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The Company Announcements Office  
ASX Limited Via E Lodgement

31 Oct 2018

## **QUARTERLY ACTIVITIES REPORT TO 30<sup>TH</sup> SEPTEMBER 2018**

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### ***Buddadoo Project – West Yilgarn***

- RC holes with vanadiferous titanomagnetite mineralisation from the Buddadoo Gabbro and adjacent rock-units have been sent for metallurgical studies to determine mass-yield and concentrate quality.
- Follow-up soil and rock-chip sampling of high-priority gold and base-metal anomalies has been completed and results will be reported once they have been received from the laboratory and interpreted.

### ***Croydon Top Camp Project (CTCP) – North Pilbara***

- 53.4g of gold reported by prospectors using metal detectors from Croydon Top Camp Prospect. Coarse-grained gold particles show an irregular morphology more typical of material derived from lode-style deposits that are widespread and economically significant across the Yilgarn and Pilbara.
- 182 auger-pulp re-assays report maximum gold of 25g/t. Higher gold values are correlated with elevated pathfinder elements that include arsenic, tungsten, antimony, potassium and silica.
- A field visit has collected soil and rock-chip samples from the major prospects and an airborne magnetic and radiometric survey has recently been completed and results will be reported after the data has been processed.

### **Corporate Activity – Capital Raising**

- During the Quarter, the Company entered into a loan with Yandal Investments Pty Ltd, a company associated with its major shareholder Mr Mark Creasy. The loan allows the Company to undertake additional exploration on its tenements. Full details of the loan were contained in the Company's announcement dated 3<sup>rd</sup> August 2018.

## **Project Summaries**

Coziron Resources is advancing exploration on five projects, but the focus of activity this quarter has been the Buddadoo Project in the mid-west region of Western Australia and the Croydon Top Camp Project in the Pilbara. Details of each project and a summary of the activities and results obtained are presented in the sections below.

### **Buddadoo Project – Murchison Province**

The 192km<sup>2</sup> Buddadoo Project (E59/1350), which covers part of the Gullewa Greenstone Belt, is mineralised with bands of massive and disseminated vanadiferous titanomagnetite in gabbro and has extensive prospectivity for gold and copper mineralisation (Fig 1). The project is located about 200km east of Geraldton Port and 60km from a rail siding at Morawa that connects to Geraldton. The most advanced prospect on the tenement is accessible using a bitumen-road between the towns of Morawa and Yalgoo, then a road with a made surface for about 10km, and 5 km of station tracks. The tenement covers part of the Gullewa Greenstone Belt which is cut by major faults and intruded by granitic and gabbroic rocks.

The Company is focussed on the Buddadoo vanadium-magnetite system following the completion of a first round of RC drilling that completed 28 holes for a total of 2795 m (full details to the CZR:ASX on 28<sup>th</sup> Feb 2018, 21<sup>st</sup> March 2018 and 5<sup>th</sup> April 2018). The holes were allocated across two targets. Ten holes inclined at -60 to 250, each to a depth of 200 m were located on four cross-sections to sample the geology underlying a 350 m wide high-order magnetic anomaly with outcropping bands of massive and disseminated vanadiferous titanomagnetite mineralisation now attributed to Budd\_Gabbro\_04 (Fig 2). Eighteen holes, inclined -60 to 070°, each to a depth of 100 m were located on three cross-sections to sample the geology underlying two second-order magnetic structures that are associated with copper and nickel anomalism in the soils and now attributed to Budd\_Gabbro\_06.

During the Quarter, the Company completed an additional fieldwork programme as outlined by CZR:ASX on 22/8/2018. Drill-hole BUDRC027 from Budd\_gabbro\_04 and an interval of BUDRC013 from Budd\_gabbro\_06 have been sampled for metallurgical work to determine mass-yield and concentrate quality. Results will be reported as they become available.

In addition, follow-up soil and rock-chip sampling has been undertaken over targets with the potential to be associated with copper and gold mineralisation.

