



## Thalanga Zinc Project – Development Progress Update

Zinc developer Red River Resources Limited (ASX: RVR) (“Red River” or the “Company”) is pleased to provide the following update on the ongoing progress at its Thalanga Zinc Project in Queensland, where it expects to restart commercial production in 2H CY2017.

### Thalanga Plant and Site

- Thalanga Plant and Site rehabilitation and restart activities continued during January and February, with the following undertaken:
  - Termite-damaged wooden power poles were replaced with concrete power poles around the site, ensuring reliable power supply from the substation on site to West 45 portal;
  - Commenced installation of new power poles to future portal for Far West;
  - Continued work around the grinding circuit, with all major structural repairs completed;
  - Cleaning around the plant is ongoing, reagent lines being flushed and setting site up for start of commissioning activities;
  - Cyclone feed pumps have been removed, and work to rebuild and replace pumps has started;
  - Continued replacing gridmesh around walkways and access platforms;
  - Ambulance arrived on site, currently being retrofitted and registered for use; and
  - Bus run from Charters Towers to the mine site has commenced.

### West 45

- PYBAR Mining Services (“PYBAR”) has been engaged as the underground mining contractor for the West 45 deposit. PYBAR has commenced mobilising personnel and equipment to site, and mining activities are scheduled to commence end of March.
- AMC Mining Consultants (“AMC”) undertook a site visit and completed a geotechnical review of the planned development. This review will assist with ongoing refinement to mine planning at West 45 and Far West.
- Explosive licence application is underway.
- Power reticulation to West 45 has commenced.
- Two refuge chambers were purchased and delivered to site. They will be commissioned before being taken underground.

### Thalanga Operations

- Red River has commenced the recruitment of the Senior Site Management Team, having already recruited high calibre people for the roles of Mining Manager, Geology Manager, Maintenance Manager, SHEC Superintendent and Processing Superintendent. These are critical additions to the Red River team and will greatly assist the Company in its development activities.

### Concentrate Offtake Agreement

- Negotiations are ongoing with a number of potential offtake partners. Red River is aware of the strong market for concentrates and is seeking to maximise outcomes for shareholders.

## 1. Thalanga Plant and Processing Infrastructure

The Thalanga Plant is designed for a nominal throughput of 650ktpa, using standard industry technology to produce saleable copper, lead and zinc concentrates via flotation. The plant flowsheet is summarised as:

- Crushing circuit (three-stage crushing circuit);
- Milling circuit (primary (x1) and secondary ball mill (x2) circuit);
- Concentrate flotation circuit (differential copper, lead and zinc flotation circuits);
- Concentrate thickening and filtration;
- Regrind circuit;
- Concentrate storage, blending and transport; and
- Sub-aqueous disposal of tailings to fully permitted Tailings Storage Facility (“TSF”) with sufficient existing capacity for currently planned operations.

The Thalanga Plant is fully permitted, and Red River commenced early stage restart activities in Q4 CY2016. The Plant is forecast to restart commercial production in 2H CY2017.

Figure 1 Thalanga Plant and Processing Infrastructure



Ore is transported to the Run of Mine (“ROM”) Pad, where it is stockpiled and gradually fed into the concentrator for processing. The Thalanga ROM Pad contains a number of stockpiles from the Vomacka Pit (mined by a previous owner) dating from March 2012, when the Thalanga Mine was placed on care & maintenance. Red River is currently reviewing potential options to monetise a number of these stockpiles.

