

# Corona Minerals

## Annual Report

EL21/2010

For Period 21 December 2013

to 20 December 2014

Tasmania

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## List of Digital Files Accompanying this Report

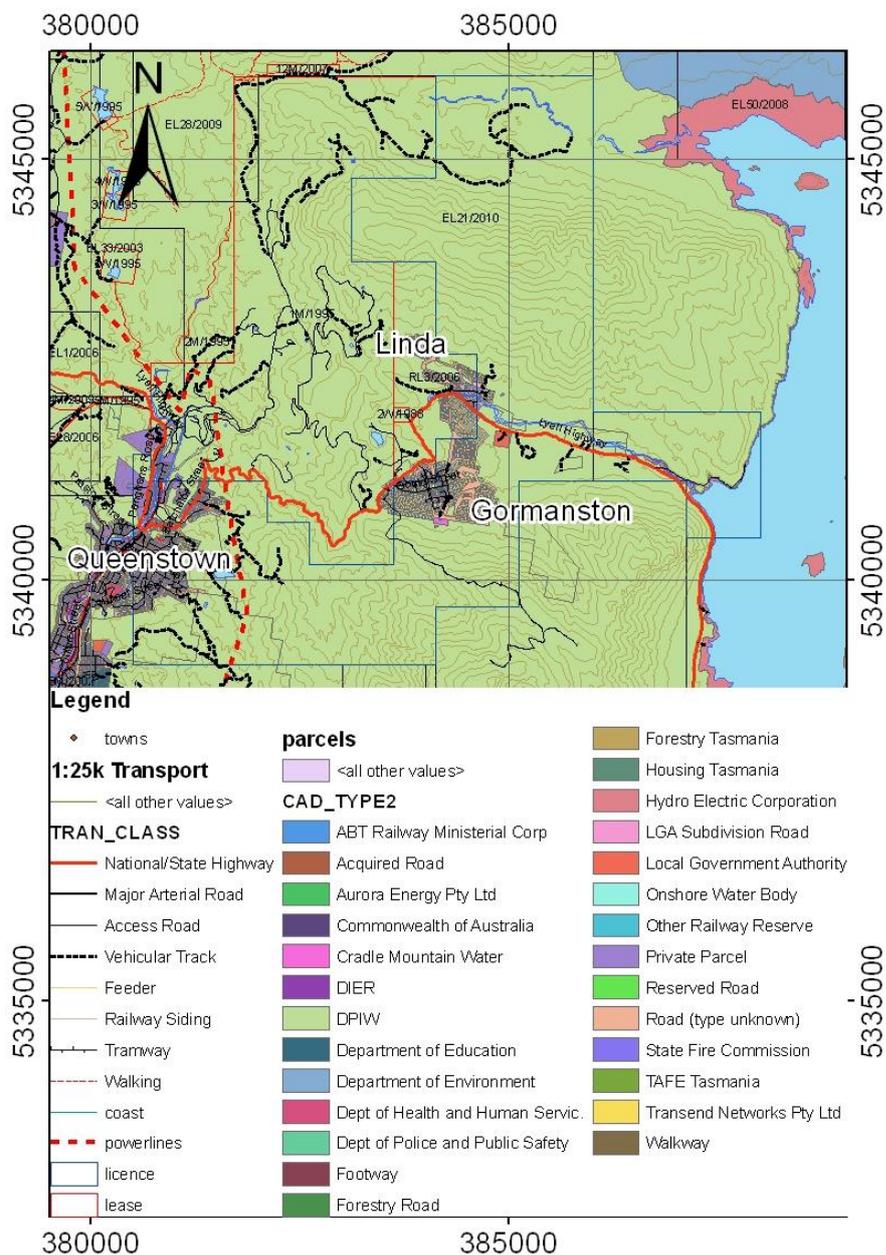
- EL212010\_20141217\_1\_Text
- EL212010\_20141217\_2\_Appendix1
- EL212010\_20141217\_3\_Appendix2
- EL212010\_20141217\_4\_Appendix3
- EL212010\_20141217\_5\_Appendix4
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## 1. Introduction

EL21/2010 is located east of Queenstown on the West Coast of Tasmania, directly adjacent and partially surrounding the Copper Mines of Tasmania Mt Lyell Mining Lease. Corona Minerals Ltd (“Corona”) conducted PQ3 diameter diamond drilling to test the accuracy of last year’s successful AC drilling and test for economic amounts of Zn-Pb-Ag mineralisation. Although mineralisation was extended along strike by 100m consistent high tenor mineralisation was not intersected, downgrading the potential economic viability of this prospect.