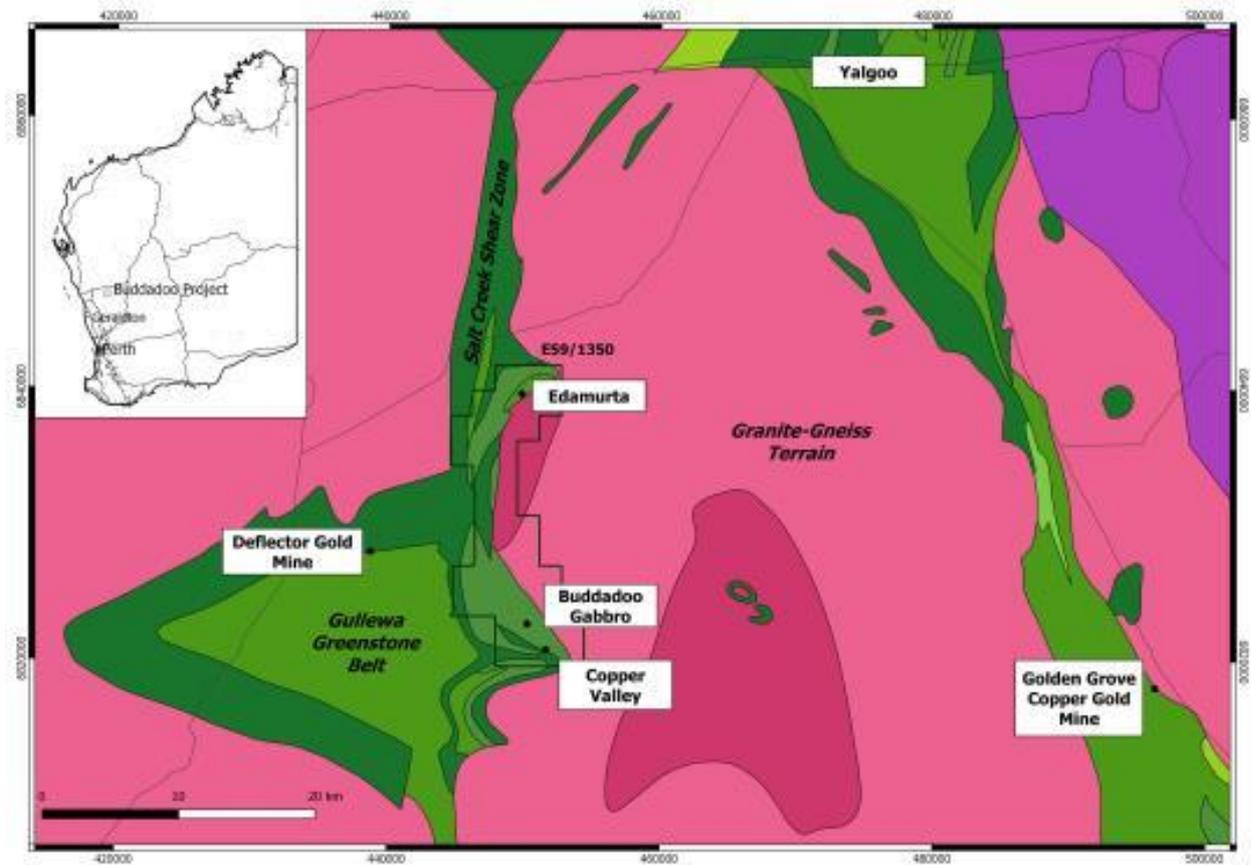


Fig 1 - Location and main exploration prospects for the Buddadoo Project (E59/1350) on the Geological Survey of Western Australia summary map of the regional geology.

