Liontown East discovery continues to deliver high grade zinc results

Highlights:

- **Assay results further extend Liontown East, demonstrating excellent continuity of high-grade mineralisation.**
  - **18.15m @ 8.8% Zn Eq. from 517.25m down-hole incl. 9.4m @ 10.5% Zn Eq. from 526.0m down-hole**
  - **23m @ 8.25% Zn Eq. from 219m down-hole incl. 9m @ 9.9% Zn Eq. from 226m down-hole**
- **LTED13 intersected 1.4m of massive sulphide mineralisation and 4.3m of semi-massive sulphide mineralisation from 485.2m down-hole (assays pending)**
- **Liontown East remains open and Red River plans to aggressively continue to define further extensions.**

Zinc producer Red River Resources Limited (ASX: RVR) is pleased to report further high-grade assay results from drilling at the Liontown East discovery, part of the Company's Thalanga Zinc Project ("Project") in Queensland.

Liontown East is located on approximately 700m from the eastern edge of the current Liontown Mineral Resource.

LTED12 returned a high-grade intercept of:

– **18.15m @ 8.8% Zn Eq.** (0.3% Cu, 2.1% Pb, 5.1% Zn, 0.5 g/t Au & 19 g/t Ag) from 517.25m down-hole; including **9.4m @ 10.5% Zn Eq.** (0.4% Cu, 2.9% Pb, 6.0% Zn, 0.3 g/t Au & 21g/t Ag) from 526m down-hole

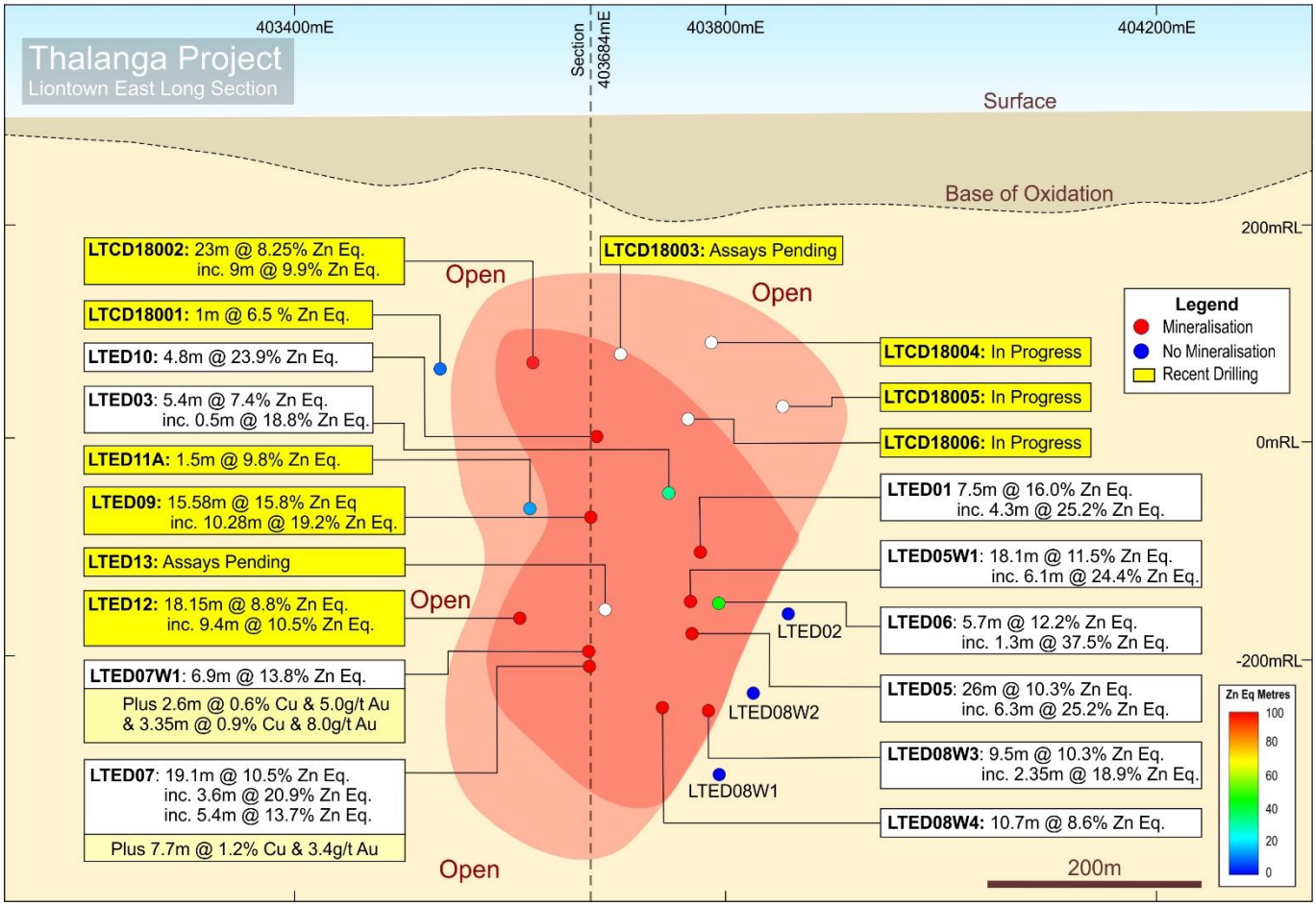
LTCD18002 returned a high-grade intercept of:

