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The Company Announcements Office  
ASX Limited Via E Lodgement

26 April 2018

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## Quarterly Activities Report to 31<sup>st</sup> March 2018

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

- 28 RC holes for 3,795 m completed on the Buddadoo Gabbro.
- 18 holes of 100 m on 3 cross-sections targeted copper and nickel anomalism in soils overlying linear second-order magnetic features along the eastern (basal) margin of the gabbro.
- 10 holes of 200 m on 4 cross-sections targeted the 6 km long and 350 m wide high-order magnetic anomaly associated with bands of massive and disseminated vanadiferous titanomagnetite.
- All the holes targeting vanadiferous titanomagnetite (Figures 3 to 6) intercepted down-hole intervals with high magnetic susceptibility (*ranging 5,000 to 120,000 SI units*), with geological logs reporting magnetite-rich drill-chips.
- The thickest downhole intercepts are in BUDRC015 with 66m (From surface to 66 m), BUDRC018 with 71m (93 to 164 m) and BUDRC027 with 39m (86 to 125 m).
- Logging of the 18 exploration holes inclined -60° to 070° and drilled to 100m deep on the three sections (BUDRC003-8, BUDRC9-14, and BUDRC 21-26) for copper and nickel reports a range of felsic and mafic rocks, some highly magnetic intervals with susceptibility exceeding 10,000 SI units, rocks with traces of sulphide and an interval from 53 to 60 m with up to 25% sulphide in BUDRC010.
- All 1 metre interval samples for geochemistry have been received by Bureau Veritas Laboratories in Perth and results will be reported when they are available.

### **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 (Fig 13). Details of each project and a summary of the activities and results reported are presented in the sections below.

## **Buddadoo Project – West Yilgarn**

The 192km<sup>2</sup> Buddadoo Project (E59/1350) located about 200km east of Geraldton Port and 60km from a rail siding at Morawa that connects to Geraldton, is serviced by a bitumen-road between the towns of Morawa and Yalgoo and a number of station tracks (Fig 1). The tenement covers part of the Gullewa Greenstone Belt which is cut by major faults and intruded by granitic and gabbroic rocks. Historical exploration on E59/1350 identified mineralisation at two sites. Edamurta, in the north, has gold, copper and zinc associated with felsic and mafic volcanics of the Gullewa Greenstone Belt. In the south, the Buddadoo Gabbro has copper and bands of vanadiferous magnetite in intrusive gabbroic rocks (Fig 2).

During the Quarter the Company received statutory approvals for drilling, undertook preparatory earthworks on the access track and drill-pads and completed 28 RC drill-holes for a total of 2,795 m (full details to the 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. Eighteen holes, inclined -60 to 050°, 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. Ten holes inclined at -60 to 230, 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 that is associated in parts with outcropping bands of massive and disseminated vanadiferous titanomagnetite mineralisation.

The RC drill-holes were all logged for geology, measured for magnetic susceptibility and sampled for geochemistry on 1 m intervals. The magnetic susceptibility readings provide evidence for changes in the amount of vanadiferous titanomagnetite that can be mapped over changes in rock-type on the geological sections that cross the high-order magnetic anomaly (See Figs 3 to 6). All the samples for geochemistry have been transported from site to Bureau Veritas laboratories in Perth and results will be reported when they are available.

## **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> (Fig 4). The tenements include JORC-compliant resources in the Robe Mesa, Robe Extension and P529 channel iron deposits along with a new style of volcanic-hosted magnetite mineralisation that have been drilled by the Company (Fig 7).

No field activities have been undertaken during the Quarter.

### *Prospecting License P08/529 Legal Action*

Coziron is currently undertaking legal action available to it under the Mining Act to challenge the expiry of the tenure of Prospecting Licence P08/529, held by Coziron's whole owned subsidiary Zanthus Resources Pty Ltd (**Zanthus**), and ZanF Pty Ltd. Zanthus applied for a Retention Licence eight weeks prior to the tenement expiry date of 6<sup>th</sup> July 2017. The DMIRS did not process the Retention Licence application prior to the tenement expiry date, and did not inform Zanthus of the expiry of the tenement until letter dated 31 August 2017 (received by the Zanthus on 3 September 2017).

Zanthus is continuing the legal process to seek to have the prospecting licence re-instated. The Company also has a Mining Lease application that covers the P529 JORC-compliant iron-ore resource.

### **Croydon Top-Camp – West Pilbara**

Coziron has entered into a conditional agreement with Creasy Group to acquire a 70% interest in Croydon Top-Camp (E47/2150) project. This tenement covers 317 km<sup>2</sup> in the West Pilbara and is located about 80 km south-east of Karratha (Fig 8). A summary of historical activities and results was reported to the ASX on 8<sup>th</sup> and 28<sup>th</sup> of November 2017. The region has a basement of metasediments of the De Grey Superbasin with intercalated mafics of the Millindinna intrusives that were then deformed and intruded by major suite of granitic rocks. These rocks are then unconformably overlain by the Fortescue Group.

Prospectivity for gold on Top-Camp can be attributed to at least two settings on the western portion of the tenement.

1. Conglomerates at the base of the Fortescue Group which have the potential to host detrital deposits; and
2. Structurally complex, turbiditic, meta-sediments of the De Grey Superbasin with the potential for hydrothermal vein and replacement styles of mineralisation.

Gold results from reconnaissance drainage and soil sampling indicate that the material derived from the basal parts of the Fortescue Group is anomalous in gold (>5ppb; Fig 9). Follow-up sampling is required to determine whether the source of the anomalism can be located.

More advanced prospects for gold mineralisation are represented within the structurally complex turbiditic metasediments of the De Grey Super Basin (Fig 9). In particular, gold results from gridded soil and auger sampling that is supported by anomalous arsenic and antimony values and a historical intercept in a shallow RC drill-hole have highlighted a 1.5km long by 500m wide zone associated at the Top Camp Prospect that represents a very high-priority target for further work (Fig 10).

No fieldwork was 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 (Fig 8). 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 (Fig 11). In addition, where soil and drainage samples have been collected near the base of the Fortescue Basalt, they typically report anomalous gold (Fig 11; Full details were reported to the ASX on 11<sup>th</sup> of October 2017).

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 (Fig 8). 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 (Fig 12). 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.