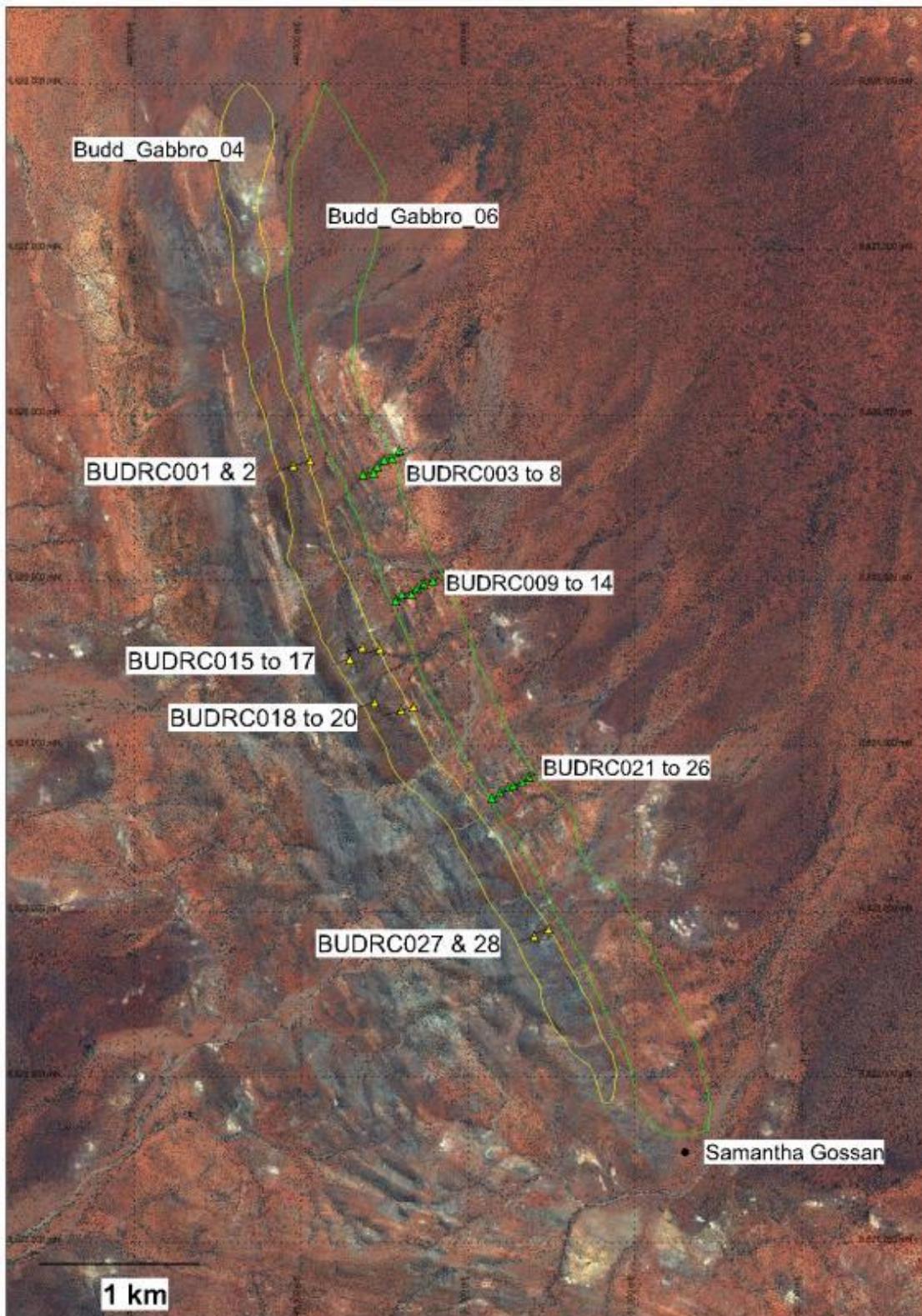


Fig 2 Location of the completed 2018 RC drill-holes with yellow triangles targeting vanadiferous titanomagnetite (this report, Table 1) and green triangles targeting copper-nickel anomalism on high resolution Quickbird satellite imagery with the trace of Budd\_Gabbro\_04 and Budd\_Gabbro\_06.

## Croydon Top-Camp – Pilbara

Coziron is acquiring from Creasy Group a 70% interest in the 317 km<sup>2</sup> Croydon Top-Camp project located about 100km south-east of Karratha in the Pilbara (CTCP, E45/2150). The tenement is subdivided into three blocks that cover a crustal-scale north-east trending fault-system which separates granitic rocks of the Pilbara Craton from deformed, metasedimentary rocks of the De Grey Superbasin (Fig 3). These rocks are then overlain in parts by a significantly younger suite of conglomeratic sediments and volcanics of the Fortescue Group.

