

ASX Announcement

20 January 2022

ASX Code: RVR

RVR hits 86m @ 2.3% Zn Eq from surface at Cougartown

Summary:

- RC drilling identifies mineralisation at Liontown satellite prospects Cougartown,
 Cougartown West and Max Cu-Au
- Cougartown prospect intercepts include:
 - o 86m @ 2.3% Zn Eq from 0m (CGRC004)
 - 43m @ 1.6% Zn Eq from 55m (CGRC001)
 - 18m @ 1.6% Zn Eq from 101m and 16m @ 1.7% from 142m Zn Eq (CGRC003)
- Cougartown West prospect intercepts include:
 - 40m @ 3.0% Zn Eq from 67m (CWRC002)
- Drilling is being planned for Max Cu-Au East and other satellite targets around Liontown that may increase mill feed to Thalanga
- Liontown drill program continues to focus on Mineral Resource delineation and extension
- RVR is developing Liontown as the third deposit to be mined at its Thalanga Operations.

Red River Resources Limited (ASX: RVR) is pleased to announce results from reverse circulation drilling at Cougartown, Cougartown West and Max Cu-Au exploration prospects near its Liontown Project, part of its Thalanga Operations in north Queensland (Figure 1).

Red River continues to progress development of Liontown as the third deposit for its Thalanga Operations, prospects near Liontown will potentially provide additional feed to the process plant at Thalanga. Liontown has a current Mineral Resource of 4.1Mt @ 0.6% Cu, 1.9% Pb, 5.9% Zn, 1.1 g/t Au & 29 g/t Ag (12.7% Zn Eq).

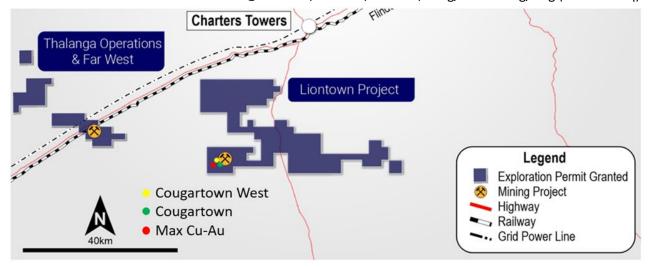


Figure 1: Location of Red River's exploration prospects near the Liontown deposit at Thalanga



Red River completed 5,697m of drilling at Liontown (results reported 18 August 2021 and 2 December 2021) and 1,928m of drilling on the Cougartown, Cougartown West and Max-Au satellite prospects, which has returned several exciting intercepts including:

Cougartown

- 86m @ 2.3% Zn Eq from 0m (CGRC004)
- 43m @ 1.6% Zn Eq from 55m (CGRC001)
- 18m @ 1.6% Zn Eg from 101m and 16m @ 1.7% Zn Eg from 142m (CGRC003)

Cougartown West

- 40m @ 3.0% Zn Eq from 67m (CWRC002).