## 2. Tenure

Corona Minerals Ltd owns 100% of EL21/2010, which encompasses 21 km<sup>2</sup> of tenure and covers crown land, the gazetted townships of Linda and Gormanston, and minor amounts of HEC land near Lake Burbery.



**FIGURE 1: EL21/2010 TENURE**

### **3. Access**

Access within the tenement is excellent with the Lyell Highway running through the Linda valley and serviceable 4WD roads access in the Little Owen area.

### **4. Geology**

The mid-late Cambrian Mount Read Volcanics (MRV) dominate the southern half of the tenement where the rocks are the direct strike extent from the Mt Lyell Mining Lease and are intensely altered in places. The volcanic succession is composed of Central Volcanic Complex (CVC) rhyolites, and Western Volcano Sedimentary (WVS) volcanoclastic. The WVS sequence, and probably CVC sequence, is host to several andesite-basalt units which appear to be contemporaneous with mineralisation throughout the MRV. Ordovician aged Owen group siliciclastic conglomerates and sandstones are found in the east of the tenement forming prominent bluffs and mountains. Ordovician Marine sequences of the Gordon group are seen in the Linda and Comstock valleys, inferred to be sitting either in half graben or synclinal positions in the valley floors. The Gordon group is mainly composed of Limestone sequences, but a unit in the Cemetary creek area of Linda Valley has the appearance of a Black Shale and is host to zinc dominated stratabound or strataform base metal mineralisation. Silurian aged Eldon Group sandstone and siltstones overly the Gordon Group in the Linda Valley. The Linda and Comstock Valleys are mostly covered with tertiary glacial moraine, with variable thicknesses of cover.

### **5. Mineralisation**

Stratabound and possibly strataform massive, semi-massive and disseminated pyrite-sphalerite-galena mineralisation is hosted within the “Chamonix shale” interpreted to be upper Gordon Group. Bedding parallel quartz veining is common within this unit, and is not seen in the underlying limestone—a distinction used to argue the Chamonix Shale is a separate unit and not just “decomposed Limestone”. Mineralisation is inferred to be primary Ordovician in age of MVT, Irish style or even possibly CD (SEDEX) style, with a Devonian aged overprint.

### **6. Structure**

Predominant structure has a north west orientation, with the North Lyell fault. Several phases of folding starting in the late Cambrian, throughout the Ordovician and during the Devonian Tabberaberan orogeny have created complex structural relationships.

### **7. Exploration Philosophy**

EL21/2010 was initially targeted for mineralisation associated with the Mount Read Volcanics. Further research indicated Zn mineralisation has been outlined in Ordovician rocks in the Linda valley.



## 8. Exploration History

Exploration in this area has been ongoing since the late 1800's when Mt Lyell was first discovered. A total of 11 copper prospects, 4 gold prospects and one base metals prospect occur within the area of interest and 33 recorded holes had been drilled prior to Corona's involvement. A more detailed compilation can be found in Hughes 2012.

## 9. Previous Work Completed by Corona

A helicopter supported VTEM and aeromagnetic survey was conducted in 2011, which outlined large conductive bodies within the Linda and Comstock Valleys. Geochemical sampling and mapping in 2012 confirmed widespread zinc anomalism within the Linda Valley, and a reassessment of the geology and a new model for mineralization was outlined. Based upon this work and the new model developed Corona drilled 15 Air core holes at the Chamonix Zinc prospect intersecting significant Zn-Pb-Ag mineralisation in the Chamonix Shale.