The western block of the tenement has a long history of gold prospecting and small-scale mining activity within a 100 km<sup>2</sup> area of the Constantine Sandstone. Some areas with greater evidence of prospector activity have been more systematically sampled using soils, rock-chip and auger methods. Results from these programmes are reported annually to the Geological Survey of Western Australia (described in detail CZR:ASX on 24-May-2018) and assist Coziron to outline priority prospects and plan fieldwork activities. The eastern block of the tenement has reported occurrences of gold, copper and cobalt.

In the western block, the Top Camp area is the most advanced prospect as it covers a broad valley floor with extensive areas of prospector disturbance over an area that is about 2 km long by 1.5 km wide (Fig 3). During the Quarter, CZR received reports from prospectors who had been recovering gold using metal detectors from 40E prospecting permits (CZR:ASX 20<sup>th</sup> September 2018). In total, some 53.5g of gold was reported and significantly, a photograph of an acid-cleaned gold particle supplied by one of the prospectors shows an intergrowth with quartz and rhombic indentations, suggesting the intergrowth contained carbonate (Fig 4). This supports a primary origin for the gold from a lode-style deposit which are widespread and economically significant across the Pilbara and Yilgarn of Western Australia.

CZR also undertook a comprehensive re-assay of 187 auger pulps using whole-rock XRF and laser ablation ICP for an extensive suite of trace-elements from a fused disk and gold, platinum and palladium by fire-assay on a 40gm charge (CZR:ASX 10<sup>th</sup> October 2018). Of the 182 auger samples from the six cross-sections that are approximately 500 m in length and distributed over a strike length of almost 1 km, 14% report gold greater than 50 ppb and 90% are greater than a typical background of less than 5 ppb in rocks without mineralisation. The maximum gold of 25 g/t, which is replicated by the laboratory duplicate at 24.1g/t, is significantly greater than the maximum gold value of 8 g/t reported in the historical results.

Each 500 m wide cross-section shows systematic increases and decreases in the gold content from the 20m spaced samples with higher values overlying areas of alteration associated with a North-east trending structural corridor (Fig 5). Intervals of samples along the lines with gold above 20 ppb also have elevated arsenic, antimony, tungsten, potash and silica that typically reach maximum values where the gold is higher. This enriched element association is typical of the mineralisation in lode-style gold deposits. Each zone of peak gold and pathfinder-element anomalism that overlies the areas of altered rocks extending over a strike length of at least 1 km represents a priority drill-target.

Since the end of the Quarter, a field visit has been completed to the Croydon Top-Camp Project. The focus of the visit was to determine whether the main gold prospects at Top Camp, Bottom Camp and Middle Valley are accessible for drilling. In addition, prospects with historical reports of gold, copper cobalt and rare-earths were located to determine their accessibility for drilling and sampled by soil and rock-chips to determine the extent of the anomalism.

