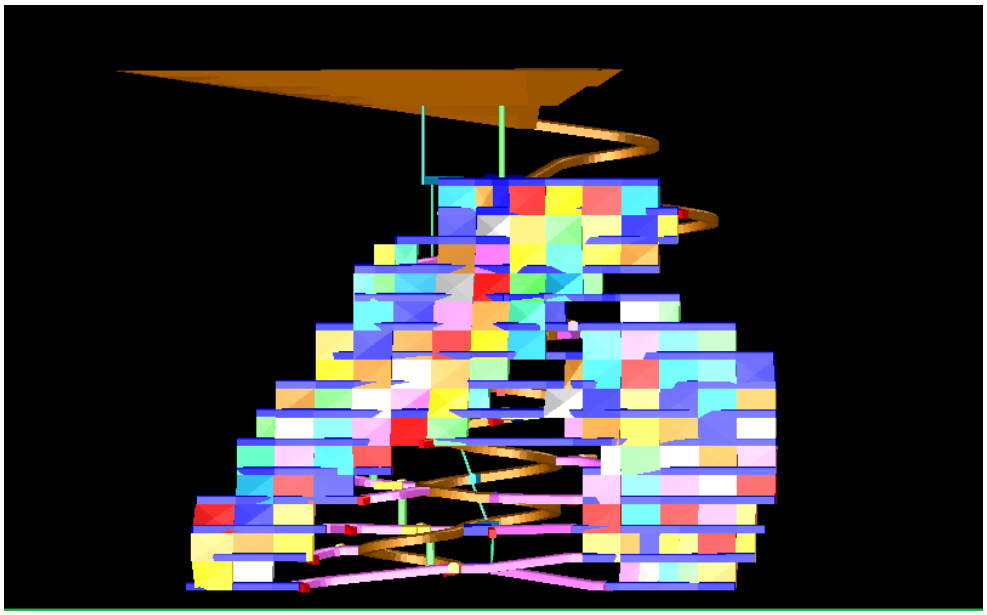


4.3. Waterloo

The Waterloo deposit is located approximately 40km to the SSW of Charters Towers and ~50km east from the Thalanga mine. As with the West 45 and Far West deposits, Waterloo is a VHMS deposit which contains zinc, lead, copper, gold and silver. Red River intends to mine Waterloo and truck the ore to the Thalanga Plant for processing.

Ore from Waterloo will be trucked 16km by unsealed road, and then by the sealed all weather Gregory Developmental Road (20km) and finally by the sealed all weather Flinders Highway (60km) to the Thalanga Site Consistent with West 45 and Far West, Waterloo will be mined using the LHS mining method. To achieve a high recovery artificial crown pillars will be created using cemented rock fill.

Figure 6 Waterloo Development and Stope Design (Mining One)



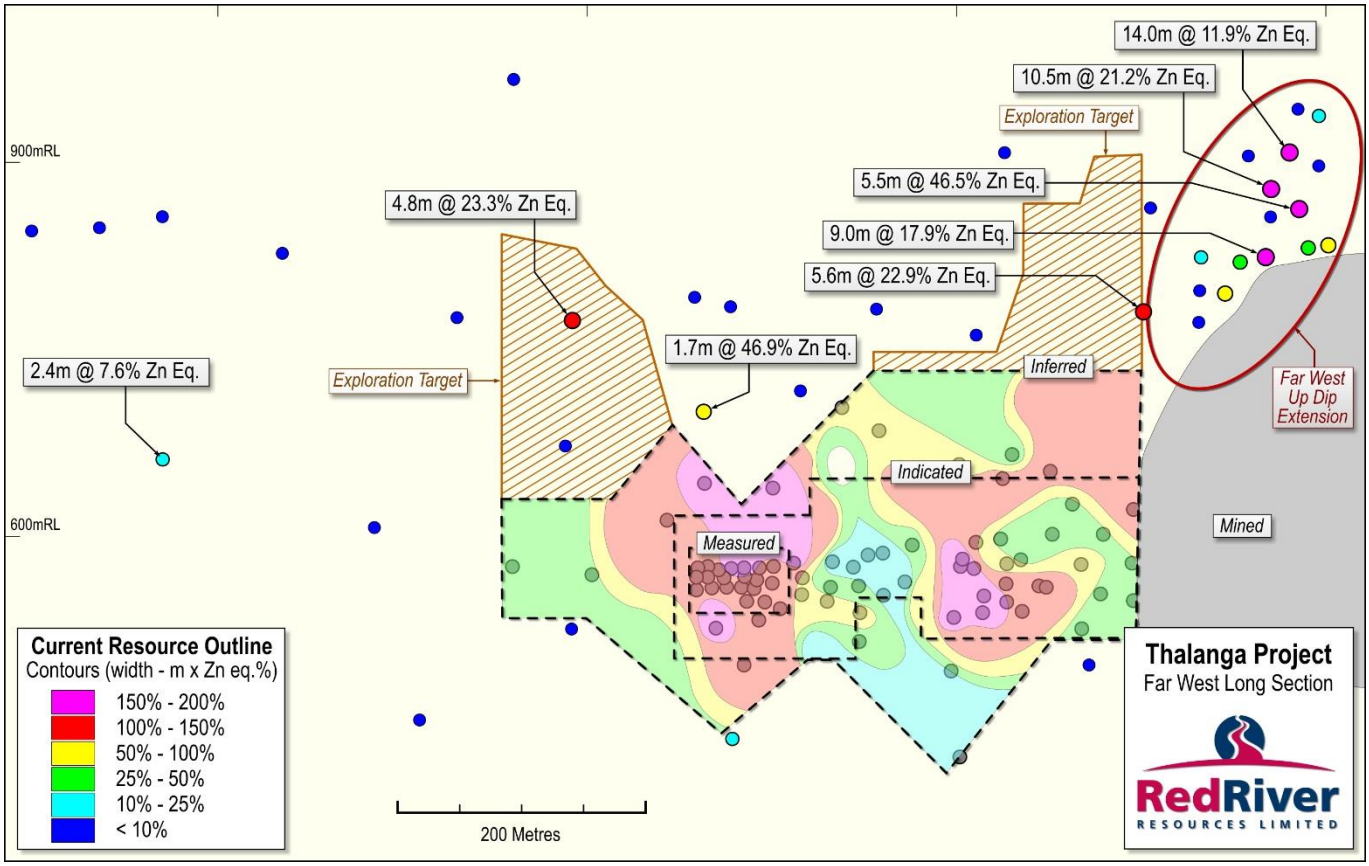
5. Not Included in Current Production Target

Red River considers that there is substantial upside associated with the Production Target, particularly given anticipated high grade extensions to areas of known mineralisation at Far West, and the fact that no material from the JORC Resources at Orient or Liontown is currently included in the Study parameters.

5.1. Far West Exploration Target

Based on work carried out to date, Red River has determined an Exploration Target of 500 – 750kt @ 10.0% – 15.0% Zn equivalent at Far West (relating to the upper levels of known mineralisation), as shown below. The material comprising the Exploration Target is not included in the Study's Production Target.

Figure 7 Far West Exploration Target



For this Exploration Target, the potential quantity and grade is conceptual in nature, there has so far been insufficient exploration to define a Mineral Resource in compliance with the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource as defined by the JORC Code.

The Far West drill database supplied to Mining One contained a total of 704 holes. For the purposes of the resource estimation process a total of 671 holes were subset from this. The drilling data is primarily comprised of diamond holes drilled from both surface and underground drill positions. A total of 31 reverse circulation (RC) holes were also drilled into the resource area. The diamond drill holes from surface were pre-collared with RC down to approximately 100m depth where HQ core was commenced, this core size was further reduced to NQ2 size core where the ore interval was intersected. Drilling campaigns were conducted between the early 1990's and 1997 by RGC Thalanga Pty Ltd.

The Company believes that the current Thalanga Far West Resource has the potential to increase through infill drilling into the up dip projections of the current resource area. The ore domain wireframe was extended into this area however the lack of sufficient drill coverage and confidence in the nature and orientation of the mineralised lens in this area precluded resources from being reported. Drill spacing in this area is greater than 100m, so the Company plans to drill an additional 12 holes into Areas 1 & 2. These holes have the potential to bring additional resources into the estimate and to upgrade portions of the Inferred Resource to an Indicated Resource category. This drilling is likely to occur within the next 12 months.

5.2. Orient & Liontown

The deposits at Orient and Liontown are not yet included in the planned Production Target. Red River considers there to be strong potential at Liontown, in particular, given the interpretation of a high grade core of mineralisation that could represent attractive, high-grade feed for the Thalanga Plant. Red River will prioritise resource definition work at Liontown in order to better understand the high-grade core.

Table 4 Orient & Liontown

Prospect	Classification	Tonnes kt	Cu %	Pb %	Zn %	Au g/t	Ag g/t	ZnEq %
Orient[1]	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%
	Total	**540**	**0.9%**	**1.8%**	**7.9%**	**0.2**	**44**	**13.6%**
Liontown[2]	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%
	Total	**2,038**	**0.5%**	**1.6%**	**4.6%**	**0.8**	**25**	**8.4%**
Total	Measured	**-**	-	-	-	-	-	-
	Indicated	**863**	0.7%	1.8%	6.4%	0.7	34	11.2%
	Inferred	**1,715**	0.5%	1.5%	4.8%	0.7	27	8.6%
	Total	**2,578**	**0.6%**	**1.6%**	**5.3%**	**0.7**	**29**	**9.5%**

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

(1) Refer to RVR ASX release dated 11 February 2015 for JORC Code (2012) Table 1 Parameters and zinc equivalent calculation

(2) Refer to RVR ASX release dated 24 June 2015 for JORC Code (2012) Table 1 Parameters and zinc equivalent calculation

5.3. Mineralised Stockpiles and Mineralisation Less than Cut Off Grade

Over the life of the project, mineralised surface stockpiles will be created at each proposed mine. The opportunity will exist to treat these stockpiles through the Thalanga Plant and this will also provide greater operational flexibility.

A significant amount of mineralisation less than the current cut-off grade (9% Zinc Equivalent) but greater than the incremental cut-off grade (5.8% Zinc Equivalent) exists within West 45, Far West and Waterloo mine plans. The opportunity may exist, subject to metallurgical, technical and economic evaluation, to mine and treat a proportion of this material through the Thalanga Plant.

Table 5 Project Mineralised Stockpiles and Mineralisation Less than Cut Off Grade

Mineralisation	Tonnes kt	ZnEq %
Mineralised Stockpiles	132	6.6%
Mineralisation Less than Cut-Off Grade	747	6.5%

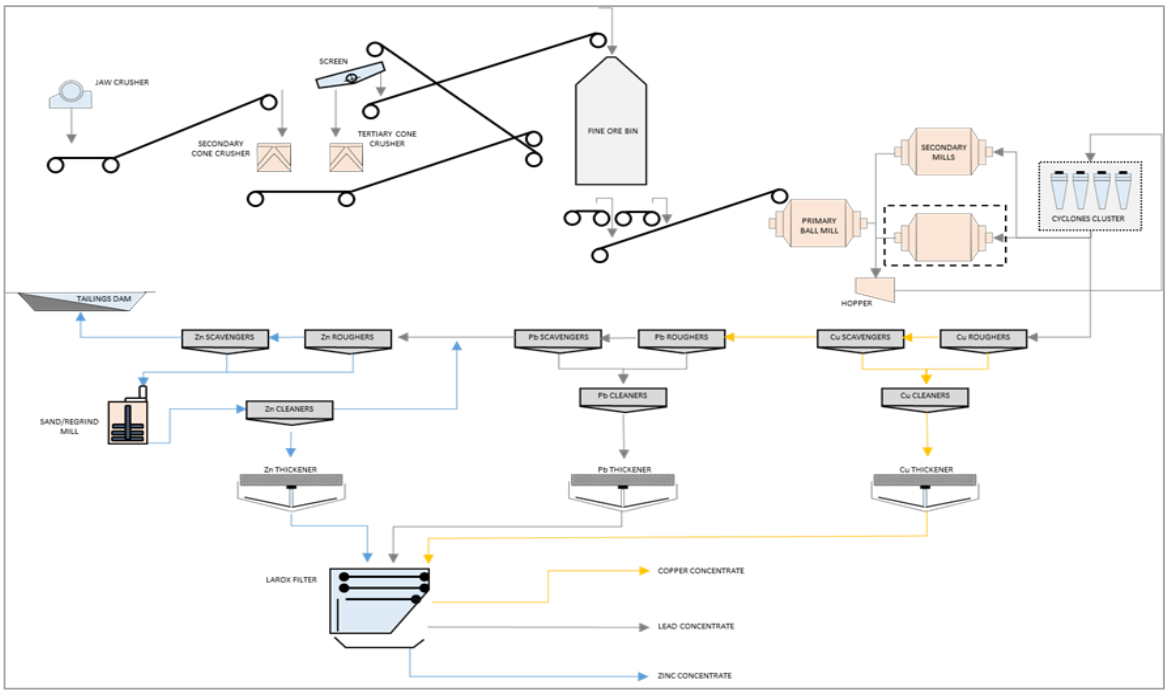
6. Processing

The Thalanga Plant was sourced from the Seltrust Mining Corporation Teutonic Bore Mine in West Australia. The plant was de-commissioned in the late 1980's and relocated to Thalanga where it was re-assembled and commissioned in 1990. The Thalanga Plant last operated in 2012 and has been on active care & maintenance. The Thalanga Plant is currently designed for a nominal throughput of 650ktpa and uses standard industry technology to produce saleable copper, lead and zinc concentrates. The plant flowsheet (refer to Figure 9) is summarised as:

- Three stage crushing circuit;
- Primary (x1) and secondary ball mill (x2) circuit;
- Regrind plant;
- Differential copper, lead and zinc flotation circuits;
- Concentrate thickening and filtration;
- Concentrate storage, blending and transport and
- Sub aqueous disposal of tailings to Tailings Storage Facility (TSF)

Figure 8 Thalanga Plant

Figure 9 Simplified Thalanga Process Flowsheet



Metallurgical testwork has been completed on both the West 45 and Waterloo deposits, and Far West is an extension of the Thalanga deposit which was mined from 1990 to 1998, resulting in a high degree of process certainty.

6.1. Tailings Storage Facility

The currently active cell of the tailings storage facility has sufficient capacity for the planned operations. ATC Williams (previously Australia Tailings Consultants) has undertaken a review of the tailings storage facility.

Figure 10 Tailings Storage Facility

The concentrate specifications are readily acceptable to the market with predicted concentrate grades of 22-26% Cu, 60% Pb and 52-56% Zn respectively and low to negligible penalty elements. Opportunity exists to further enhance base and precious metal recoveries, and the Company will continue review such opportunities. A summary of the assumptions used in the Study are presented below:

Table 6 Metallurgical Grades and Concentrate Recoveries

	West 45	Far West	Waterloo Transition	Waterloo Primary
Proportion of Total Ore Processed	25%	48%	5%	22%
Copper Concentrate				
Grade – Cu	22%	26%	24%	24%
Recovery – Cu	80%	80%	58%	80%
Grade – Ag	250 g/t	150 g/t	350 g/t	300 g/t
Recovery – Ag	15%	15%	38%	15%
Grade – Au	-	1.0 g/t	3.0 g/t	2.4 g/t
Recovery – Au	-	17%	30%	20%
Lead Concentrate				
Grade – Pb	60%	60%	-	60%
Recovery – Pb	80%	75%	-	70%
Grade – Ag	1,150 g/t	1,050 g/t	-	950 g/t
Recovery – Ag	55%	50%	-	50%
Grade – Au	-	3.5 g/t	-	2.8 g/t
Recovery – Au	-	30%	-	30%
Zinc Concentrate				
Grade – Zn	56%	56%	52%	56%
Recovery – Zn	89%	89%	76%	89%

7. Capital and Operating Cost Estimates

The Project has a very low pre-production capital cost as a result of the extensive existing infrastructure, which includes:

- **Thalanga Plant:** 650ktpa Polymetallic Processing Plant, ROM pad & concentrate storage facilities.
- **Roads:** all-weather, sealed access road running 6km from Flinders Highway to the Thalanga minesite.
- **TSF:** an existing Tailings Storage Facility ("**TSF**"), waste rock dumps and two evaporation ponds.
- **Power:** 66kva grid connected power supply from Ergon Energy with 11kva site power reticulation.
- **Water:** water supply borefield, sewerage treatment ponds, and reverse osmosis water treatment facility.
- **Fuel:** fuel storage tanks and dispenser and hydrocarbons storage and waste disposal area.
- **Offices:** all office facilities required for operations, including administration office, mining operations offices, maintenance offices, workshops (heavy vehicle, light vehicle and boiler makers workshops), process plant offices, metallurgical laboratory building, first aid building, stores warehouse and core shed and yard.

The capital expenditure required to achieve first concentrate production for the Project is estimated to be A$17.7 million as shown in Table 7 below. It is estimated another A$14.6 million of funding will be required for working capital purposes and other project related costs prior to the Thalanga Zinc Project generating a positive cash flow. A further A$87 million of capital (development and sustaining capital) is required for the remaining projected mine life and will be funded from project cash flow.

Table 7 Capital Cost Estimates

Capital Cost to First Concentrate Production (A$m)	(A$m)
Mine Development	5.3
Plant Refurbishment	7.3
Mine Infrastructure	0.3
Capitalised Operating Costs	1.7
Other Costs	3.2
Total Pre-Production Capex	**17.7**

The life of mine operating cost estimates per tonne of ore milled/mined are summarised in Table 8 below.

