Ermine Exploration Update

Highlights:

- **Exploration activities commence within the Ermine Project area**
- **High grade polymetallic massive sulphide mineralisation intersected in ERDD18005 (1.95m @ 15.5% Zn Eq.) at Ermine North**
  - **ERDD18005 intersected 1.95m @ 15.5% Zn Eq. (1.1% Cu, 2.2% Pb, 9.1% Zn, 0.1 g/t Au & 33 g/t Ag) from 223.05m down hole.**
- **Follow up drilling is planned**

Red River Resources Limited (ASX: RVR) ("Red River" or the "Company") is pleased to announce initial assay results from an exploration drilling program at the Ermine Project, part of its Thalanga Operations in Queensland.

The Company completed an initial two holes (ERDD18001 & ERDD18005) before demobilising the drilling rig for the wet season. The program aimed to test several geophysical and geochemical anomalies in the larger Ermine-Echidna mineralised system. Highlights from drilling included:

- ERDD18005: 1.95m @ 15.5% Zn Eq. (1.1% Cu, 2.2% Pb, 9.1% Zn, 0.1 g/t Au & 33 g/t Ag) from 223.05m down hole at the Ermine North target.

The Ermine-Echidna system is located on EPM 12766 and is approximately 75km east of Red River's Thalanga Operations. Further discoveries near Thalanga have the potential to provide RVR with additional material that could be processed at the Thalanga plant, which has capacity for increased throughput.

Managing Director's Comment

Red River's Managing Director, Mel Palancian commented: "*We continue to be pleasantly surprised with the success of our exploration activities which demonstrate prospectivity of our extensive exploration portfolio. The Ermine prospect is one of several we will assess to more clearly define a long and sustainable mine life at Thalanga*".

Polymetallic massive sulphide mineralisation from ERDD18005

The Ermine-Echidna system is located on EPM 12766 and is approximately 75km to the east of Red River's Thalanga Operations. Previous exploration has defined a large (2km+ length) coincident geochemical and geophysical anomaly.

Previous historic drilling (carried out by Plutonic Operations Ltd in 1992 and 1993) produced a number of significant high grade intercepts including 3.2m @ 1.2% Cu, 7.9% Pb, 29.2% Zn, 0.4 g/t Au & 190 g/t Ag (refer to RVR ASX release "Ermine North: Red River Identifies Exciting New Exploration Target", 16 November 2015) from drill hole ERCD14A.

The high grade zinc mineralisation identified by Plutonic consists of a sulphide debris flow, typical of the outer fringe of a Volcanic Hosted Massive Sulphide (VHMS) Deposit. Review of the diamond core by Red River's Exploration team has confirmed this interpretation. The sulphide debris flow consists of an accumulation of rock debris consisting of clasts of volcanics, sediments, jasper and sphalerite rich massive sulphide boulders.

The poly metallic mineralisation intersected in ERDD18005 has the potential to be the source of the high grade sulphide rich debris flow discovered by Plutonic.

Ongoing analysis by Red River's exploration team has confirmed the presence of encouraging outcropping lithologies including extensive jasper horizons and local gossans developed at the boundary between felsic volcanics and an overlying sequence of mixed sediments and volcanics.