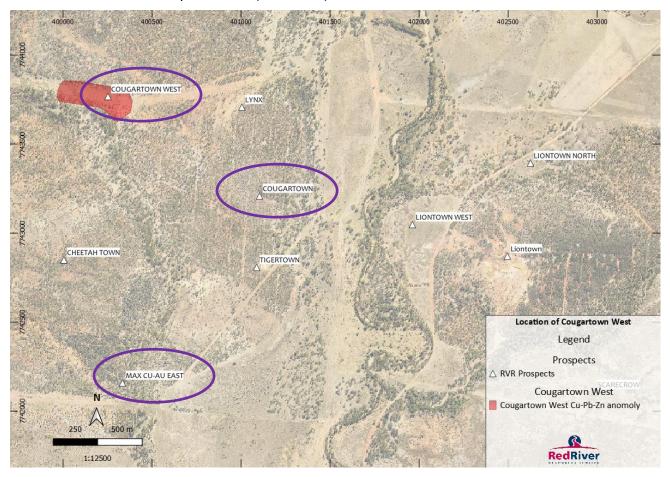


Figure 2: Location of Liontown Satellite Exploration Programs



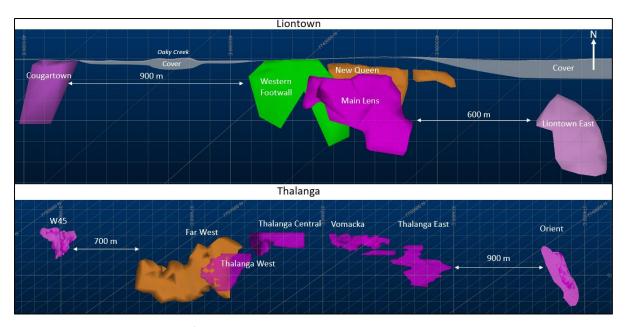


Figure 3: 3D comparison of Liontown Project including Cougartown prospect and the Thalanga system

Cougartown Prospect

Background

Located 1.5km west of the Liontown Resource on EPM 14161 in a thickened sequence of north-northwest striking, steeply dipping, Trooper Creek dacite volcaniclastics, the prospect outcrops as a 4m wide, 200m strike Pb-Zn-Ag-Au gossan. The gossan and associated mineralisation are located on a contact between strongly silica-chlorite altered pumice breccia in the north (stratigraphic footwall) and a feldspar phyric pumice breccia/dacitic volcaniclastic in the south.

This geological setting is much like the New Queen horizon at Liontown and is therefore highly prospective. Past trenching and soil sampling delineated Cu-Au-Pb-Zn anomalies parallel to stratigraphy. A weak coincident induced polarization (IP) anomaly was identified during a 1985 geophysical survey.

Several past drill programs have been completed over the greater prospect area with positive results. RVR exploration team identified gaps in the coverage of the past drilling and implemented a program to confirm historic RAB results with high sample quality reverse circulation drilling.

Red River Exploration

Red River completed four reverse circulation holes for 556 metres. Holes were between 88m and 202m in length and inclined to the north. All holes intercepted mineralisation.

CGRC001 and CGRC004 targeted the shallow area below the outcropping gossan. CGRC002 and CGRC003 targeted both a parallel horizon to the south and the gossan horizon at depth.

The results are a strong indication of a significant mineralising system, likely dipping near vertical.

Due to these results and similar from surrounding shallow drill programs, targeting will now focus on the potential for a change and upgrading of the mineralising system at depth. Assessment and prioritising of deeper drilling is underway.



Table 1: Cougartown Prospect Results

Hole ID	From (m)	To (m)	Intersection (m)*	Au g/t	Cu%	Pb%	Zn%	Ag g/t	Zn Eq. %	Oxidation Sate
CGRC001	0.0	21.0	21.0	0.02	0.09	0.13	0.83	14.5	1.62	Oxide/Transitional
and	55.0	98.0	43.0	0.10	0.03	0.20	1.05	3.2	1.60	Sulphide
CGRC002	7.0	10.0	3.0	0.01	0.02	0.00	1.09	22.1	1.70	Oxide/Transitional
and	148.0	150.0	2.0	0.03	0.05	0.03	2.15	1.3	2.38	Sulphide
and	178.0	180.0	2.0	0.08	0.02	0.43	0.82	1.8	1.35	Sulphide
CGRC003	101.0	119.0	18.0	0.03	0.01	0.06	1.47	0.0	1.63	Sulphide
and	142.0	158.0	16.0	0.03	0.02	0.04	1.61	0.8	1.71	Sulphide
CGRC004	0.0	86.0	86.0	0.11	0.06	0.17	1.43	11.1	2.28	Oxide/Transitional /Sulphide
Including	0.0	36.0	36.0	0.17	0.08	0.29	0.86	19.0	1.95	Oxide/Transitional
including	36.0	86.0	50.0	0.07	0.05	0.08	1.84	5.3	2.23	Sulphide
including	47.0	50.0	3.0	0.25	0.07	0.44	5.18	0.2	6.21	Sulphide
*Downhole w	idth (1% Zı	n Eq cut	off)							