Table 8 Operating Cost Estimates

Life of Mine Average Operating Cost Estimates	A$/tonne ore
Mining	$74
Mine Technical Services	$7
Processing	$36
General & Administration	$17
Total	**$135**

The estimated life of mine C1 (cash cost) and C3 (total cost) per pound (lb) of payable zinc (net of by-product credits) are summarised in Table 9 below.

Table 9 Life of Mine C1 (cash cost) and C3 (total cost) per lb payable Zn

LOM Average Operating Cost Estimates	US$/lb Zn payable
Mining & Mine Technical Services	0.50
Processing	0.22
General & Administration	0.10
Zinc Concentrate Realisation Costs	0.27
By-product Credits	(0.92)
C1 Cash Cost (net of by-product credits)	**0.18**
C3 Total Cost (net of by-product credits)	**0.73**

C1 Cash Cost calculated as total direct cash operating costs including all mining and processing costs, mine site overheads and realisation costs (including transport costs, treatment and refining costs and smelter recovery deductions) net of revenue credits from sale of by products (copper, lead, gold and silver) divided by the amount of payable zinc produced. C3 Total Cost is calculated using the same methodology as C1 but incorporates a capital charge and royalties.

7.1. Royalties

Allowances have been made for the following royalties:

- Thalanga Copper Mines Pty Ltd ("TCM") retains a 4% Net Smelter Return ("NSR") royalty on all saleable materials from the Mining Leases and Exploration Permits as per Table 10
- FTI acting on behalf of Kagara Limited (in liquidation) and Kagara Copper Pty Ltd (in liquidation) retains a 0.8% NSR royalty on all saleable materials from the Mining Leases and Exploration Permits as per Table 10
- Guangdong Guangxin Mine Resources Group Co Ltd ("GMRG") retains a 0.7% NSR royalty on all saleable materials from the Mining Leases and Exploration Permits as per Table 10

Table 10 Project Royalties

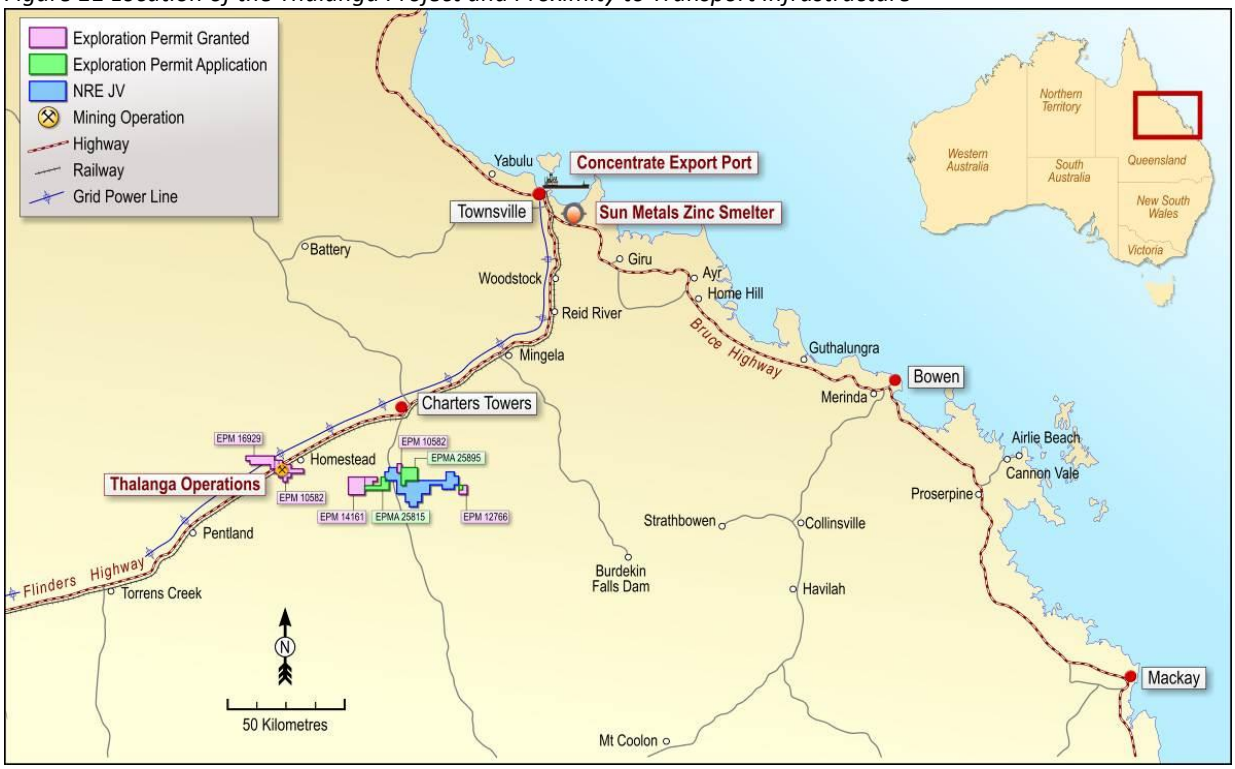
Royalty Holder	Mining Leases	Exploration Permits
TCM Royalty	1392, 1531, 10137, 10185 and 10186	10582 and 12766
FTI Royalty	10277	14161 and 16929
GMRG Royalty	10277	14161 and 16929

The Queensland Government royalties are applied to all commodities produced and sold in accordance with published rates and guidelines. Please refer to the Queensland Mineral Resources Act 1989 (Mineral Resources Regulation 2013, current as of 1 July 2015).

8. Infrastructure

The Project is well serviced by State and Federal road networks. The Thalanga Project (West 45 deposit, Far West deposit and Thalanga Plant) is located approximately 6km from the Flinders Highway (A6), with access to site by a Company owned sealed road. Both the Flinders Highway and site access road are considered all-weather roads and are rarely cut-off by flooding or other events. The Waterloo project is located approximately 16km from the Gregory Developmental Road (A7) by unsealed roads maintained by Charters Towers Regional Council.

Figure 11 Location of the Thalanga Project and Proximity to Transport Infrastructure



It is expected that the majority of the workforce will be drawn from local and regional communities, predominately Charters Towers. The Company plans to operate a daily bus service from Charters Towers to transport workers to and from site (similar to service currently operated by Evolution Mining Ltd's Pajingo gold mine, located 80km south of Charters Towers).

8.1. Power

The Project is connected to local grid power which is supplied to the site via the Ergon 66 kV network; including West 45 and Far West mine sites, as they both are located within 2km of the Plant site. A diesel powered generator station will be required at Waterloo to power the underground mine.

8.2. Water

Water capacity currently exists on site in the Tailings Storage Facility and the disused Vomacka open pit. This will be augmented by an existing borefield located 9km from the Project.

8.3. Plant Site Facilities

The site infrastructure is in excellent condition and provides all necessary facilities for operations, including administration offices, workshops, stores, fuel storage and an assay laboratory.

Figure 12 Thalanga Project infrastructure – site entrance, weighbridge, administration office and assay laboratory

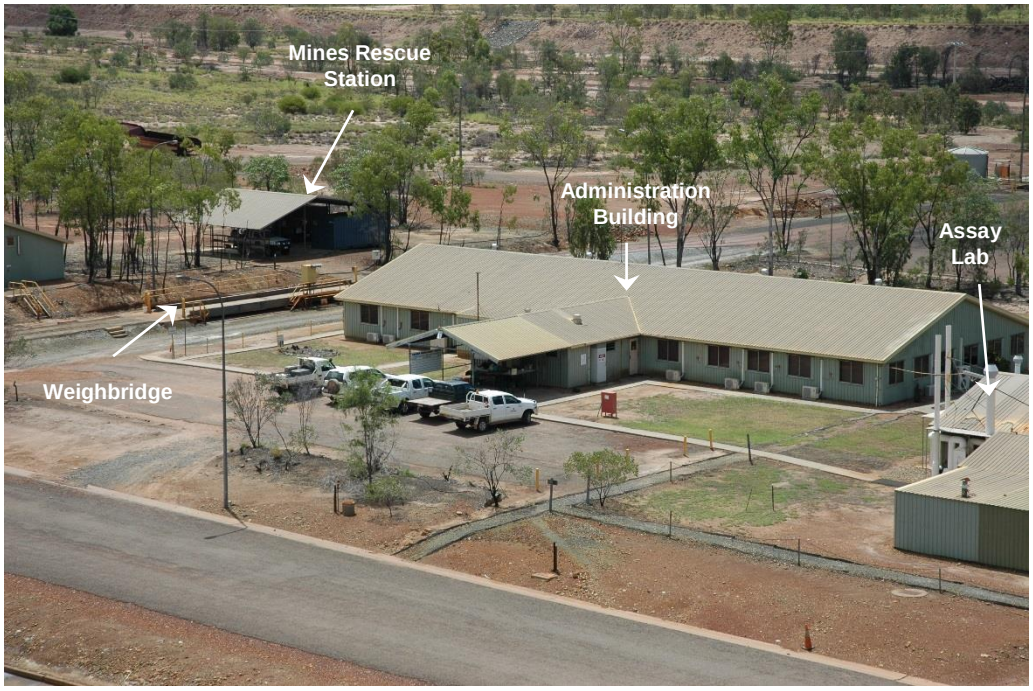
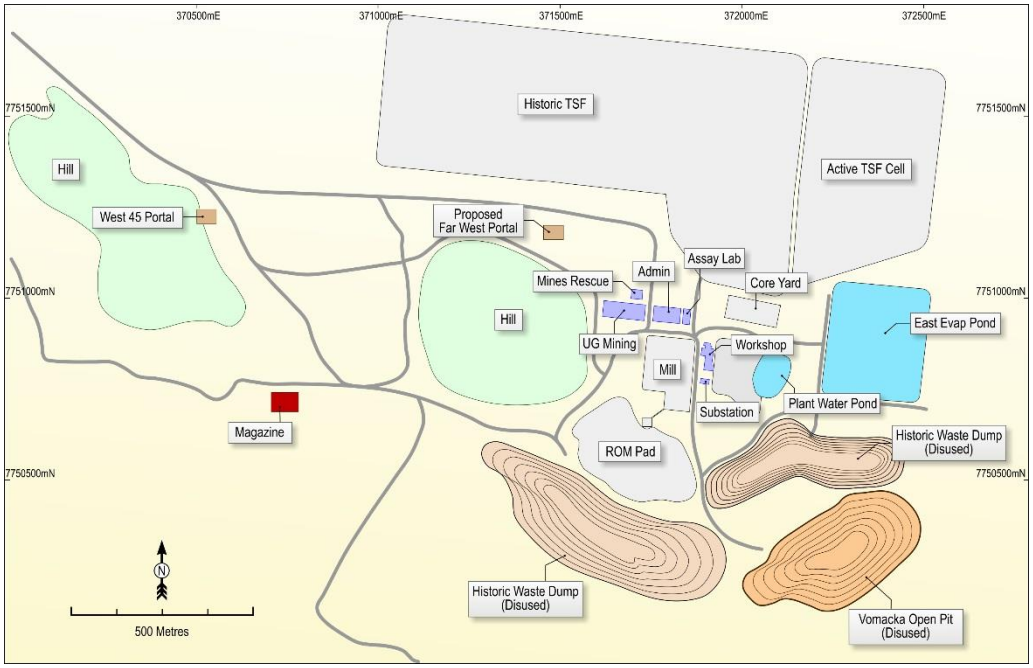


Figure 13 Thalanga Project Site Map



9. Marketing & Logistics

The site is some 200km from Townsville and most major consumables will be gathered or sourced from there and trucked to site. Multiple cartage contactors provide a daily service at very competitive rates. Historically, concentrates from the Project have typically been trucked to the port of Townsville, which is Australia's largest copper, zinc and lead export port (metal and concentrate) for shipment to smelters or sent directly to the Sun Metals Zinc refinery in Townsville, which is owned by Korea Zinc.

Red River will truck the concentrate from Thalanga to Townsville, whether to the Sun Metals Zinc Smelter or to the port and on to bulk carriers for transport overseas. Half height sealed containers will be used to transport concentrates that will be loaded onto ships for export. Red River is in discussions with a number of potential groups in relation to the offtake for Project concentrates, and hopes to provide further information on this in the future.

10. Projected Revenue & Commodity Price Assumptions

Consensus commodity price forecasts and exchange rates used in the Re-Start Study are provided in Table 11 below.

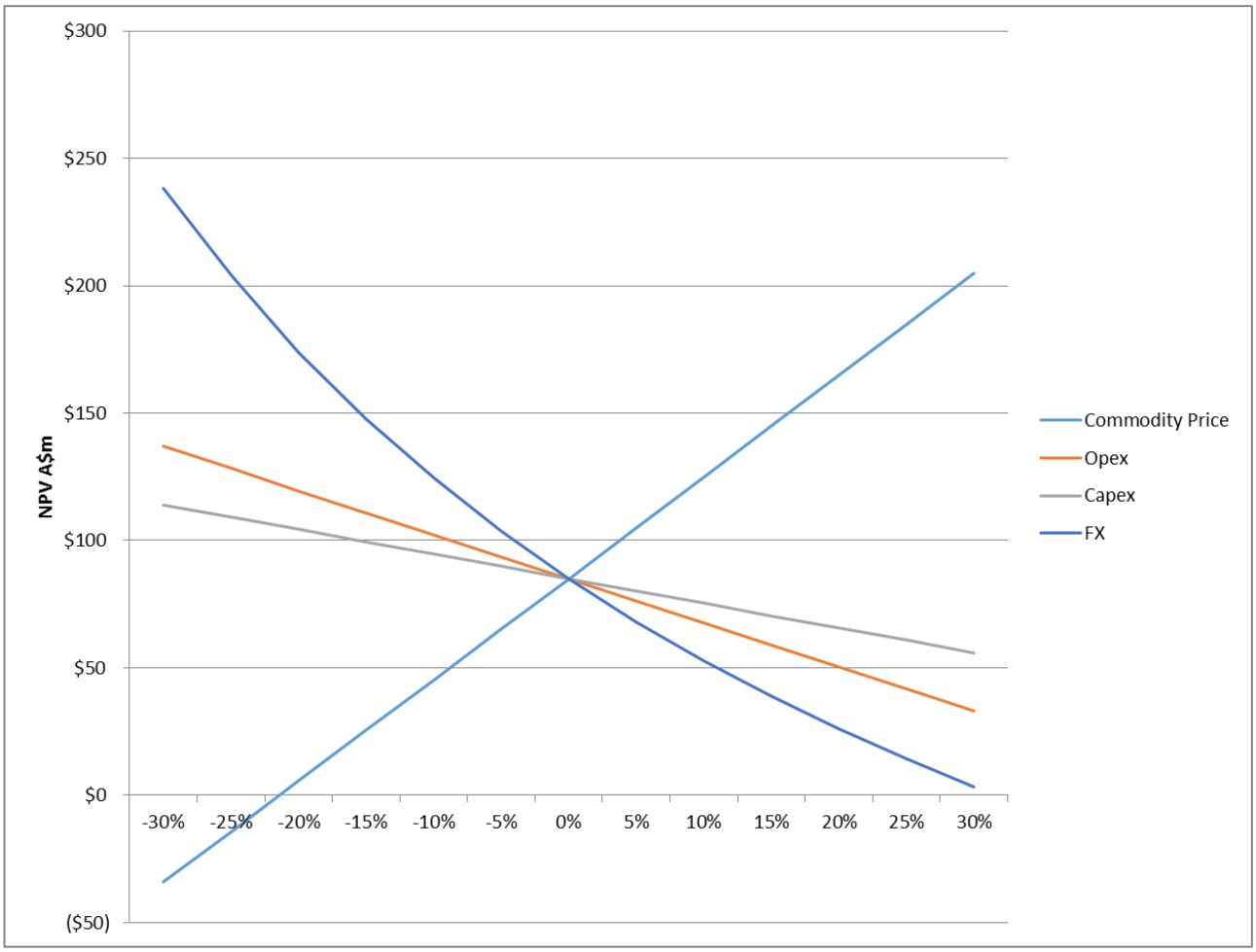
Table 11 Pricing Assumptions

Commodity	Units	2016	2017	2018	2019	2020	2021	2022	2023	2024
Copper	US$/t	6,173	6,647	6,932	7,142	7,148	7,148	7,148	7,148	7,148
Lead	US$/t	1,984	2,178	2,226	2,258	2,300	2,300	2,300	2,300	2,300
Zinc	US$/t	2,205	2,648	2,708	2,728	2,624	2,624	2,624	2,624	2,624
Gold	US$/oz	1,200	1,262	1,300	1,310	1,269	1,269	1,269	1,269	1,269
Silver	US$/oz	17.00	18.96	19.97	20.39	19.94	19.94	19.94	19.94	19.94
Exchange Rate	(US$:A$)	0.73	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75

11. Project Sensitivity Analysis

The spider diagram in Figure 14 below illustrates that the Thalanga Zinc Project is most sensitive to changes in commodity price (primarily zinc) and the exchange rate. A discount rate of 8% was used in the Net Present Value calculation.

Figure 14 NPV Sensitivity Chart



12. Timeline to Production

Red River has completed the Re-Start Study for the Thalanga Zinc Project. The Company estimates that production of saleable base metal concentrates will commence approximately 6 months after the Red River Board makes the final investment decision. The Company has commenced discussions with a number of key stakeholders, including potential offtakers, financiers, and mining contractors.

13. Permitting, Environment & Approvals

The Project currently operates under Environmental Authority reference EPML00773613 dated 19 September 2014. A number of key Environmentally Relevant Activities are authorised at the Project under the site's current Environmental Authority. Red River is developing an Environmental Management System for the Thalanga Operations.