Figure 1 Ermine Project Location

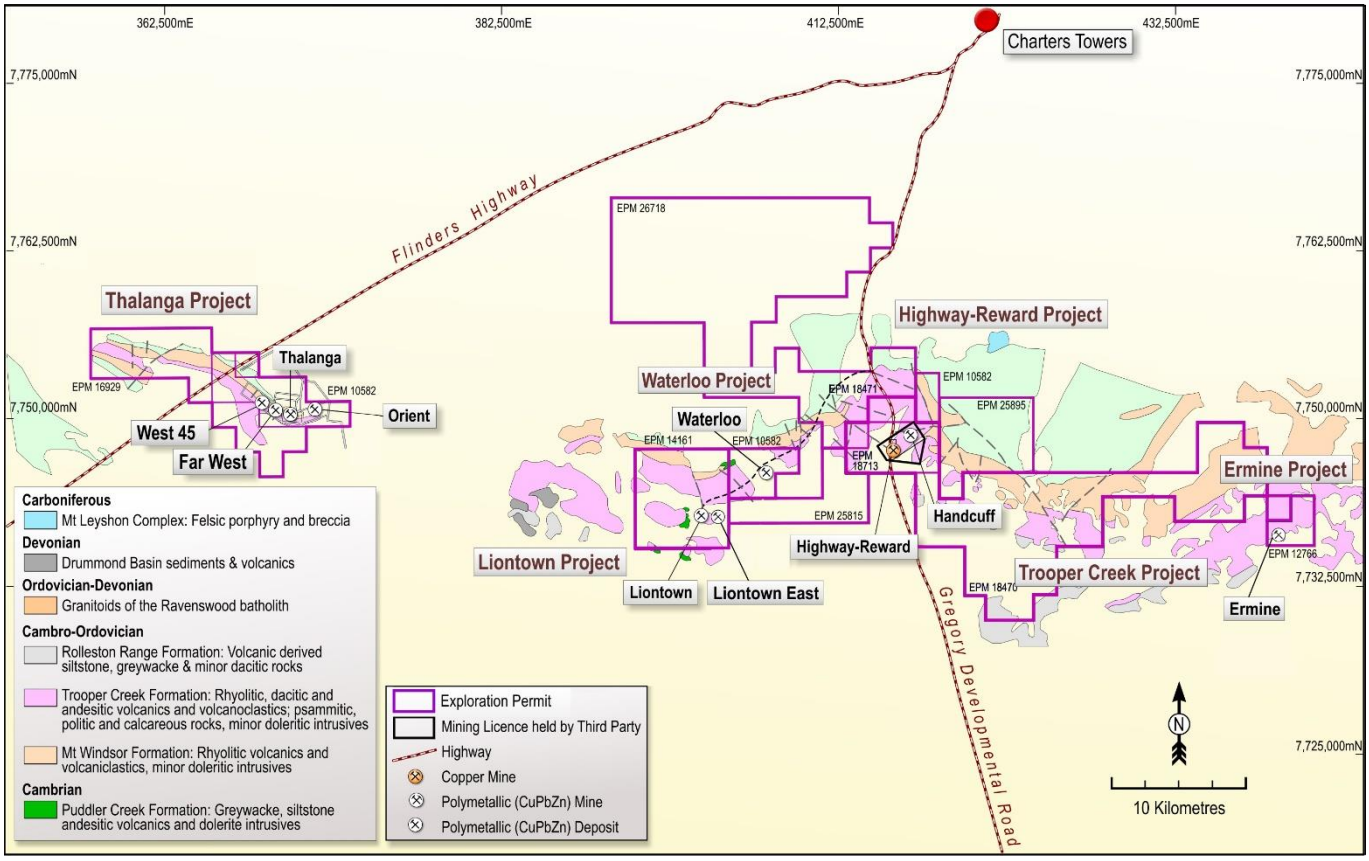
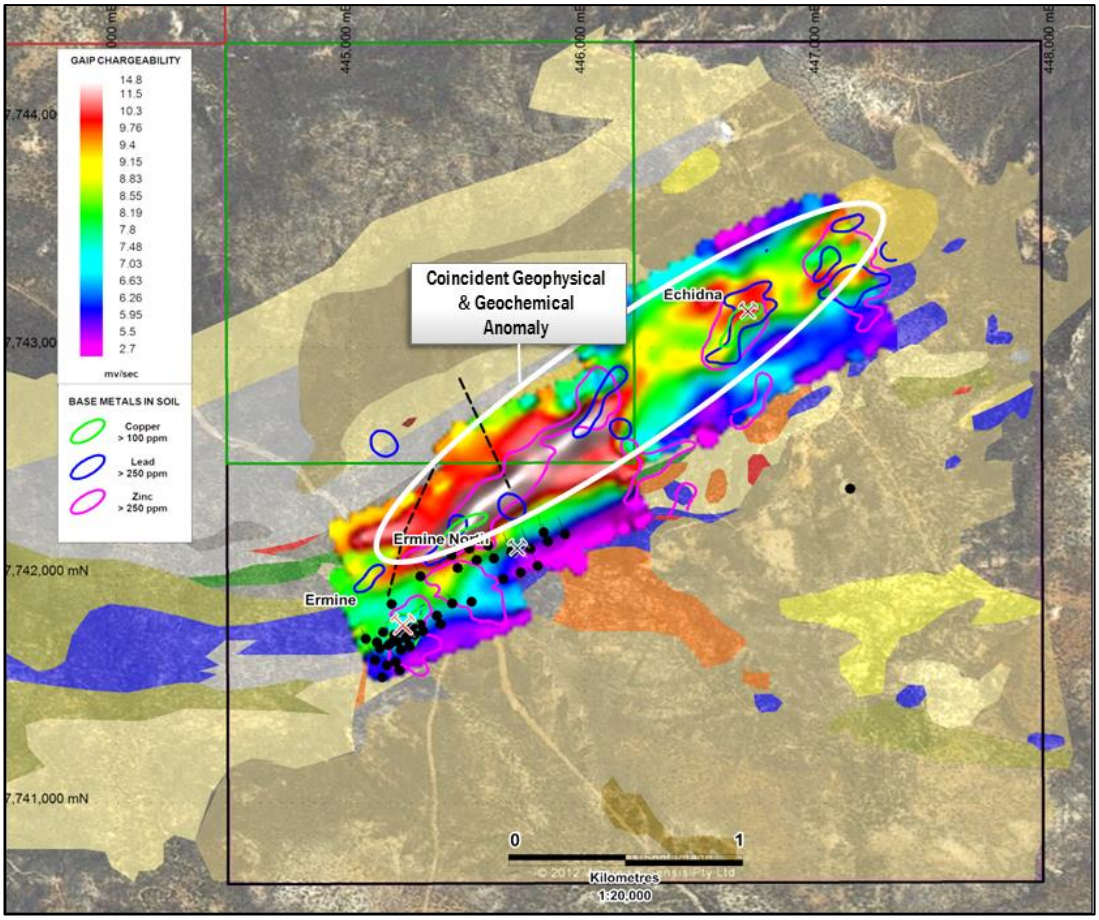