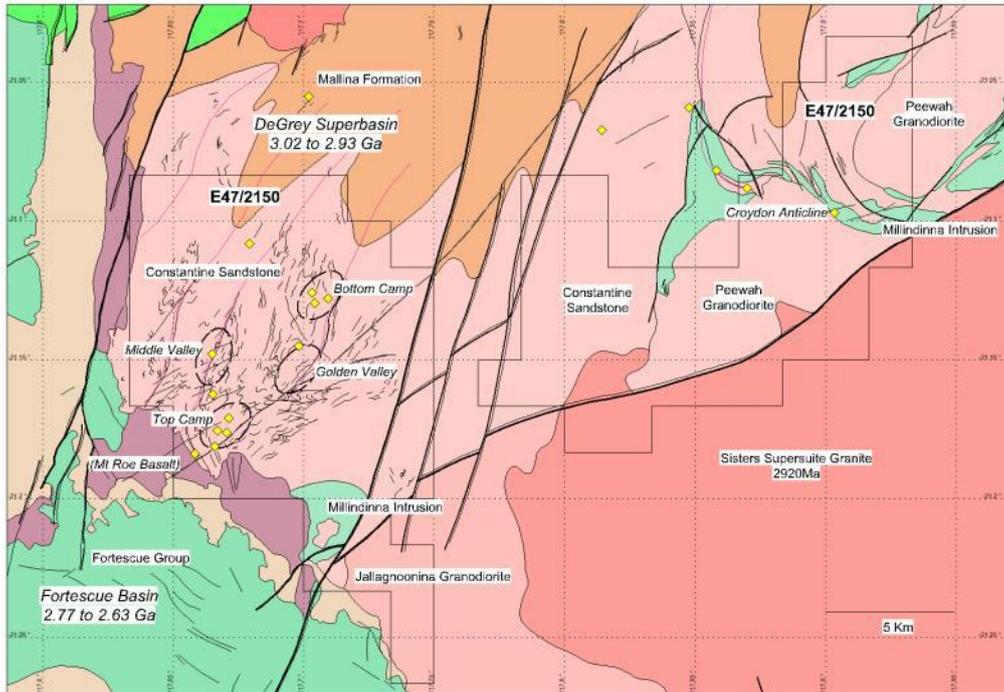


Fig 3. Croydon Top-Camp project (E47/2150) showing location of gold occurrences from the Geological Survey of Western Australia in sediments of the DeGrey Superbasin separated by a crustal-scale fault from granitic rocks of the Pilbara Craton and overlain by younger rocks of the Fortescue Group (Geology from GSWA digital 1:100K mapping).

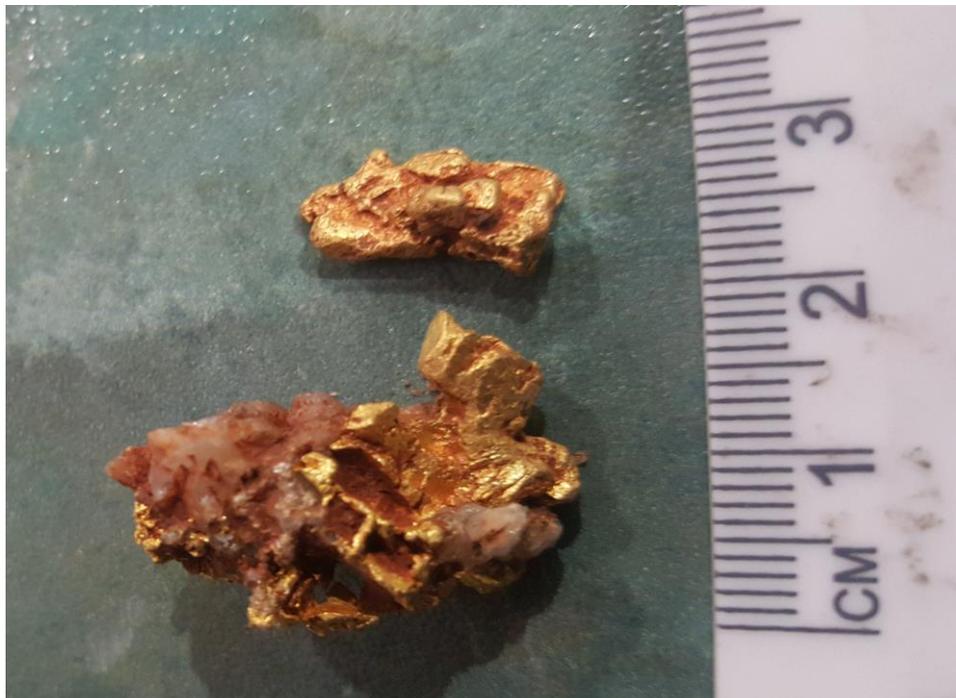


Fig 4. Prospector supplied photo of acid-cleaned gold recovered by metal detector from Prospecting Permit 528156 over the Top Camp Prospect area showing an intergrowth with vein-style quartz and rhombic indentations suggesting carbonate was present.