The Project consists of the following Mining Leases (ML 10186, ML 10185, ML 1531, ML 10137 and ML 1392) and Exploration Permits (EPM 10582). All Mining Leases and Exploration Permits are held by Red River's wholly owned subsidiary, Cromarty Resources Pty Ltd ("**Cromarty**") with the exception of ML 1392.

The Queensland Government (Department of Natural Resources and Mines) has given indicative approval to transfer ML1392 from Kagara Copper Pty Ltd to Cromarty subject to the various third party consents. These consents have been given and the transfer will be completed shortly.

The Waterloo deposit is located on EPM 10582. Red River plans to commence the process of applying for a Mining Lease over the Waterloo deposit.

14. Next Steps

The results of the Re-Start study confirm Red River's strategy to re-commence production at the Thalanga Zinc Project. Based on the positive results of the Study, the Company plans to progress long lead time items combined with project and corporate development activities with a view to starting production at the Thalanga Zinc Project in 2016. Key areas of additional work include the following

1. **Continuing discussions with potential offtake partners;**
2. **Continuing discussions with potential mining contractors; and**
3. **Further consideration of the various financing options available to restart production.**

Given the very strong exploration potential of the Project, ongoing exploration activities will continue to be progressed by Red River, in parallel with planning for a re-start of production at the Project.

Over the next 12 month period, Red River plans to execute a high impact exploration strategy with a twin focus:

- Resource definition drilling: increase resources at known deposits with a particular focus on Far West; and
- Systematic target testing: drilling of key targets generated by Red River's ongoing exploration activities

Red River will also continue to investigate opportunities to increase mining rates at the Thalanga Zinc Project to allow the Thalanga Plant to operate at full processing capacity (approx. 650ktpa throughput).

Competent Persons Statement

The information in this report that relates to the estimation and reporting of the West 45, Far West, Orient, Liontown and Waterloo Resources and the Far West Exploration Target 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. Details of the relevant Mineral Resource estimates were released in the ASX on the following dates:

Estimate	Date
West 45 Resource Estimate	11 February 2015
Far West Resource Estimate and Exploration Target	27 January 2015
Waterloo Resource Estimate	24 April 2015
Orient Resource Estimate	11 February 2015
Liontown Resource Estimate	24 June 2015

Red River confirms that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the announcements referred to above continue to apply and have not materially changed

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 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'.

APPENDIX 1: West 45

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The deposit was primarily sampled via half core samples based on geological considerations within diamond drill holes drilled on a 20m x 20m pattern through the project area. • The holes were orientated to ensure drill intersections were approximately perpendicular to the dip and strike of the ore lenses and overall geological package. • Diamond core and reverse circulation drill samples were crushed and assayed for Cu, Pb, Zn, Ag, Fe and Au via Atomic Absorption Spectrum (AAS) for the base metals and fire assay with an AAS finish for gold.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• A total of 71 diamond holes have been drilled in the West 45 project area, of these a total of 47 diamond holes have been used to estimate resources for the project. The diamond core size drilled was predominately with standard tube NQ2 sized core. All diamond core was orientated. • In addition to the diamond drilling a total of 10 reverse circulation holes were drilled within the project area with 6 of these used during the estimation of the resources.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• The diamond core drill recovery was monitored using a combination of the drillers run sheets, core block markings and manual piecing together of core and measurement by Kagara Geologists and Field Assistants in the core processing facility. Any core loss was noted within the logging sheets. • The majority of the resource is based on diamond drilling, the deposit predominately consists of zinc and copper mineralization, there are no concerns regarding loss of fine material during the core sampling process for this deposit.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All diamond core and reverse circulation chips were logged for geological and geotechnical characteristics. Rock type, alteration style and sulphide mineral content were logged by a site geologist. The logging was sufficient to enable creation of detailed geological model that supports the resource estimate. Core photographs are taken of each core tray and stored as part of the resource database dataset.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-*	• NQ2 sized diamond core was marked up and cut in half with a diamond core saw. The right side of the core as sampled according to the geological intervals selected by the site geologist. • The RC samples were poured through a riffle splitter after the sample was circulated from the drill face through a cyclone and into a large plastic bag. • The methodology of selecting half core via geological intervals guarantees that the core samples are representative. The reverse circulation drilling samples are collected on 1m intervals so there is no selectivity

Criteria	JORC Code explanation	Commentary
	half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	bias with these. • The sample sizes vary from material sourced from the core samples given the varying sample lengths. The RC samples are generally 5-10 kg. • The sample sizes are appropriate given the relatively even distribution of base metal grades within the deposit
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The ALS laboratory completed internal standard and duplicate samples. • 30 pulp residues were sent to the onsite laboratory. Results of these samples showed strong correlation with the original samples for all base metals except Pb. Since the Pb content of the resource is not material this is not deemed to detract from the quality of the assay dataset. • Resampling of 79 quarter core samples was completed in January 2015. Results showed an overall correlation coefficient of 0.82 for all metals. The program has added further verification to the original assay dataset.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Holes are drilled to within 10m of each other in some areas of the deposit, the assay data in these holes is consistent through the mineralized zones. • Data was entered into a central database and then validated by a series of validation checks to ensure erroneous data was not saved into the resource database.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The Thalanga mine grid was extended to cover the West 45 deposit. All holes were surveyed using the Thalanga site survey team who used a differential GPS survey system. • The topography surface is represented by a wireframe file that has been edited over time by the site survey team. The surface covers the complete West 45 deposit area. The surface is an accurate representation of the actual topographic surface at the site.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The West 45 deposit has been drilled on an average spacing of 20m x 20m in the main resource area and down to 10m x 10m in some places. This drill spacing provides evidence of mineralized zone continuity for the purposes of resource estimation. • No sampling compositing was necessary in the initial diamond drilling however compositing of raw assay data was completed in preparation for the resource estimation process.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The majority of diamond holes were orientated to provide an approximate perpendicular intersection angle with the main mineralized zones. • No sampling bias is assessed as been caused by the orientation of the drilling orientation.
Sample security	• *The measures taken to ensure sample security.*	• Samples were supervised by either the drill crew, field assistant or geologist and at all times. Given the base metal nature of the deposit sample security was no assessed as a significant risk.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A review of the assay data was completed by Sheperd 1997. A due diligence review of the resource estimation was completed by Mining One Consultants was completed in November 2013.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• No agreements or joint ventures are attributed to the Mining lease covering the West 45 deposit. No joint ventures exist over the property however a 4% NSR is payable to Thalanga Copper Mines in addition to the standard Queensland government royalty. • The license area is current.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• RGC Thalanga Pty Ltd drilled the deposit between 1996-1998 and then Kagara Copper drilled the project between 2007-2011.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The deposit consists of stratiform sulphide lenses and stringer zones developed within quartz eye volcanoclastics located between a dacite hangingwall and rhyolite footwall.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• A list of each resource drillhole location and interval is located as an appendix to this table, see below.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• The exploration results reported for West 45 were included as weighted average assay intervals for Zn, Cu, Ag and Pb. No cutting of high grades was completed when reporting as exploration results
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The typical drill sample interval is 1m in length, the average thickness of the mineralized zone is 5m, there are no issues with reporting the results based on this. • The drillholes intercepted the mineralized lenses at an approximately perpendicular angle. All exploration results were reported as downhole thicknesses.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See Table 1 for a location plan of all drill collars used in the resource estimate.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All drill intercepts are listed in Table 2
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;*	• Not Applicable

Criteria	JORC Code explanation	Commentary
	geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Mining has commenced within the deposit, some step out drilling will be completed from the underground workings.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The survey, sampling and logging data was electronically imported into the resource database. Checks were also made of the original lab sample sheets and the database to ensure that transcription errors were not present. A visual check was also made of the drill traces, assay and logging data in the 3D environment of Surpac to ensure that results correlated between drillholes and were inline with the geological interpretation and mineralization continuity.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was completed by Stuart Hutchin on 16/10/2013 where West 45 core samples were inspected, the portal area viewed and general location of surface collars were confirmed.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The confidence in the overall geological interpretation is high and has been confirmed by continued infill drilling from the underground workings and the actual orientation of the stoping blocks from within the mine. • The dacite, quartz eye volcanoclastics and rhyolite geological units have been modelled and are used to define general areas of rock types within the deposit. The mineralized zones typically occur within the quartz eye volcanoclastics. • The mineralized lenses occur within the quartz eye volcanoclastic package, they are discrete pods of massive sulphide and stringer mineralization, some fault control on these zones is evident that does cause termination of individual lenses.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The strike length of individual mineralized pods ranges from 40m to 240m, thickness of the zones ranges from 5m to 20m. The resource domains are located from 20m below the surface topography and extend to a depth of 250m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	• The resource model was constructed using Surpac software. Mineralised domain wireframes were constructed using a nominal 5% Zn Eq boundary, these domains were used to constrain the estimate. A minimum domain thickness of 2m was used, this corresponds to the minimum practical mining width within an underground operation. • High grade Zn, Cu, Pb, Ag and Au were applied using the 95th percentile method. This cut up to 31 composites in Lens 1. No high grades were cut out of lenses 3, 4, 5 and 6 due to the lack of any significant high grade outliers in those populations. • A composite file was created using an average composite length of 1m. The average sample length within the assay dataset is also 1m. • Variograms were not created due insufficient quantity of sample pairs within the relatively small dataset, meaningful variograms were not created. • An inverse distance estimate was run given the lack of variograms. This method was however deemed to be suitable given the style and orientation of the mineralization. • The average Zn grade for zone 1 (largest component to the resource) is 8.3% Zn in comparison to the mean of the zone 1 composites of 8.92% Zn. The estimated Cu grade for zone 1 is 0.6% Cu in comparison to 0.61% Cu for the mean of the zone 1 composites.

Criteria	JORC Code explanation	Commentary
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The resource tonnages have been estimated on a dry basis
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut – off using 5% Zn Eq has been used to report resources. This was chosen as the lower limit of potentially economically extractable material within an underground mining operation in this style of deposit.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The resources have been estimated using a minimum thickness of 2m for each of the domain shapes, this minimum thickness therefore accounts for any dilution in zones that are less than this thickness. The proposed mining method is via underground long hole stoping techniques, the model parameters are therefore deemed to be suitable for this type of potential mining operation.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• The ore is planned to be crushed and a separate zinc, copper and lead concentrates produced. Metallurgical test work has shown that a saleable concentrate can be produced from the West 45 ore. The ore will be processed at the existing Thalanga processing facility.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The tailings produced during the creation of the concentrate will be disposed of at the currently permitted Thalanga tailings facility. Waste rock from the mine will be placed on the existing waste dump locations. Approvals have been given for mining of the West 45 deposit by the Queensland State Government.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The bulk densities for the ore and waste rock types were estimated using the Archimedes method, that is (Dry Weight / (Dry Weight – Wet Weight).
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The resources have been classified according to the drill density and the modelled continuity of both the thickness and grade of the mineralized zones in the view of the resource geologist. Only indicated and inferred blocks have reported for the resource, no measured blocks are reported. • The resource classification is deemed appropriate in relation to the drill spacing and geological continuity of the mineralized domains.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Mining One consultants completed a review of the West 45 resource as part of a due diligence program. No critical flaws were highlighted with the source data set or the modelling methodology however there were some deficiencies such as the limited QAQC programs during drilling and the lack of data to create variograms.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The resource estimate is deemed to be an accurate reflection of both the geological interpretation and tenure of mineralization within the deposit. Underground development commenced on the deposit where lens 1 was intersected as predicted by the resource model, the limited production grades achieved prior to the company going into administration were consistent with the reported resource grades for that area of the deposit. This provides confidence in the estimate.

WEST 45 – Table 1: DRILLHOLE COLLAR LOCATIONS

Hole_ID	X	Y	Z	Max_Depth	Azimuth	Dip
TH045	18590.41	20640.84	1027.5	534.71	181.5	-71
TH406	18595	20625	1028.5	804.71	180	-73
TH508	18721.03	20171.57	1025.62	403.01	20	-60
TH509	18700.74	20286.3	1031.58	307.01	20	-60
TH510	18654.48	20326.15	1032.89	291.31	20	-60
TH511	18655.24	20248.61	1029.02	360.01	20	-60
TH512	18620.42	20287.22	1030.15	327.51	20	-60
TH513	18612.15	20349.89	1032.44	240.01	20	-60
TH514	18646.01	20275.8	1030.03	300.81	20	-60
TH515	18699.81	20358.37	1037.25	200.01	20	-60
TH516	18579.99	20366.88	1031.54	210.2	20	-60
TH518	18650.97	20365.96	1035.03	200.01	20	-60
TH519	18700.83	20381	1039.39	138.01	20	-60
TH520	18696.93	20327.81	1034.69	251.01	20	-60
TH524	18616.92	20374.99	1034.59	177.01	20	-60
TH525	18549.47	20301.51	1028.12	323.81	20	-60
TH526	18549.46	20199.57	1025.46	481.01	20	-60
TH527	18617.21	20363.25	1033.94	192.01	20	-60
TH528	18652.44	20299.95	1031.69	290.01	20	-60
TH530	18650.33	20347.7	1034.23	210.86	20	-60
TH536	18617.86	20259.14	1028.99	315.01	20	-60
TH537	18617.47	20317.24	1031.49	270.31	20	-60
TH538	18700.1	20345.77	1035.76	201.9	20	-60
TH541	18680.87	20335.78	1034.51	243.41	18	-61
TH542	18640.06	20334.28	1033.2	267.31	18	-61
TH543	18721.1	20337.69	1035.98	204.01	18	-60
TH544	18950	20600	1020	800.01	193	-71
TH545	18600.13	20323.84	1030.97	252.01	18	-61
TH546	18600.09	20355.78	1032.52	207.01	18	-61
TH547	18640.77	20312.91	1032.02	276.51	18	-61
TH548	18600.27	20304.26	1029.95	69	18	-60
TH548A	18603.15	20304.04	1031.34	246	18	-60
TH549	18679.75	20355.64	1036.16	225.21	18	-60
TH550	18680.66	20312.76	1033.18	249.21	18	-61
TH551	18719.89	20313.15	1034.01	242.01	18	-61
TH552	18719.84	20361.93	1038.05	170.01	18	-61
TH553	18750.49	20346.18	1037.44	180.01	18	-61
TH554	18680.67	20296.79	1032.03	60	18	-62
TH554A	18680.48	20292.8	1031.75	279.21	18	-62
TH555	18599.98	20273.55	1028.87	246	18	-62
TH556	18775.07	20353.64	1037.99	160.01	18	-62
TH557	18775.43	20357.3	1038.44	123.2	18	-52

Hole_ID	X	Y	Z	Max_Depth	Azimuth	Dip
TH558	18640.69	20291.99	1031.14	279.01	18	-61
TH560	18580.02	20315.69	1029.66	267.21	18	-62
TH561	18579.96	20291.89	1028.91	297.21	18	-62
TH562	18680.06	20277.78	1031.007	54	18	-62
TH562A	18679.91	20271.29	1030.465	270.01	18	-62
TH563	18670.53	20307.37	1032.62	63	18	-61
TH563A	18670.43	20309.07	1032.68	249	16	-62
TH564	18627.98	20544.98	1046.52	307.5	196	-65
TH565	18750.6	20333.53	1036.13	170.01	18	-63
TH566	18679.59	20358.53	1036.37	150.21	18	-54
TH567	18600.09	20358.8	1032.7	144.11	18	-49
TH570	18683.11	20559.9	1039.271	258.81	198	-47.5
TH571	18683.11	20559.9	1039.271	361.7	198	-41
TH572	18950	20587	1024	281.31	230	-21
TH579	18658.63	20357.5	1034.851	231.6		
TH608	18682.58	20336.21	1034.624	180.6		
TH636	18771.9	20314.63	1034.68	158.7	0	-55.5
TH637	18778.02	20349.64	1037.895	131.6	5	-64.5
TH638	18723.02	20360.3	1037.949	159	355	-63
TH639	18714.13	20328.1	1034.993	197.1	4.5	-60
TH640	18700.12	20304.47	1032.909	150	0	-59
TH641	18689.94	20318.82	1033.674	120	0	-60
TH642	18620.08	20298.04	1030.371	287.8	0	-60
TH643	18630.18	20360.2	1034.255	62.8	0	-60
TH644	18654.94	20343.12	1034.079	188.7	5	-61
TH645	18630.04	20340.16	1033.045	188.7	0	-60
TH646	18620.61	20336.12	1032.44	188.7	359	-61
TH647	18630.08	20359.42	1034.27	185.8	0	-60
TH648	18700.07	20306.34	1033.072	239.8	0	-60
TH649	18640.13	20529.99	1046.649	309	180	-62
TH650	18640.08	20529.91	1046.662	73.3	180	-51
TH651	18640.1	20529.68	1046.763	260.8	180	-51
TH652	18642	20529.75	1046.637	64	172	-53
TH653	18654.83	20320.53	1032.739	278.5	4	-62
TH654	18713.83	20324.95	1034.74	224.8	22	-62
TH657	18795.21	20317.43	1035.117	194.5	22	-62
TR1	18800	20190	1028	448.01	360	-60
TR2	18400	20290	1024	469.21	360	-60
TRRC072	18400	20400	1028	210.01		
TRRC080	18400	20371	1028	78.01		
TRRC081	18450	20365	1028	60.01		
TRRC082	18549.63	20366.07	1029.82	200.01		
TRRC083	18474.09	20291.1	1025.11	358.01		
TRRC084	18650.7	20326.25	1033.03	261.01		