Figure 2 Ermine Project Gradient Array Induced Polarisation (Chargeability) & Historical Drill Collars



Drill hole ERDD18005 intersected 1.95m metres of interbedded massive sulphide, semi massive sulphide and fine grained siltstone from 223.05m down hole. Drill hole ERDD18001 did not intersected any material mineralisation.

Mineralisation intersected in ERDD18005 is 'in-situ' in nature and has the potential to be a source of the high grade sulphide debris flow drilled by Plutonic at Ermine.

Figure 3 ERDD18005 – polymetallic massive sulphide intercept (1.95m @ 15.5% Zn Eq.)

The massive sulphide mineralisation intersected was polymetallic in nature, dominated by medium grained sphalerite (Zn, Fe)S, pyrite (FeS_2), galena (PbS), and chalcopyrite ($CuFeS_2$) mineralisation. Sphalerite mineralisation is pale yellow to brown in colour.

Figure 4 Polymetallic massive sulphide mineralisation from ERDD18005

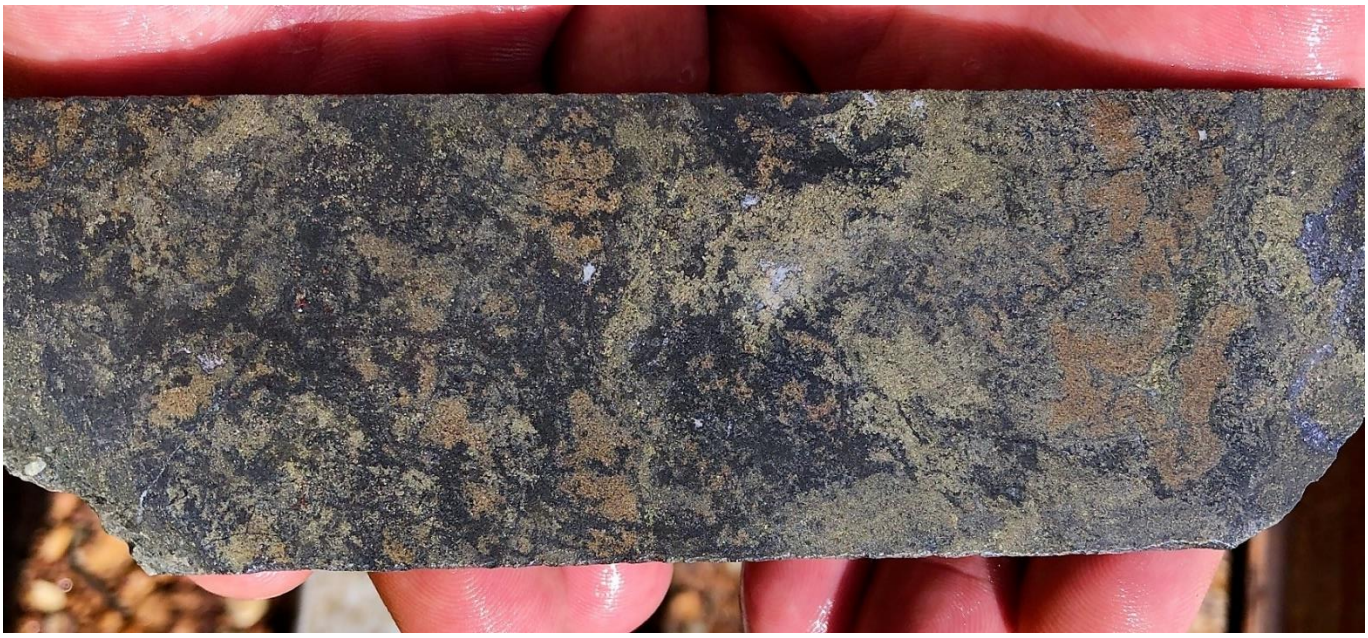
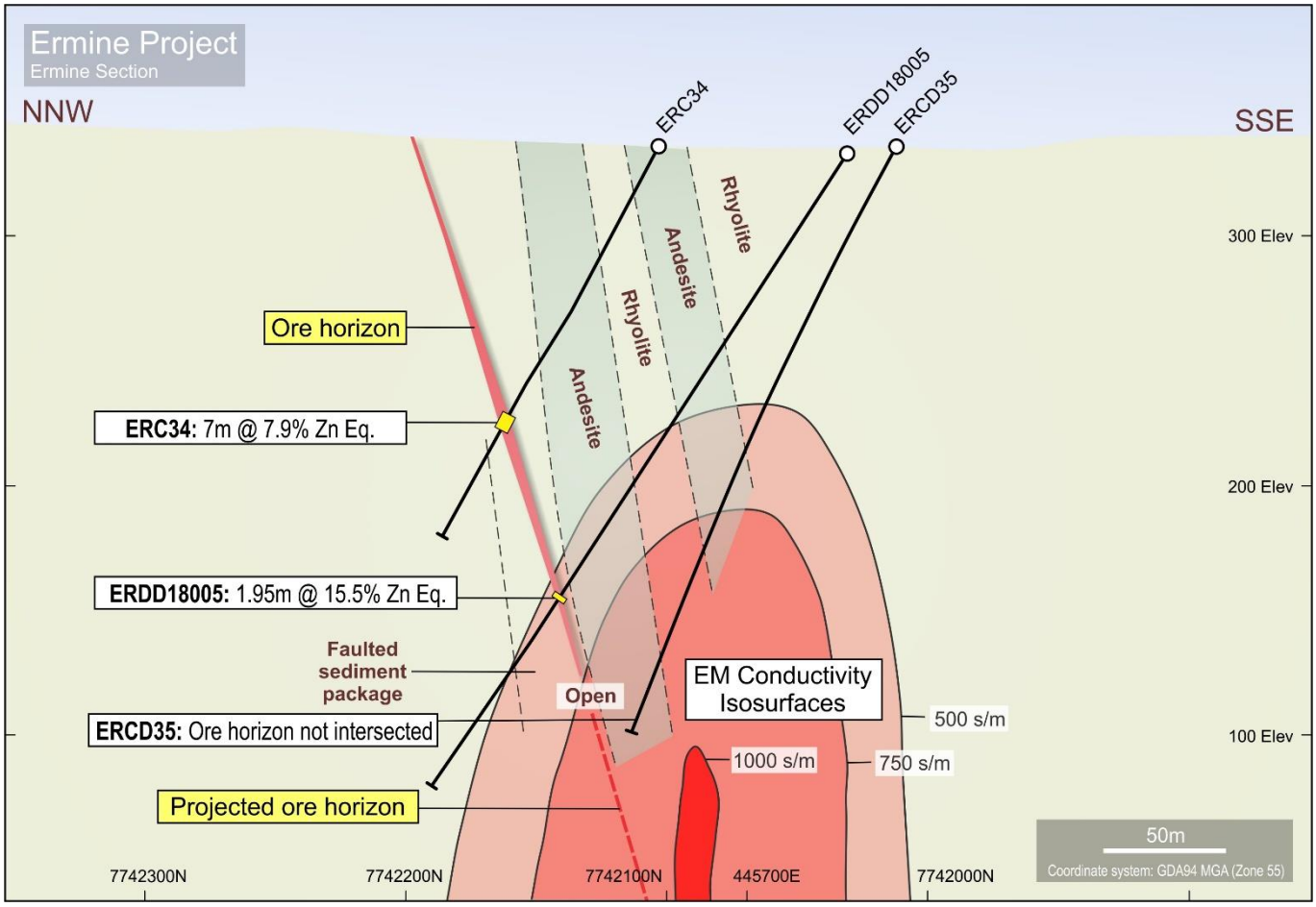


Figure 5 Ermine North Cross Section (ERDD18005)



ERDD18005 was drilled down dip of ERC034 which was drilled by Plutonic in 1992, which intersected 7m @ 7.84% Zn Eq. (1.4% Cu, 0.7% Pb, 2.1% Zn, 0.1 g/t Au, 13 g/t Ag).