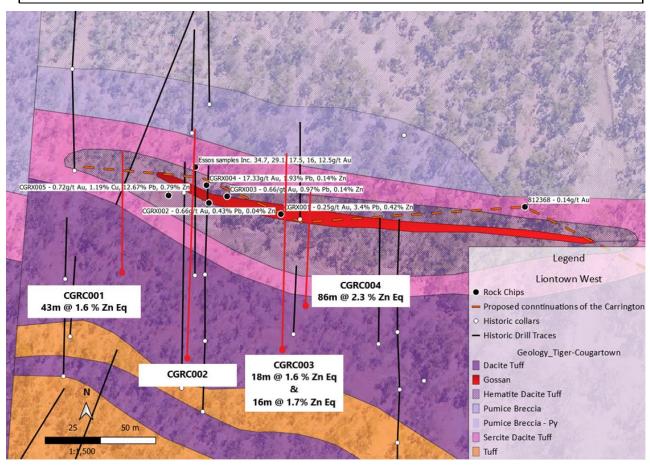


Figure 4: Cougartown Prospect drill locations



Cougartown West Prospect

Background

Located 2.5km northwest of Liontown, the Cougartown West prospect is a 200 x 300m Cu-Pb-Zn soil anomaly on a north-west striking contact between a northern feldspar-phyric pumice breccia and a southern younger pumice breccia containing common ash interflows. The geology is equivalent to the Liontown footwall dacitic pumice breccia and thus the mineralisation is in the New Queen position. The prospect is under shallow cover with minor sub-crop.

Following the identification of the soil anomaly, strong EM responses were identified by Esso in 1982-1984 and 445m of trenching located mineralisation in the northern section of the broader anomaly. Cougartown West sits on Line H of the Red River 2014 IP Survey (Figure 5) (ASX Announcement 06 February 2015). The geophysical signature of this anomaly is consistent with the current interpretation of weak structurally hosted base metal mineralisation. A second moderate sized geophysical anomaly occurs at the northern end of the line at ~744200N. This anomaly whilst relatively discreet is situated under ~50-100m of cover.

Three holes by previous explorers have been drilled at the prospect. A western hole hosted mineralisation within a sericite-pyrite-silica-altered dacitic schist (likely shear zone) stratigraphically above a feldspar-phyric pumice breccia. This mineralisation was located below the southern section of anomalous zinc identified within the trenches, but the hole did test the full trench anomaly.

The remaining two holes are located southeast and did not return any positive results. They do not test the eastern extent of the trench anomaly.

Red River exploration

Red River's first-pass program comprised five reverse circulation holes for 656 metres. The holes tested the possibility of multiple lenses on an 80m spacing to cover a total strike 240m. Holes were between 118 and 154m in length and inclined to the north.

Four holes CWRC001, CWRC003, CWRC004 and CWRC005 spaced at 80m along strike tested below the main surface zinc geochemical trend. They intersected schistose volcanoclastic breccias then pumice breccia and terminated in dacites. Low level base metal mineralisation occurred through the pumice breccias.

Hole CWRC002 100m south tested the down dip extension of the surface geochemical trend below CWRC003. Mineralisation was intersected within rhyodacite above the pumice breccia unit. The strongly zinc dominated intersection is open to the east, west and down dip. And offers a great opportunity for further targeting.

Results from the drilling at Cougartown West (Table 2).

Table 2: Cougartown West Prospect Results

Hole ID	From (m)	To (m)	Intersection (m)*	Au g/t	Cu%	Pb%	Zn%	Ag g/t	Zn Eq. %	Oxidation Sate
CWRC001	87.0	92.0	5.0	0.01	0.03	0.59	1.09	2.4	1.81	Sulphide
CWRC002	67.0	107.0	40.0	0.02	0.06	0.16	2.53	0.6	2.97	Sulphide
CWRC003	75.0	76.0	1.0	0.00	0.00	0.01	3.64	0.0	3.67	Sulphide
CWRC004	72.0	73.0	1.0	0.00	0.00	0.00	1.63	0.3	1.63	Sulphide