Hole_ID	X	Y	Z	Max_Depth	Azimuth	Dip
TRRC085	18650.64	20356.6	1034.72	208.01		
TRRC086	18650.43	20286.86	1031.04	294.01		
TRRC087	18750.69	20326.17	1035.42	210.01		
TRRC088	18895.11	20248.35	1030.28	100.01		
TRRC089	18597.3	20344.37	1031.67	246.01		
TRRC090	18700.96	20331.42	1034.68	256.01		
TRRC091	18650.97	20374.29	1036.11	132.01		
TRRC092	18499.73	20360.42	1027.94	240.01		
TRRC094	18750.79	20366.58	1039.51	142.01		

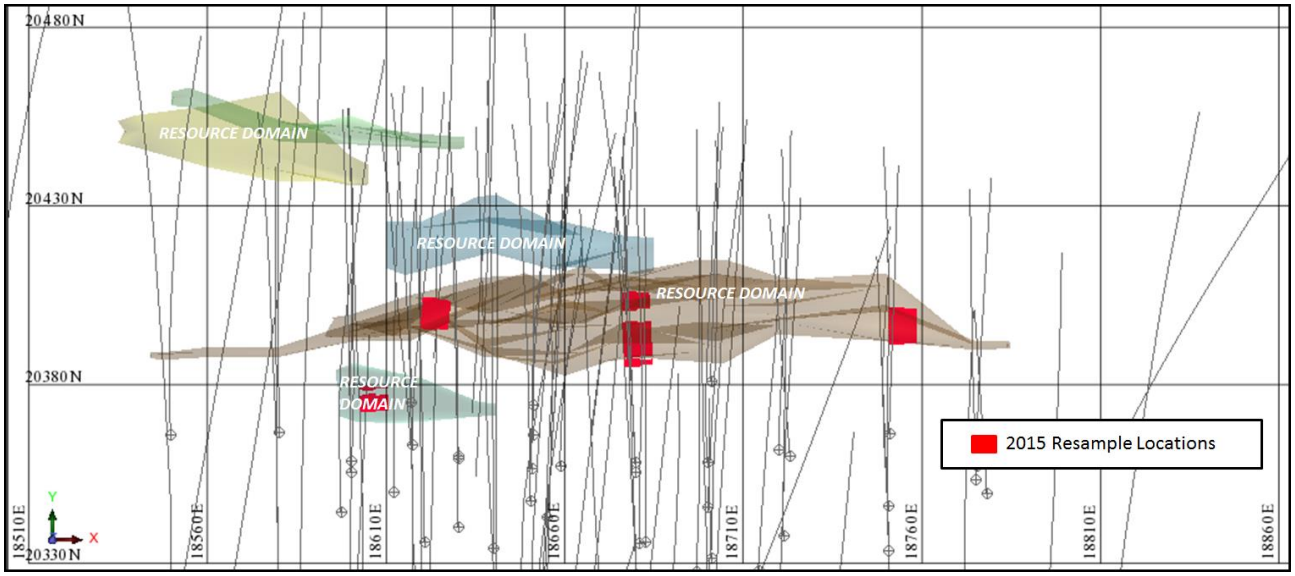
WEST 45 – Table 2: DRILLHOLE INTERCEPT TABLES

hole_id	depth_from	depth_to	Cu %	Pb %	Zn %	Ag ppm	Au ppm	domain
TH045	314	318	1.22	0.04	3.02	8.6		6
TH510	142.5	149	1.13	6.84	12.53	105.2	0.49	1
TH510	154	160.1	0.42	2.21	6.27	64.7	0.24	1
TH510	166.1	197.4	0.18	1.96	6.61	47.4	0.16	3
TH512	175.7	183.7	0.42	5.47	9.37	24.1	0.37	4
TH513	94	106.51	0.38	1.64	3.02	213.5	0.67	1
TH515	73.8	77	0.29	2.34	6.42	90.3	0.35	1
TH516	41.55	47.24	0.25	3.70	6.27	57.0	0.33	1
TH516	157.75	167.91	0.16	1.52	2.79	30.9	0.14	5
TH520	143.6	155.5	0.77	5.26	13.70	64.5	0.30	1
TH524	34.6	48	0.57	3.13	5.19	65.6	0.43	1
TH524	146.55	147.7	0.05	0.84	3.48	9.0	0.08	5
TH525	257.82	259.96	0.92	0.42	4.25	9.5	0.06	6
TH527	66.05	78.55	1.21	4.40	7.58	89.0	0.16	1
TH527	164.9	168.7	0.69	1.14	9.26	21.2	0.18	5
TH528	187.74	190	0.30	1.75	2.58	75.3	0.32	1
TH528	210	241	0.26	2.04	3.69	8.8	0.08	1
TH530	105.15	123.25	1.62	6.46	13.32	124.6	0.64	1
TH537	158.05	173.1	0.11	1.74	3.04	21.4	0.13	1
TH537	183.35	205.33	0.08	1.24	4.13	14.4	0.04	3
TH538	95.4	102.84	1.45	9.43	17.83	151.8	0.73	1
TH538	116.3	132.55	0.39	4.68	8.95	95.1	0.39	1
TH541	123.3	153.8	1.31	5.42	13.16	218.4	1.00	1
TH542	129.4	137.3	0.66	6.11	14.09	90.8	0.58	1
TH542	171.7	191.7	0.10	1.70	2.80	35.3	0.13	3
TH543	115.5	117	0.55	3.06	8.18	55.7	0.31	1
TH543	119.4	131.5	0.56	7.16	11.92	119.5	0.60	1
TH545	121.8	123.7	0.17	1.36	2.15	22.2	0.11	4
TH545	148.8	150.2	0.05	1.02	1.21	160.3	2.12	1
TH545	215.1	220.1	0.07	1.15	4.53	14.4	0.11	6
TH547	153.3	158.3	0.12	1.66	2.93	22.0	0.10	1
TH547	172.2	197.2	0.19	3.11	5.61	45.5	0.23	1
TH547	213.7	240.3	1.60	0.85	6.05	22.7	0.15	3
TH548A	144.8	151.3	1.60	8.87	19.10	78.1	0.59	4
TH549	103.7	111.6	0.32	4.05	5.97	72.2	0.20	1
TH550	157.7	163.7	0.29	2.19	4.01	28.2		1
TH550	180.7	196.6	0.89	2.04	12.28	27.0	0.15	1
TH550	209.31	216.8	0.62	1.69	7.86	19.1	0.11	3

hole_id	depth_from	depth_to	Cu %	Pb %	Zn %	Ag ppm	Au ppm	domain
TH552	74	75	0.53	2.16	10.23	360.0	1.18	1
TH553	88.1	104	0.57	6.81	18.55	175.7	0.79	1
TH553	110	116	0.38	2.17	3.14	8.5	0.09	1
TH554A	182.6	200	1.00	6.22	13.47	161.3	0.80	1
TH554A	206.6	216	0.64	1.21	7.69	20.6	0.14	1
TH554A	227	230	0.47	0.86	6.52	19.3	0.12	3
TH556	75.2	77.5	0.59	2.64	5.73	94.3	0.39	1
TH558	191.8	196.8	0.12	2.28	3.72	18.4	0.05	1
TH558	216.4	218.4	0.41	1.55	3.54	61.5	0.17	1
TH560	241	248	0.31	1.60	4.43	17.9	0.11	6
TH563A	168	173.7	0.70	3.17	9.66	130.6	0.39	1
TH563A	184.6	208.4	0.70	3.58	11.86	61.3	0.51	1
TH563A	230.8	234.4	0.22	2.52	4.48	26.9	0.24	3
TH564	201.2	202.1	0.26	0.59	5.57	8.0	0.04	5
TH564	241.8	246.9	0.34	2.43	6.16	19.4	0.15	3
TH565	124	127.4	1.20	4.03	11.31	35.7	0.20	1
TH567	53.2	55	0.97	4.80	12.41	121.3	0.42	1
TH567	136	137.7	0.15	3.24	4.49	19.0	0.07	5
TH570	208	213	0.46	3.63	6.92	187.8	0.54	1
TH570	228.2	235	0.47	3.06	5.88	64.8	0.21	1
TH571	198.7	216.58	0.94	5.58	11.48	167.4	0.62	1
TH579	140	142	0.91	7.34	11.79	168.0	0.35	1
TH579	163.9	197	0.28	2.22	3.81	17.8	0.12	1
TH608	120.5	137.2	0.90	6.38	9.62	139.0	0.56	1
TH638	88	89.15	1.80	21.80	28.60	554.0	0.84	1
TH638	104.8	112	0.18	3.37	4.73	20.3	0.10	1
TH639	137.5	141.5	0.50	3.17	10.45	42.0	0.31	1
TH639	148	163.8	0.62	3.46	10.01	43.1	0.15	1
TH642	155.4	157	0.22	2.36	3.60	44.9		4
TH642	225.1	239.1	0.72	2.74	7.22	32.1	0.12	3
TH644	107.9	129.8	0.72	10.63	16.84	203.2	0.73	1
TH645	116.3	126.2	0.67	6.39	10.01	77.9	0.45	1
TH646	118.3	123.2	0.38	1.59	1.35	37.0	0.14	1
TH647	80	92.45	0.46	2.36	3.57	47.7	0.24	1
TH647	171.1	173.7	0.85	0.69	10.40	18.6	0.09	5
TH648	162.1	166.3	0.40	0.81	3.05	20.7	0.10	1
TH649	209.2	224	0.09	0.93	1.53	9.4	0.06	3
TH651	198	203	0.28	1.78	3.39	70.0	0.27	1
TH651	208	211	0.18	2.04	2.85	86.1	0.33	1
TH651	233.25	238	0.78	6.02	8.52	50.4	0.87	4

hole_id	depth_from	depth_to	Cu %	Pb %	Zn %	Ag ppm	Au ppm	domain
TH653	150	153	0.15	1.76	3.49	35.8	0.12	1
TH653	168	171.1	0.11	0.89	1.61	94.6		1
TH653	189	206	0.07	0.29	1.78	23.5	0.03	3
TRRC082	44	47	0.82	2.59	9.94	20.7	0.18	1
TRRC082	172	177	0.10	0.94	4.22	10.6	0.11	5
TRRC084	141	146	0.86	2.91	16.24	10.0	0.54	1
TRRC084	152	156	1.23	4.02	19.24	344.8	1.26	1
TRRC084	171	195	0.13	1.84	5.18	48.0	0.21	3
TRRC085	94	102	0.82	4.81	7.26	65.8	0.31	1
TRRC086	185	196	0.31	4.58	8.70	42.2	0.19	1
TRRC086	209	236	0.31	1.26	4.11	24.0	0.12	1
TRRC089	108	110	0.60	0.10	11.10	77.0	0.22	1
TRRC090	142	154	0.36	3.50	11.39	37.4	0.44	1
TRRC090	165	189	0.49	3.24	9.51	22.3	0.10	1

WEST 45 - DRILLHOLE COLLAR PLAN



Section 4 Estimation and Reporting of Ore Reserves

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td>Mineral Resource estimate for conversion to Ore Reserves</td><td>Mineral Resource Estimate used for the West 45 restart Feasibility Study was published on the ASX (11 February 2015) and the total resource is 591kt at a grade of 0.6% copper, 3.5% lead, 8.3% zinc, 0.3g/t gold and 69g/t silver. The Mineral Resources for West 45 are inclusive of the Ore Reserves.</td></tr>
<tr><td>Site Visits, Re-start Study inputs and preparation</td><td>The following people has provided input into this Re-Start Study

Mr Mel Palancian (Red River Resources): Mr Palancian has visited the site and understands the detail associated with the site. Mr Palancian is the Managing Director of Red River Resources and is responsible for the final compilation of the Re-Start Study and also the Ore Reserve Estimate for West 45.

Mr Karl Spaleck (Red River Resources): Mr Spaleck has visited the site and understands the detail associated with the site. Mr Spaleck is the Thalanga Site General Manager and has been involved with the project for some time. Mr Spaleck also worked as liaison between the Company and Mincore Pty Ltd for the site refurbishment and metallurgical aspects as well as the external environmental consultants (Northern Resource Consultants) in relation to the environmental requirements and approvals associated with the Project.

Mr Donald Garner (Red River Resources): Mr Garner has visited the site and understands the detail associated with the site. Mr Garner is an Executive Director of Red River Resources and compiled the overall economic model associated with the Project.

Mr Stuart Hutchin (Mining One Consultants): Mr Hutchin is the Geology Manager (Mining One) and is responsible for the geological review of the deposits (West 45, Far West and Waterloo) including the resource estimation process as part of the Re-Start Study. He has visited the site and is familiar with the Project and its layout.

Mr Stewart Cuthbert (Mining One Consultants): Mr Cuthbert is the Senior Mining Engineer (Mining One) who has completed the mining study work associated with the Re-Start Study. Mr Cuthbert has not visited the site and has done his work based on information provided to him by the Company

Mr Cameron Bain (Mincore): Mr Bain - Principle Engineer (RPEQ Qualified) and has completed the site review of the Thalanga processing facility and with the assistance of Ken Bracher (RPEQ), David Tay and Rob Hill were responsible for the capital cost estimate to rehabilitate the Thalanga processing facility and operating cost estimate for the Thalanga processing facility. Mr Bain has visited the site and is familiar with the project and its layout.</td></tr>
<tr><td>Study status</td><td>The Ore Reserve was developed as part of the restart Feasibility Study which included technical and economic aspects to determine the viability of recovering the mineral resource. A detailed mine plan and practical mining schedule was developed by Mining One Consultants Pty Ltd. Appropriate modifying factors relating to the selected mining method (bench stoping), geotechnical conditions and metallurgical parameters were applied. The costs were derived from vendor estimates specific to the project and are considered to be within ±15% accuracy.</td></tr>
<tr><td>Cut-off parameters</td><td>The economic cut-off grade for the mineralisation was determined using the Net Smelter Return (NSR) to account for the value of all payable metals which was then converted to zinc equivalents (ZnEq). The NSR values were calculated at the ‘mine gate’ basis and incorporate metal pricing in the table below. The NSR value was adjusted for transport costs, port handling charges and concentrate treatment and refining charges on all payable metals. Payable metals are zinc, lead, copper and silver.

The cut-off NSR value was determined from the site operating costs including mining, processing and site administration costs. The cut-off was estimated to be $125 per tonne processed based on the full operating cost made. An incremental stope cut-off of $80 per tonne and an incremental development cut-off of $40 per tonne processed were also estimated as a subset of the operating costs.

The NSR cut-off was converted to zinc equivalents (ZnEq) using the commodity prices, exchange rate and recoveries shown below. ZnEq was chosen as zinc in the main revenue source when compared with the other metals produced.

The ZnEq formula was estimated as: ZnEq%= Zn% + 0.9 x Pb% + 3.3 x Cu% + 0 x Au g/t + 0.025 x Ag g/t
The mine design and therefore the Reserve Estimate has been calculated using a cut-off of 9% ZnEq and does not include incremental stope or development material other than that included in the dilution modifying factors.

<table>
<tr><td></td><td></td><td>Cut-off Grade</td><td>Incremental Stope Cut-off Grade</td><td>Incremental Development Cut-off Grade</td></tr>
<tr><td>Total Operating Cost</td><td>AUD</td><td>$125</td><td>$80</td><td>$40</td></tr>
<tr><td>Cut-off Grades</td><td>ZnEq</td><td>9.0%</td><td>5.8%</td><td>3.0%</td></tr>
<tr><td colspan="5">Note: Cut-off Grades have been rounded</td></tr>
</table>

<table>
<tr><th>Zinc Equivalents (ZnEq)</th><th>Zn</th><th>Pb</th><th>Cu</th><th>Au</th><th>Ag</th></tr>
<tr><td>Commodity Prices USD/lb or /oz</td><td>1.0</td><td>0.9</td><td>3.0</td><td>1,200</td><td>17.0</td></tr>
<tr><td>Forex AUD:USD</td><td>0.85</td><td>0.85</td><td>0.85</td><td>0.85</td><td>0.85</td></tr>
<tr><td>Recoveries</td><td>89%</td><td>80%</td><td>80%</td><td>-</td><td>70%</td></tr>
<tr><td>ZnEq Factors</td><td>1</td><td>0.9</td><td>3.3</td><td>0</td><td>0.025</td></tr>
<tr><td colspan="6">Notes: ZnEq factors have been rounded</td></tr>
</table>
</td></tr>
<tr><td>Mining factors or assumptions</td><td>The underground mining method selected is overhand benching and utilises conventional underground mechanised mining practices. The stoping sequence is based on mining bottom-up from three set horizons, two of which will be filled with cemented rockfill and the remaining stope voids will be filled with rockfill. The selected mining method is considered well suited to the disposition of the orebody and ground conditions; it is also flexible to enable ready adjustments to stope strike lengths as needed.

