Survey Detects Multiple High Priority Targets at Liontown

Highlights:

- Multiple extensive and intense chargeability anomalies detected by Liontown Induced Polarisation (IP) survey
- Survey is 90% complete, with more than 52 line kilometres of data collection across 7km of geological strike
- High priority targets identified may potentially yield a number of new discoveries
- Drilling to commence at Scarecrow Target once current program at Liontown East is complete

Zinc developer Red River Resources Limited (ASX: RVR) (“Red River” or the “Company”) is pleased to announce an IP survey at the Company’s Liontown Project, part of Red River’s Thalanga Zinc Project in Queensland, has reached 90 per cent completion. More than 52 line kilometres of data collection has been completed across 7km of highly prospective geological strike at the project, which is 40km southwest of Charters Towers and 30km SE of the Thalanga Project.

The Liontown IP survey has detected multiple untested chargeable and conductive bodies within the project area.

Red River’s Managing Director Mel Palancian commented: “The results from this IP survey to date have been very encouraging, identifying numerous targets that will need further testing. Our immediate interest is the Scarecrow Target, which is an exceptionally large and intense target, and we are planning to drill several holes at Scarecrow once our drilling program at nearby Liontown East is complete.

Meanwhile, we will examine other results from the IP survey to determine further exploration opportunities from it as we aim to add to our resource inventory for the Thalanga Project, which is on track to recommence zinc production in 2H 2017”.

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1. Liontown IP Survey Results

As a part of Red River’s ongoing strategy to discover additional ore for the Thalanga Mill, the company commenced a very large scale IP survey over the Liontown VHMS horizon from Liontown to east of Waterloo. The first phase of the survey is approximately 90% complete and incorporates more than 52 line kilometres of data collection across 7km of geological strike. The survey stands out as the first intensive application of high energy (50kva transmitter) induced polarisation across this part of the Mt Windsor Belt, unlocking multiple new mineral systems and horizons. This gives Red River a strong competitive advantage over previous explorers and fast-tracks the company’s value generation strategy. A preliminary analysis of the results received to date has highlighted a number of extensive and intense chargeability anomalies, typically coincident with resistivity highs (in part ruling out carbonaceous sediments as the cause of the highs). These most significant of these new zones of immediate interest include:

- Scarecrow Target
- Liontown East Extension
- Snowleopard Target and Liontown Northern Anomaly Target (Snowleopard Cluster)
- Agincourt West Target
- Blenheim West Target

Induced Polarisation geophysics is a screening tool employed by Red River to highlight mineral horizons that are chargeable (disseminated sulphide minerals hold an electric charge for a few milliseconds longer than non-sulphide minerals) and resistive (resistivity measures the resistance to a charge or current in minerals and rocks). Red River has successfully utilised Dipole-Dipole Induced Polarisation (IP) geophysics to discover high grade ore at Liontown East. Previous IP surveys conducted by Red River show a consistent strong correlation between chargeability highs and mineralised horizons – structural and lithological contacts that hosts mineral deposits and their associated ‘plumbing’ systems.
Figure 1 Phase 2 Liontown and Waterloo IP Survey
Figure 2 Lontown IP Survey – 3D View Looking North

Vertical Scale – each block = 500m
Horizontal Scale – each block = 2,000m
2. Scarecrow Target

The Scarecrow Target is located approx. 600m south of the Liontown Deposit/Liontown East extension. Scarecrow currently has a total strike length of 1.4km, and is an exceptionally large and intense target. Once the current phase of drilling has been completed at Liontown East, it is planned to move the drill rig to test Scarecrow, with an initial two-hole program planned.

Figure 3 403000mE (Line 2) Chargeability Section - Scarecrow Target and Liontown IP Response

Figure 4 403000mE (Line 2) Resistivity Section - Scarecrow Target and Liontown IP Response
3. Liontown East Extension

The Liontown East Target remains strong; the eastern down-plunge extension has a slightly more subdued chargeability response, more likely related to depth rather than actual sulphide content. The target model is open at depth and the Liontown East system is interpreted to continue to plunge easterly to depth. The Liontown East chargeability anomaly now extends to a minimum 700m strike length.