## 10. Work Completed by Corona in Current Period

During the current reporting period Corona conducted a PQ3 diamond drilling program at the Chamonix Prospect to further assess the economic viability of the "Chamonix shale" hosted zinc-lead-silver mineralisation. Mineragraphy and petrology was undertaken by Gary McArthur of MODA on two samples from the drilling.

### 10.1. PQ3Diamond Drilling Program

A total of 338.3 m were drilled in 7 vertical holes utilising PQ3 and HQ3 diamond drilling techniques in order to maximise recovery. Wholecore was contracted to undertake the drilling program utilising a Coretach CSD1200 track mounted diamond drill rig. Drilling pads, sumps and access roads were constructed using a 20t excavator provided by Williams Earth moving. Drilling was very difficult but in terms of recovery quite successful. The very soft and clayey nature of the host package was problematic but manageable, the main problems with recovery arose when large quartz veins were intersected cutting this package.

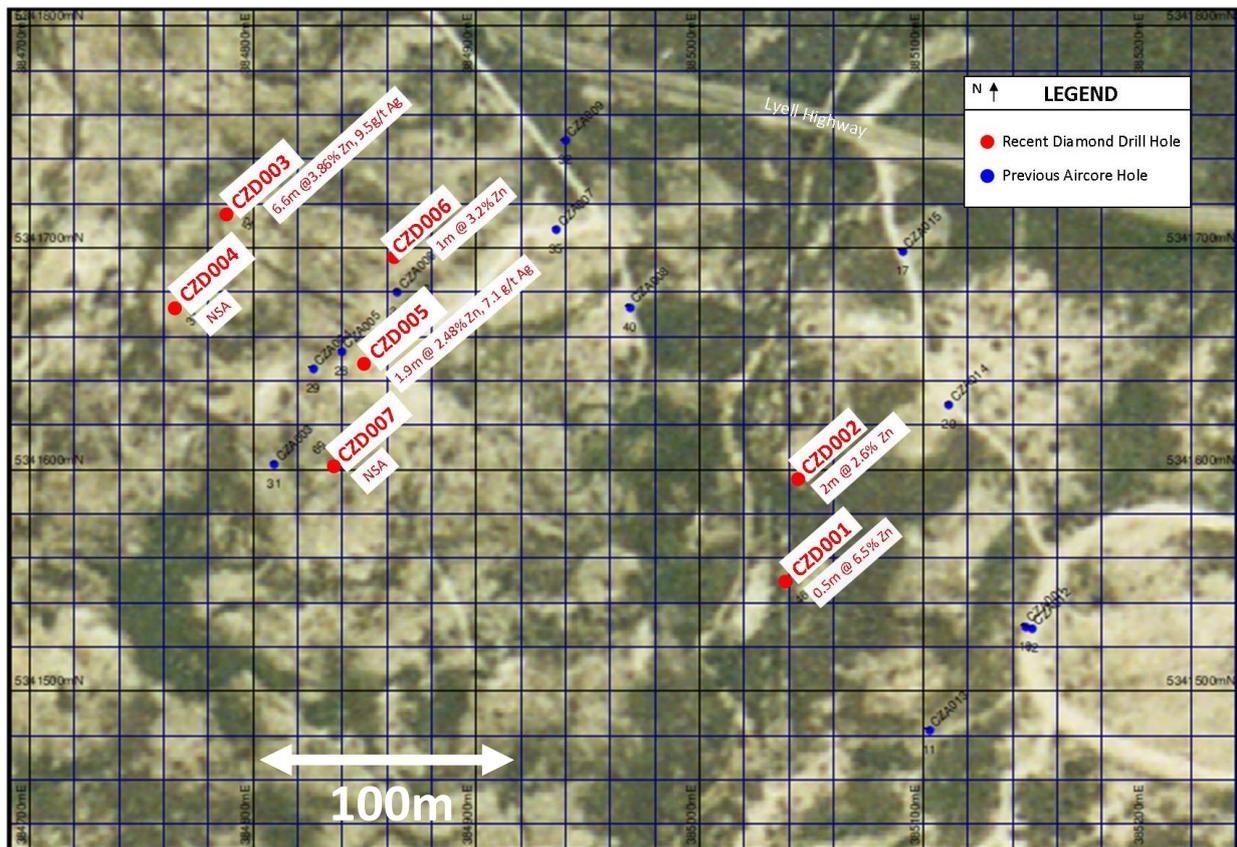
One metre intervals were sent to Genalysis Intertek Adelaide for assay using four acid digest and an ICPMS finish for Ag, Al, As, Au, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sn, Sr, Te, Ti, Tl, V, W, Zn, and Zr. Over range Zn, Pb and S were re-assayed using a 4 acid HBr digest and ICPMS finish.