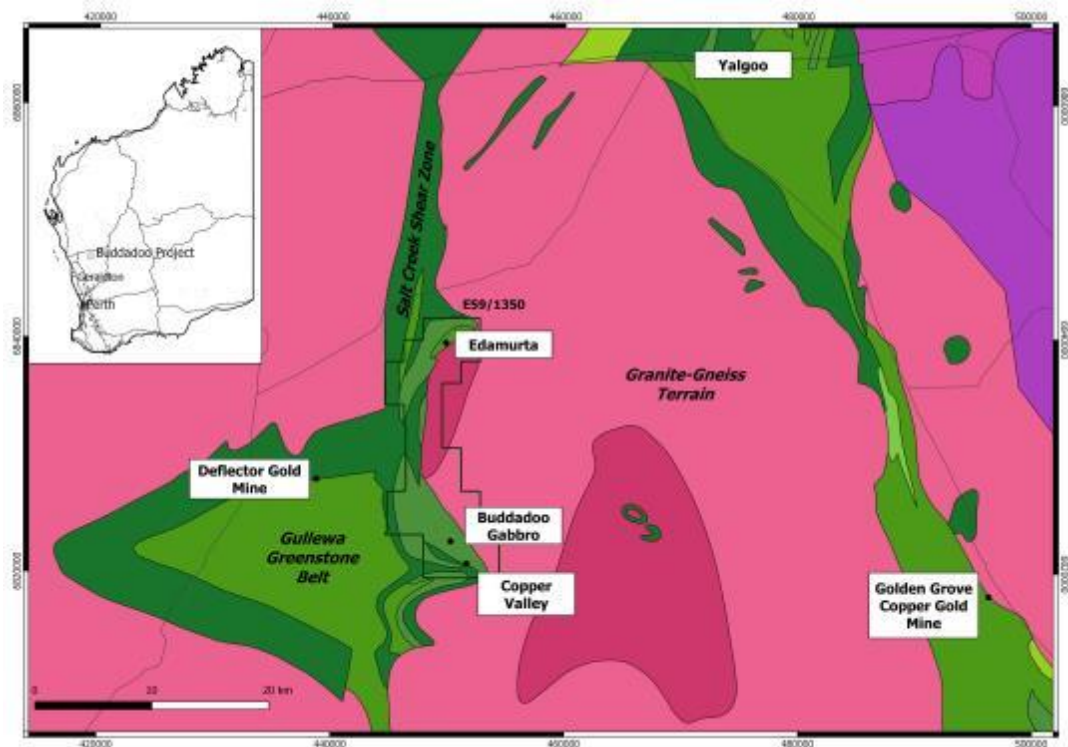


Fig 1 - Location and main exploration prospects for the Buddadoo Project (E59/1350) on the Geological Survey of Western Australia summary map of the regional geology.

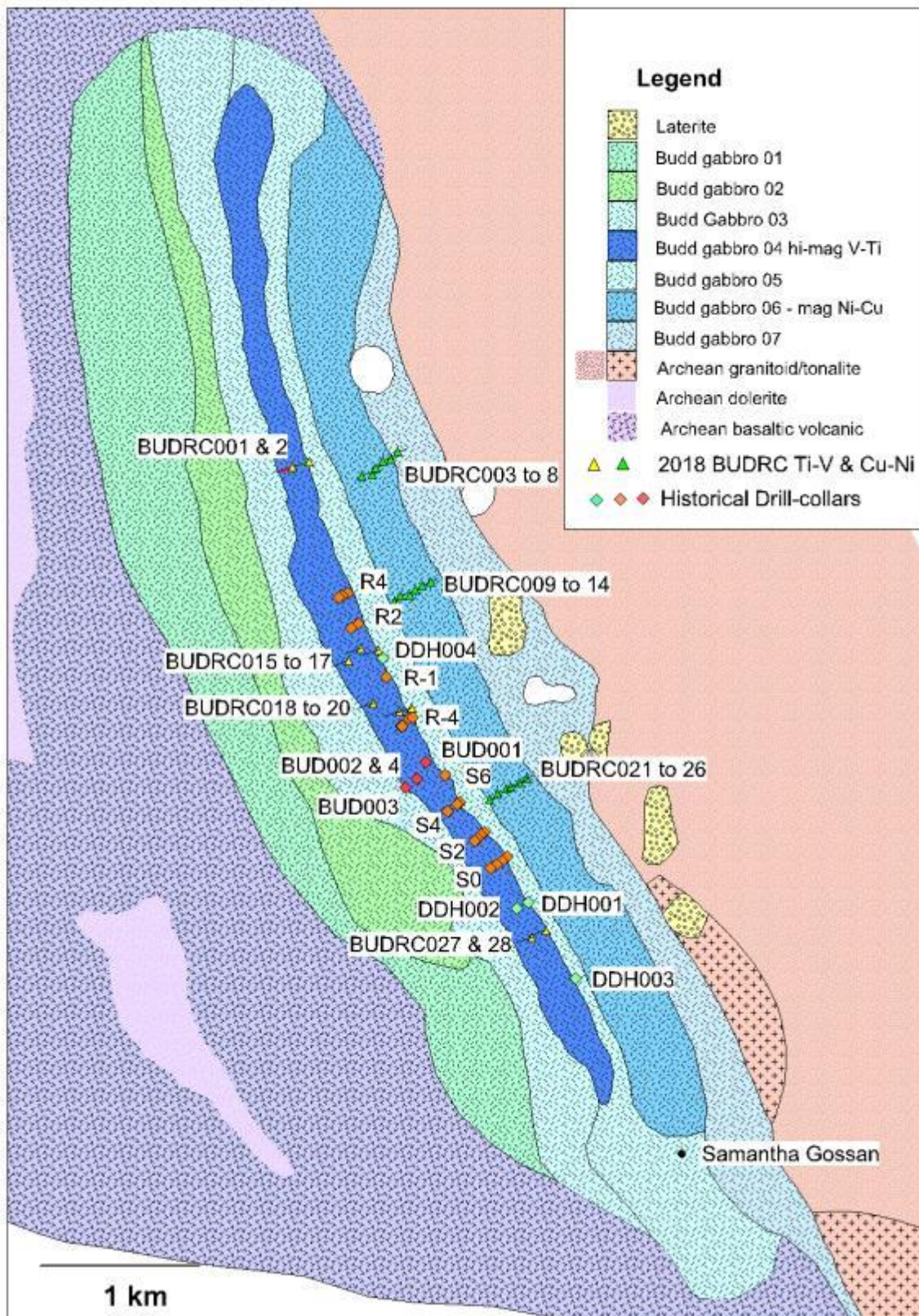


Fig 2 Location of the completed 2018 RC drill-holes with yellow triangles targeting vanadiferous titanomagnetite and green triangle targeting copper-nickel anomalism (full details on hole locations are in Table 1 of CZR to ASX on 5 April 2018) and historical drilling overlain on the interpreted geological map for the Buddadoo Gabbro.