Kevin Rosengren & Associates completed two geotechnical assessments in 2011 which recommended sublevel intervals up to 20m and maximum stope strike lengths of 30m. The sublevel interval chosen is 20m floor to floor and stope strike lengths vary between 20 and 25m maximum. The average stope width is approximately 9m. The Ore Reserve estimate is based on a minimum stope width of 2m. Hangingwall</td></tr>
</table>

	and footwall dilution of 0.5m wide each (1m total) was included to account for stope overbreak. A recovery factor of 95% has been applied to all diluted stope tonnages. No unplanned dilution has been applied to development ore and a recovery of 100% has been assumed. Conventional long hole drilling and blasting will be used to break the stope ore. Development mining, using drill and blast methods, will recommence from the existing underground development faces once they have been dewatered, checked and rehabilitated as needed. The main decline will be 5.5m wide by 5.5m high and at a gradient of 1 in 7. Ore development will be mined 4.5m wide and 4.5m high. A standard underground mobile mining fleet will be utilised for underground mining activities including a twin boom jumbo drill, production drill, load haul dump units and 50t trucks. Ground conditions encountered in the West 45 portal and decline are good and have remained stable since mining ceased in early 2012. The decline has been bolted and meshed in the backs and walls using galvanised elements as per Kevin Rosengren & Associates recommendations. Cable bolting has been used at all intersections and where major structures daylight the decline. The mine plan intends to follow the recommended ground control regime. In addition the mine plan includes cablebolting of all stope hangingwalls from every ore drive using 6m long cables, 4 per ring and rings spaced at 2.5m on average. Stope brows will also be cable bolted at set points. Groundwater inflows encountered in the existing decline were low and a Ground Water Yield Assessment of West 45 by Rob Lait and Associates in 2011 also suggested that inflows will be low. The minimum pumping system design capacity is 20 litres per second which should be adequate to dewater the mine from natural ground water and introduced mine water. A power line is installed near the mine portal and the mine plan includes establishment of a stepdown transformer. An air compressor and receiver, underground two way communications as well as associated underground air, water and electrical reticulation systems are included in the mine plan. A ventilation system consisting of a surface to underground exhaust raise will need to be installed along with primary and secondary fans. The decline will be used as the fresh air intake. An egress system from surface will also be progressively installed as the mine workings become deeper. An underground refuge chamber is included in the mine plan. Water supply to the underground operations is in place as well as diesel storage facility, workshops, mine offices and change houses. The run of mine ore pad and waste rock dump is also in place.
Metallurgical factors or assumptions	The Thalanga polymetallic processing facility is approximately 1.5km from the West 45 portal and has successfully treated approximately 3,000t of West 45 ore in 2012. It has also successfully treated approximately 3.66Mt of primary sulphides from the nearby Thalanga mine. The processing facility consists of a three stage crushing circuit including a primary jaw crusher and, secondary and tertiary cone crushers, a 640kW primary ball plant, two 640kW secondary ball plants, separate copper, lead and zinc flotation circuits, separate copper, lead and zinc thickeners, a vertical filter press and associated reagent dosing systems and control systems. A regrind Plant is also a part of the circuit. The maximum throughput of this plant treating poly metallic ore is considered to be 650kt per annum as achieved in 1996. The Company intends to operate the plant at a throughput of approximately 300kt per annum for processing West 45 and considers that there will be surplus capacity in the processing plant. The processing facility utilises differential flotation of copper, lead and zinc minerals and is a common and proven beneficiation method throughout the mining industry but also in the past at Thalanga. The process plant is considered to be appropriate to the West 45 style of mineralisation and is not novel in its nature. Metallurgical testwork was conducted on the West 45 mineralisation in 2008 by Eacham Metallurgy Laboratory on two composite samples (high and low grade) which were compiled from two drillholes. Metallurgical domains at West 45 are assumed to be generally uniform with the exception of high and low grade areas. In addition, a low grade bulk sample from West 45 (~3,000t) was processed in 2012 over three days. The metallurgical factors applied in the economic evaluations are; zinc 89% recovery & 56% concentrate grade, lead 80% recovery & 60% concentrate grade plus 55% recovery of silver into the lead concentrate, copper 80% recovery & 22% concentrate grade plus 15% recovery of silver into the copper concentrate. There are no material deleterious elements expected that will prevent the saleability of the concentrates.
Environmental	The project is a disturbed mine site currently on care and maintenance. The Thalanga Operations' region is characterised by flat, open plains and situated relatively high in this landscape, at the foot of a rocky range that crosses the Flinders Highway. The topography of the mining leases is generally flat to gently undulating terrain. Typical wet season rainfall occurs from November to March; with average annual rainfall of 662mm and wettest months of January and February. Average annual maximum temperature is 30^0C and average wind speed is ~8km/h. Evaporation in the region varies from ~1,500mm to ~2,500mm; generally ~2,000mm. The Thalanga processing facility, associated infrastructure including the existing tailings storage facility are permitted in accordance to statuary authorities. The West 45 mine site has a granted mining lease. The proposed mining activities will be the same continuation of previous approved activities including storage of selected mine waste in existing dumps, tailings in the exiting tailings storage facility and mine water through the exiting water management and storage facilities. The Plan of Operations will require amendment from current care and maintenance activities to full operations. Northern Resource Consultants have inspected the project and assisted the Company with environmental aspects of the study and ongoing compliance of the project.
Infrastructure	All of the infrastructure for the process plant and supporting areas are in place. Some refurbishment of the plant and infrastructure will be required and this has been included in the restart Feasibility Study and economic evaluations. Mincore Pty Ltd have inspected the project and assisted the Company in preparing the process plant and infrastructure refurbishment programs and costings. Some supporting infrastructure for the underground mine will be required such as primary ventilation fans, electrical substation and pumping stations all of which have been included in the restart Feasibility Study and economic evaluations. The site is powered from the Queensland electricity grid and it is assumed that adequate power supply will be available. Water is recycled and reused on site and supplemented by an existing borefield which has been assumed to provide adequate volumes.

<table>
<tr><td></td><td>Access to the site is via as sealed road off the Flinders Highway; approximately 60km from Charters Towers.

Mobile telecommunications are accessible from the Telstra mobile network from Charters Towers and there is a fibre optic cable to site for data and fixed line telecommunications.

It is intended to recruit and bus most of the workforce from Charters Towers.</td></tr>
<tr><td>Costs</td><td>Capital and operating costs have been built up from first principles. Capital and operating costs for the process plant & infrastructure were estimated by Mincore using vendor prices (contractors, original equipment manufacturers and suppliers) and supplemented by Red River prices estimated in the same process. These costs include plant and infrastructure refurbishment, replacement and/or commissioning; first fills and spares. Mining capital and operating costs were estimated using a reputable mining contractor budget pricing based on the mine plan and requirements.

Labour requirements were developed for each department (except underground mining as the workforce will be provided by the mining contractor) and employee salaries and on-costs were developed from Hays guidelines and a local labour hire advisory firm who provided local salaries. Employee costs include Qld payroll tax, WorkCover and Qld Mines Safety levy.

Concentrate transport and handling costs were sourced from vendor budget pricing. Concentrate shipping costs were sourced from a shipping logistics provider. Concentrate treatment and refining costs were sourced from a reputable metals trader including penalty elements and are considered to be average basis industry terms.

Queensland government royalties were applied as per published rates (State Revenue Office) for the various metals recovered. Royalties to third parties have also been accounted for in the economic assessment as per their respective agreements. Foreign exchange rates were sourced from forecast consensus industry surveys.</td></tr>
<tr><td>Revenue factors</td><td>The West 45 head grades and tonnage were determined on a monthly basis from a detailed schedule of mining of the Ore Reserve after the application of dilution and recovery factors. The schedule is based on a logical mining development and stoping sequence of the Ore Reserve. Transport costs, port handling charges, shipping costs, smelter treatment charges, refining costs were included in the economic model. Payable terms for metals in zinc, lead and copper concentrates were also provided by a reputable metals trader and included in the economic model.

The revenues are based on production of zinc, lead and copper in concentrates and silver credits in the lead and copper concentrates. Commodity prices used for economic assessments were based on June 2015 forecast broker consensus pricing and are listed below.

<table>
<tr><th colspan="7">Commodity Pricing Consensus + RVR YR1</th></tr>
<tr><th>Commodity</th><th>Unit</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020+ Long Term</th></tr>
<tr><td>Zinc</td><td>USD/lb</td><td>$1.00</td><td>$1.20</td><td>$1.23</td><td>$1.24</td><td>$1.19</td></tr>
<tr><td>Lead</td><td>USD/lb</td><td>$0.90</td><td>$0.99</td><td>$1.01</td><td>$1.02</td><td>$1.04</td></tr>
<tr><td>Copper</td><td>USD/lb</td><td>$2.80</td><td>$3.02</td><td>$3.14</td><td>$3.24</td><td>$3.24</td></tr>
<tr><td>Silver</td><td>USD/oz</td><td>$17.00</td><td>$18.96</td><td>$19.97</td><td>$20.39</td><td>$19.94</td></tr>
<tr><td>Foreign Exchange USD:AUD</td><td></td><td>0.73</td><td>0.75</td><td>0.75</td><td>0.75</td><td>0.75</td></tr>
</table></td></tr>
<tr><td>Market assessment</td><td>The majority of the West 45 value is derived from zinc. London Metal Exchange (LME) zinc stocks have been steadily declining over the past 2 years and with the imminent closure of Century and Lisheen zinc mines. It is anticipated that declining zinc inventories will persist or perhaps reduce depending on global demand strength. Many industry commentators are forecasting higher zinc prices from 2016 and onwards than current spot. In addition the Sun Metals Zinc Refinery is located in Townsville and is ~200km by road from Thalanga Operations and it regularly imports zinc concentrates from overseas markets.

It is assumed the demand for zinc concentrate from West 45 will be supported by some mine closures and limited mine supply response therefore creating a favourable selling environment.</td></tr>
<tr><td>Economic</td><td>Mine production and ore processing inputs have been detailed in the sections above and have been included in the economic assessment. The capital and operating cost inputs have also been discussed above and are considered to be with ± 15% accuracy and have been included in the economic assessment.

The mining, processing, capital cost and operating cost schedules form the basis of the financial model which utilises commodity prices and foreign exchange rates detailed above. The NPV was calculated using a discount rate of 8% and is positive. Sensitivities around commodity prices, foreign exchange rates, metallurgical recoveries, capital costs and operating costs to ±30% variance have been presented.</td></tr>
<tr><td>Social</td><td>West 45 and the Thalanga Operations are approximately 60km from Charters Towers which is a mining and agriculture based community of approximately 8,200 people. The Company intends to source the majority of its workforce from Charters Towers as mine closures have adversely impacted the community and skilled workers are available. In addition the site will be a bus in/out from Charters Towers which will further strengthen community support for the project and benefits for the community. The Company has received only positive indications from local landholders and the Charters Towers community to date as the community sees the direct benefits or restarting the operations.</td></tr>
<tr><td>Other</td><td>The Thalanga Operations and West 45 do typically receive higher rainfall in summer and early autumn and dryer periods in winter. In some years the ‘wet season’ rainfall can be double the average and these peak events could adversely impact the site and operations. The Flinders Highway from Charters Towers and the sealed site access road is rarely cut-off and in the event that it is cut-off due to flooding, it is likely to be less than one week. This may impact short term production however it is unlikely to impact longer term production estimates.
The Company is not aware of any material legal risks. The Company has not entered into any concentrate or metal off-take or marketing arrangements for West 45.

The West 45 mine and Ore Reserve are located on a granted Mining Lease. The current Plan of Operations and Environmental Authority need to be amended and approved by the state government which the Company expects that it should occur within the Feasibility Study time frame.

The Company must raise funds to finance the project subject to board and shareholder approvals. The Company will consider its options for structuring finance and it could be either or a combination of equity, debt and offtake finance. The Company will also investigate working capital facilities which it has assumed in the economic modelling.</td></tr>
</table>

Classification	The Ore Reserve estimate is classified as Probable Ore Reserves and this accurately reflects the confidence of the deposit in line with guidelines set out in the JORC Code (2012). There are no measured mineral resources within the Ore Reserve and therefore no Proven Ore Reserves can be stated. The Ore Reserve estimation and classification methods are considered by the Competent Person to be appropriate for the style and nature of the deposit.
Audits or reviews	The Ore Reserve estimate has been internally reviewed.
Discussion of relative accuracy/ confidence	The West 45 Ore Reserve is a global estimate derived from the global West 45 Mineral Resource. The Ore Reserve was classified as Probable based on Mineral Resources classified as Indicated. The accuracy of the Ore Reserve is reflected in the classification of the Ore Reserve and the classification of the underlying Mineral Resources upon which it is based. Confidence in the Ore Reserve is high as the restart Feasibility Study mine plan and schedule were completed to a high standard with appropriate modifying factors. The brownfields site has operated in the past. The level of accuracy for the study is considered to be ±15%.

APPENDIX 2: Thalanga Far West

The assumptions and inputs below were applied to the Thalanga Far West Resource estimate to formulate the production target and Scoping Study for the Thalanga Far West project and should be read in conjunction with this announcement.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td>Mineral Resource estimate used</td><td>Mineral Resource Estimate used for the Thalanga Far West Scoping Study was published on the ASX (27 January 2015) and the total resource is 1,158kt at a grade of 1.7% copper, 1.9% lead, 5.8% zinc, 0.2g/t gold and 49g/t silver. The production target utilises Thalanga Far West Mineral Resources.</td></tr>
<tr><td>Site Visits, Re-start Study inputs and preparation</td><td>The following people has provided input into this Re-Start Study

Mr Mel Palancian (Red River Resources): Mr Palancian has visited the site and understands the detail associated with the site. Mr Palancian is the Managing Director of Red River Resources and is responsible for the final compilation of the Re-Start Study.

Mr Karl Spaleck (Red River Resources): Mr Spaleck has visited the site and understands the detail associated with the site. Mr Spaleck is the Thalanga Site General Manager and has been involved with the project for some time. Mr Spaleck also worked as liaison between the Company and Mincore Pty Ltd for the site refurbishment and metallurgical aspects as well as the external environmental consultants (Northern Resource Consultants) in relation to the environmental requirements and approvals associated with the Project.

Mr Donald Garner (Red River Resources): Mr Garner has visited the site and understands the detail associated with the site. Mr Garner is an Executive Director of Red River Resources and compiled the overall economic model associated with the Project.

Mr Stuart Hutchin (Mining One Consultants): Mr Hutchin is the Geology Manager (Mining One) and is responsible for the geological review of the deposits (West 45, Far West and Waterloo) including the resource estimation process as part of the Re-Start Study. He has visited the site and is familiar with the Project and its layout.

Mr Stewart Cuthbert (Mining One Consultants): Mr Cuthbert is the Senior Mining Engineer (Mining One) who has completed the mining study work associated with the Re-Start Study. Mr Cuthbert has not visited the site and has done his work based on information provided to him by the Company

Mr Cameron Bain (Mincore): Mr Bain - Principle Engineer (RPEQ Qualified) and has completed the site review of the Thalanga processing facility and with the assistance of Ken Bracher (RPEQ), David Tay and Rob Hill were responsible for the capital cost estimate to rehabilitate the Thalanga processing facility and operating cost estimate for the Thalanga processing facility. Mr Bain has visited the site and is familiar with the project and its layout.</td></tr>
<tr><td>Study status</td><td>The Scoping Study is a technical and economic study of the potential viability of developing Mineral Resources at an order of magnitude. It includes assessments, modifying and operational factors required to demonstrate that progress to a prefeasibility study can be reasonably justified at the time of reporting.

As a part of the Scoping Study, a detailed mine design and schedule was developed by Mining One Consultants Pty Ltd. The study assumes that the Thalanga operations will be restarted with the West 45 Ore Reserve and that Thalanga Far West will commence sometime thereafter.</td></tr>
<tr><td>Cut-off parameters</td><td>The economic cut-off grade for the mineralisation was determined using the Net Smelter Return (NSR) to account for the value of all payable metals. The NSR values were calculated on at the ‘mine gate’ basis and incorporate metal pricing in the table below. The NSR value was adjusted for transport costs, port handling charges and concentrate treatment and refining charges on all payable metals. Payable metals are zinc, lead, copper, gold and silver.

The cut-off NSR value was determined from the site operating costs including mining, processing and site administration costs. The cut-off was estimated to be $125 per tonne processed based on the full operating cost. An incremental stope cut-off of $80 per tonne and an incremental development cut-off of $40 per tonne processed were also estimated as a subset of the operating costs.

The NSR cut-off was converted to zinc equivalents (ZnEq) using the commodity prices, exchange rate and recoveries shown below. ZnEq was chosen as zinc in the main revenue source when compared with the other metals produced.

The ZnEq formula was estimated as: ZnEq%= Zn% + 0.9 x Pb% + 3.3 x Cu% + 0.5 x Au g/t + 0.025 x Ag g/t The mine design was developed using a cut-off of 9% ZnEq and does not include incremental material.

