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# **Truncheon Drilling Update**

### Highlights:

- TR01 (TR01W1) and TR02 completed at Truncheon.
- Encouraging zones of intense hydrothermal alteration intercepted in all holes with alteration assemblages intersected similar to those intersected in historical drilling at the Highway Reward deposit.
- Zones of intensive pyrite alteration and veining indicative of feeder zones plus discrete zones of massive and semi massive pyrite with trace chalcopyrite intersected in TR01W1 and TR02 holes.
- Drilling was part-funded under Round 9 of the Queensland Government's Future Resources Program – Collaborative Drilling Initiative (CDI).

Red River Resources Limited (ASX: RVR) ("Red River" or the "Company") is pleased to announce that it has completed the initial diamond drill holes (TR01 & TR02) planned to test the Truncheon target.

TR01 was terminated at 286m depth due to excessive deviation and a daughter hole, TR01W1, was cut at 94.1m depth off TR01 which was completed at 510m depth. TR02 was completed at 498.1m depth.

All holes intersected encouraging zones of intense hydrothermal alteration, similar to the alteration intersected in historical drilling at the Highway Reward deposit. Significant zones of intensive pyrite alteration and veining indicative of feeder zones plus discrete zones of massive and semi massive sulphide with trace chalcopyrite were also intersected.

Importantly, the drilling has provided evidence for a large scale mineralised hydrothermal system at Truncheon, with zones of intensive pyrite alteration and veining, indicative of feeder zones plus massive to semi-massive pyrite.

Red River's Managing Director Mel Palancian commented: "While it appears that we did not intersect economic mineralisation in our first holes, we are pleased to have intersected zones of intense hydrothermal alteration, feeder zones and semi massive to massive pyrite, which are all indicative of a potentially large scale mineralising VHMS system being present at Truncheon.

Our plan is to carry out a detailed review of the core to extract as much possible information to help us to better target the next phase of drilling at Truncheon. In combination with this, we will carry out downhole electromagnetic surveys to better understand the system.

Whilst we are doing this, the diamond drill rig will be relocated to the Liontown East target to continue Red River's high impact exploration program."



### 1. Drill hole information summary

Table 1 Drill hole information summary, Thalanga Zinc Project (Truncheon)

Hole ID	Depth	Dip	Azi (MGA)	East (MGA)	North (MGA)	RL (MGA)	Lease ID	<b>Hole Status</b>
TR01	286m	-66°	327.5°	419305	7749683	376	EPM 18713	Completed
TR01W1	510m			419305	7749683	376	EPM 18713	Completed
TRO2	498.1m	-68°	55.8°	418853	7749820	367	EPM 10582	Completed

Hole TR01 was terminated at 286m depth due to excessive deviation and a daughter hole, TR01W1, was cut at 94.1m depth off TR01. TR01W1 was completed at 510m depth.

### 2. TRO1 (TRO1W1)

TR01 (TR01W1) intersected a package of intensely hydrothermally altered vertical to sub vertical dipping volcaniclastic rocks with interbedded sediments (cherts) and andesites, with zones of intense (up to 20%) disseminated pyrite and pyrite in veins with a 2m zone (390.0m - 392.0m down hole width) of strongly sericite altered coarse grained semi massive to massive pyrite.

Figure 1 Strongly sericite altered semi-massive sulphide (FOV 386.4 m - 392.8 m)





Figure 2 Strongly sericite altered semi-massive sulphide (390.6m)



Figure 3 Pyrite stringer veins showing infill and alteration relationships between pyrite and sericite overprinting chlorite in volcaniclastic (389.7m)





# Table 2 TR01 Geology Summary

From	То	Geology Summary	
0.0m	4.7m	No sample	
4.7m	179.0m	Epidote-chlorite altered andesite with quartz-carbonate-epidote +/- pyrite veins and rare chlorite-pyrite-chalcopyrite+/-sphalerite veins. Disseminated pyrite throughout.	
179.0m	181.1m	Siliceous chlorite altered siltstone with pyritic laminations and rare trace chalcopyrite	
181.1m	248.0m	Epidote altered andesite with rare zones of coarse pyrite disseminations.	
248.0m	250.0m	Strongly chlorite-silica-hematite altered andesitic volcanoclastic unit with coarse grained euhedral disseminated pyrite.	
250.0m	261.0m	Laminated chert with disseminated pyrite.	
261.0m	287.0m Strongly chlorite-silica-hematite altered andesitic volcaniclastic unit with coarse grained e disseminated pyrite and rare trace chalcopyrite.		