*Downhole width (1% Zn Eq cut off)



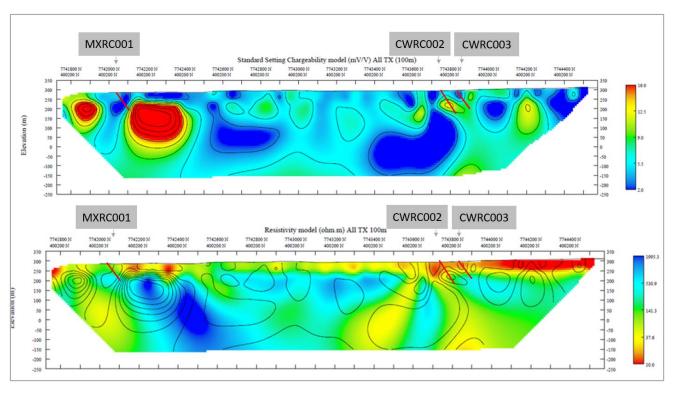


Figure 5: RVR's 2014 IP Survey Line 400200E

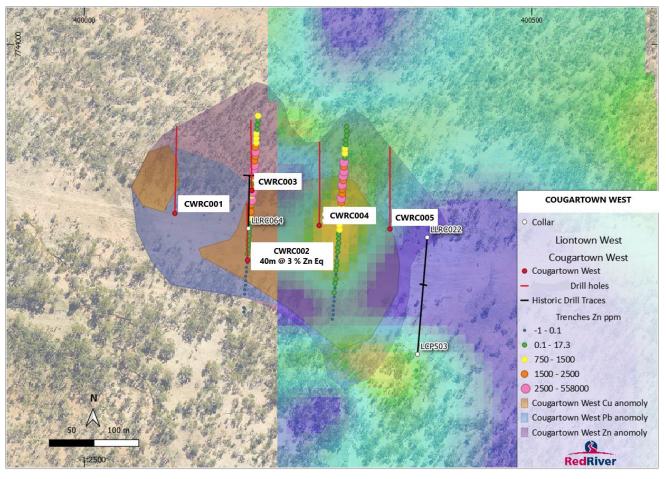


Figure 6: Cougartown West Prospect drill locations



Max Copper Gold Prospect

Background

Located 2.6km southwest of Liontown on EPM 14161 Au-Cu-Ba soil anomalies located over siltstones interpreted to be part of the upper Trooper Creek Formation were investigated. Field mapping and positive rock chip sampling further refined targets and suggested the possibility of the of the host sequence being a fold repeat of the Liontown Horizon and thus justified drill testing.

Red River exploration

Red River's drilling consisted of five reverse circulation holes for 716 drill metres. Inclined holes of 100-200m length were drilled. MXRC002 and MXRC003 targeted a southern Cu-Au anomaly and outcropping gossanous sediments. MXRC004 and MXRC005 targeted a northern Zn-Pb-Cu-As anomaly with coincident chert horizons.

All holes passed from siltstones, through tuffaceous shales and into pumice breccias replicating the Liontown sequence but being shallow dipping to the southeast. Low level Pb-Zn-Cu anomalism within the shales adjacent to the pumice breccia contact and then cyclically within the pumice breccia was detected.

Hole MXRC001 targeted 150m east along strike of the Max Cu-Au prospect. A low-level Cu-Au soil anomaly in shallow cover and a coincident IP response were identified (see Figure 5). The high chargeability response was interpreted to represent a copper-pyrite rich VHMS footwall stringer zone and the hanging wall position was targeted for massive base metal mineralisation. The hole intersected shale and minor quartz veining with no significant mineralisation to 100m depth at which point it was prematurely terminated due to significant water intercepted in the hole. The hole did not reach target and will be redrilled.