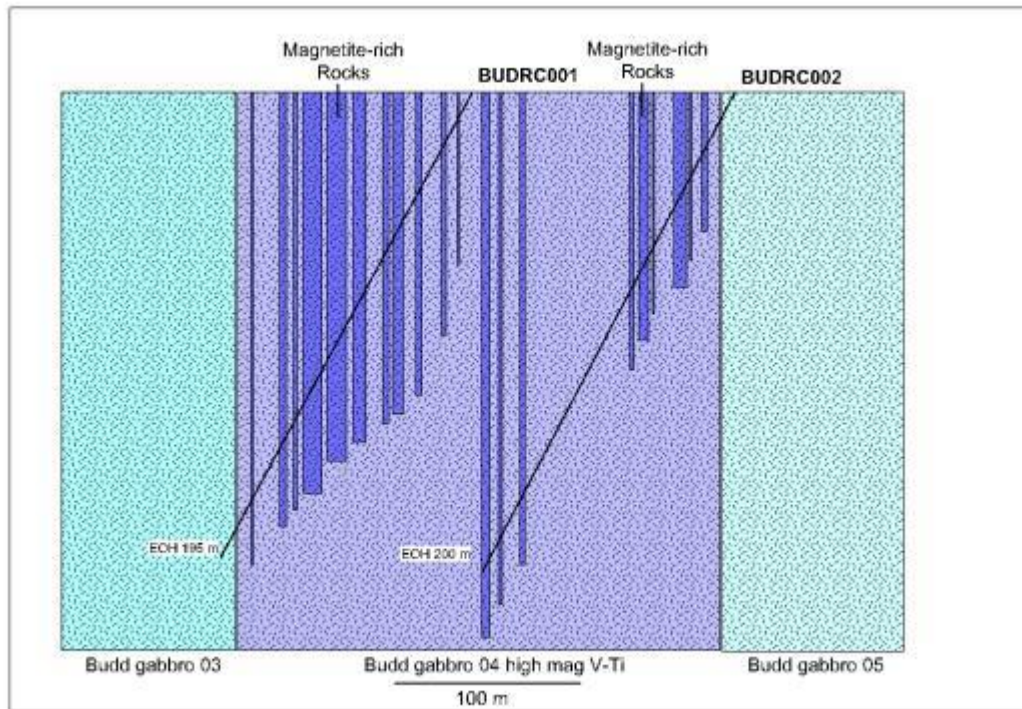


Fig 3 BUDRC001 and BUDRC002 downhole intercepts showing magnetite-rich rocks (defined by magnetic susceptibility greater than 5000 SI units and an abundance of magnetite in the RC chips) overlain on the distribution of Budd gabbros 03 to 05 from Fig 2 (released ASX 21-03-2018 but included for completeness).

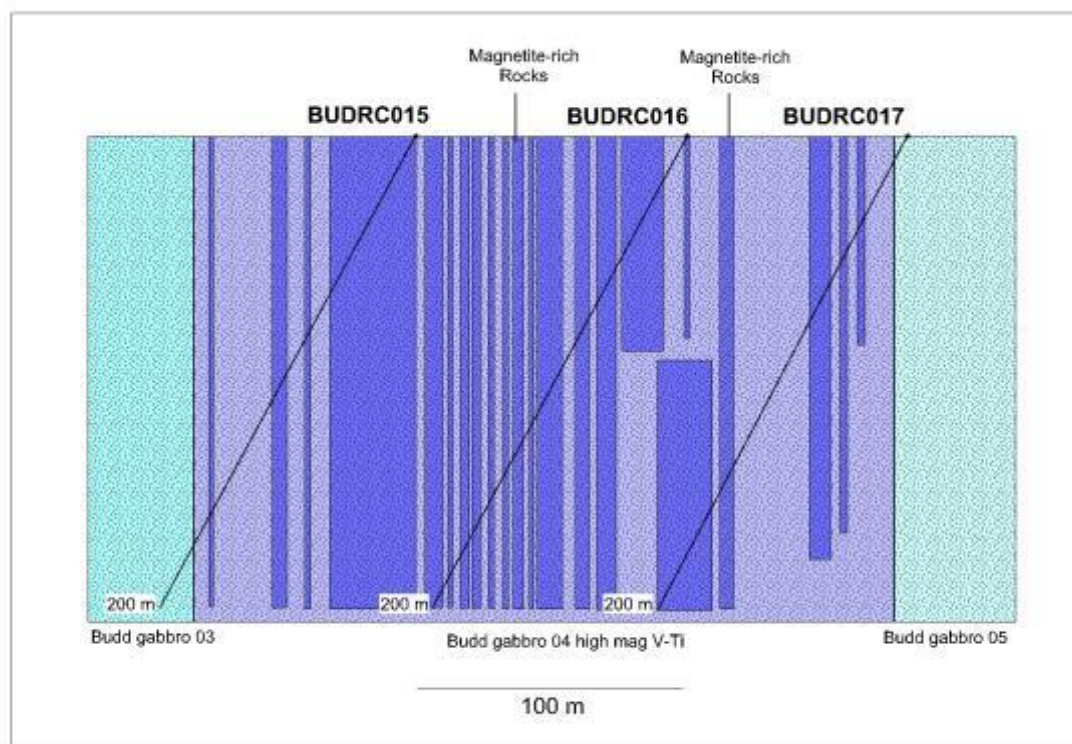


Fig 4 BUDRC015 to BUDRC017 downhole intercepts showing magnetite-rich rocks (defined by magnetic susceptibility greater than 5000 SI units and an abundance of magnetite in the RC chips) overlain on the distribution of Budd gabbros 03 to 05 from Fig 2.