Figure 2 Thalanga ROM Pad

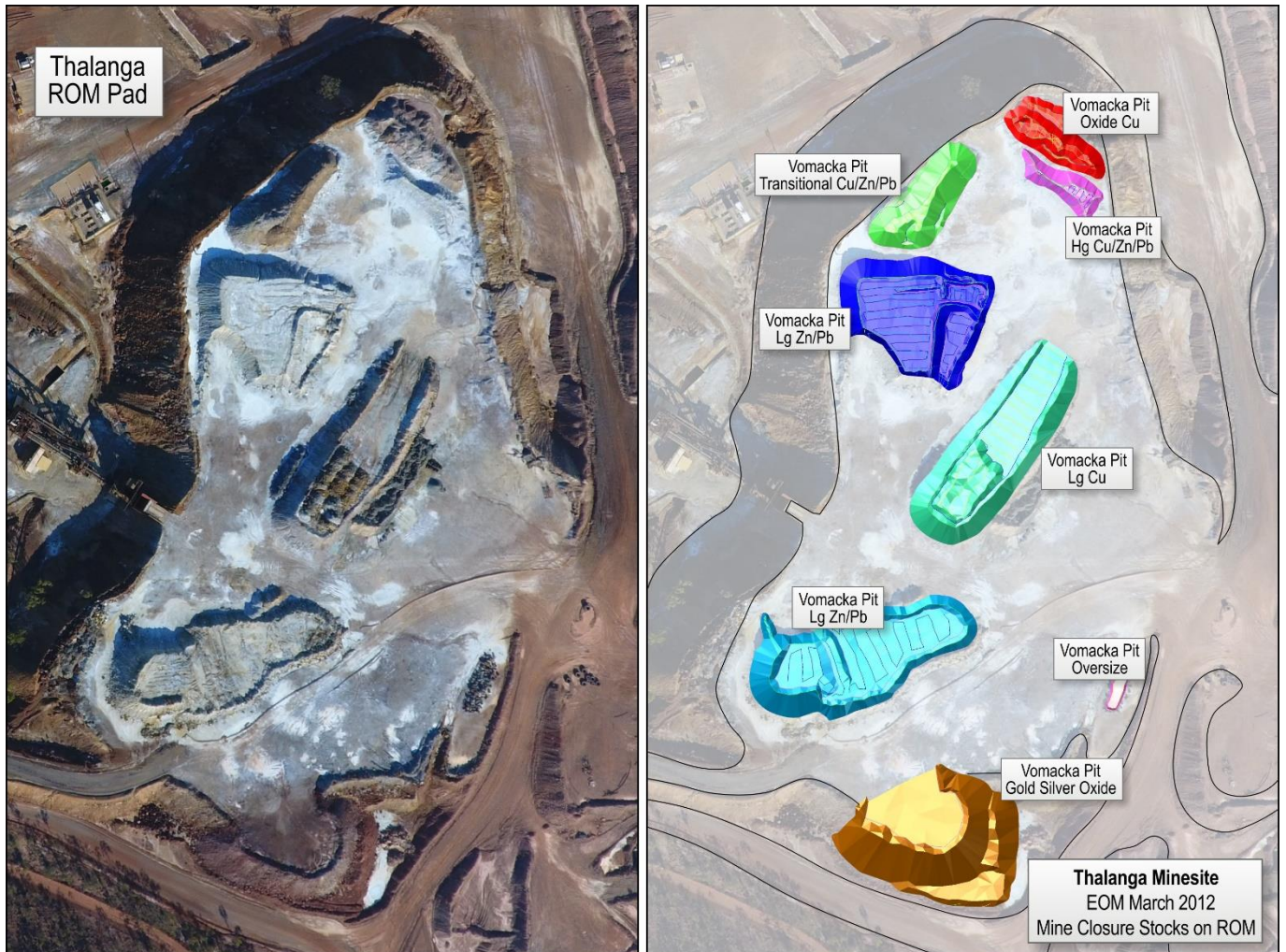


Figure 3 Charters Towers bus transfer



Bus transport of all employees and contractors from Charters Towers to Thalanga and return has commenced.

Figure 4 Replacing power poles on site



Termite damaged wooden power poles on site are being replaced with concrete power poles.

Figure 5 Unloading thickener rakes and refurbished equipment for reinstallation



Thalanga Plant refurbishment activities continued during the period, and activity and staffing levels increased post the completion of the restart fundraise.

## 2. 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. About 2,835t of ore was extracted and processed by Kagara through the Thalanga Plant prior to operations being placed on care & maintenance. The box-cut and portal collar have been mined and supported to a high standard. No serious defects are evident. Ground conditions are considered to be good.

PYBAR has been engaged as the underground mining contractor for the West 45 deposit. PYBAR has commenced mobilising personnel and equipment to site, and mining activities are scheduled to commence in the coming weeks.

Figure 6 West 45 Portal



Work program to re-establish grid power reticulation to the West 45 portal commenced during the period, in preparation for the restart of mining activities.

Figure 7 Delivery of West 45 underground refuge chambers



Red River has commenced acquiring key equipment for the restart of production at Thalanga.

Figure 8 PYBAR plant mobilised to site



PYBAR has commenced mobilising personnel and equipment to site, and mining activities are scheduled to commence end of March.

## Thalanga Zinc Project Background

Red River released a Restart Study (the internal study prepared by Red River to assess the potential restart of the Thalanga Zinc Project) in November 2015, which demonstrated the highly attractive nature of the Project. The Project has a low operating cost, low pre-production capital cost (\$17.2 million), and a short timeline to production (six months).