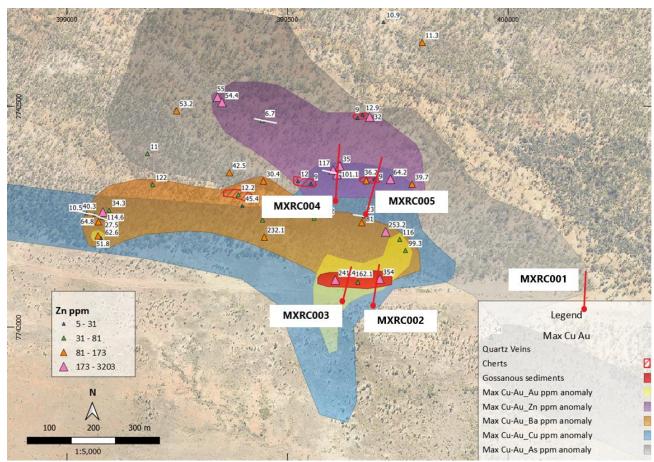


Figure 7: Max Cu-Au Prospect drill locations



Liontown Background

Red River's Liontown Project is located approximately 32km in a direct line from its Thalanga Operations and 107km by road (Figure 7). The total Liontown Project Mineral Resource (Fresh Sulphide) (Liontown + Liontown East) consists of 4.1Mt @ 0.6% Cu, 1.9% Pb, 5.9% Zn, 1.1 g/t Au & 29 g/t Ag (12.7% Zn Eq.) and a shallow oxide gold Mineral Resource of 113,000 tonnes @ 1.9g/t Au & 24 g/t Ag (ASX Announcement 11 March 2020).

The Liontown deposit is of volcanogenic-hosted-massive-sulphide (VHMS) style and is hosted within Cambro-Ordovician marine volcanic and volcano-sedimentary sequences of the Mt Windsor Volcanic Sub-province. The Liontown deposit demonstrates strong affinities with other well-known deposits in the region including the Liontown East, Waterloo and the operating Thalanga group deposits.

The Liontown deposit VHMS mineralisation comprises the **Main Lode**, **New Queen** and **Liontown East** (Figure 1) lenses. The Main Lode and Liontown East lenses are contained within a series of fine-grained siltstones (hanging wall) at their contact with a thick package of rhyodacitic pumice breccia (footwall), while the New Queen lenses are hosted within a series of schists within the footwall rhyodacitic pumice breccia. The mineralisation occurs as massive, banded, and stringer sulphides of sphalerite, pyrite, galena and chalcopyrite. Lenses are capped near surface by gold bearing oxide material.

The **Western Footwall** and **Gap** are gold-copper dominant polymetallic lodes of mineralisation with a late-stage structural influence and hosted in the footwall pumice breccia. This late structure locally intersects and overprints the New Queen VHMS mineralisation near the surface. High-grade Au-Cu structurally controlled mineralisation was historically mined from 1905-1911 as the Carrington Lode. The oxide zone of the New Queen was also historically mined with minor tonnages reported from 1951-1963.

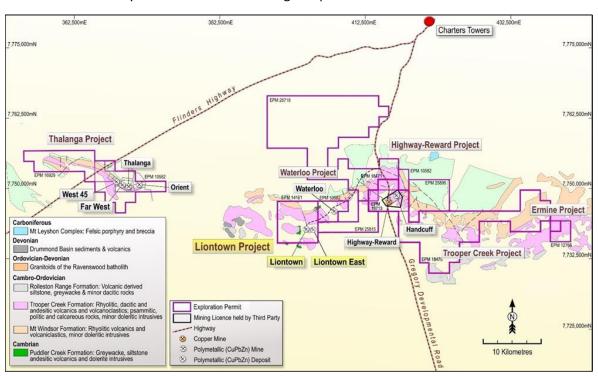


Figure 8: Location of Liontown



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 at the Liontown Project (Liontown and Liontown East) and from ongoing metallurgical data generated from operational activities at Thalanga (processing West 45 and Far West). The Liontown Project is related to and of a similar style of mineralisation to the Thalanga Deposit (West 45 and Far West) and it is appropriate to apply similar recoveries. The Metallurgical Recovery for each metal is shown below in Table 3.

Metal Prices and Foreign Exchange assumptions are set as per internal Red River price forecasts and are shown below in Table 3.