Plutonic drilled a number of other holes (ERCD23, ERCD35, ERCD37 - completed in 1993) in the area, which didn't extend deep enough to intersect the mineralisation (refer to Figure 6, Ermine North Cross Section).

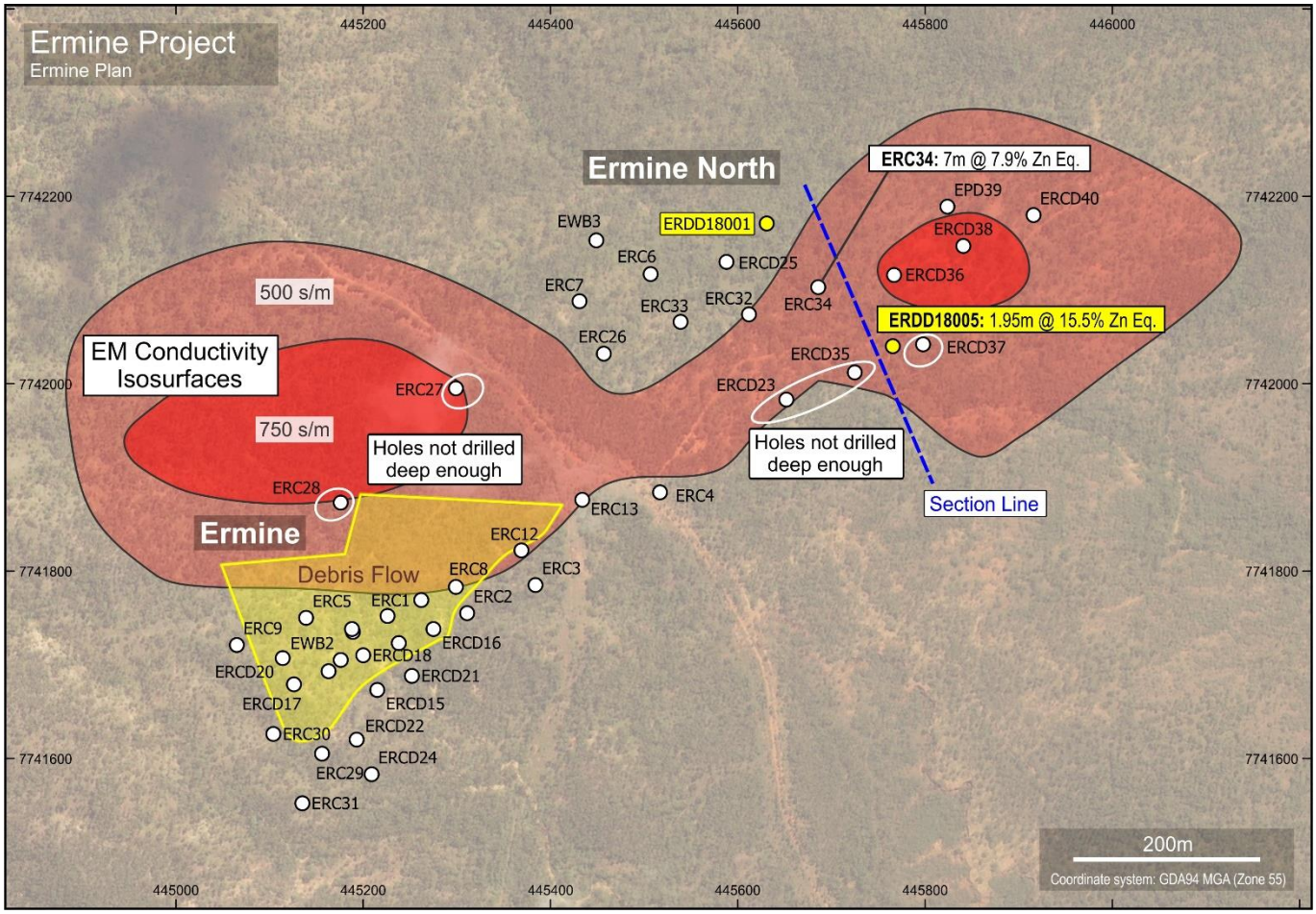
Table 1 Drill hole assay summary

Hole ID	From (m)	To (m)	Intersection (m)[1]	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq. (%)
ERDD18005	223.05	225.00	1.95	1.1	2.2	9.1	0.1	33	15.5
(1) Downhole width									