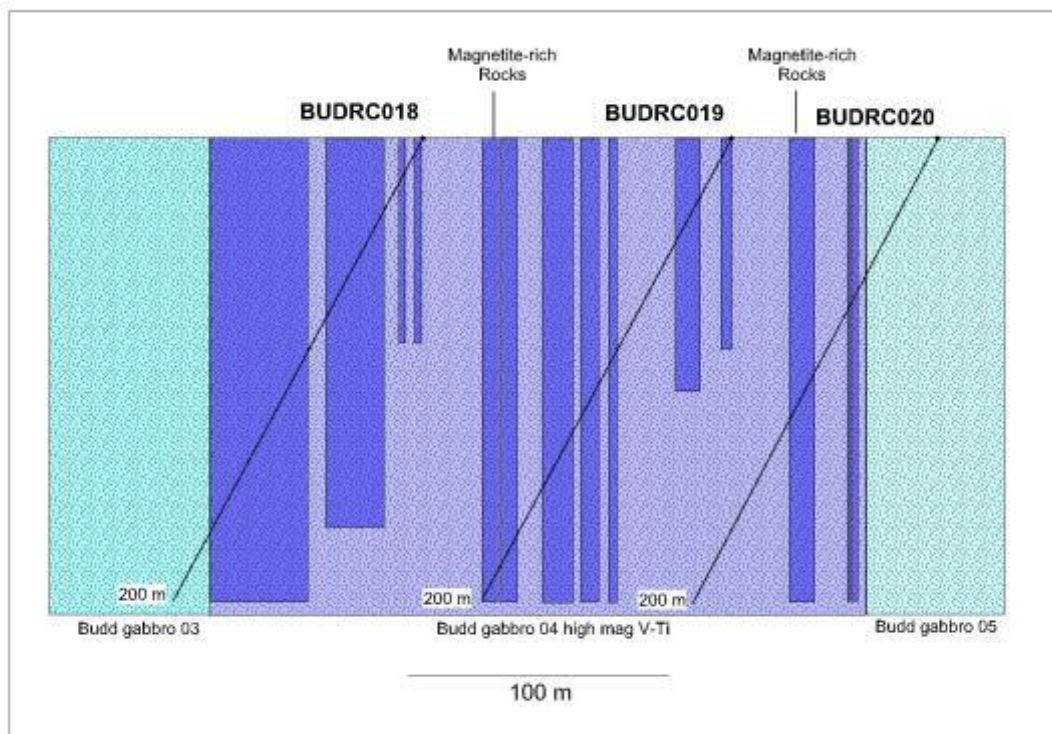


Fig 5 BUDRC018 to BUDRC020 downhole intercepts showing magnetite-rich rocks (defined by magnetic susceptibility greater than 5000 SI units and an abundance of magnetite in the RC chips) overlain on the distribution of Budd gabbros 03 to 05 from Fig 2.

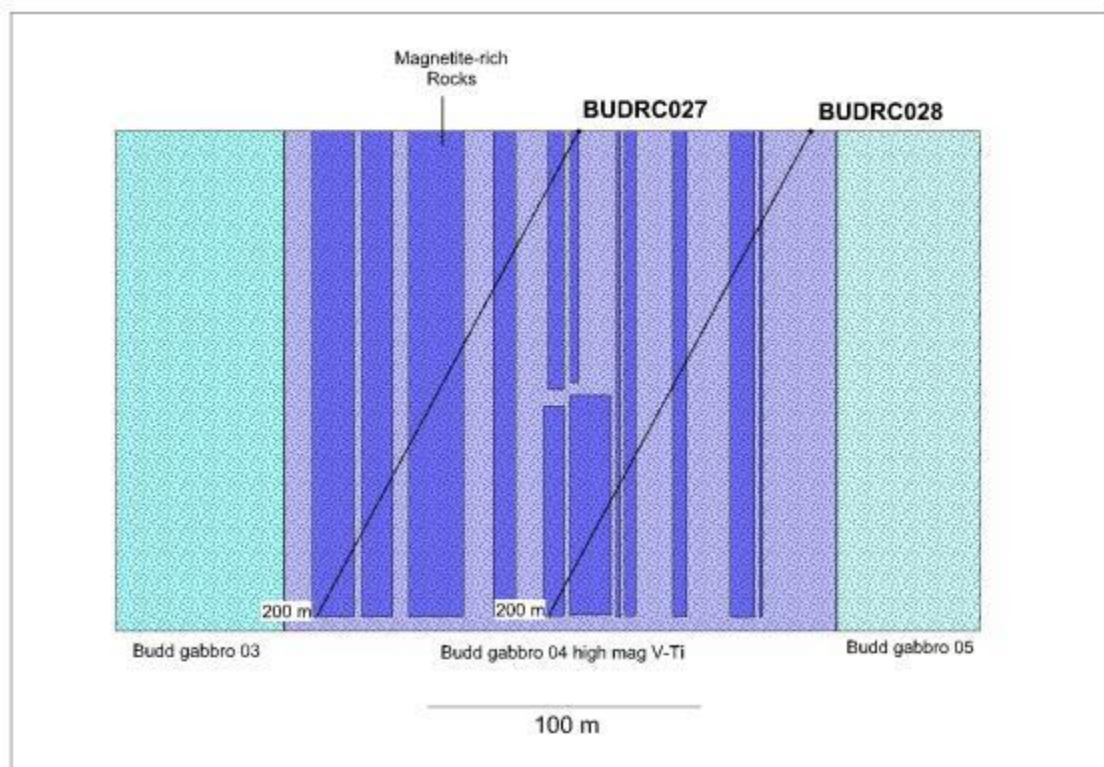


Fig 6 BUDRC027 to BUDRC028 downhole intercepts showing magnetite-rich rocks (defined by magnetic susceptibility greater than 5000 SI units and an abundance of magnetite in the RC chips) overlain on the distribution of Budd gabbros 03 to 05 from Fig 2.