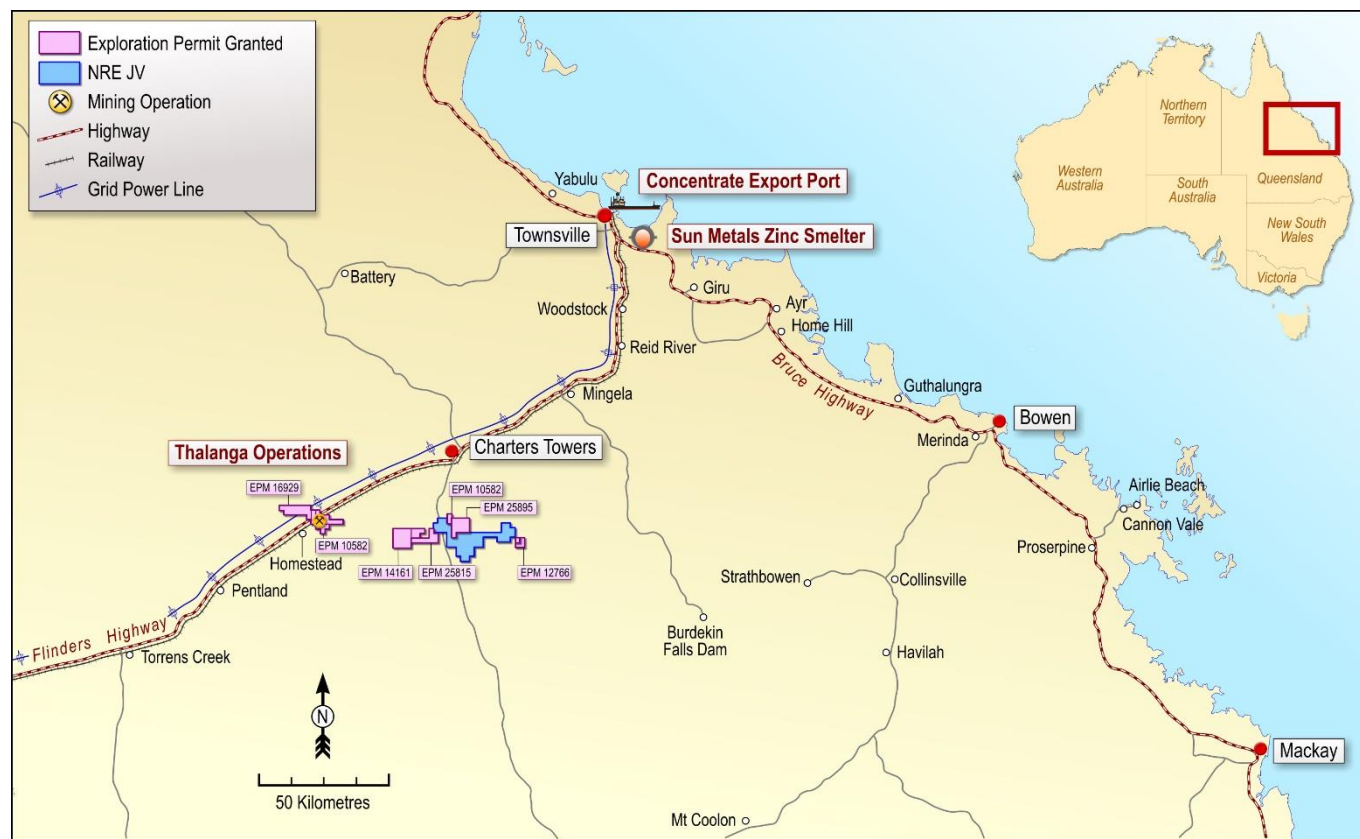
Annual average production is 21,400 tonnes of zinc, 3,600 tonnes of copper, 5,000 tonnes of lead, 2,000 ounces of gold and 370,000 ounces of silver in concentrate over an initial mine life of five years, and there is outstanding extension potential.

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

The Thalanga Zinc Project Restart Study is based on production from three deposits – West 45, Far West and Waterloo. The Thalanga Zinc Project Restart Study is based on low level technical and economic assessments and there is insufficient data to support the estimation of Ore Reserves at Far West and Waterloo, provide assurance of an economic development case at this stage, or provide certainty that the results from the Thalanga Zinc Project Restart Study will be realised.

Further, as the production target that forms the basis of the Thalanga Zinc Project Restart Study includes Mineral Resources that are in the Inferred Category and there is a low level of geological confidence associated with Inferred Mineral Resources, there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

Figure 9 Thalanga Zinc Project Location





On behalf of the Board,

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

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