Table 2 Drill hole information summary, Thalanga Operation (Ermine Project)

Hole ID	Depth (m)	Dip	Azi (MGA)	East (MGA)	North (MGA)	RL (MGA)	Lease ID	Hole Status
ERDD18001	326.6	-50	312.5	445631	7742171	337	EPM12766	Complete
ERDD18005	320.1	-56	331	445766	7742040	335	EPM12766	Complete

Figure 6 Ermine Project Area – Drill Hole Collar Plan



RVR plan to drill down dip, testing the core of the Ermine North conductivity anomaly and along strike with a view to better define the extend of the mineralisation at Ermine North.

The Ermine conductivity anomaly is also planned to be tested by drilling. Analysis indicates that the previous historic drilling (ERC27 and ERC28) carried out by Plutonic, was not deep enough the test the anomaly

Evaluation of the historic core is also underway to help vector to a thicker section of the sediment package. Jasper fertility and gossan sampling and mapping will also continue.

About Red River Resources (ASX: RVR)

RVR is the leading ASX base metal producer, with its key asset being the Thalanga Operation in Northern Queensland. RVR commenced copper, lead and zinc concentrate production at the Thalanga Operation in September 2017 and RVR is focused on maximising returns from the Operation by increasing plant throughput and extending mine life through increasing Mineral Resources and Ore Reserves at deposits currently in the mine plan (West 45, Far West and Waterloo), by potentially converting Mineral Resources into Ore Reserves at Liontown and Orient and by continuing to aggressively explore our growing pipeline of high quality targets within the surrounding area.

On behalf of the Board,

Mel Palancian
Managing Director
Red River Resources Limited

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

Mel Palancian
Managing Director
mpalancian@redriverresources.com.au
D: +61 3 9095 7775

Nathan Ryan
NWR Communications
nathan.ryan@nwrcommunications.com.au
M: +61 420 582 887

COMPETENT PERSONS STATEMENT

Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr Steven Harper 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 Harper consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Zinc Equivalent Calculation

The net smelter return zinc equivalent (Zn Eq.) calculation adjusts individual grades for all metals included in the metal equivalent calculation applying the following modifying factors: metallurgical recoveries, payability factors (concentrate treatment charges, refining charges, metal payment terms, net smelter return royalties and logistic costs) and metal prices in generating a zinc equivalent value for copper (Cu), lead (Pb), zinc (Zn), gold (Au) and silver (Ag).

Red River has selected to report on a zinc equivalent basis, as zinc is the metal that contributes the most to the net smelter return zinc equivalent (Zn Eq.) calculation. It is the view of Red River Resources that all the metals used in the Zn Eq. formula are expected to be recovered and sold.

Where:

Metallurgical Recoveries are derived from historical metallurgical recoveries from test work carried out the Thalanga deposit. The Ermine deposit is related to and of a similar style of mineralisation to the Thalanga Deposit and it is appropriate to apply similar recoveries. The Metallurgical Recovery for each metal is shown below in Table 1.

Metal Prices and Foreign Exchange assumptions are set as per internal Red River price forecasts and are shown below in Table 1.

Table 1 Metallurgical Recoveries and Metal Prices

Metal	Fresh Mineralisation	Price
Copper	80%	US$3.00/lb
Lead	70%	US$0.90/lb
Zinc	88%	US$1.00/lb
Gold	50%	US$1,200/oz
Silver	65%	US$17.00/oz

Payable Metal Factors are calculated for each metal and make allowance for concentrate treatment charges, transport losses, refining charges, metal payment terms and logistic costs. It is the view of Red River that three separate saleable base metal concentrates will be produced at Thalanga. Payable metal factors are detailed below in Table 2.

Table 2 Payable Metal Factors

Metal	Payable Metal Factor
Copper	Copper concentrate treatment charges, copper metal refining charges copper metal payment terms (in copper concentrate), logistic costs and net smelter return royalties
Lead	Lead concentrate treatment charges, lead metal payment terms (in lead concentrate), logistic costs and net smelter return royalties
Zinc	Zinc concentrate treatment charges, zinc metal payment terms (in zinc concentrate), logistic costs and net smelter return royalties
Gold	Gold metal payment terms (in copper and lead concentrates), gold refining charges and net smelter return royalties
Silver	Silver metal payment terms (in copper, lead and zinc concentrates), silver refining charges and net smelter return royalties

The zinc equivalent grade is calculated as per the following formula:

Zn Eq. (fresh mineralisation) = (Zn%*1.0) + (Cu%*3.3) + (Pb%*0.9) + (Au ppm*0.5) + (Ag ppm*0.025)

The following metal equivalent factors used in the zinc equivalent grade calculation has been derived from metal price x Metallurgical Recovery x Payable Metal Factor and have then been adjusted relative to zinc (where zinc metal equivalent factor = 1).