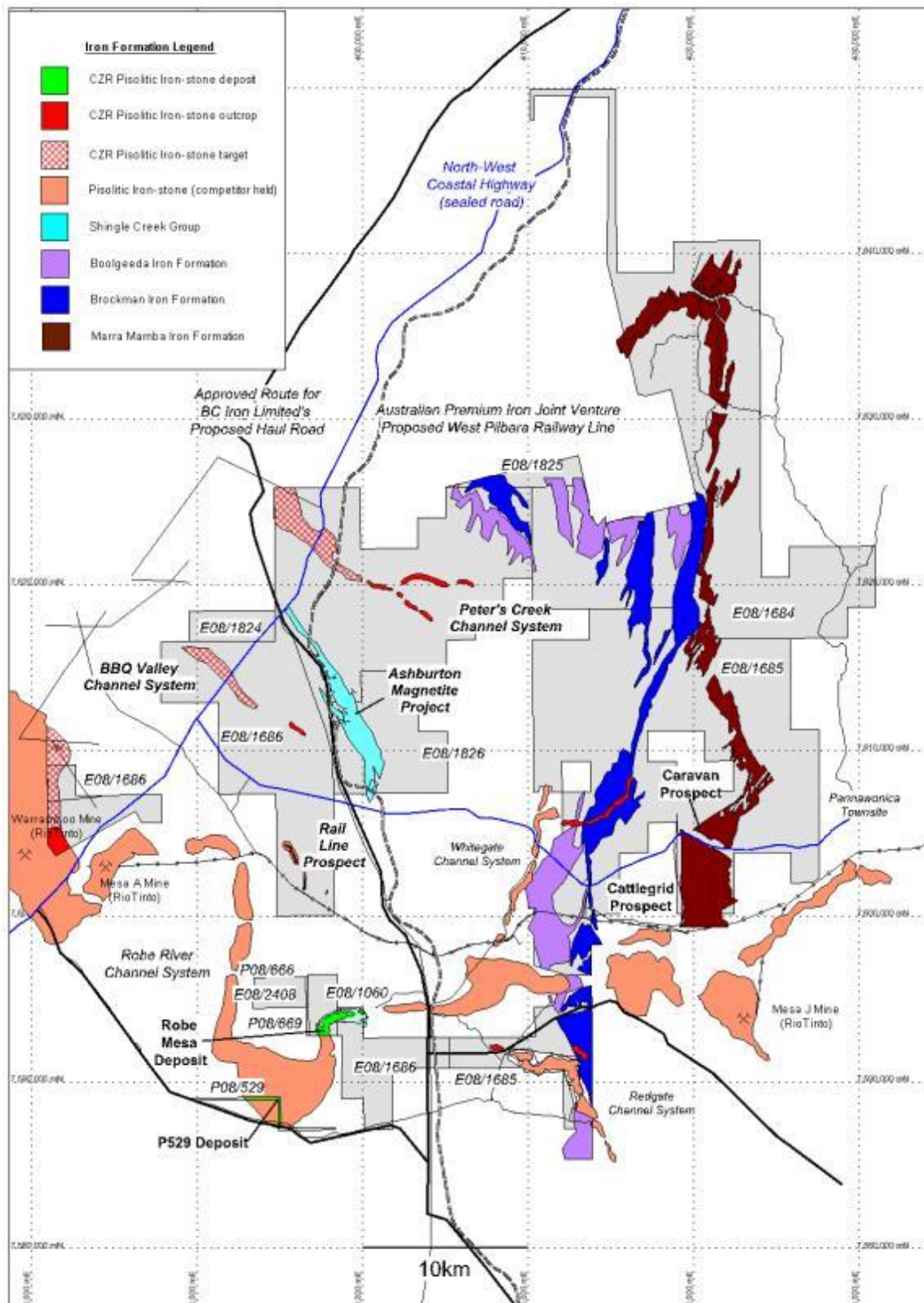


Fig 7. Location of Robe Mesa CID deposit, Ashburton magnetite project and P08/529 CID deposit and tenement coverage from the Yarraloola Project, West Pilbara of Western Australia.



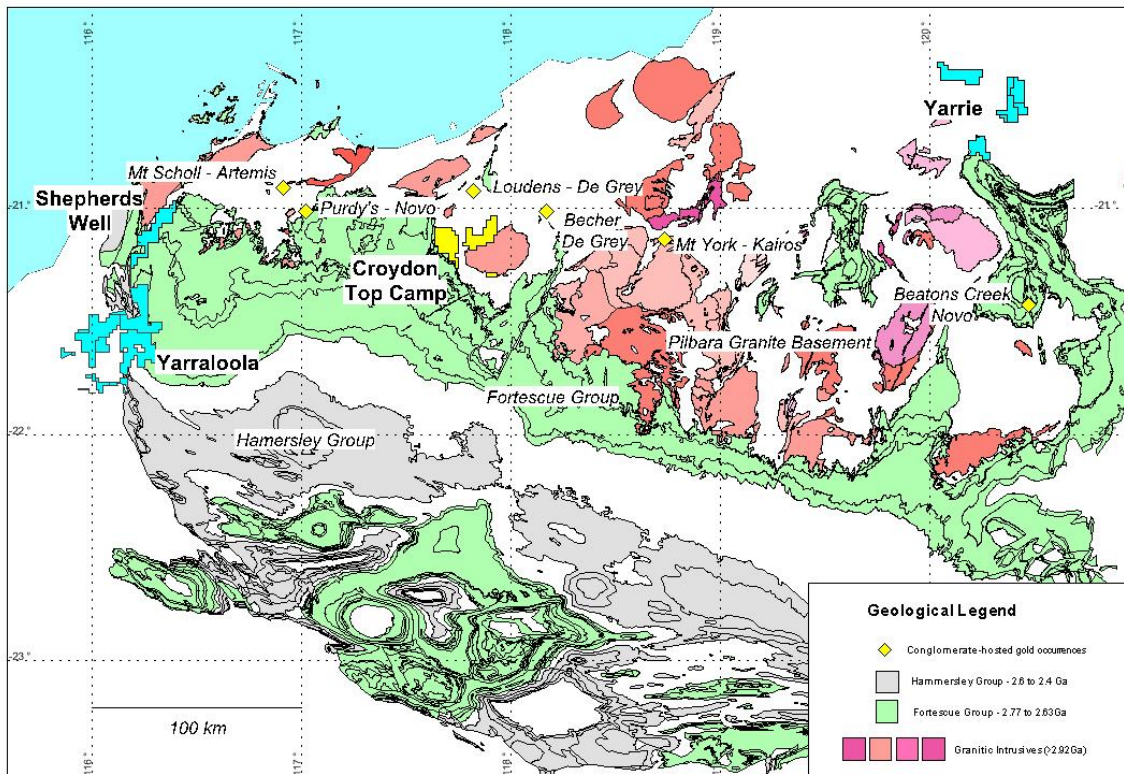


Fig 8. Regional geological setting of the Croydon Top-Camp project (E47/2150 in yellow) with other Coziron projects (Yarraloola, Shepherds Well and Yarrie in blue) showing their spatial relationship to the major geological units in the Pilbara using the Geological Survey of Western Australia 2.5million-scale map and the reported conglomerate-hosted gold occurrences.