<table>
<tr><td></td><td></td><td>Cut-off Grade</td><td>Incremental Stope Cut-off Grade</td><td>Incremental Development Cut-off Grade</td></tr>
<tr><td>Total Operating Cost</td><td>AUD</td><td>$125</td><td>$80</td><td>$40</td></tr>
<tr><td>Cut-off Grades</td><td>ZnEq</td><td>9.0%</td><td>5.8%</td><td>3.0%</td></tr>
<tr><td colspan="5">Note: Cut-off Grades have been rounded</td></tr>
</table>

<table>
<tr><th>Zinc Equivalents (ZnEq)</th><th>Zn</th><th>Pb</th><th>Cu</th><th>Au</th><th>Ag</th></tr>
<tr><td>Commodity Prices USD/lb or /oz</td><td>1.0</td><td>0.9</td><td>3.0</td><td>1,200</td><td>17.0</td></tr>
<tr><td>Forex AUD:USD</td><td>0.85</td><td>0.85</td><td>0.85</td><td>0.85</td><td>0.85</td></tr>
<tr><td>ZnEq Factors</td><td>1</td><td>0.9</td><td>3.3</td><td>0.5</td><td>0.025</td></tr>
<tr><td colspan="6">Notes: ZnEq factors have been rounded</td></tr>
</table>
</td></tr>
<tr><td>Mining factors or assumptions</td><td>The underground mining method selected is overhand benching and utilises conventional underground mechanised mining practices. The stoping sequence is based on mining bottom-up from three set horizons, two of which will be filled with cemented rockfill and the remaining stope voids will be filled with rockfill. The selected mining method is considered well suited to the disposition of the orebody and ground conditions; it is also flexible to enable ready adjustments to stope strike lengths as needed.</td></tr>
</table>

	Development mining using drill and blast methods will commence from the surface. The main decline will be 5.5m wide by 5.5m high and at a gradient of 1 in 7. Ore development will be mined 4.5m wide and 4.5m high. A standard underground mobile mining fleet will be utilised for underground mining activities including a twin boom jumbo drill, production drill, load haul dump units and 50t trucks. The Thalanga Far West orebody is an extension of the Thalanga West orebody which was mined in the 1990's. An exploration drive was mined from Thalanga West to Thalanga Far West to conduct an extensive underground drilling campaign and also one stope was extracted before the mine closed in 1998. There are numerous geotechnical reports by Kevin Rosengren & Associates relating to the performance and ground conditions at Thalanga West. The main geotechnical issue at Thalanga West was when the microdiorite dyke intersected stope voids and unravelled. It is assumed that Thalanga Far West will, in places, have the microdiorite dyke intersecting or in close proximity to some stopes and development. Therefore, the mine design for Thalanga Far West is based on significantly smaller stopes than Thalanga West. In addition the mine plan includes cablebolting of all stope hangingwalls from every ore drive using 6m long cables, 4 per ring and rings spaced at 2.5m. Stope brows will also be cable bolted at set points. The sublevel interval chosen is 20m floor to floor and stope strike lengths of 20m maximum. Stopes are planned to be mined in single lifts. The average stope width is approximately 5m. The minimum stope width of 2m was applied for the mine design. Hangingwall and footwall dilution of 0.5m wide each (1m total) was included and an additional 10% tonnage at 0% grade was included to account for stope overbreak. A recovery factor of 95% has been applied to all diluted stope tonnages. No unplanned dilution has been applied to development ore and a recovery of 100% has been assumed. Measured, indicated and inferred Mineral Resources have been used in the Scoping Study. Conventional long hole drilling and blasting will be used to break the stope ore. It is assumed that development will be bolted and meshed in the backs and walls using galvanised elements. Bolts in the decline backs will be grouted. Cable bolting has been allowed for at all development intersections. A stand-off pillar of approximately 30m has been assumed between the historic Thalanga West workings and designed Thalanga Far West stopes. Groundwater inflows are assumed to be high since the Thalanga West workings have been filled with un-cemented tailings and the mine plan assumes that the historic workings will be progressively dewatered as the decline advances down. A power line is installed near the planned mine portal which is assumed will be extended and the mine plan includes establishment of a stepdown transformer. An air compressor and receiver, underground two way communications as well as associated underground air, water and electrical reticulations systems are included in the mine plan. A ventilation system consisting of a surface to underground exhaust raise along with primary and secondary fans is included in the mine plan. The decline is assumed to be used as the fresh air intake. An egress system from surface (progressively installed as the mine workings become deeper) and an underground refuge chamber is included in the mine plan. Water supply to the underground operations is nearby and extension of this system is included in the mine plan. Diesel storage facility, workshops, mine offices and change houses are currently in place. The run of mine ore pad is approximately 500m away and waste rock dump is also in place.
Metallurgical factors or assumptions	The Thalanga poly metallic processing facility is approximately 0.5km from the proposed Thalanga Far West portal and has treated approximately 30,000t of Thalanga Far West ore the late 1990's. It has also successfully treated approximately 3.66Mt of primary sulphides from the adjacent Thalanga mine. It is intended that this facility will be used to beneficiate Thalanga Far West mineralisation. The processing facility consists of a three stage crushing circuit including a primary jaw crusher and, secondary and tertiary cone crushers, a 640kW primary ball plant, two 640kW secondary ball plants, separate copper, lead and zinc flotation circuits, separate copper, lead and zinc thickeners, a vertical filter press and an associated reagent dosing systems and control systems. A regrind plant is also a part of the circuit. The maximum throughput of this plant treating poly metallic ore is considered to be 650kt per annum as achieved in 1996. The Company intends to operate the plant at a throughput of approximately 300kt per annum for processing Thalanga Far West and considers that there will be surplus capacity in the processing plant. The processing facility utilises differential flotation of copper, lead and zinc minerals and is a common and proven beneficiation method throughout the mining industry but also in the past at Thalanga. The process plant is considered to be appropriate to the Thalanga Far West style of mineralisation and is not novel in its nature. The metallurgical factors applied in the economic evaluations are based on Thalanga mine historicals; zinc concentrate 89% recovery & 56% concentrate grade, lead concentrate 75% recovery & 60% concentrate grade plus 50% recovery of silver & 30% recovery of gold into the lead concentrate, copper concentrate 80% recovery & 26% concentrate grade plus 15% recovery of silver & 17% recovery of gold into the copper concentrate. There are no material deleterious elements expected that will prevent the saleability of the concentrates.
Environmental	The project is a disturbed mine site currently on care and maintenance. The Thalanga Operations' region is characterised by flat, open plains and situated relatively high in this landscape, at the foot of a rocky range that crosses the Flinders Highway. The topography of the mining leases is generally flat to gently undulating terrain. Typical wet season rainfall occurs from November to March; with average annual rainfall of 662mm and wettest months of January and February. Average annual maximum temperature is 30^0C and average wind speed is ~8km/h. Evaporation in the region varies from ~1,500mm to ~2,500mm; generally ~2,000mm. It has been assumed that the Thalanga processing facility, associated infrastructure including the existing tailings storage facility will be used to beneficiate Thalanga Far West mineralisation. These facilities are permitted in accordance to statuary authorities. The Thalanga Far West resource is on a granted and valid mining lease. The proposed mining activities are similar to that of previous underground mines at the project including storage of selected mine waste in existing dumps, tailings in the exiting tailings storage facility and mine water through the exiting water management and storage facilities. The Plan of Operations will require amendment and approval from statutory authorities. There is a risk that approvals may be delayed from timeframes stated in the Scoping Study.
Infrastructure	All of the infrastructure for the process plant and supporting areas are in place. Refurbishment of the plant and infrastructure will be required and this has been included in the restart Feasibility Study for West 45. Some supporting infrastructure for the underground mine will be required such as primary ventilation fans, electrical substation and pumping stations all of which have been included in the Scoping Study and economic evaluations.

<table>
<tr><td></td><td>The site is powered from the Queensland electricity grid and it is assumed that adequate power supply will be available. Water is mainly recycled and reused on site and supplemented by an existing borefield which has been assumed to provide adequate volumes.

Access to the site is via as sealed road off the Flinders Highway; approximately 60km from Charters Towers. Mobile telecommunications are accessible from the Telstra mobile network from Charters Towers and there is a fibre optic cable to site for data and fixed line telecommunications.

It is intended to recruit and bus most of the workforce from Charters Towers.</td></tr>
<tr><td>Costs</td><td>The majority of capital and operating costs have been built up from first principles. Capital and operating costs for the process plant & infrastructure were estimated by Mincore using vendor prices (contractors, original equipment manufacturers and suppliers) and supplemented by Red River prices estimated in the same process. Mining capital and operating costs were estimated using mining contractor budget pricing received for West 45 as they are in a similar locality and based on a similar mining method and plan.

Labour requirements were developed for each department (except underground mining as the workforce will be provided by the mining contractor) and employee salaries and on-costs were developed from Hays guidelines and a local labour hire advisory firm who provided local salaries. Employee costs include Qld payroll tax, WorkCover and Qld Mines Safety levy.

Concentrate transport and handling costs were sourced from vendor budget pricing. Concentrate shipping costs were sourced from a shipping logistics provider. Concentrate treatment and refining costs were sourced from a reputable metals trader including penalty elements and are considered to be average basis industry terms.

Queensland government royalties were applied as per published rates (State Revenue Office) for the various metals recovered. Royalties to third parties have also been accounted for in the economic assessment as per their respective agreements.
Foreign exchange rates were sourced from forecast consensus industry surveys.</td></tr>
<tr><td>Revenue factors</td><td>The Thalanga Far West head grades and tonnage were determined on a monthly basis from a detailed schedule after the application of dilution and recovery factors. The schedule is based on a logical mining development and stoping sequence. Transport costs, port handling charges, shipping costs, smelter treatment charges, refining costs were included in the economic model. Payable terms for metals in zinc, lead and copper concentrates were also provided by a reputable metals trader.

The revenues are based on production of zinc, lead and copper in concentrates and silver and gold credits in the lead and copper concentrates. Commodity prices used for economic assessments were based on June 2015 forecast broker consensus pricing and are listed below.
<table>
<tr><th colspan="7">Commodity Pricing Consensus + RVR YR1</th></tr>
<tr><th>Commodity</th><th>Unit</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020+ Long Term</th></tr>
<tr><td>Zinc</td><td>USD/lb</td><td>$1.00</td><td>$1.20</td><td>$1.23</td><td>$1.24</td><td>$1.19</td></tr>
<tr><td>Lead</td><td>USD/lb</td><td>$0.90</td><td>$0.99</td><td>$1.01</td><td>$1.02</td><td>$1.04</td></tr>
<tr><td>Copper</td><td>USD/lb</td><td>$2.80</td><td>$3.02</td><td>$3.14</td><td>$3.24</td><td>$3.24</td></tr>
<tr><td>Gold</td><td>USD/oz</td><td>$1,200</td><td>$1,262</td><td>$1,300</td><td>$1,310</td><td>$1,269</td></tr>
<tr><td>Silver</td><td>USD/oz</td><td>$17.00</td><td>$18.96</td><td>$19.97</td><td>$20.39</td><td>$19.94</td></tr>
<tr><td>Foreign Exchange USD:AUD</td><td></td><td>0.73</td><td>0.75</td><td>0.75</td><td>0.75</td><td>0.75</td></tr>
</table></td></tr>
<tr><td>Market assessment</td><td>The majority of the Thalanga Far West value is derived from zinc and copper. London Metal Exchange (LME) zinc stocks have been steadily declining over the past 2 years and with the imminent closure of Century and Lisheen zinc mines. It is anticipated that declining zinc inventories will persist or perhaps reduce quicker depending on global demand strength. Many industry commentators are forecasting higher zinc prices from 2016 and onwards than current spot. In addition the Sun Metals Zinc Refinery is located in Townsville and is ~200km by road from Thalanga Operations and it regularly imports zinc concentrates from overseas markets.

It is assumed the demand for zinc concentrate from Thalanga Far West will be supported by some mine closures and limited mine supply response therefore creating a favourable selling environment. The medium to long term outlook for copper concentrates is positive with consensus pricing rising based on expected demand.</td></tr>
<tr><td>Economic</td><td>Mine production and ore processing inputs have been detailed in the sections above and have been included in the economic assessment. The capital and operating cost inputs have also been discussed above and are considered to be with ± 30% accuracy and have been included in the economic assessment.

The mining, processing, capital cost and operating cost schedules form the basis of the financial model which utilises commodity prices and foreign exchange rates detailed above. The NPV was calculated using a discount rate of 8%. Sensitivities around commodity prices, foreign exchange rates, metallurgical recoveries, capital costs and operating costs to ±30% variance have been presented.</td></tr>
<tr><td>Social</td><td>The Thalanga Operations are approximately 65km from Charters Towers which is a mining and agriculture based community of approximately 8,200 people. The Company intends to source the majority of its workforce from Charters Towers as recent mine closures have adversely impacted the community and skilled workers are available. In addition the site will be a bus in/out from Charters Towers which will further strengthen community support for the project and benefits for the community. The Company has received only positive indications from local landholders and the Charters Towers community to date as the community sees the direct benefits or restarting the operations.</td></tr>
<tr><td>Other</td><td>The Thalanga Operations and Thalanga Far West do typically receive higher rainfall in summer and early autumn and dryer periods in winter. In some years the ‘wet season’ rainfall can be double the average and these peak events could adversely impact the site and operations. The Flinders Highway from Charters Towers and the sealed site access road is rarely cut-off and in the event that it is cut-off due to flooding, it is likely to be less than one week. This may impact short term production however it is unlikely to impact longer term production estimates. The Company is not aware of any material legal risks. The Company has not entered into any concentrate or metal off-take or marketing arrangements for Thalanga Far West.

The Thalanga Far West Mineral Resource is located on a granted Mining Lease. The current Plan of Operations and Environmental Authority need to be amended and approved by the state government. There is a risk that timeframes could be delayed.
The Company intends to undertake further studies and drilling relating to the project. The development of the project will depend on the outcome of these amongst other factors.</td></tr>
</table>

	The Company must raise funds to finance the project subject to board and shareholder approvals. The Company will consider its options for structuring finance and it could be either or a combination of equity, debt and offtake finance. The Company will also investigate working capital facilities which it has assumed in the economic modelling. The Company has assumed that financing activities will occur in parallel to further studies and drilling.
Classification	The Company does not have an Ore Reserve estimate for Thalanga Far West.
Discussion of relative accuracy/ confidence	The Company has a view that the Scoping study is of high confidence as the site has operated in the past, the Mineral Resource contains Measured and Indicated Mineral Resources in addition to Inferred Mineral Resources and the mine plan and schedule were completed to a high standard with appropriate modifying factors. The level of accuracy for the Scoping Study is considered to be ±30%.

APPENDIX 3: Waterloo

The assumptions and inputs below were applied to the Waterloo Resource estimate to formulate the production target and Scoping Study for the Waterloo project and should be read in conjunction with this announcement.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td>Mineral Resource estimate used</td><td>Mineral Resource Estimate used for the Waterloo Scoping Study was published on the ASX (24 April 2015) and the total resource is 707kt at a grade of 1.9% copper, 1.6% lead, 11.0% zinc, 0.9g/t gold and 50g/t silver. The production target utilises Waterloo Mineral Resources.</td></tr>
<tr><td>Site Visits, Re-start Study inputs and preparation</td><td>The following people has provided input into this Re-Start Study

Mr Mel Palancian (Red River Resources): Mr Palancian has visited the site and understands the detail associated with the site. Mr Palancian is the Managing Director of Red River Resources and is responsible for the final compilation of the Re-Start Study and also the Ore Reserve Estimate for West 45.

Mr Karl Spaleck (Red River Resources): Mr Spaleck has visited the site and understands the detail associated with the site. Mr Spaleck is the Thalanga Site General Manager and has been involved with the project for some time. Mr Spaleck also worked as liaison between the Company and Mincore Pty Ltd for the Thalanga site refurbishment and metallurgical aspects as well as the external environmental consultants (Northern Resource Consultants) in relation to the environmental requirements and approvals associated with the Project.

Mr Donald Garner (Red River Resources): Mr Garner has visited the site and understands the detail associated with the site. Mr Garner is an Executive Director of Red River Resources and compiled the overall economic model associated with the Project.

Mr Stuart Hutchin (Mining One Consultants): Mr Hutchin is the Geology Manager (Mining One) and is responsible for the geological review of the deposits (West 45, Far West and Waterloo) including the resource estimation process as part of the Re-Start Study. He has visited the site and is familiar with the Project and its layout.

Mr Stewart Cuthbert (Mining One Consultants): Mr Cuthbert is the Senior Mining Engineer (Mining One) who has completed the mining study work associated with the Re-Start Study. Mr Cuthbert has not visited the site and has done his work based on information provided to him by the Company

Mr Cameron Bain (Mincore): Mr Bain - Principle Engineer (RPEQ Qualified) and has completed the site review of the Thalanga processing facility and with the assistance of Ken Bracher (RPEQ), David Tay and Rob Hill were responsible for the capital cost estimate to rehabilitate the Thalanga processing facility and operating cost estimate for the Thalanga processing facility. Mr Bain has visited the site and is familiar with the project and its layout.</td></tr>
<tr><td>Study status</td><td>The Scoping Study is a technical and economic study of the potential viability of developing Mineral Resources at an order of magnitude. It includes assessments, modifying and operational factors required to demonstrate that progress to a prefeasibility study can be reasonably justified at the time of reporting.

As a part of the Scoping Study, a detailed mine design and schedule was developed by Mining One Consultants Pty Ltd. The study assumes that the Thalanga operations will be restarted on the back of the West 45 Ore Reserve and the Waterloo will commence sometime thereafter.</td></tr>
<tr><td>Cut-off parameters</td><td>The economic cut-off grade for the mineralisation was determined using the Net Smelter Return (NSR) to account for the value of all payable metals. The NSR values were calculated on at the ‘mine gate’ basis and incorporate metal pricing in the table below. The NSR value was adjusted for transport costs, port handling charges and concentrate treatment and refining charges on all payable metals. Payable metals are zinc, lead, copper, gold and silver.

The cut-off NSR value was determined from the site operating costs including mining, processing and site administration costs. The cut-off was estimated to be $125 per tonne processed based on the full operating cost. An incremental stope cut-off of $80 per tonne and an incremental development cut-off of $40 per tonne processed were also estimated as a subset of the operating costs.

The NSR cut-off was converted to zinc equivalents (ZnEq) using the commodity prices, exchange rate and recoveries shown below. ZnEq was chosen as zinc in the main revenue source when compared with the other metals produced.

The ZnEq formula was estimated as: ZnEq%= Zn% + 0.9 x Pb% + 3.3 x Cu% + 0.5 x Au g/t + 0.025 x Ag g/t The mine design was developed using a cut-off of 9% ZnEq and does not include incremental material.