Table 3 Metal Equivalent Factors

	Metal Equivalent Factor				
Project/Deposit	Copper	Lead	Zinc	Gold	Silver
Ermine	3.3	0.9	1.0	0.5	0.025

APPENDIX 1

ASSAY DETAILS

Hole ID	From (m)	To (m)	Int (m)[1]	Cu%	Pb%	Zn%	Au g/t	Ag g/t	Zn Eq.%
ERDD18005	218.00	219.00	1.00	0.0	0.0	0.0	0.0	0	0.0
ERDD18005	219.00	220.00	1.00	0.0	0.0	0.0	0.0	0	0.0
ERDD18005	220.00	221.26	1.26	0.0	0.1	0.1	0.0	1	0.3
ERDD18005	221.26	222.10	0.84	0.0	0.1	0.4	0.0	1	0.5
ERDD18005	222.10	223.05	0.95	0.0	0.2	0.6	0.1	4	1.1
ERDD18005	223.05	223.35	0.30	0.3	2.3	22.0	0.1	37	25.9
ERDD18005	223.35	223.80	0.45	0.0	0.6	2.6	0.0	6	3.5
ERDD18005	223.80	224.40	0.60	2.4	2.7	7.1	0.1	56	18.8
ERDD18005	224.40	225.00	0.60	0.9	2.7	9.6	0.1	29	15.8
ERDD18005	225.00	225.35	0.35	0.0	0.0	0.2	0.0	1	0.3
ERDD18005	225.35	226.00	0.65	0.0	0.0	0.0	0.0	0	0.1
ERDD18005	226.00	227.00	1.00	0.0	0.0	0.0	0.0	0	0.0
ERDD18005	227.00	228.00	1.00	0.0	0.0	0.0	0.0	0	0.1
ERDD18005	228.00	229.00	1.00	0.0	0.1	0.1	0.0	1	0.3
ERDD18005	229.00	229.60	0.60	0.0	0.0	0.1	0.0	0	0.1
ERDD18005	229.60	230.00	0.40	0.0	0.0	0.0	0.0	0	0.0

(1) Downhole width

JORC Code, 2012 Edition – Table 1

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.*	• Diamond drilling was used to obtain core samples • Samples consist of half NQ2 drill core • Sample intervals were selected by company geologists based on visual mineralisation • Intervals ranged from 0.4 to 1.45m based on geological boundaries • Samples were sawn if half using an onsite core saw and sent to Intertek Genalysis laboratories Townsville. • Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis. • Analysis consisted of a four acid digest and Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) for the following elements; Ag, As, Ba, Bi, Ca, Cu, Fe, K, Mg, Mn, Na, Pb, S, Sb, Ti, Zn, & Zr. A selection of samples was also assayed for Au using a 30g Fire Assay technique • Sampling undertaken by Plutonic consisted of a combination of Reverse Circulation (RC) and Diamond Core drilling undertaken using industry standard procedures.
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).*	• Drilling techniques consist of; • HQ3 diamond core drilling until in competent ground and 29.6m down hole • NQ2 diamond core drilling for the remainder of the drill holes. • Drilling undertaken by Plutonic consisted of a combination of Reverse Circulation (RC) drilling, HQ sized diamond core drilling, and NQ sized diamond core drilling.