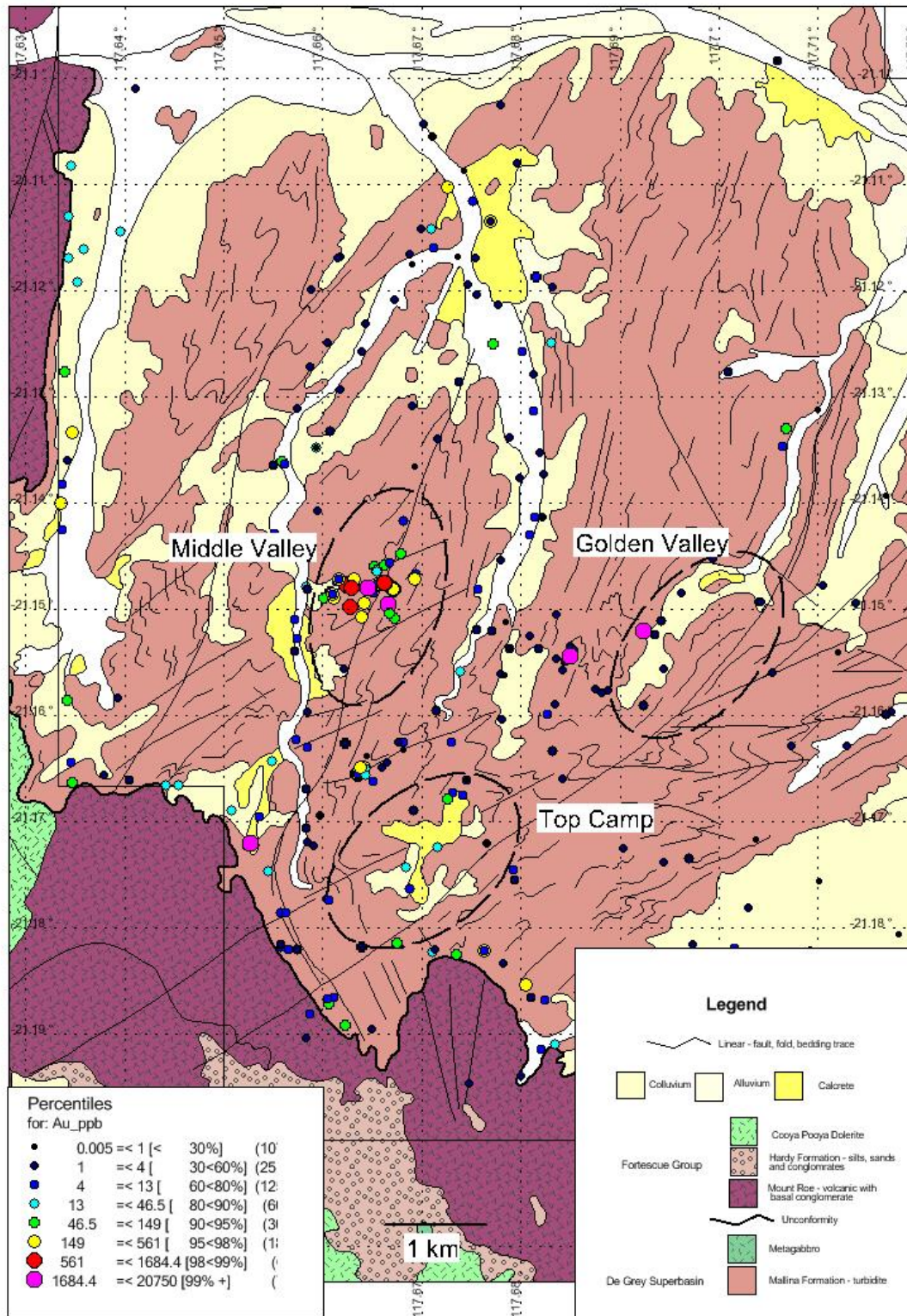


Fig 9. Croydon Top Camp area on the 1:100K Mt Wohler digital geology from the Geological Survey of Western Australia with the location of historical stream samples reporting gold greater than 5ppb showing anomalous samples associated with the base of the Fortescue Group and clusters of samples attributed to named anomalies associated with De Grey Superbasin metasediments.