– **23m @ 8.25% Zn Eq.** (1.2% Cu, 0.7% Pb, 3.3% Zn, 0.3 g/t Au & 12 g/t Ag) from 219m down-hole; including **9m @ 9.9% Zn Eq.** (1.7% Cu, 0.6% Pb, 3.2% Zn, 0.3 g/t Au & 15g/t Ag) from 226m down-hole

LTED13 intersected 1.4m of massive sulphide mineralisation and 4.3m of semi-massive sulphide mineralisation between 485.2m and 490.9m downhole (assays pending);

The diamond drill rig has completed the designed diamond tail on the pre-collar LTCD18003. It will then complete diamond tails on LTCD18004, LTCD180005 and LTCD18006.

Figure 1 Liontown East Long Section



Assay results were also received for RC drill hole LTCD18001 (intersected 1m @ 6.5% Zn Eq. from 248m down-hole) and LTED11A (intersected 0.96m @ 13.7% Zn Eq. from 434.24m down-hole and 1.5m @ 9.8% Zn Eq. from 440.7m down-hole). Geological interpretation of the LTED11A intersection indicates that the hole was drilled through a fault zone which has offset the majority of the target base metal mineralisation.

Table 1 Drill hole geological information summary

Hole ID	From (m)	To (m)	Intersection (m)[(1)]	Intercept Description	Status
LTED13	485.2	486.6	1.4	Massive sulphides	Assays pending
	486.6	490.9	4.3	Semi-massive sulphides	Assays pending
(1) Down hole width					

Table 2 Material drill hole assay summary, Liontown East Project

Hole ID	From (m)	To (m)	Intersection (m)[(1)]	Cu (%)	Pb (%)	Zn (%)	Au (g/t)	Ag (g/t)	Zn Eq. (%)
LTED01	452.7	460.2	7.5	0.4	4.1	9.6	1.0	37	16.0
inc.	452.7	457.0	4.3	0.6	6.6	15.1	1.6	56	25.2
LTED03	419.6	425.0	5.4	0.2	1.5	4.0	1.1	35	7.4
inc.	419.6	423.5	3.9	0.2	1.9	5.0	1.5	37	9.0
LTED05	504.7	530.7	26.0	0.6	2.2	5.4	0.9	25	10.3
inc.	504.7	511.0	6.3	0.9	6.1	14.6	1.4	64	25.2
LTED05W1	486.9	505.0	18.1	0.3	3.1	6.8	0.6	22	11.5
inc.	486.9	493.0	6.1	0.7	7.0	14.1	1.0	51	24.4
LTED06	501.25	507.0	5.75	0.2	3.4	7.2	1.3	22	12.2
inc.	504.7	506.0	1.3	0.4	11.4	22.4	3.5	67	37.5
LTED07	529.4	548.5	19.1	0.5	2.3	6.4	0.2	13	10.5
inc.	529.4	533.0	3.6	0.4	6.1	13.5	0.1	18	20.9
and	557.0	564.7	7.7	1.2	0.6	1.4	3.4	36	nm
LTED07W1	523.8	530.7	6.9	0.4	3.3	9.0	0.2	16	13.8
and	543.7	546.3	2.6	0.1	0.6	2.6	5.0	8	nm
and	554.15	557.5	3.35	0.9	0.5	3.2	8.0	38	nm
LTED08W3	620.8	630.3	9.5	1.1	0.9	5.3	0.5	15	10.3
inc.	624.65	627.0	2.35	1.8	1.6	10.1	1.5	24	18.9
LTED08W4	625.2	635.9	10.7	0.4	1.4	5.5	0.4	13	8.63
LTED09	419.02	434.60	15.58	0.4	4.0	8.6	1.2	60	15.8
inc.	419.02	429.30	10.28	0.5	4.9	10.6	1.5	70	19.2
LTED10	379.2	384.0	4.8	0.6	5.0	12.5	4.2	120	23.9
LTED11A	434.24	435.2	0.96	0.3	2.5	9.2	0.4	45	13.7
and	440.7	442.2	1.5	0.1	3.2	5.1	0.8	10	9.8
LTED12	517.25	535.4	18.15	0.3	2.1	5.1	0.5	19	8.8
inc.	517.25	521.5	4.25	0.4	2.2	6.3	1.3	28	11.0
inc.	526.0	535.4	9.4	0.4	2.9	6.0	0.3	21	10.5
LTCD18001	248.0	249.0	1.0	0.1	11.3	1.7	0.0	1	6.5
LTCD18002	219.0	242.0	23.0	1.2	0.7	3.3	0.3	12	8.25
inc.	226.0	235.0	9.0	1.7	0.6	3.2	0.3	15	9.9