Metal **Metallurgical Recoveries Price** Copper 80% US\$3.00/lb Lead 70% US\$0.90/lb Zinc 88% US\$1.00/lb Gold US\$1,200/oz 65% Silver 65% US\$17.00/oz FX Rate: A\$0.85:US\$1

Table 3: Metallurgical Recoveries and Metal Prices

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 from the Liontown Project. Payable metal factors are detailed below in Table 4.

Table: 4 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. =
$$(Zn\%*1.0) + (Cu\%*3.3) + (Pb\%*0.9) + (Au ppm*2.0) + (Ag ppm*0.025)$$

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 5: Metal Equivalent Factors

Metal	Copper	Lead	Zinc	Gold	Silver
Metal Equivalent Factor	3.3	0.9	1.0	2.0	0.025



Competent Persons Statement

Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr Peter Carolan who is a member of Australian Institute of Geoscientists, 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 Carolan consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

About Red River Resources (ASX: RVR)

RVR is building a multi-asset operating business focused on base and precious metals with the objective of delivering prosperity through lean and clever resource development. RVR's foundation asset is the Thalanga Base Metal Operation in Northern Queensland, which was acquired in 2014 and where RVR commenced copper, lead and zinc concentrate production in September 2017. RVR has commenced production at the high-grade Hillgrove Gold Operation in New South Wales which was acquired in 2019. The Hillgrove Operation is a key part of RVR's strategy to build a multi-asset operating business focused on base and precious metals.

On behalf of the Board,

Mel Palancian

Managing Director

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Appendix 1

Table 1: Drill hole information summary for reported holes

Hole ID	Total Depth (m)	Dip	Azimuth	East (MGA)	North (MGA)	RL (MGA)	GRID_NAME	Hole Type	Tenement	Comment
CWRC001	154	-55	358.8	400099	7743814	293	MGA94_55	RC	EPM 14161	
CWRC002	136	-60	359.8	400182	7743745	293	MGA94_55	RC	EPM 14161	
CWRC003	118	-55	359.8	400183	7743836	293	MGA94_55	RC	EPM 14161	
CWRC004	130	-55	2.8	400268	7743794	293	MGA94_55	RC	EPM 14161	
CWRC005	118	-55	357.8	400339	7743792	293	MGA94_55	RC	EPM 14161	
CGRC001	106	-57	359.8	401059	7743185	290	MGA94_55	RC	EPM 14161	
CGRC002	202	-60	359.8	401090	7743148	290	MGA94_55	RC	EPM 14161	
CGRC003	160	-55	359.8	401134	7743147	290	MGA94_55	RC	EPM 14161	
CGRC004	88	-55	359.8	401143	7743173	290	MGA94_55	RC	EPM 14161	
MXRC001	100	-55	359.8	400176	7742040	285	MGA94_55	RC	EPM 14161	
MXRC002	130	-55	359.8	399696	7742051	300	MGA94_55	RC	EPM 14161	
MXRC003	112	-55	359.8	399620	7742057	300	MGA94_55	RC	EPM 14161	
MXRC004	196	-58	359.8	399607	7742282	300	MGA94_55	RC	EPM 14161	
MXRC005	178	-55	17.8	399679	7742256	300	MGA94_55	RC	EPM 14161	



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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 retrospectivity 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. 	 Reverse circulation (RC) techniques were used to obtain samples. No samples were collected from collar drilling. RC samples were split using a rig-mounted cone splitter on regular 1m intervals to obtain a sample for assay. All Red River samples were 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 of all Red River samples 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 was undertaken. All samples were assayed for Au using a 25g Fire Assay technique



