

Coziron Resources Limited

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The Company Announcements Office ASX Limited Via E Lodgement

30 April 2019

QUARTERLY ACTIVITIES REPORT TO

31 March 2019

Buddadoo Project - West Yilgarn

- At -45 microns, Davis Tube Wash (DTW) produces magnetite concentrates from screened Buddadoo RC samples with Fe from 66 to 68%, V₂O₅ from 0.8 to 1.86%, TiO₂ from 1.4 to 5.7%, contaminants SiO₂ and Al₂O₃ at less than 1% and mass yields up to 46%.
- -45 microns is typically an optimal feedstock grain-size for either roast-leach or iron-ore pellets.

Croydon Top Camp Project (CTCP) - North Pilbara

- At Martin Prospect, an EM conductor that is down dip from the copper (11.6%) and gold (2.6g/t) gossan represents a priority drill-target for three RC holes totalling 500m.
- Additional EM conductors within the greenstone sequence on the eastern part of the CTCP represent further priority targets for surface geochemistry and RC drilling.
- New gold targets add to drill-ready zones for structural gold mineralisation within the carbonate-rich rocks at the Croydon Top Camp prospect where a 2000m RC drill program is planned.

Yarraloola Iron Ore - West Pilbara

The Company continues to review the commercialisation strategy for its existing +90Mt indicated and inferred JORC compliant CID resource at its Robe Mesa project as well as the development of the Ashburton magnetite project from which samples produce a high quality (>67% Fe) product.



Project Summaries

Coziron Resources is advancing exploration on five projects, but the focus of activities 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 are presented in the sections below.

Buddadoo Project – Murchison Province

The 192 km² Buddadoo Project (E59/1350) covers part of the Gullewa Greenstone Belt and contains gabbroic rocks with bands of massive and disseminated vanadiferous titanomagnetite and widespread prospectivity for gold and copper mineralisation (Fig 1). The project is located about 200 km east of Geraldton Port and 60 km from a rail siding at Morawa that connects to Geraldton. The main prospects on the tenement are all accessible using a bitumen-road between the towns of Morawa and Yalgoo, then a gravel-surface road for about 10km, and 5 km of station tracks.

During the Quarter, CZR reported results from an initial metallurgical study of selected RC samples from the vanadiferous magnetite in gabbro (CZR:ASX 7th February 2019). This is additional data from 2 of the 28 holes for a total of 2795 m that were drilled across 2 targets in early 2018 (full details by CZR:ASX on 28th February 2018, 21st March 2018 and 5th April 2018). The first target is the high-order magnetic anomaly some 350m wide and 6km long with outcropping bands of coarse grained, massive and disseminated vanadiferous titanomagnetite that has ten holes inclined at -60 to 250, each to a depth of 200 m on four cross-sections. The second target covers two second-order magnetic structures each about 100m wide and 6 km long where titanomagnetite outcrops poorly between bands of mafic and felsic gneiss and these were intersected with eighteen holes, inclined -60 to 070°, each to a depth of 100 m on three cross-sections (Fig 1).

The metallurgical study provides an indication of the effect of particle size on the mass-recovery and composition of the vanadiferous magnetite concentrate (CZR:ASX 7^{th} Feb 2019). BUDRC027 was selected as being representative of both the geology and composition of material from the mid-zone of the Buddadoo Gabbro, while BUDRC013 represents intervals of mineralisation with higher vanadium to titanium ratios in the gneissic rocks to the east of the gabbro (Fig 2). These drill-holes are respectively located stratigraphically above and below intervals from the eastern margin of the Buddadoo Gabbro that were RAB/RC drilled in the 1980's and have historical metallurgical work that reported an overall mass recovery at about 20% and a concentrate with a V_2O_5 content of 1.7%.

The 200 RC samples from BUDRC027 were combined into six bulked samples using 10,000 and 5,000 SI units in the down-hole magnetic susceptibility as cut-offs. Only three samples with susceptibility significantly less than 1,000 Si units were excluded. An additional sample was created from the high grade 52-74m interval from BUDRC013 (Table 1). Each RC composite was then screened into five fractions to determine the mass distribution by particle size. A fraction from each screen size was then subjected to a Davis Tube wash-test (DTW) with the magnetic separation at 3,000 gauss. Coarse fractions (greater than 0.5 mm) were processed using a dry low-intensity magnetic separator (LIMS) at 1000 gauss and all fractions of the head, concentrate and tails were weighed and fully analysed by XRF and Laser-ablation ICP on a fused disk.

The results show that even at the coarsest grain-size, there is an upgrading of the vanadium (V_2O_5) content across all samples and this is significantly greater for samples with lower V_2O_5 content (Table 2).