(1) Downhole width
Nm – zinc equivalent not calculated for high Au-Cu assay intervals

Table 3 Diamond drill hole information summary, Liontown East Project – Thalanga Zinc

Hole ID	Dip	Final Depth (m)	Azi (MGA)	East (MGA)	North (MGA)	RL (MGA)	Lease ID	Hole Status
LTED01	-65	576	0	403788	7742679	297	EPM14161	Completed
LTED02	-65	570	19.7	403786	7742678	297	EPM14161	Completed
LTED03	-57	474.6	6.5	403700	7742680	294	EPM14161	Completed
LTED04	-60	162.75	3.3	403790	7742679	297	EPM14161	Abandoned
LTED05	-68	530.7	3.3	403788	7742679	297	EPM14161	Completed
LTED06	-73	727.2	352	403790	7742679	297	EPM14161	Completed
LTED07	-74	600.4	330	403790	7742679	297	EPM14161	Completed
LTED08	-76	255.3	330.5	403889	7742555	298	EPM14161	Completed
LTED08A	-72	132.6	345.7	403890	7742554	298	EPM14161	Abandoned
LTED09	-67	508	358.2	403694	7742678	294	EPM14161	Completed
LTED10	-56	453	344	403695	7742676	294	EPM14161	Completed
LTED11	-61	139.4	337.8	403700	7742676	294	EPM14161	Abandoned
LTED11A	-61	501.5	337.8	403698	7742675	294	EPM14161	Completed
LTED12	-73	591.5	337.1	403698	7742675	294	EPM14161	Completed
LTED13	-76	574.7	1.6	403698	7742674	294	EPM14161	Assay Pending

Table 4 Diamond drill hole (wedge) information summary, Liontown East Project – Thalanga Zinc

Hole ID	Dip	Wedge Depth (m)	Final Depth (m)	Azi (MGA)	East (MGA)	North (MGA)	RL (MGA)	Lease ID	Hole Status
LTED05W1	-66	315.85	761.6	349	403788	7742679	297	EPM14161	Completed
LTED07W1	-56	265.25	582.4	327	403790	7742679	297	EPM14161	Completed
LTED08W1	-76	164.5	701.05	342	403889	7742555	298	EPM14161	Completed
LTED08W2	-52	175.2	697	352	403889	7742555	298	EPM14161	Completed
LTED08W3	-35	226.2	673	354	403889	7742555	298	EPM14161	Completed
LTED08W4	-49	238.2	693.6	331	403889	7742555	298	EPM14161	Completed
LTED08W5	-55	361.75	400.5	328	403889	7742555	298	EPM14161	Abandoned
LTED08W6	-53	250.2	492.6	330	403889	7742555	298	EPM14161	Abandoned

Table 5 RC/diamond tail drill hole information summary, Liontown East Project – Thalanga Zinc