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). 	Reverse circulation drilling techniques were completed using a face sampling 5 ¼ inch bit
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. 	 Sample recovery is measured and recorded by company trained geology staff. Moisture content and sample recovery is recorded for each RC sample. Holes were generally "dry", with occasionally wet intervals encountered and logged and recorded appropriately. Where poor recovery is encountered insufficient sample return has been reported. Negligible sample loss has been recorded except in the vicinity of old workings/shafts which are recorded.
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 would support mineral resource estimation. Qualitative logging includes lithology, alteration, mineralisation, oxidation state and textures. Quantitative logging includes sulphide and gangue mineral percentages All drill core and RC chips were photographed. Logging of drill holes is considered sufficient to support geological interpretation and modelling. RC drilling contractors adjust their drilling approach to specific conditions to maximise



		sample recovery.
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. 	 Sample preparation is industry standard, occurring at an independent commercial laboratory which has its own internal Quality Assurance and Quality Control procedures. 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. All RC samples are split using a rig-mounted cone splitter to collect a 1m sample 3-5kg in size. RC drilling completed duplicates at a rate of 1 in 25 samples. Holes were generally "dry", with occasionally wet intervals encountered (perched water tables) and logged and recorded appropriately. Sample sizes are considered appropriate to the mineralization based on; the style of mineralization, the thickness and consistency of the intersections, the sampling methodology, and assay value ranges for gold and base metals.
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 	 The assay methods employed are considered appropriate for near total digestion. Laboratory certified standards were used at a rate of 1 in 20 in each sample batch. Certified standards returned results within an acceptable range. Field duplicates are taken for all RC samples



	 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. 	 (1 in 25 samples). No field duplicates are submitted for diamond core. Geophysicals or handheld XRF tools were not used. Industry standard certified reference materials (CRMs) were utilized in order to check laboratory assay quality control. The QA/QC program includes CRMs, blanks, preparation duplicates and field duplicates and is acceptable according to industry standards.
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 have been reviewed by Company geologists and laboratory technicians. Significant intersections are reviewed by alternate senior geological staff to the drilling geologist. No twinned holes were drilled for this data set. Commercial laboratory certificates are supplied, as well as digital data files. Data files are imported into a database and subsequently verified by appropriate geological professionals. Assay data at "less than detection" limits are calculated as half the detection limit value where used.
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 	 All Red River collars surveyed with RTKGPS. Down hole surveys conducted with digital magnetic multi-shot camera at 30m intervals and at end of hole. Coordinate system used is MGA94 Zone 55. Topographic control is based on a detailed 3D Digital Elevation Model.



	topographic control.	
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 current drill spacing is variable between approximately 50-150m. No sample compositing has been applied to reported data.
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.
Sample security	The measures taken to ensure sample security.	 Samples have been overseen by company staff during transport from site to Intertek Genalysis laboratories, Townsville.
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

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

Criteria JORC Code explanation Commentary



Mineral		_, ,,,,,
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 	 The drilling was conducted on Exploration Permit EPM 14161. EPM 14161 is held by Cromarty Pty Ltd. (a wholly owned subsidiary of Red River Resources) and forms part of Red River's Thalanga Zinc Project. Red River engaged Native Title Claimants, the Jannga People to conduct cultural clearances of drill pads and access tracks. The Exploration Permits are in good standing.
	obtaining a licence to operate in the area.	
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Historic Exploration was carried out by Esso Exploration, Liontown Resources, Nickle Mines, Great Mines & PanContinental Mining. Work programs included geochemical surveys, drilling and geophysics.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The exploration model is Volcanic Hosted Massive Sulphide (VHMS) base metal mineralisation.
		 There is additional evidence of late cross cutting structurally/fault controlled 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, 	See Appendix 1 -Table1 – Drill Hole Details



	 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. 	
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. No grade capping has been applied. Significant Intercepts relate to assay results reported as >1% Zn Equivalent. Zn equivalent formula utilised is: Zn% + (Cu%*3.3) + (Pb%*0.9) + (Au_{ppm}*2) + (Ag_{ppm}*0.025)
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the 	 The mineralisation is interpreted to be dipping at approximately 80 degrees to the south, drill holes have been designed to intercept the mineralisation as close to perpendicular as possible.



	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').	Down hole intercepts are reported. True widths are likely to be approximately 50-80% 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.	 Exploration results are reported in this release Mineral Resources and Reserves are not reported in this release. 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 at Liontown is ongoing.