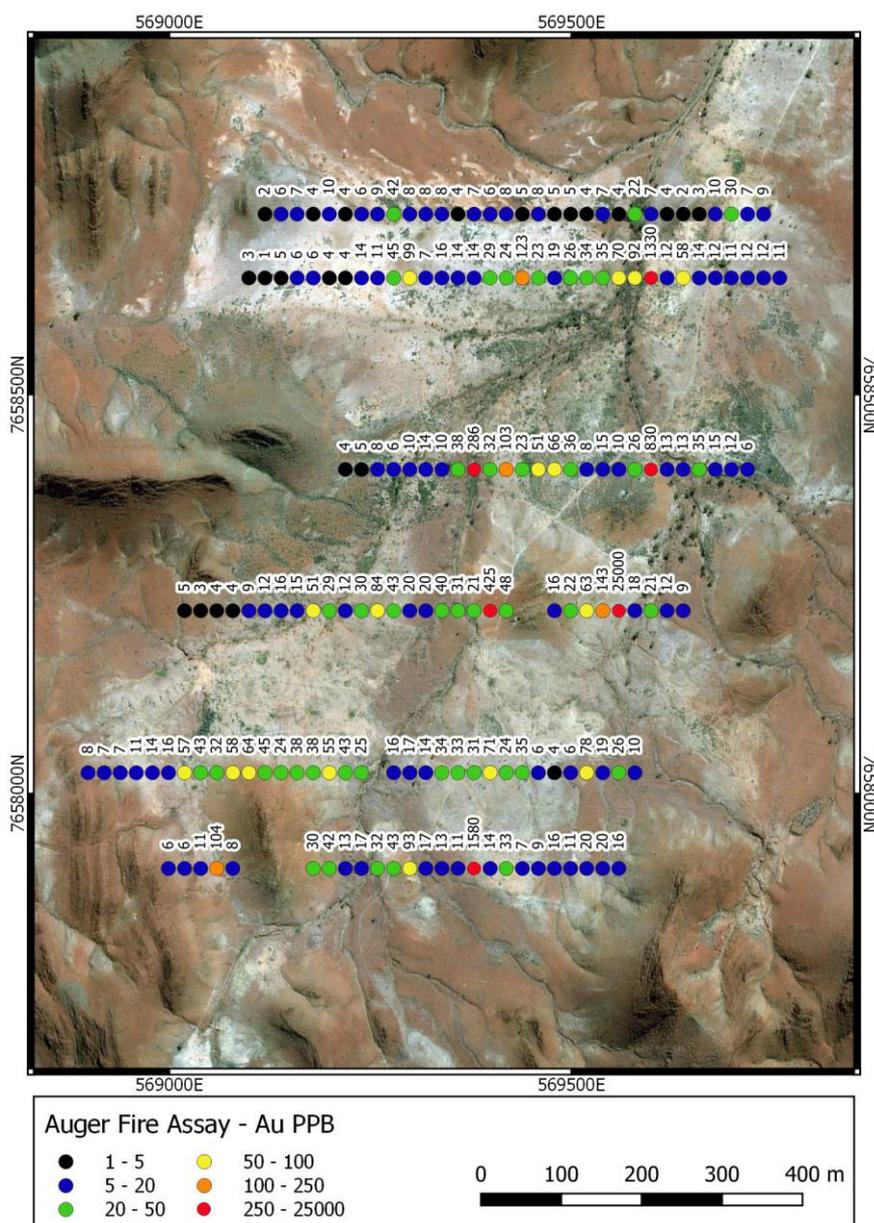


Fig 5 Fire assay gold in ppb from the 182 auger pulp re-assays overlain onto Google Earth imagery of the Top Camp Prospect showing the anomalous values (>5ppb) overlying areas of lighter coloured, carbonate-bearing rocks within the NE-trending structural corridor.

### Yarraloola Project – West Pilbara

Yarraloola is CZR’s most advanced project, located about 100km southwest of Karratha and covers an area of 896km<sup>2</sup>. The tenements include JORC-compliant resources in the Robe Mesa, Robe East Extension and P529 channel iron deposits. It also hosts a new style of volcanic-hosted magnetite mineralisation that has been previously drilled by the Company (Fig 6).

No field activities have been undertaken during the Quarter.