Hole ID	Dip	Final Depth(m)	Azi (MGA)	East (MGA)	North (MGA)	RL (MGA)	Lease ID	Hole Status
LTCD18001	-60	306[2]	350	403532	7742767	301	EPM14161	Completed
LTCD18002	-60	276[2]	350	403608	7742803	299	EPM14161	Completed
LTCD18003	-60	0 – 94.4[1] 94.4 – 264[2] 264-318.7[3]	350	403685	7742849	298	EPM14161	Completed
LTCD18004	-60		350	403764	7742808	301	EPM14161	In progress[4]
LTCD18005	-60		350	403764	7742893	296	EPM14161	In progress[4]
LTCD18006	-60		350	403846	7742853	297	EPM14161	In progress[4]

Drill rig utilised (1) Mud rotary, (2) RC, (3) Diamond
(4) Awaiting diamond tails

About Red River Resources (ASX: RVR)

RVR is the leading ASX pure play zinc producer, with its key asset being the high quality Thalanga Zinc Project in Central Queensland. RVR commenced concentrate production at the Thalanga Zinc Project in September 2017 and RVR is focused on maximising returns from the Project by increasing plant throughput and extending mine life through increasing Mineral Resources and Ore Reserves at deposits currently in the mine plan (West 45, Thalanga Far West and Waterloo), by 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 PERSON STATEMENT

Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr Alex Nichol who is a member of the Australasian 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 Nichol 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 Liontown deposit. The Liontown East deposit is related to and of a similar style of mineralisation to the Liontown 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	Metallurgical Recoveries	Price
Copper	80%	US$3.00/lb
Lead	70%	US$0.90/lb
Zinc	88%	US$1.00/lb
Gold	15%	US$1,200/oz
Silver	65%	US$17.00/oz
FX Rate: A$0.85:US$1		

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 Liontown East. 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. = (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	Copper	Lead	Zinc	Gold	Silver
Metal Equivalent Factor	3.3	0.9	1.0	0.5	0.025

APPENDIX 1

ASSAY DETAILS

Hole ID	From (m)	To (m)	Int (m)	Cu%	Pb%	Zn%	Au g/t	Ag g/t	Zn Eq. %
LTED11A	433.00	434.24	1.24	0.0	0.0	0.0	0.0	0	0.0
LTED11A	434.24	435.20	0.96	0.3	2.5	9.2	0.4	45	13.7
LTED11A	435.20	436.00	0.80	0.1	0.3	1.0	0.0	8	1.9
LTED11A	436.00	437.00	1.00	0.1	0.2	1.2	0.0	5	1.7
LTED11A	437.00	438.00	1.00	0.0	0.2	0.9	0.0	3	1.3
LTED11A	438.00	439.00	1.00	0.0	0.0	0.0	0.0	1	0.0
LTED11A	439.00	440.00	1.00	0.0	0.0	0.0	0.0	0	0.0
LTED11A	440.00	440.70	0.70	0.0	0.0	0.0	0.0	0	0.0
LTED11A	440.70	442.20	1.50	0.1	3.2	5.1	0.8	40	9.8
LTED11A	442.20	443.00	0.80	0.0	0.3	1.1	0.1	7	1.7
LTED11A	443.00	444.00	1.00	0.0	0.1	0.4	0.1	2	0.6
LTED11A	444.00	445.00	1.00	0.2	0.4	1.2	0.1	4	2.2
LTED11A	445.00	446.00	1.00	0.1	0.6	2.5	0.1	9	3.5
LTED11A	446.00	447.00	1.00	0.0	0.0	0.8	0.1	5	1.1
LTED11A	447.00	448.00	1.00	0.2	0.1	2.5	0.1	5	3.5
LTED11A	448.00	449.00	1.00	0.1	0.2	2.1	0.1	5	2.7
LTED11A	449.00	450.00	1.00	0.0	0.3	2.3	0.1	4	2.9
LTED11A	450.00	451.00	1.00	0.3	0.1	2.8	0.1	5	4.1
LTED11A	451.00	452.00	1.00	0.1	0.2	2.1	0.1	4	2.7
LTED11A	452.00	453.00	1.00	0.1	0.0	1.4	0.0	3	1.7
LTED11A	453.00	454.00	1.00	0.2	0.1	2.7	0.1	6	3.7
LTED11A	454.00	455.00	1.00	0.0	0.1	0.3	0.1	6	0.6
LTED11A	455.00	456.00	1.00	0.0	0.1	0.6	0.2	14	1.2
LTED11A	456.00	457.00	1.00	0.3	0.2	3.0	0.2	20	4.7
LTED11A	457.00	457.50	0.50	0.3	0.1	2.1	0.1	10	3.4
LTED11A	457.50	458.00	0.50	0.0	0.0	0.1	0.0	2	0.2
**bdl – below detection limit*									