At -150 microns, which is the maximum preferred particle size for iron-ore pellets, the Fe in the concentrates upgraded across all samples to greater than 62% and the combined SiO_2 and Al_2O_3 is less than 5% in all except the small volumes of the least magnetic samples. The low levels of SiO_2 contamination are also a cost-advantage for vanadium recovery by roast-leach. As the grain-size decreases towards -45 microns, the decrease in TiO_2 content and increasing Fe and V_2O_5 significantly improves the metallurgical characteristics for smelting. In particular, the lower TiO_2 content improves the iron recovery and vanadium content of pig-iron. At -45 microns, magnetite concentrates returned Fe from 66-68%, V_2O_5 from 0.8 to 1.86%, TiO_2 from 1.4 to 5.7%, contaminants SiO_2 and Al_2O_3 at less than 1% and mass yields up to 46%.

Planned Programmes

CZR is planning another drill program on the vanadiferous magnetite at Buddadoo with results contributing to the geological, geochemical and metallurgical database that will be utilised for the independent estimation of a JORC-compliant resource and a scoping study for a mining and processing operation. The results from the metallurgical work will be used to determine whether the optimum business model for Buddadoo is the production of either a vanadiferous titanomagnetite concentrate for shipping (DSO) from the port of Geraldton, or justifies the development of an onsite downstream processing facility. The company has also completed an extensive review of the available geochemical and geophysical results from the broader Buddadoo project and has generating first-pass drill targets for gold mineralisation.



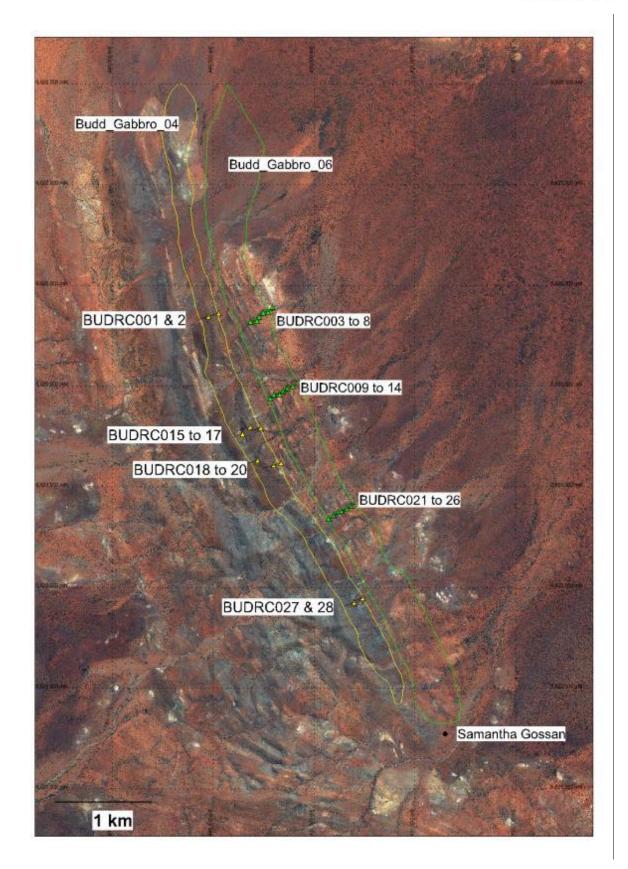


Fig 1 Location of the completed 2018 RC drill-holes with yellow triangles intersecting bands of massive and disseminated vanadiferous titanomagnetite in gabbro (Budd_Gabbro_04) and green triangles in the area of Budd_Gabbro_06 reporting vanadiferous magnetite in a mafic and felsic gneiss sequence overlain on high resolution Quickbird satellite imagery.



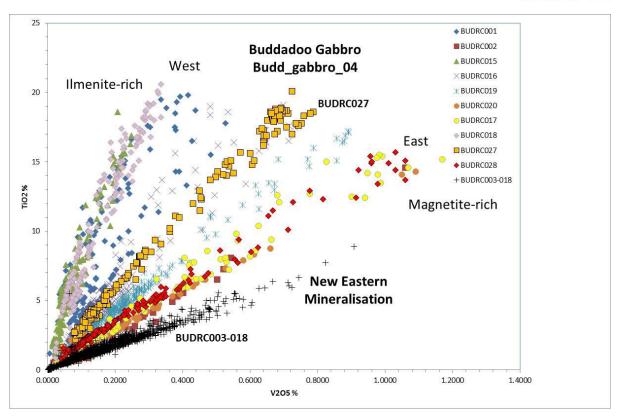


Fig 2. The vanadium versus titanium contents from the 2018 RC samples plotted by drill-hole highlighting the spatial control on the vanadium to titanium ratios.

Table 1. Number of samples in each of the test-work composites.