### Shepherds Well Project – West Pilbara

Shepherds Well (E08/2361), in the West of the Pilbara, is located about 60km south-west of Karratha. The project covers an area that is 25-50 km from a new proposed public access port at Cape Preston East, serviced by tracks from the Great Northern Highway and is crossed in part by an

easement for the proposed West Pilbara railway. The region has a basement of basaltic, felsic and metasedimentary rocks that are unconformably overlain by predominantly mafic volcanics from the Fortescue Group and sediments of the Hamersley Basin. Programmes of soil and rock-chip sampling and mapping have identified nickel (Ni), copper (Cu) and gold (Au) anomalism associated with an outcrop of talc-carbonate rock at Dorper Rise and lead (Pb), zinc (Zn) and silver (Ag) associated with a linear magnetic anomaly at Suffolk Ridge. In addition, where soil and drainage samples have been collected near the base of the Fortescue Basalt, they typically report anomalous gold.

No fieldwork was undertaken during the Quarter.

### **Yarrie Project – North Pilbara**

The Yarrie Project consists of six granted exploration licences (E45/3725, E45/3728, E45/4065, E45/4433, E45/4604, and E45/4605) that cover a total of 419km<sup>2</sup>, about 160km east of Port Hedland. Yarrie is serviced by bitumen and gravel roads and a natural gas pipeline between Pt Hedland and the Telfer copper-gold mine. The BHPB-owned rail connection between the Yarrie mining area and Port Hedland also services this area.

The Yarrie tenements have the potential to host high-grade (+62% Fe) iron-ore deposits within the magnetically active Archaean-age Nimingarra Iron Formation. Historical RC drill intercepts with Fe greater than 62% from the Cabbage Tree and Kennedy Gap prospects require follow-up. There is also the potential for gold and base-metals associated with the strongly deformed, mixed mafic to ultramafic volcanic rocks that have interbedded metasediments in the Pilbara basement. In addition, E45/3278 covers a portion of the basal interval of the Fortescue Group that is prospective for gold in conglomerate.

No fieldwork was undertaken during the Quarter.