Hole ID	From (m)	To (m)	Int (m)	Cu%	Pb%	Zn%	Au g/t	Ag g/t	Zn Eq. %
LTED12	517.25	518.20	0.95	0.3	3.8	12.8	0.8	40	18.6
LTED12	518.20	518.85	0.65	0.7	0.8	2.8	0.4	30	6.8
LTED12	518.85	520.00	1.15	0.3	2.4	5.4	0.3	20	9.1
LTED12	520.00	521.00	1.00	0.5	2.0	5.1	2.4	26	10.4
LTED12	521.00	521.50	0.50	0.5	1.2	2.6	3.5	26	7.8
LTED12	521.50	522.00	0.50	0.2	0.2	1.8	0.1	7	2.9
LTED12	522.00	523.00	1.00	0.1	0.2	1.3	0.1	5	2.0
LTED12	523.00	524.00	1.00	0.1	0.2	2.3	0.4	7	3.1
LTED12	524.00	525.00	1.00	0.1	0.6	3.0	0.2	8	4.3
LTED12	525.00	526.00	1.00	0.1	0.4	2.2	0.2	6	3.2
LTED12	526.00	527.00	1.00	0.4	0.6	3.6	0.6	12	6.1
LTED12	527.00	528.00	1.00	0.7	1.1	2.9	0.6	17	7.0
LTED12	528.00	528.75	0.75	0.3	2.9	5.7	0.2	25	10.0
LTED12	528.75	530.00	1.25	0.4	3.8	7.4	0.4	41	13.5
LTED12	530.00	530.60	0.60	0.7	5.3	10.0	0.3	47	18.4
LTED12	530.60	532.00	1.40	0.1	2.6	5.4	0.1	14	8.5
LTED12	532.00	532.80	0.80	0.2	4.4	6.9	0.2	13	12.0
LTED12	532.80	534.00	1.20	0.3	2.6	5.9	0.1	19	9.6
LTED12	534.00	535.40	1.40	0.3	3.5	7.4	0.3	16	12.2
LTED12	535.40	536.00	0.60	0.0	0.5	1.5	0.2	5	2.2
LTED12	536.00	537.00	1.00	0.3	0.5	2.0	0.4	12	3.9
LTED12	537.00	538.00	1.00	0.1	0.7	2.7	0.4	8	3.9
LTED12	538.00	539.00	1.00	0.1	0.1	0.8	0.1	2	1.1
LTED12	539.00	540.30	1.30	0.2	0.2	2.3	0.6	9	3.8
**bdl – below detection limit*									