Criteria	JORC Code explanation	Commentary
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.*	• Core is measured every metre with recovery and RQD taken over the meter interval • Sample recovery is measured and recorded by company trained geology technicians and geologists • Any issues with recovery is always checked against drillers run sheet. • Good ground conditions have been encountered to date • The method of recording sample recovery used by Plutonic is unknown. • The Plutonic diamond core available suggests good ground conditions were encountered suggesting negligible sample loss • The Plutonic drill holes were logged to a level of detail that would support mineral resource estimation. The qualitive logging includes, lithology, alteration and textures and quantities logging includes sulphide and gangue mineral percentages
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.*	• Holes are logged to a level of detail that will support mineral resource estimation. • Qualitative logging includes lithology, alteration, structures and textures • Quantitative logging includes sulphide and gangue mineral percentages • All drill core was photographed • All drill holes have been logged in full • No photographs of Plutonic core are available
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.*	• Core was sawn and half core sent for analysis • Sample preparation is industry standard, occurring at an independent commercial laboratory • Samples were crushed to sub 6mm, split and pulverised to sub 75µm in order to produce a representative sub-sample for analysis • Laboratory certified standards were used in each sample batch • The sample sizes are considered to be appropriate to correctly represent the mineralisation style • Reverse Circulation holes drilled by Plutonic were sampled at either 1m intervals or 4m composites. The split ratio is unknown. The diamond holes were sampled ½ core. Intervals were predominately 1m in length, however sample lengths vary based on geological contacts. • Plutonic quality control procedures consisted of internal assay laboratory duplicate samples. • Plutonic sample sizes are appropriate to the grain size of the material being collected

Criteria	JORC Code explanation	Commentary
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 assay methods employed are considered appropriate for near total digestion • Laboratory certified standards were used in each sample batch • Certified standards returned results within an acceptable range • All geochemical analysis of Plutonic drilling was conducted at the Australian Laboratory Services facility in Charters Towers. Samples were analysed for Cu, Pb, Zn, and Ag by the Atomic Absorption Spectrometry (AAS) method and Au by Fire Assay (FA). Quality control procedures consisted of internal assay laboratory duplicate samples.
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.*	• Laboratory results are reviewed by Company geologists and laboratory technicians • Primary Plutonic assay data has been transcribed from original laboratory results
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.*	• Collars surveyed by a handheld GPS • Down hole surveys conducted with magnetic multi-shot digital camera • Coordinate system used is MGA94 Zone 55 • Topographic control is based on a detailed 3D Digital Elevation Model • A selection of drilling undertaken by Plutonic has been surveyed with a handheld GPS to validate the original survey locations. Drilling was conducted on a local grid system. The coordinates presented in the report are in MGA Zone 55 • Topographic control of Plutonic data is based on federal Satellite Radar data.
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 drilling was designed to test of continuation mineralisation from ERC34 and other Plutonic holes along a conductivity trend on a 90m spacing • This report does not contain any Mineral Resource or Ore Reserve Estimation • No sample compositing has been applied

Criteria	JORC Code explanation	Commentary
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.*	• Drill holes are orientated perpendicular to the perceived strike of the host lithologies • Drill holes are drilled at a dip based on logistics and dip of anomaly to be tested • The orientation of the drilling is designed to not bias sampling • The same methodology of drilling was undertaken by Plutonic
Sample security	• *The measures taken to ensure sample security.*	• Samples have been overseen by company geologists during transport from site to Intertek Genalysis laboratories, Townsville. • Security of Plutonic drill samples is unknown
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been carried out at this point • No audits or reviews are available for Plutonic drilling

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 drilling was conducted on historical Exploration Lease EPM8680 • The drilling was conducted on Exploration Lease EPM12766 • EPM12766 is held by Cromarty Pty Ltd. (a wholly owned subsidiary of Red River Resources) and form part of Red River's Thalanga Zinc Project • Red River Resources has engaged Native Title Claimants, the Birriah People • The Exploration Leases are in good standing
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historic Exploration was carried out by Plutonic Operations Ltd. This included geochemical sampling, geophysics and drilling
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The exploration model is Volcanic Hosted Massive Sulphide (VHMS) base metal mineralisation • The regional geological setting is the Mt Windsor Volcanic Sub-province, consisting of Cambro-Ordovician marine volcanic and volcano-sedimentary sequences
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, including, easting and northing, elevation or RL, dip and azimuth, down hole length, interception depth and hole length.* • *If the exclusion of this information is justified the Competent Person should clearly explain why this is the case.*	• See Table 2 – Drill hole information summary • See Appendix 1 – Assay Details
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.*	• Interval length weighted assay results are reported Significant Intercepts are chosen based on the context of the results, for example significant intercepts relating to resource definition are generally > 5% Zn Equivalents. • Refer to Appendix 1 for metal equivalent calculation methodology

Criteria	JORC Code explanation	Commentary
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 mineralisation is interpreted to be steeply dipping. Drill holes have been angled to intercept the mineralisation as close to perpendicular as possible. • Down hole intercepts are reported. True widths are likely to be 60-70% of the down hole widths.
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 plans and sections.*	• Refer to plans and sections within report
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.*	• The accompanying document is considered to represent a balanced report
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported.*	• All meaningful and material 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).*	• Further drilling is planned based on the results of this current program