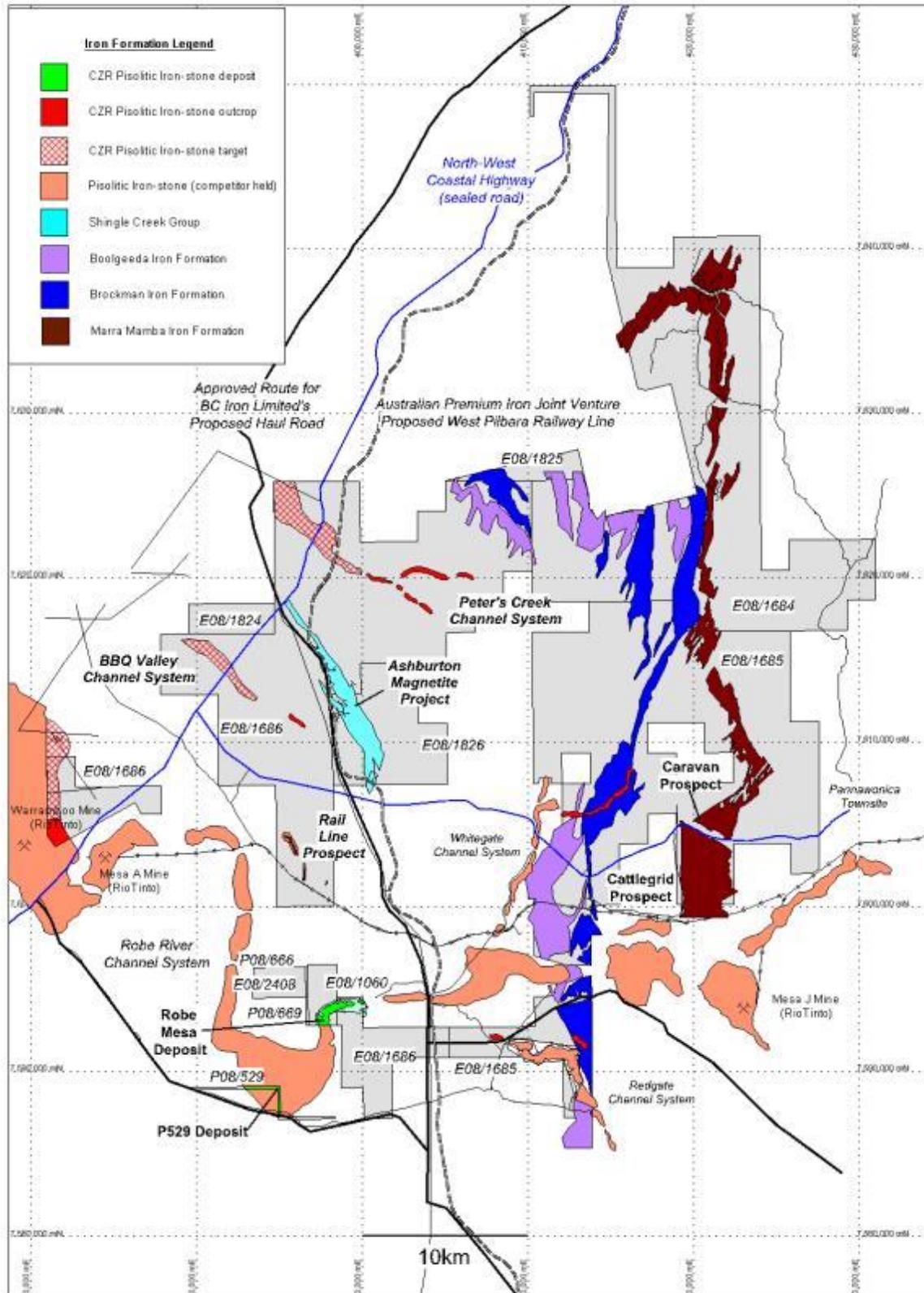


Fig 6. Location of Robe Mesa CID deposit, Ashburton magnetite project and P08/529 CID deposit and tenement coverage from the Yarraloola Project, West Pilbara of Western Australia.

## **ABOUT COZIRON RESOURCES LIMITED**

Coziron Resources Limited has exploration focussed on the Yarraloola (853km<sup>2</sup>), Shepherd Well (193km<sup>2</sup>), Croydon Top-Camp (317 km<sup>2</sup>) and Yarrie (357.5km<sup>2</sup>) Projects in the Pilbara region and Buddadoo (210km<sup>2</sup>) Project in the Yilgarn region of Western Australia.

For further information please contact Adam Sierakowski or Rob Ramsay on 08 6211 5099.

## **COMPETENT PERSONS STATEMENT**

*The information in this report that relates to mineral resources and exploration results is based on information compiled by Rob Ramsay (BSc Hons, MSc, PhD) who is a Member of the Australian Institute of Geoscientists. Rob Ramsay is a full-time Consultant Geologist for Coziron and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Rob Ramsay has given his consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

*Coziron Resources Ltd – Changes to the Tenement Schedule in the past Quarter*

Project	Location	Tenement Number	Economic Entity's Interest at Quarter End	Change in Economic Entity's Interest During Quarter
Yarraloola	West Pilbara, WA	E08/1060	85%	No Change
Yarraloola	West Pilbara, WA	E08/1684	85%	No Change
Yarraloola	West Pilbara, WA	E08/1685	85%	No Change
Yarraloola	West Pilbara, WA	E08/1686	85%	No Change
Yarraloola	West Pilbara, WA	E08/1824	85%	No Change
Yarraloola	West Pilbara, WA	E08/1825	85%	No Change
Yarraloola	West Pilbara, WA	E08/1826	85%	No Change
Yarraloola	West Pilbara, WA	E08/2408	100%	No Change
Yarraloola	West Pilbara, WA	P08/529	85%	No Change
Yarraloola	West Pilbara, WA	P08/666	100%	No Change
Yarraloola	West Pilbara, WA	P08/669	100%	No Change
Shepherds Well	West Pilbara, WA	E08/2361	70%	No Change
Yarrie	East Pilbara, WA	E45/3725	70%	No Change
Yarrie	East Pilbara, WA	E45/3728	70%	No Change
Yarrie	East Pilbara, WA	E45/4065	70%	No Change
Yarrie	East Pilbara, WA	E45/4604	70%	No Change
Yarrie	East Pilbara, WA	E45/4605	70%	No Change
Yarrie	East Pilbara, WA	E45/4433	100%	No change
Buddadoo	Mid-west, WA	E59/1350	85%	No Change