Hole ID	From (m)	To (m)	Int (m)	Cu%	Pb%	Zn%	Au g/t	Ag g/t	Zn Eq. %
LTCD18001	248.0	249.0	1.00	1.7	0.0	0.6	0.1	11	6.5
LTCD18002	217.0	218.0	1.00	0.1	0.1	3.0	0.1	4	3.6
LTCD18002	218.0	219.0	1.00	0.3	0.3	1.7	0.4	5	3.5
LTCD18002	219.0	220.0	1.00	2.0	1.2	2.0	0.6	15	10.3
LTCD18002	220.0	221.0	1.00	0.7	0.7	1.0	0.4	10	4.2
LTCD18002	221.0	222.0	1.00	3.2	4.3	10.9	1.3	33	26.7
LTCD18002	222.0	223.0	1.00	0.3	0.2	0.7	0.1	5	2.1
LTCD18002	223.0	224.0	1.00	0.5	0.3	1.1	0.2	5	3.3
LTCD18002	224.0	225.0	1.00	1.3	0.3	1.4	0.4	9	6.5
LTCD18002	225.0	226.0	1.00	0.5	0.3	1.1	0.2	6	3.2
LTCD18002	226.0	227.0	1.00	1.3	0.8	3.7	0.6	14	9.2
LTCD18002	227.0	228.0	1.00	1.2	1.3	4.0	0.6	25	10.0
LTCD18002	228.0	229.0	1.00	0.5	0.5	1.1	0.1	6	3.2
LTCD18002	229.0	230.0	1.00	2.3	0.4	1.9	0.2	11	10.0
LTCD18002	230.0	231.0	1.00	2.7	0.8	3.9	0.2	26	14.3
LTCD18002	231.0	232.0	1.00	4.2	0.6	3.2	0.3	24	18.5
LTCD18002	232.0	233.0	1.00	1.3	0.3	3.4	0.2	12	8.3
LTCD18002	233.0	234.0	1.00	0.5	0.8	5.4	0.2	8	8.2
LTCD18002	234.0	235.0	1.00	1.3	0.4	2.3	0.1	11	7.4
LTCD18002	235.0	236.0	1.00	0.7	0.4	1.6	0.2	7	4.4
LTCD18002	236.0	237.0	1.00	0.3	0.2	1.8	0.1	5	3.2
LTCD18002	237.0	238.0	1.00	0.5	0.4	2.4	0.2	7	4.6
LTCD18002	238.0	239.0	1.00	0.4	0.2	1.9	0.1	5	3.4
LTCD18002	239.0	240.0	1.00	0.3	0.3	3.4	0.1	5	4.9
LTCD18002	240.0	241.0	1.00	0.8	0.2	3.5	0.1	6	6.5
LTCD18002	241.0	242.0	1.00	0.6	0.7	14.4	0.1	11	17.2
**bdl – below detection limit*									

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 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 (DD) and reverse circulation (RC) techniques were used to obtain samples • No samples were collected from mud rotary drilling. • RC samples were split using a rig-mounted cone splitter on 1m intervals to obtain a sample for assay • Diamond core was placed in core trays for logging and sampling. Half core samples were nominated by the geologist from diamond core based on visual mineralisation. Intervals ranged from 0.24 to 1.5m based on geological boundaries • Diamond samples were sawn in half using an onsite core saw. All 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 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
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).*	• Diamond drilling techniques consist of; • PCD drilling through the cover sequence • HQ diamond core drilling of the parent hole • NQ2 diamond core and navigational drilling for the remainder of the drill holes. • Reverse circulation drilling techniques was completed using a 5.5" bit • Mud Rotary drilling was completed using a 7 7/8" PCD 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 geotechnicians • Moisture content and sample recovery is recorded for each RC sample • Negligible sample loss has been recorded
Logging	• *Whether core and chip samples have been*	• Holes are logged to a level of detail that would support mineral resource estimation.

Criteria	JORC Code explanation	Commentary
	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.*	• Qualitative logging includes lithology, alteration and textures • Quantitative logging includes sulphide and gangue mineral percentages • All drill core and RC chips were photographed • All drill holes have been logged in full 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.*	• Core was sawn and half core sent for assay • 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 • All RC samples are split using a rig-mounted cone splitter to collect a 1m sample 3-5kg in size. All samples were intended and assumed to be dry, moisture content was recorded for every sample
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 • Field duplicates are taken for all RC samples (1 in 40 samples). No field duplicates are submitted for diamond core.
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 • No twinned holes were drilled for this data set
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and*	• Collars surveyed with handheld GPS • Down hole surveys conducted with digital magnetic multi-shot camera

Criteria	JORC Code explanation	Commentary
	other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Coordinate system used is MGA94 Zone 55 • Topographic control is based on a detailed 3D Digital Elevation Model
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 approximately 50-100m • No sample compositing has been applied
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 orientation of the drill core is determined using a digital Orientation Tool
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

Section 2 Reporting of Exploration Results

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

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 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 Gudjalla People to conduct cultural clearances of drill pads and access tracks • The Exploration Permits are in good standing
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historic Exploration was carried out by Esso Exploration & PanContinental Mining. This included drilling and geophysics
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 Table1 – Drill Hole Details • 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 relate to assay results > 5% Zn Equivalent. • Zn equivalent formula utilised is: Zn% + (Cu%*3.3) + (Pb%*0.9) + (Au_{ppm}*0.5) + (Ag_{ppm}*0.025)

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 dipping at approximately 70 degrees, drill holes have been designed to intercept the mineralisation as close to perpendicular as possible. • Down hole intercepts are reported. True widths are likely to be approximately 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.*	• 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 East is ongoing