# Table 3 TR01W1 Geology Summary

From	То	Geology Summary		
174.7m	231.8m	Weak to moderate chlorite-epidote altered andesite with fine carbonate-epidote-pyrite veins and		
		pyrite-chalcopyrite veins		
231.8m	237.7m	Laminated chert with minor pyrite		
237.7m	248.7m	Strongly chlorite altered andesitic clastic with disseminated pyrite		
248.7m	254.1m	Laminated chert with minor pyrite		
254.1m	255.6m	Strongly chlorite altered andesitic clastic with disseminated pyrite		
255.6m	269.8m	Zone of brecciated and laminated chert and strongly sericite altered siltstone with disseminated		
255.0111		pyrite and trace chalcopyrite.		
269.8m	325.0m	Strongly chlorite altered andesitic clastic & rare massive pyrite clasts with disseminated pyrite		
325.0m	360.0m	Strongly chlorite-pyrite altered andesite. Pyrite as disseminations and veins with rare trace		
325.0111		chalcopyrite		
360.0m	390.0m	Strongly chlorite altered andesitic clastic with disseminated pyrite		
390.0m	392.0m	Strongly sericite altered coarse grained semi massive to massive pyrite		
202.0m	510.0m	Weakly chlorite altered andesite with common pyrite +/- sericite veins & rare trace blebby		
392.0m		chalcopyrite		



#### 3. TRO2

TR02 intersected a package of graded volcanic units in the hanging wall of intensely, hydrothermally altered, volcaniclastic rocks with interbedded sediments (cherts) and intrusive (andesite/dacite). Trace amounts of galena and chalcopyrite were observed in two zones (78.2m – 95.1m & 181.9m – 238.0m downhole widths). A strongly sericite & chlorite altered 4.9m zone of disseminated pyrite and pyrite in veins was observed at 391.9m – 396.8m (downhole width).

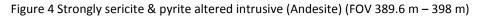






Figure 5 Semi-massive sulphide (pyrite) (294 m)



Table 4 TR02 Geology Summary

From	То	Geology Summary		
0.0m	2.7m	No sample		
2.7m	120m	Moderately chlorite altered volcaniclastic, with graded bedding. Some fine pyrite stringers and trace galena/chalcopyrite associated with locally intense sericite alteration.		
120m	159.1m	Siliceous feldspar phyric glassy andesite.		
159.1m	162.5m	Moderately chlorite altered volcaniclastic, with graded bedding.		
162.5m	181.9m	Strongly chlorite altered volcaniclastic with intense hematite alteration in clasts. Disseminated pyrite abundant		
181.9m	242m	Strongly chlorite altered volcaniclastic with intense epidote & sericite alteration in clasts. Trace galena and chalcopyrite with abundant disseminated pyrite.		
242m	242.3m	Fault zone		
242.3m	325.4m	Moderately chlorite altered intrusive unit (dacite) with weak pervasive pyrite and zones of locally intense pyrite associated with fractures.		
325.4m	326.2m	Semi-massive sulphides (pyrite)		
326.2m	391.9m	Strongly chlorite and pyrite altered intrusive unit (andesite)		
391.9m	392.7m	Strongly sericite and pyrite altered intrusive unit (andesite), with moderate epidote alteration associated with fractures. Pyrite mineralisation up to ~30%		
392.7m	393m	Fault Zone		
393m	396.8m	Strongly sericite and pyrite altered intrusive unit (andesite), with moderate epidote alteration associated with fractures. Pyrite mineralisation up to ~30%		
396.8m	498.1m	Intrusive unit (andesite) with gradual weakening alteration from strong epidote and pyrite to completely unaltered.		



#### 4. Next Steps

Selected zones of core are being cut and submitted for assay, but based on the geological logging of the core, Red River is not expecting any material assay results. Red River is also planning to undertake the following:

- Detailed specific gravity measurements will be taken and used to verify the previous gravity modelling and to confirm whether the sulphides intersected in the drilling confirm the modelled gravity anomalies.
- As part of a larger program of planned downhole electromagnetic (EM) surveys at the Thalanga Zinc Project, a downhole EM survey will be carried out at Truncheon.
- Red River is in discussion with a number of consultants to undertake a detailed review of the intense alteration
  and sulphide veining intersected to gain a better understanding of the Truncheon system and to also maximise
  the information gained from the initial drilling to plan the second phase of drilling at Truncheon.

### **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.

On behalf of the Board,

Mel Palancian
Managing Director
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### **COMPETENT PERSON STATEMENT – EXPLORATION RESULTS**

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