<table>
<tr><td></td><td></td><td>Cut-off Grade</td><td>Incremental Stope Cut-off Grade</td><td>Incremental Development Cut-off Grade</td></tr>
<tr><td>Total Operating Cost</td><td>AUD</td><td>$125</td><td>$80</td><td>$40</td></tr>
<tr><td>Cut-off Grades</td><td>ZnEq</td><td>9.0%</td><td>5.8%</td><td>3.0%</td></tr>
<tr><td colspan="5">Note: Cut-off Grades have been rounded</td></tr>
</table>

<table>
<tr><td>Zinc Equivalents (ZnEq)</td><td>Zn</td><td>Pb</td><td>Cu</td><td>Au</td><td>Ag</td></tr>
<tr><td>Commodity Prices USD/lb or /oz</td><td>1.0</td><td>0.9</td><td>3.0</td><td>1,200</td><td>17.0</td></tr>
<tr><td>Forex AUD:USD</td><td>0.85</td><td>0.85</td><td>0.85</td><td>0.85</td><td>0.85</td></tr>
<tr><td>ZnEq Factors</td><td>1</td><td>0.9</td><td>3.3</td><td>0.5</td><td>0.025</td></tr>
<tr><td colspan="6">Notes: ZnEq factors have been rounded</td></tr>
</table>
</td></tr>
<tr><td>Mining factors or assumptions</td><td>The underground mining method selected is overhand benching and utilises conventional underground mechanised mining practices. The stoping sequence is based on mining bottom-up from four set horizons, three of which will be filled with cemented rockfill and the remaining stope voids will be filled with rockfill. The selected mining method is considered well suited to the disposition of the orebody and ground conditions; it is also flexible to enable ready adjustments to stope strike lengths as needed.</td></tr>
</table>

	Development mining using drill and blast methods will commence from the surface. The main decline will be 5.5m wide by 5.5m high and at a gradient of 1 in 7. Ore development will be mined 4.0m wide and 4.5m high. A standard underground mobile mining fleet will be utilised for underground mining activities including a twin boom jumbo drill, production drill, load haul dump units and 45t trucks. The Waterloo orebody has had no historic mining and is overlain by Campaspe cover sediments. An approximately 32m deep boxcut is planned to enable collaring of the portal below the Campaspe sediments. The ground conditions have assumed to be more fractured particularly in and around the orebody as evidenced from drill core. Therefore, the mine design for Waterloo is based on significantly smaller stopes and additional unplanned dilution. In addition the mine plan includes cablebolting of all stope hangingwalls from every ore drive using 6m long cables, 4 per ring and rings spaced at 2.5m. Stope brows will also be cable bolted at set points. The sublevel interval chosen is 15m floor to floor and stope strike lengths of 20m maximum. Stopes are planned to be mined in single lifts. The average stope width is approximately between 3.5m and 5m. The minimum stope width of 2m was applied for the mine design. Hangingwall and footwall dilution of 0.5m wide each (1m total) was included and an additional 10% tonnage at 0% grade was included to account for stope overbreak. A recovery factor of 95% has been applied to all diluted stope tonnages. No dilution has been applied to development ore and a recovery of 100% has been assumed. Indicated and inferred Mineral Resources have been used in the Scoping Study. Conventional long hole drilling and blasting will be used to break the stope ore. It is assumed that development will be bolted and meshed in the backs and walls using galvanised elements. Bolts in the decline backs will be grouted. Cable bolting has been allowed for at all development intersections. Ground Water Yield Assessment of Waterloo by Rob Lait and Associates in 2008 suggested that inflows will be low in the Campaspe sediments (<0.5 litres/second). Below this and the base of oxidation aquifer sequence inflows were predicted to be < 1 litre/second. The pumping system design capacity is 20 litres per second which should be adequate to dewater the mine from natural ground water and introduced mine water. Power supply from the mine has assumed to be from diesel generators installed near the planned. The mine plan includes establishment of a stepdown transformer. An air compressor and receiver, underground two way communications as well as associated underground air, water and electrical reticulations systems are included in the mine plan. A ventilation system consisting of a surface to underground exhaust raise along with primary and secondary fans is included in the mine plan. The decline is assumed to be used as the fresh air intake. An egress system from surface (progressively installed as the mine workings become deeper) and an underground refuge chamber is included in the mine plan. Water supply to the underground operations is assumed to be sourced from reclaimed underground water supplemented by bore water in the mine plan. A diesel storage facility, workshop, mine office and change houses are also included in the mine plan. The run of mine ore pad is assumed approximately 500m away and waste rock dump in the mine plan.
Metallurgical factors or assumptions	The Thalanga poly metallic processing facility is approximately 110km from the proposed Waterloo mine site and it is assumed that the mineralisation will be trucked and processed at Thalanga Operations. It has successfully treated approximately 3.66Mt of primary sulphides from the nearby Thalanga mine. The processing facility consists of a three stage crushing circuit including a primary jaw crusher and, secondary and tertiary cone crushers, a 640kW primary ball plant, two 640kW secondary ball plants, separate copper, lead and zinc flotation circuits, separate copper, lead and zinc thickeners, a vertical filter press and an associated reagent dosing systems and control systems. A regrind plant is also a part of the circuit. The maximum throughput of this plant treating poly metallic ore is considered to be 650kt per annum as achieved in 1996. The Company intends to operate the plant at a throughput of approximately 300kt per annum for processing Waterloo in conjunction with Thalanga Far West and considers that there will be surplus capacity in the processing plant. The processing facility utilises differential flotation of copper, lead and zinc minerals and is a common and proven beneficiation method throughout the mining industry but also in the past at Thalanga. The process plant is considered to be appropriate to the Waterloo style of mineralisation and is not novel in its nature. Two metallurgical domains are assumed at Waterloo; primary sulphide mineralisation below the depth of oxidation which makes up approximately 81% of the Production Target and transitional partly oxidised mineralisation. Waterloo also contains some oxide Inferred Mineral Resources which are low in base metals and high in precious metals however, these have not been considered or included in the Scoping Study. Metallurgical testwork was conducted on the primary sulphide Waterloo mineralisation in 2008 by Eacham Metallurgy Laboratory on two composite samples (high and average grade) which were compiled from two drillholes. The approximately 19% of the Waterloo inventory is assumed to include transitional sulphide mineralisation which has been assumed will perform similar to transitional sulphide mineralisation mined and processed at the Thalanga operations from the Vomacka pit. The transitional metallurgical performance has been applied separate to the primary sulphide metallurgical performance in the mine plan and economic evaluations. It has been assumed that a saleable lead concentrate will not be produced from transitional mineralisation due to potential selectivity issues with differential flotation of copper and lead mineralisation. The metallurgical factors applied in the economic evaluations are based on the combined knowledge of the Waterloo testwork and Thalanga mine historicals for primary mineralisation and, Vomacka historical performance for the transitional mineralisation. For primary sulphide mineralisation they are; zinc concentrate 89% recovery & 56% concentrate grade, lead concentrate 70% recovery & 60% concentrate grade plus 50% recovery of silver & 30% recovery of gold into the lead concentrate, copper concentrate 80% recovery & 24% concentrate grade plus 15% recovery of silver & 20% recovery of gold into the copper concentrate. For transition mineralisation they are; zinc concentrate 76% recovery & 52% concentrate grade, copper concentrate 58% recovery & 24% concentrate grade plus 38% recovery of silver & 30% recovery of gold into the copper concentrate. There are no material deleterious elements expected that will prevent the saleability of the concentrates. The respective zinc equivalent formulae for transition and fresh primary sulphides are therefore calculated differently to account for metallurgical variances and are stated below. These formulae assume commodity pricing and the exchange rate stated in the table in the "Cut-off parameters" section above. Transition mineralisation: ZnEq%= 0.84 x Zn% + 0 x Pb% + 2.46 x Cu% + 0.41 x Au g/t + 0.013 x Ag g/t

<table>
<tr><td></td><td>Primary fresh sulphide mineralisation: ZnEq%= Zn% + 0.75 x Pb% + 3.39 x Cu% + 0.53 x Au g/t + 0.028 x Ag g/t</td></tr>
<tr><td>Environmental</td><td>The Waterloo project region is characterised by flat, open plains and is generally gently undulating terrain.

Typical wet season rainfall occurs from November to March; with average annual rainfall of 662mm and wettest months of January and February. Average annual maximum temperature is 30^{0}C and average wind speed is ~8km/h. Evaporation in the region varies from ~1,500mm to ~2,500mm; generally ~2,000mm. The Thalanga processing facility, associated infrastructure including the existing tailings storage facility are permitted in accordance to statuary authorities.

The Waterloo resource is located on an exploration permit. The Company will need to undertake further studies and agreements then apply and receive grant of a mining lease at Waterloo before production can commence. There is a risk that approvals may be delayed from timeframes stated in the Scoping Study.</td></tr>
<tr><td>Infrastructure</td><td>Supporting infrastructure for the potential Waterloo underground mine will be required including primary ventilation fans, electrical substation, bore field and pumping stations all of which have been included in the Scoping Study and economic evaluations. A diesel storage facility, workshop, mine office and change houses are also included in the mine plan and economic evaluations. The run of mine ore pad is assumed approximately 500m away and waste rock dump in the mine plan.

All of the infrastructure for the process plant and supporting areas are in place at the Thalanga Operations which will be used to beneficiate the mineralisation. Some refurbishment of the plant and infrastructure will be required and this has been included in the restart Feasibility Study for West 45 and assumed to be operational when Waterloo commences.

Access to the site is via a 16km unsealed road off the Gregory Developmental Road. The Gregory Development road is sealed. In total it is approximately 110km from Waterloo project site to the Thalanga Operations by road. Mobile telecommunications are accessible from the Telstra mobile network from Charters Towers. It is intended to recruit and bus most of the workforce from Charters Towers.</td></tr>
<tr><td>Costs</td><td>The majority of capital and operating costs have been built up from first principles. Capital and operating costs for the process plant & infrastructure were estimated by Mincore using vendor prices (contractors, original equipment manufacturers and suppliers) and supplemented by Red River prices estimated in the same process.

Mining capital and operating costs were estimated using mining contractor budget pricing received for West 45 as they are in a similar locality and based on a similar mining method and plan. Additional costs were applied to account for additional ground control anticipated, surface haulage of the mineralisation from Waterloo to Thalanga Operations (contractor quote), mine surface infrastructure, studies and permitting.

Labour requirements were developed for each department (except underground mining as the workforce will be provided by the mining contractor) and employee salaries and on-costs were developed from Hays guidelines and a local labour hire advisory firm who provided local salaries. Employee costs include Qld payroll tax, WorkCover and Qld Mines Safety levy.

Concentrate transport and handling costs were sourced from vendor budget pricing. Concentrate shipping costs were sourced from a shipping logistics provider. Concentrate treatment and refining costs were sourced from a reputable metals trader including penalty elements and are considered to be average basis industry terms.

Queensland government royalties were applied as per published rates (State Revenue Office) for the various metals recovered. Royalties to third parties have also been accounted for in the economic assessment as per their respective agreements.
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<tr><td>Revenue factors</td><td>The Waterloo head grades and tonnage were determined on a monthly basis from a detailed schedule after the application of dilution and recovery factors. The schedule is based on a logical mining development and stoping sequence. Transport costs, port handling charges, shipping costs, smelter treatment charges, refining costs were included in the economic model. Payable terms for metals in zinc, lead and copper concentrates were also provided by a reputable metals trader.

The revenues are based on production of zinc, lead and copper in concentrates and silver and gold credits in the lead and copper concentrates. Commodity prices used for economic assessments were based on June 2015 forecast broker consensus pricing and are listed below.

<table>
<tr><th colspan="7">Commodity Pricing Consensus + RVR YR1</th></tr>
<tr><th>Commodity</th><th>Unit</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020+ Long Term</th></tr>
<tr><td>Zinc</td><td>USD/lb</td><td>$1.00</td><td>$1.20</td><td>$1.23</td><td>$1.24</td><td>$1.19</td></tr>
<tr><td>lead</td><td>USD/lb</td><td>$0.90</td><td>$0.99</td><td>$1.01</td><td>$1.02</td><td>$1.04</td></tr>
<tr><td>Copper</td><td>USD/lb</td><td>$2.80</td><td>$3.02</td><td>$3.14</td><td>$3.24</td><td>$3.24</td></tr>
<tr><td>Gold</td><td>USD/oz</td><td>$1,200</td><td>$1,262</td><td>$1,300</td><td>$1,310</td><td>$1,269</td></tr>
<tr><td>Silver</td><td>USD/oz</td><td>$17.00</td><td>$18.96</td><td>$19.97</td><td>$20.39</td><td>$19.94</td></tr>
<tr><td>Foreign Exchange USD:AUD</td><td></td><td>0.73</td><td>0.75</td><td>0.75</td><td>0.75</td><td>0.75</td></tr>
</table></td></tr>
<tr><td>Market assessment</td><td>The majority of the Waterloo value is derived from zinc. London Metal Exchange (LME) zinc stocks have been steadily declining over the past 2 years and with the imminent closure of Century and Lisheen zinc mines. It is anticipated that declining zinc inventories will persist or perhaps reduce quicker depending on global demand strength. Many industry commentators are forecasting higher zinc prices from 2016 and onwards than current spot. In addition the Sun Metals Zinc Refinery is located in Townsville and is ~200km by road from Thalanga Operations and it regularly imports zinc concentrates from overseas markets.

It is assumed the demand for zinc concentrate from Waterloo will be supported by limited mine closures and limited mine supply response therefore creating a favourable selling environment.</td></tr>
<tr><td>Economic</td><td>Mine production and ore processing inputs have been detailed in the sections above and have been included in the economic assessment. The capital and operating cost inputs have also been discussed above and are considered to be with ± 30% accuracy and have been included in the economic assessment.

The mining, processing, capital cost and operating cost schedules form the basis of the financial model which utilises commodity prices and foreign exchange rates detailed above. The NPV was calculated using a discount rate of 8%.</td></tr>
</table>

	Sensitivities around commodity prices, foreign exchange rates, metallurgical recoveries, capital costs and operating costs to ±20% variance have been presented.
Social	The Waterloo project site is approximately 55km from Charters Towers and the Thalanga Operations are approximately 65km from Charters Towers which is a mining and agriculture based community of approximately 12,000 people. The Company intends to source the majority of its workforce from Charters Towers as recent mine closures have adversely impacted the community and skilled workers are available. In addition the site will be a bus in/out from Charters Towers which will further strengthen community support for the project and benefits for the community. The Company has received only positive indications from local landholders and the Charters Towers community to date as the community sees the direct benefits or restarting the operations.
Other	The Thalanga Operations and Waterloo do typically receive higher rainfall in summer and early autumn and dryer periods in winter. In some years the 'wet season' rainfall can be double the average and these peak events could adversely impact the site and operations. The Flinders Highway from Charters Towers and the sealed site access road is rarely cut-off and in the event that it is cut-off due to flooding, it is likely to be less than one week. This may impact short term production however it is unlikely to impact longer term production estimates. The Waterloo access road is not sealed and may experience more frequent wet season flooding events that may cut access to the mine temporarily or prevent bulk haulage of mineralisation or supplies using heavy vehicles. The Company is not aware of any material legal risks. The Company has not entered into any concentrate or metal off-take or marketing arrangements for Waterloo. The Waterloo Mineral Resource is located on an exploration permit and a Mining Lease must be obtained in the assumed timeframes. The current Plan of Operations and Environmental Authority need to be amended and approved by the state government. There is a risk that timeframes could be delayed. The Company intends to undertake further studies and drilling relating to the project. The development of the project will depend on the outcome of these amongst other factors. The Company must raise funds to finance the project subject to board and shareholder approvals. The Company will consider is options for structuring finance and it could be either or a combination of equity, debt and offtake finance. The Company will also investigate working capital facilities which it has assumed in the economic modelling. The Company has assumed that financing activities will occur in parallel to further studies and drilling.
Classification	The Company does not have an Ore Reserve estimate for Waterloo.
Discussion of relative accuracy/ confidence	The Company has a view that the Scoping study is of high confidence as the Thalanga site has operated in the past, the Mineral Resource contains Indicated Mineral Resources in addition to Inferred Mineral Resources and the mine plan and schedule were completed to a high standard with appropriate modifying factors. The level of accuracy for the Scoping Study is considered to be ±30%.

APPENDIX 4: Thalanga Far West JORC Tables

JORC 2012 Table 1.