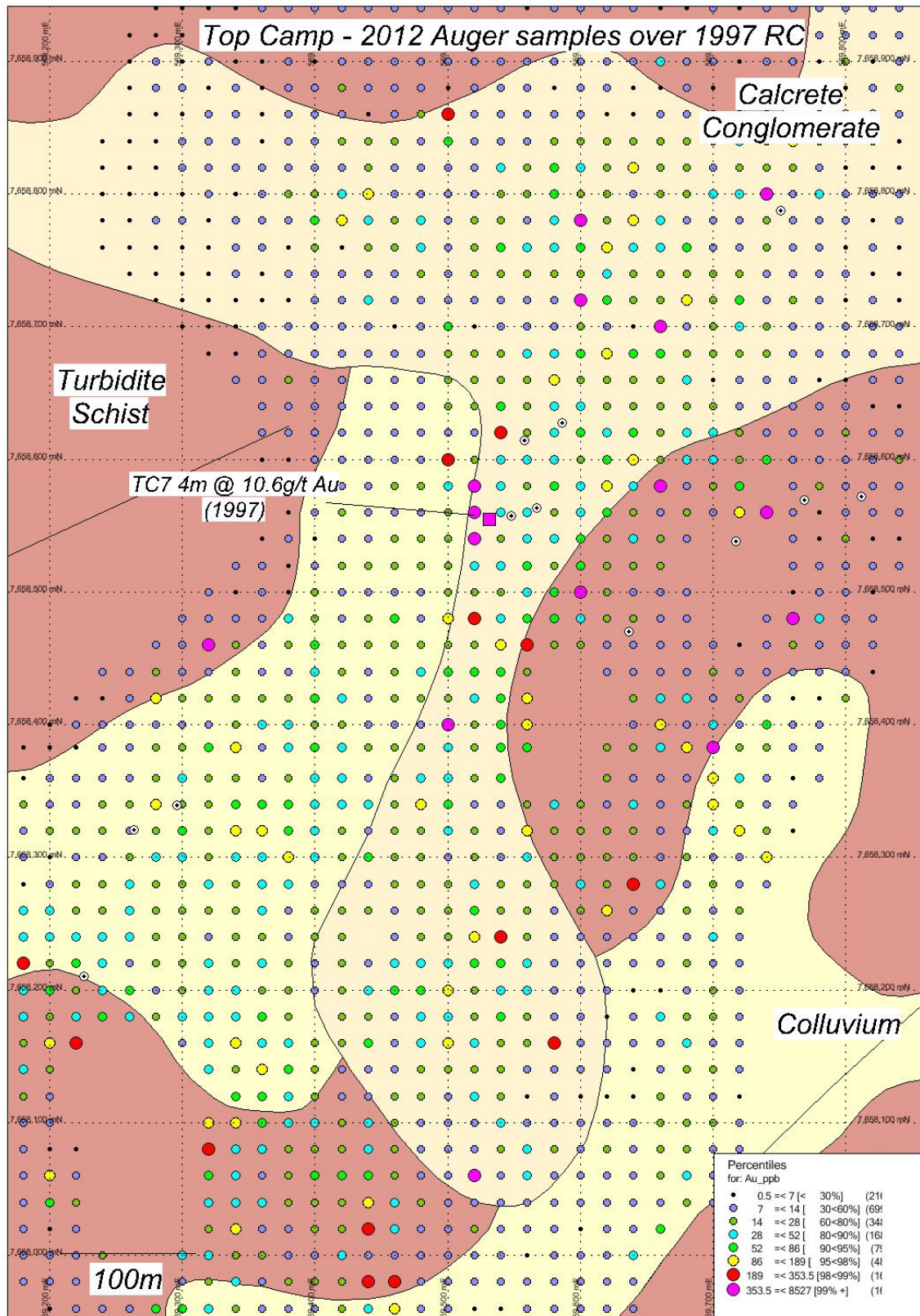


Fig 10. Top Camp prospect from Fig 5 showing a compilation of past work activities with the percentile distribution of gold from gridded auger samples completed in 2012 and the location of the 1997 RC hole that reported an intercept with gold mineralisation.

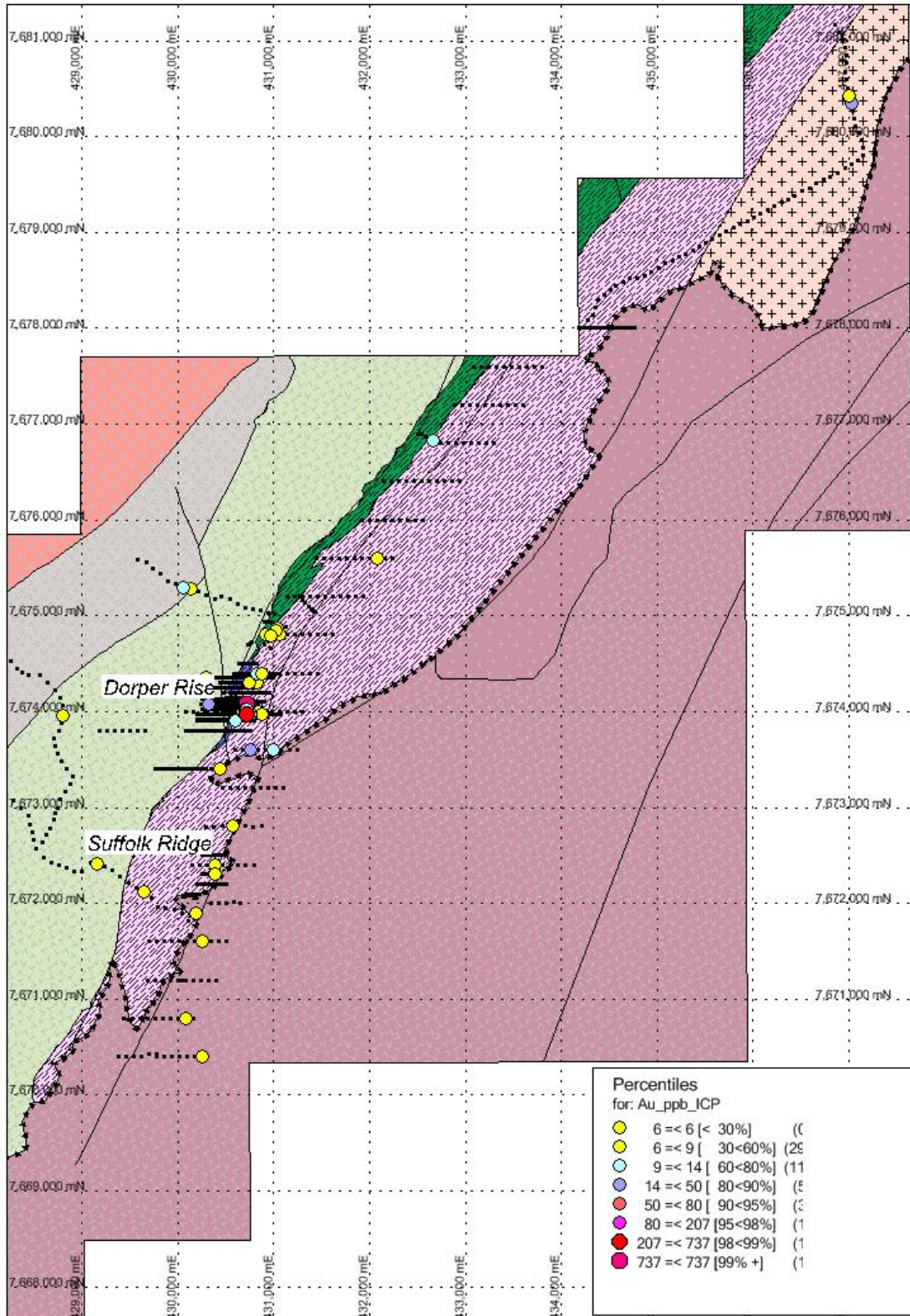


Fig 11. Soil sample locations showing the percentile gold (Au in ppb) distribution adjacent to the Dorper Rise and Suffolk Ridge Prospects that are not associated with high Cr-Ni or Zn and overlay on geological polygons from Geological Survey of Western Australia that have been updated by Coziron using field mapping and publically available Bing satellite imagery.