No economic widths of mineralisation were intersected with the best interval being CZD003: 6.6m @ 3.86% Zn. Hole CZD005 effectively twinned the high grade intercept of ~8m @ 10% Zn+Pb in CZA 002 and returned only a narrow interval of low tenor mineralisation. The drilling program has downgraded the potential for economic amounts of mineralisation although there may be a possible vertical structurally hosted component to the mineralisation, which would not have been tested by this drilling program.

Drilling results are tabulated below and data can be found in Appendix 1, 2, 3 and 4. Figure 3 shows the drilling plan.

Hole No.	GDA94 Easting	GDA94 Northing	Dip	Azi.	Total Depth	From, m	To, m	Width, m	Grade/notes
CZD001	385038	5341550	-90	-	45.5	9.5	10	0.5	6.5% Zn
CZD002	385043	5341596	-90	-	34	3	5	2	2.6% Zn
CZD003	384787	5341715	-90	-	52	5.23	11.8	6.6	3.86% Zn, 9.5 g/t Ag
						5.23	3	1.44	7.98% Zn 9.4 g/t Ag
							6.67		
CZD004	384764	5341674	-90	-	36.8	NSA	NSA	NSA	Hole drilled into foot wall of CS
CZD005	384849	5341649	-90	-	60.8	27.5	29.4	1.9	2.43% Zn, 7.1 g/t Ag
CZD006	384862	5341697	-90	-	50	23	24	1	3.2% Zn
CZD007	384837	5341603	-90	-	59.2	NSA	NSA	NSA	CS unmineralised

**TABLE 1: DRILLING RESULTS**



**FIGURE 3: PLAN OF 2014 DRILLING**

## 10.2. Mineragraphy

Gary McArthur was contracted to undertake Mineragraphy on two samples of core from the PQ3 drilling, details of which are appended in Appendix 6. McArthur found the mineral assemblage to be pyrite sphalerite galena tetrahedrite hosted in a fine sericite quartz groundmass in a weakly carbonaceous shale. Extensive brecciation has gone on which post dates the development of quartz veins.

## 11. Discussion Conclusion

Drilling at the Chamonix Zinc Prospect has revealed significant Zn-Pb-Ag potential. Near surface mineralisation is present over 240m along strike and 150m across strike. There is potential for in excess of 1500m of along strike length and up to 500m across strike length. PQ3 drilling is planned for early 2014, mineralogy and metallurgy will be conducted on core retrieved.

## 12. Environment

All drill collars were capped, cemented and covered back over using an excavator, all pads were rehabilitated, all roads constructed were rehabilitated. Corona rehabilitated historical holes on the tenement also.

## 13. Expenditure

ITEM	Cost
Salaries and wages	\$47,732
Accommodation	\$5,278
Consumables	\$4,847
Vehicle Hire	\$6,880
Drilling	\$78,521
Assays	\$10,605
Tenement Costs	\$1,224
Earthmoving	\$1,280
Other	\$6,389
Mineragraphy	\$1,760
Sub Total	\$164,516
Administration @ 10%	\$16,451
<b>TOTAL</b>	<b>\$148,064</b>

**TABLE 2: EXPENDITURE FOR THE PERIOD**

## 14. References

Hughes, C. E. D., 2012. Linda Valley Project, EL21/2010. Annual report for period 20 December 2011 to 21 December 2012. Annual technical report for corona Minerals Ltd.

## Appendix 1

## Appendix 2

## Appendix 3

## Appendix 4

## Appendix 5