Section 1 Sampling Techniques & Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	The deposit was primarily sampled via half core samples based on geological considerations within diamond drill holes drilled on a 20m x 20m up to a 100m x 100m pattern through the deposit The holes were orientated to ensure drill intersections were approximately perpendicular to the dip and strike of the ore lenses and overall geological package. Diamond core and reverse circulation drill samples were crushed and assayed for Cu, Pb, Zn, Ag, Fe and Au via Atomic Absorption Spectrum (AAS) for the base metals and fire assay with an AAS finish for gold.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	A total of 671 drillholes holes have been drilled into the Thalanga Far West project area, of these a total of 152 were surface diamond holes 488 were underground diamond holes and 31 were reverse circulation holes. The diamond core drilled from surface was predominately drilled with standard tube NQ2 sized core. All diamond core drilled from surface was orientated. All underground Diamond core was drilled BQ size and not orientated
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	The diamond core drill recovery was monitored using a combination of the drillers run sheets, core block markings and manual piecing together of core and measurement by company Geologists and Field Assistants in the core processing facility. Any core loss was noted within the logging sheets. Core recovery averaged 95% through the ore intervals. The majority of the resource is based on diamond drilling, the deposit predominately consists of copper, zinc and lead mineralization, there are no concerns regarding loss of fine material during the core sampling process for this deposit.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	All diamond core and reverse circulation chips were logged for geological and geotechnical characteristics. Rock type, alteration style and sulphide mineral content were logged by a site geologist. The logging was sufficient to enable creation of detailed geological model that supports the resource estimate. Core photographs were taken of representative drill holes and stored as part of the resource database dataset.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* *Whether sample sizes are appropriate to the grain size of the material being sampled.*	NQ2 or BQ sized diamond core was marked up and cut in half with a diamond core saw. The right side of the core as sampled according to the geological intervals selected by the site geologist. The RC samples were poured through a riffle splitter after the sample was circulated from the drill face through a cyclone and into a large plastic bag. The methodology of selecting half core via geological intervals guarantees that the core samples are representative. The reverse circulation drilling samples are collected on 1m intervals so there is no selectivity bias with these. The sample sizes vary from material sourced from the core samples given the varying sample lengths. The RC samples are generally 5-10 kg. The sample sizes are appropriate given the relatively even distribution of base metal grades within the deposit

Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	The ALS laboratory completed internal standard and duplicate samples. The results of these samples indicate that there are no known material biases in the original Thalanga Far West assay dataset. 268 re-assays of diamond core samples were submitted to the laboratory for holes along the Thalanga line of mineralisation, the results of these re-assayed showed an acceptable correlation with the original assay data.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Close spaced (10m) underground diamond holes exist in the dataset, the correlation between these fans of holes for base metal assays is high. Data was entered into a central database and then validated by a series of validation checks to ensure erroneous data was not saved into the resource database.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	The Thalanga West mine grid was used as the grid reference for the Thalanga Far West deposit. All holes were surveyed using the Thalanga site survey team who used a differential GPS survey system. The topography surface is represented by a wireframe file that has been edited over time by the site survey team. The surface covers the complete Thalanga Far West deposit area. The surface is an accurate representation of the actual topographic surface at the site.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	The Thalanga Far West deposit has been drilled on an average spacing of 10m x 10m along the old development drive out to 100m x 100m on the peripheries of the deposit area. Overall average drill spacing across the whole deposit is approximately 50m x 50m. This drill spacing provides evidence of mineralized zone continuity for the purposes of resource estimation. No sampling compositing was necessary in the initial diamond drilling however compositing of raw assay data was completed in preparation for the resource estimation process.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The majority of diamond holes were orientated to provide an approximate perpendicular intersection angle with the main mineralized zones. No sampling bias is assessed as being caused by the drilling orientation.
Sample security	*The measures taken to ensure sample security.*	Samples were supervised by either the drill crew, field assistant or geologist and at all times. Given the base metal nature of the deposit sample security was not assessed as a significant risk.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	A review of the assay data was completed by Sheperd 1997. A due diligence review of the resource estimation was completed by Mining One Consultants was completed in November 2014.

JORC 2012 Table 1.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	The Far West deposit is situated on Mining Leases ML1531 & ML1392 ML1531 is Held by Cromarty Resources Pty Ltd, a wholly owned subsidiary of Red River Resources Ltd. The Queensland Government (Department of Natural Resources and Mines) has given indicative approval to transfer ML 1392 from Kagara Copper Pty Ltd to Cromarty Resources Pty Ltd, a wholly owned subsidiary of Red River Resources Ltd subject to 3rd party consent, which has been given No joint ventures exist over the property however a 4% NSR is payable to Thalanga Copper Mines in addition to the standard Queensland government royalty. The Mining Leases are current.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	RGC Thalanga Pty Ltd drilled the deposit between 1994-1998.
Geology	*Deposit type, geological setting and style of mineralisation.*	The deposit consists of stratiform sulphide lenses and stringer zones developed within quartz eye volcanoclastics located between a dacite hangingwall and rhyolite footwall.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Location details of all Far West drillholes is provided as Table 1 of this report Survey Details of all Far West drillholes is provided as Table 2 of this report Assay Details of all Far West drillholes is provided as Table 3 of this report
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	The exploration results reported for the Thalanga Far West deposit were included as weighted average assay intervals for Cu, Pb, Zn & Ag. No cutting of high grades was completed when reporting as exploration results
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	The typical drill sample interval is 1m in length, the average thickness of the mineralized zone is 10m, there are no issues with reporting the results based on this. The drillholes intercepted the mineralized lenses at an approximately perpendicular angle. All exploration results were reported as down hole thicknesses.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	See Appendix 4 Far West Collar Plan for a location plan of all drill collars used in the resource estimate.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All drill intercepts reported are listed in Table 3

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	All meaningful data is reported
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further infill drilling will be required within the deposit area with a view to defining additional resources.

APPENDIX 4: Table 1 Thalanga Far West Collar Details

HOLE_ID	LOC_EAST	LOC_NORTH	RL_LOC	DEPTH	AMG_E	AMG_N
TH034	19934.6	20171.6	1001.5	295.0	370929.0	7750360.0
TH037	19384.1	19986.3	1010.5	499.4	370353.0	7750433.0
TH087	19556.8	20394.1	1013.2	406.3	370686.0	7750725.0
TH156	19104.4	20097.6	1019.2	433.5	370150.0	7750655.0
TH384	20029.4	20224.9	1000.9	162.2	371038.0	7750367.0
TH451	20010.0	20360.0	1002.0	170.0	371079.0	7750497.0
TH453	20030.0	20378.0	1002.0	190.0	371105.0	7750505.0
W2001NEI62	19990.0	20235.2	724.2	131.2	371006.5	7750393.3

APPENDIX 4: Table 2 Thalanga Far West Survey Details

HOLE_ID	DEPTH	DIP	GRID_AZIMUTH
TH034	0	-66.0	350.0
TH034	31	-65.0	348.5
TH034	58	-63.5	347.5
TH034	88	-63.5	345.5
TH034	118	-61.8	343.5
TH034	145	-61.3	343.5
TH034	180	-60.3	345.0
TH034	208	-60.3	346.0
TH034	238	-57.0	347.0
TH034	268	-55.5	344.0
TH034	295	-52.0	343.5
TH037	0	-63.0	6.0
TH037	30	-62.5	9.0
TH037	60	-61.0	8.0
TH037	90	-60.0	6.5
TH037	119	-57.5	9.5
TH037	149	-54.5	11.0
TH037	179	-50.0	12.5
TH037	210	-44.0	13.0
TH037	240	-31.5	15.5
TH037	270	-24.0	19.0
TH037	284	-21.5	20.5
TH037	300	-21.0	20.0
TH037	317	-19.0	19.5
TH037	333	-18.0	20.0

HOLE_ID	DEPTH	DIP	GRID_AZIMUTH
TH037	347	-17.0	19.0
TH037	363	-16.8	20.0
TH037	403	-15.0	21.5
TH037	420	-14.0	22.0
TH037	454	-12.0	19.0
TH037	484	-8.0	12.0
TH037	499.4	-8.0	12.0
TH087	0	-78.0	181.5
TH087	39	-77.0	185.0
TH087	87.1	-75.5	181.0
TH087	117	-74.0	180.5
TH087	154	-72.5	181.0
TH087	186	-71.0	185.0
TH087	222	-62.0	181.0
TH087	253.5	-60.0	182.0
TH087	280	-57.0	182.5
TH087	313	-49.5	183.5
TH087	347	-39.5	181.0
TH087	387	-34.0	182.5
TH087	406.3	-34.0	182.5
TH156	0	-64.0	2.0
TH156	30	-64.0	359.0
TH156	60	-63.0	359.0
TH156	90	-62.3	360.0
TH156	120	-62.0	360.0
TH156	150	-62.0	360.0
TH156	180	-61.9	360.0
TH156	209	-61.7	1.0
TH156	240	-61.7	1.0
TH156	270	-61.2	1.5
TH156	300	-61.0	2.5
TH156	330	-61.0	3.0
TH156	360	-59.3	2.0
TH156	390	-59.2	1.5
TH156	433	-58.9	3.0
TH156	433.5	-58.9	3.0
TH384	0	-60.0	360.0
TH384	6	-60.0	360.0
TH384	25	-60.0	356.0
TH384	43	-58.9	356.0
TH384	49	-59.0	356.0

HOLE_ID	DEPTH	DIP	GRID_AZIMUTH
TH384	61	-58.8	356.0
TH384	79	-58.0	356.0
TH384	96	-57.0	352.0
TH384	136	-57.4	353.0
TH384	162	-57.0	351.0
TH451	0	-58.0	177.0
TH451	6	-58.5	174.0
TH451	18	-58.5	175.0
TH451	30	-58.0	177.0
TH451	60	-58.0	179.0
TH451	90	-58.0	179.0
TH451	99	-58.5	179.0
TH451	107.2	-58.0	181.0
TH451	119.2	-57.5	181.0
TH451	120	-58.5	179.0
TH451	149.2	-57.5	181.0
TH451	167.2	-57.5	180.0
TH451	170	-57.5	180.0
TH453	0	-62.0	176.0
TH453	24	-61.0	176.5
TH453	48	-61.0	176.5
TH453	60	-61.0	182.5
TH453	90	-61.0	180.0
TH453	114	-60.5	177.0
TH453	118.9	-59.5	179.5
TH453	148.9	-58.5	180.0
TH453	179	-58.0	179.0
W2001NEI62	0	63.0	14.0
W2001NEI62	6	63.0	14.0
W2001NEI62	30	62.1	14.0
W2001NEI62	60	61.2	13.5
W2001NEI62	90	61.1	14.5
W2001NEI62	131	59.8	15.0

APPENDIX 4: Table 3 Thalanga Far West Assay Details

Hole_ID	From_Depth	To_Depth	Au ppm	Ag ppm	Cu%	Pb%	Zn%
TH087	343	343.5		0	0.03	0.01	0.20
TH087	343.5	344	0.05	17	0.15	0.53	0.84
TH087	344	345	0.01	1	0.02	0.04	0.17
TH087	345	345.6	0.09	17	0.23	0.96	0.91
TH087	345.6	346	0.82	286	1.12	6.15	18.00
TH087	346	347	0.58	318	3.12	10.30	25.50
TH087	347	347.2	1.38	398	6.74	9.95	22.00
TH087	347.2	348	0.08	8	0.02	0.08	0.15
TH087	348	349	0.10	0	0.01	0.02	0.05
TH156	349.6	349.8	0.01	1	0.00	0.00	0.01
TH156	353	353.3		5	0.04	0.18	0.04
TH156	353.3	354		10	0.02	0.24	0.31
TH156	354	355	0.07	28	0.09	1.01	0.96
TH156	355	356	0.09	26	0.09	0.80	0.90
TH156	356	356.8		10	0.04	0.27	0.57
TH156	356.8	357		0	0.01	0.02	0.03
TH156	377.2	377.5	0.01	1	0.00	0.00	0.01
TH156	384	385		1	0.01	0.07	0.10
TH156	385	386		6	0.05	0.26	0.59
TH156	386	387		2	0.03	0.16	0.21
TH156	387	388		4	0.06	0.27	0.45
TH156	388	389		2	0.03	0.14	0.34
TH156	389	390		0	0.01	0.02	0.06
TH156	390	391		0	0.01	0.02	0.06
TH156	391	392		0	0.01	0.01	0.04
TH156	392	393		0	0.01	0.02	0.05
TH156	393	394		0	0.02	0.01	0.06
TH156	394	395		0	0.02	0.04	0.19
TH156	395	396		1	0.01	0.09	0.17
TH156	396	397		0	0.01	0.03	0.07
TH156	397	397.5		0	0.01	0.01	0.03
TH156	397.5	398		0	0.01	0.01	0.02
TH156	398	399		0	0.01	0.01	0.03
TH156	399	400		0	0.01	0.03	0.07
TH156	400	400.6		4	0.01	0.12	0.25
TH156	400.6	401	0.08	36	0.21	1.24	3.53
TH156	401	402	0.14	24	0.27	2.07	4.42
TH156	402	403	0.24	18	0.36	2.23	4.32
TH156	403	404		0	0.01	0.01	0.05
TH156	407.6	407.8	0.01	1	0.00	0.01	0.01
TH156	414.5	414.7	0.01	1	0.00	0.00	0.01
TH156	433.3	433.5	0.01	2	0.00	0.02	0.07
TH384	100	101.3	1.06	1	0.02	0.01	0.03

Hole_ID	From_Depth	To_Depth	Au ppm	Ag ppm	Cu%	Pb%	Zn%
TH384	101.3	102.2	1.17	61	0.18	0.07	0.03
TH384	102.2	103	3.84	78	6.70	2.69	1.70
TH384	103	104.1	1.26	36	1.34	2.19	0.75
TH384	104.1	105	0.26	29	0.32	1.86	1.12
TH384	105	106	0.18	25	0.54	0.93	0.91
TH384	106	107	0.11	16	0.24	0.05	0.08
TH384	107	107.9	0.16	18	0.57	0.22	0.07
TH384	107.9	109	0.94	211	1.84	5.11	1.20
TH384	109	109.7	1.00	213	2.54	2.16	2.51
TH384	109.7	110	1.60	403	0.43	6.17	26.30
TH384	110	110.2	0.50	215	2.19	4.45	16.30
TH384	110.2	111	0.20	12	0.37	0.21	0.63
TH384	111	112.2	0.14	18	0.44	0.83	4.74
TH384	112.2	113	0.12	20	0.63	1.08	11.80
TH384	113	114	0.11	17	0.49	0.72	20.00
TH384	114	115	0.14	26	0.59	1.40	9.02
TH384	115	116.2	0.14	17	0.67	0.36	8.18
TH384	123.1	123.5	0.15	134	7.96	2.52	7.74
TH384	123.5	124	0.09	22	0.83	1.02	2.43
TH384	124	125	0.10	18	0.31	1.38	4.53
TH384	125	126	0.14	14	0.32	0.87	2.65
TH384	126	127	0.11	6	0.29	0.20	1.45
TH384	127	128	0.05	11	0.11	0.43	2.07
TH384	128	129	0.10	9	0.13	0.35	1.29
TH384	129	130	0.02	5	0.06	0.28	1.04
TH384	130	131	0.01	4	0.08	0.05	0.40
TH384	131	132.2	0.01	3	0.10	0.04	0.19
TH384	132.2	133	0.18	54	0.95	0.50	2.93
TH384	133	134	0.31	49	1.28	0.25	5.30
TH384	134	135	0.61	27	7.02	0.18	5.92
TH384	135	135.7	0.30	50	1.90	1.41	18.10
TH384	135.7	136	0.21	63	3.66	2.35	13.60
TH384	136	137	0.12	134	0.59	5.25	18.30
TH384	137	138	0.03	13	0.42	0.69	4.40
TH384	138	139	0.06	21	0.71	0.64	2.08
TH384	139	140	0.01	4	0.04	0.20	0.20
TH451	137	138	0.06		2.80	0.18	0.02
TH451	138	139	0.03		2.77	0.04	0.20
TH451	139	139.1	0.01		2.72	0.01	0.01
TH451	139.1	140.1	0.08		3.11	0.47	0.66
TH451	140.1	140.9	0.81		3.28	1.00	1.09
TH451	140.9	142.2	0.54	1	4.13	1.78	6.27
TH451	142.2	142.8	0.32		3.86	0.52	4.10
TH451	142.8	143.4	0.06		2.83	0.27	0.78

Hole_ID	From_Depth	To_Depth	Au ppm	Ag ppm	Cu%	Pb%	Zn%
TH451	143.4	144.5	0.34		3.55	0.99	2.37
TH451	144.5	145.6	0.51		3.60	7.20	2.78
TH451	145.6	146.5	0.01		2.80	0.06	0.01
TH451	146.5	147.5	0.01		2.75	0.06	0.01
TH451	147.5	148.5	0.01		2.73	0.04	0.01
TH453	159.9	160.8	0.15	53	0.41	2.13	5.68
TH453	160.8	161.75	0.13	64	1.58	2.28	2.09
TH453	161.75	162.4	0.84	82	5.10	0.85	1.66
TH453	162.4	163.1	2.05	159	15.10	1.66	1.97
TH453	163.1	163.55	0.16	21	1.36	0.22	0.17
TH453	163.55	164.2	1.56	111	17.50	0.62	1.96
W2001NEI62	111.3	112	0.95	323	4.81	5.15	3.94
W2001NEI62	112	113	0.83	110	4.08	2.14	9.39
W2001NEI62	113	114	1.10	91	2.88	1.84	8.61
W2001NEI62	114	114.5	1.16	129	7.81	2.42	8.92
W2001NEI62	114.5	116	0.84	64	3.33	1.64	4.05
W2001NEI62	116	117	0.26	113	0.33	8.01	16.90
W2001NEI62	117	118	0.36	52	2.12	1.86	5.16
W2001NEI62	118	118.75	0.23	67	1.39	2.65	6.73
W2001NEI62	118.75	120	0.25	47	1.40	1.77	2.91
W2001NEI62	120	121	0.32	15	1.23	0.52	2.05
W2001NEI62	121	122	0.07	16	0.52	0.53	1.96
W2001NEI62	122	122.5	0.23	27	0.84	0.19	1.00
W2001NEI62	122.5	124	0.07	8	0.22	0.12	0.42
W2001NEI62	124	125	0.01	1	0.06	0.08	0.20
W2001NEI62	125	126	0.01	2	0.10	0.10	0.30
W2001NEI62	110	111.3	0.01	2	0.09	0.01	0.03

APPENDIX 4: Far West Drill Collar Plan