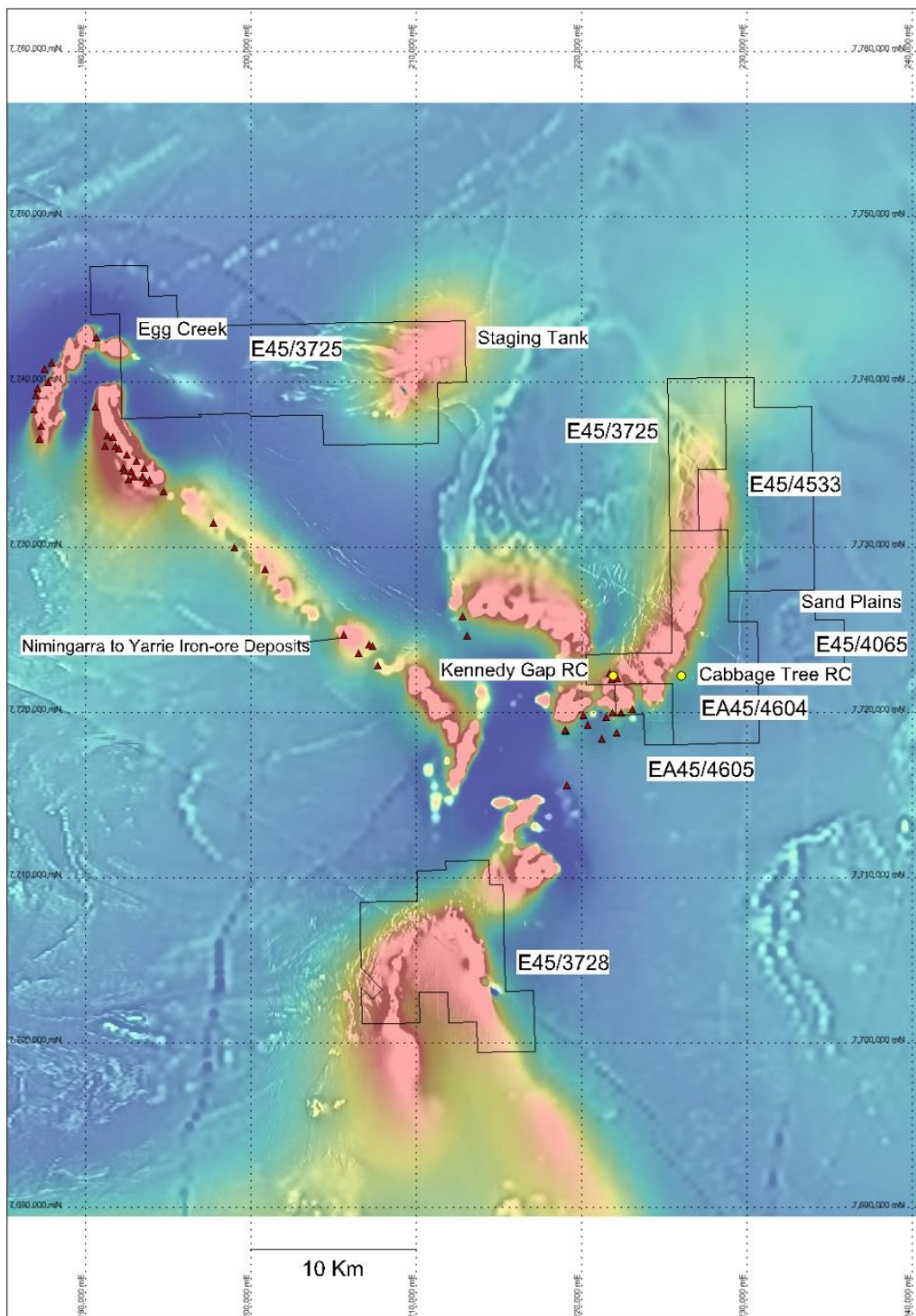
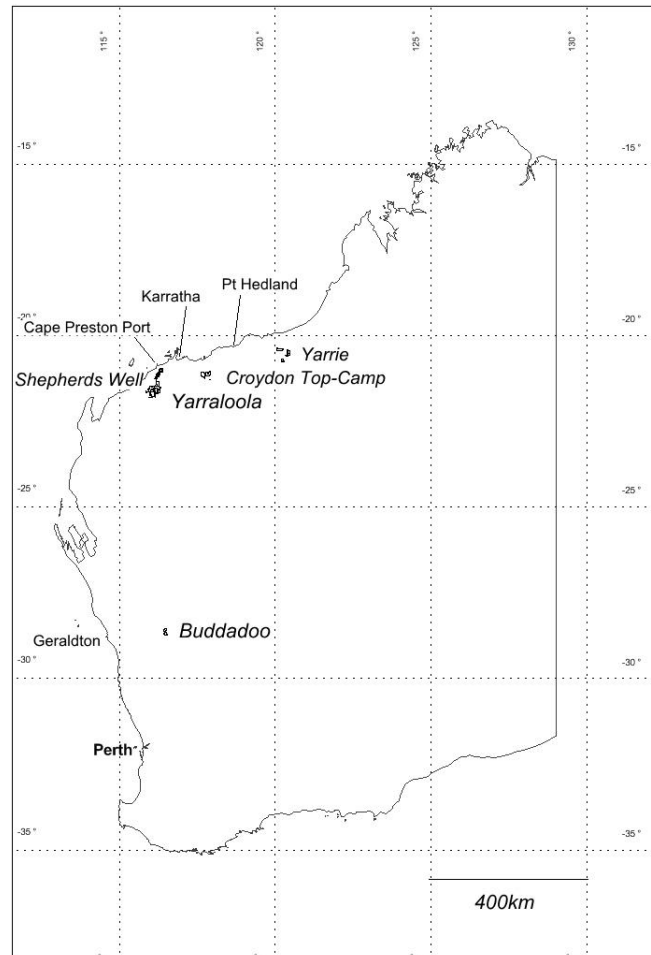


Fig 12. Regional setting of the Yarrarie Project and the Yarrarie-Goldsworthy iron-ore deposits overlain onto the magnetic intensity with the most intense responses attributed to the Nimingarra Iron Formation.

## **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 (Fig 10).



*Fig 13. Location of the Coziron Resources Ltd projects in Western Australia.*

For further information please contact Adam Sierakowski 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