Figure 5 403800mE (Line 6) Chargeability Section - Scarecrow Target and Liontown East IP Response

Figure 6 403800mE (Line 6) Resistivity Section - Scarecrow Target and Liontown East IP Response
4. Snowleopard Cluster and Liontown Northern Anomaly Targets

The Snowleopard Cluster is a grouping of large and intense chargeability anomalies that surround an intersection of a major NW trending magnetic structure (typically these structures host larger deposits as at Thalanga and Highway-Reward) with a NE trending deep VTEM (versatile time-domain electromagnetic system) structure, considered to be the potential feeder structure for the Liontown-Waterloo mineral horizon. The system looks like a possible double plunge over approximately 2km. A similar style structure (double plunge) has been noted at both the Thalanga and Liontown deposits.

Figure 7 404200mE (Line 8) Chargeability Section - Liontown Northern IP Anomaly Target IP Response

Figure 8 404950mE Line (11) Chargeability Section - Snowleopard Target IP Response
5. **Agincourt West Target**

The Agincourt West Target represents a large (600m x 400m) and intense chargeability anomaly between Agincourt and Windsor Creek, with the central peak of anomaly at depth well below any historic drilling.

![Figure 9 405900mE (Line 14) Chargeability Section - Agincourt West Target IP Response](image1)

![Figure 10 405900mE (Line 14) Resistivity Section - Agincourt West Target IP Response](image2)
6. Blenheim West Target

The Blenheim West Target represents a very large (1000m x 600m) depth-extensive and intensive chargeability anomaly between Blenheim and Waterloo, currently open to the east. The anomaly has not previously been tested by deep drilling.

Figure 11 407700mE (Line 19) Chargeability Section Blenheim West Target IP Response

Figure 12 407700mE (Line 19) Resistivity Section - Blenheim West Target IP Response
Next Steps

Red River considers the current results of the Liontown IP survey to be an outstanding success, delineating multiple high priority targets. The current survey is 90% complete, with completion of the remaining 10% currently slowed due to inclement weather, and will take approximately 10 further production days to complete.

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.

On behalf of the Board,

Mel Palancian
Managing Director
Red River Resources Limited

For further information, please visit Red River’s website or contact:

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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 Dr Kris Butera who is a member of the Australasian Institute of Mining and Metallurgy, and an employee of Australis Mineral Management consulting to Red River Resources Limited, 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). Dr Butera consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

APPENDIX A – JORC 2012 EDITION TABLE 1

THALANGA INDUCED POLARISATION (IP) SURVEY
The following information follows the requirements of the JORC 2012 Table 1 Section 1 and 2 and as applicable for ASX release related to the results of the IP Survey conducted at the Thalanga Project

Section 1: Sampling Techniques and Data

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<td>Sampling techniques</td>
<td>This report relates to the results induced polarisation (IP) surveys conducted between December and March 2017. Surveys were conducted by Fender Geophysics Pty Ltd and supervised by Red River and Montana GIS Pty Ltd personnel. The surveys targeted known mineralisation, interpreted mineralised lenses and areas of no known mineralisation at the Company’s Liontown Project. Induced polarization (IP) is a geophysical imaging technique used to identify subsurface materials, such as ore. The method is similar to electrical resistivity tomography, in that an electric current is induced into the subsurface through two electrodes, and voltage is monitored through two other electrodes.</td>
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<tr>
<td>Drilling techniques</td>
<td>The ASX release does not report exploration drilling</td>
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<tr>
<td>Drill sample recovery</td>
<td>The ASX release does not report exploration drilling</td>
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<tr>
<td>Logging</td>
<td>The ASX release does not report exploration drilling</td>
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<td>Chargeability Integration: 590msec to 1450msec</td>
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<td>Sensor: Porous Pots</td>
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<td>Quality of assay data and laboratory tests</td>
<td>Acquired IP data is of high quality – QAQC conducted by David McInnes of Montana GIS, Geophysics Consultant.</td>
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<td>Verification of sampling and assaying</td>
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<td>Location of data points</td>
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