Hole No	Composite No	Mag-suss Range (SI units)	No of Samples	% of hole
BUDRC027	Comp 1	>10,000	54	27
	Comp 2	>10,000	23	11.5
	Comp 3	5000-10000	15	7.5
	Comp 4	5000-10000	9	4.5
	Comp 5	1000-5000	77	38
	Comp 6	1000-5000	19	9.5
		<5000	3	1.5
BUDRC013	Comp 7	>2000	22	



Table 2. Mass yields and major oxide XRF compositions of the concentrates produced by Davis Tube washing (DTW) of the screened composite RC samples with significant results highlighted at -150 and -45 microns.

Comp No	Fraction	Mass Yield	Fe	V ₂ O ₅	TiO ₂	SiO ₂	Al ₂ O ₃	V upgrade
1	+500	97	51.0	0.73	18.1	3.36	2.65	0.93
>10,000SI	+250	85	56.9	0.84	16.3	1.76	1.66	1.0
SI	+150	75	60.1	0.91	14.4	.74	1.06	1.2
	+75	58	62.5	0.98	11.5	.39	0.77	1.4
	+45	51	64.8	1.05	8.63	0.21	0.55	1.6
	-45	46	67.0	1.11	5.74	0.06	0.46	1.8
2	+500	75	45.6	0.66	16.9	9.89	5.92	1.3
>10,000	+250	59	55.7	0.87	15.5	3.04	2.19	1.5
SI	+150	48	60.2	1.00	12.3	1.48	1.36	1.7
	+75	37	64.0	1.11	8.65	0.73	0.84	2.1
	+45	29	65.9	1.16	6.13	.43	0.64	2.4
	-45	24	67.7	1.20	4.03	.26	0.52	2.9
3	+250	19	50.6	0.89	13.2	8.38	4.63	3.1
<10,000	+150	19	59.5	1.18	8.96	3.61	2.27	3.3
>5,000 SI	+75	16	64.0	1.29	5.89	1.91	1.33	3.6
	+45	12	65.8	1.30	4.02	1.09	0.86	4.0
	-45	8	67.2	1.29	2.29	0.57	0.58	4.6
4	+250	29	53.7	0.87	14.1	5.68	3.18	2.7
<10,000	+150	27	60.0	1.04	10.7	2.43	1.71	2.8
>5,000 SI	+75	20	63.4	1.12	7.41	1.38	1.10	3.3
	+45	16	65.3	1.16	5.22	0.81	0.73	3.8
	-45	10	66.6	1.14	3.31	0.51	0.56	4.4
5	+250	21	55.5	0.82	14.1	4.01	2.36	3.3
>5000 SI	+150	17	59.7	0.95	11.3	2.17	1.53	3.7
	+75	11	62.9	1.04	8.05	1.37	1.07	4.4
	+45	8	65.4	1.09	6.14	0.98	0.82	5.0
	-45	7	67.0	1.09	3.98	0.69	0.65	5.5
6	+250	4.3	56.1	0.73	4.82	10.11	4.10	7.2
	+150	2.7	62.2	0.84	3.07	5.04	2.27	7.7
>5000 SI	+75	1.6	64.0	0.80	2.37	4.33	1.86	7.3
	+45	0.8	59.5	0.75	1.59	8.58	2.53	6.7
	-45	0.3	66.2	0.80	1.48	0.97	0.58	7.4
7	+500	49	29.9	0.66	5.95	26.49	12.9	1.7
>2000 SI	+250	30	59.3	1.54	5.97	5.29	2.70	2.8
	+150	29	64.2	1.70	4.55	2.31	1.32	2.7
	+75	26	66.4	1.77	3.58	1.36	0.84	2.9
	+45	21	67.3	1.80	3.01	0.97	0.62	3.3
	-45	14	68.4	1.86	2.33	0.51	0.39	4.3



Croydon Top-Camp Project (CTTP) - Pilbara

CZR is acquiring from the Creasy Group a 70% interest in the 317 km² Croydon Top-Camp project (CTCP, E45/2150) located about 100km south-east of Karratha in the Pilbara. The tenement is subdivided into three discrete 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. These rocks are then overlain in parts by a significantly younger suite of conglomeratic sediments and volcanics of the Fortescue Group and extensive sheets of sand and colluvium.

During the quarter, the company selected drill-targets using historical results, interpretations of the recently acquired airborne magnetic and radiometric survey, the re-assay of 187 auger-pulps on six cross-sections and a field visit to CTCP to acquire additional samples and assays (CZR:ASX 10 October 2018 and 6 December 2018; 1st April 2019). Approximately 2000 m of RC is allocated to generate cross-sections with intercepts across the Top Camp gold anomaly (Fig 3). In addition, 500m of RC has been allocated to the Martin Prospect Anomaly A, where greenstone-belt geology down-dip from the copper and gold-rich gossan contains conductive targets generated by moving loop electromagnetic and fixed loop transient electro-magnetic surveys completed in 2016 (Fig 4).

Follow-up Programmes

In preparation for a proposed 500m RC drilling programme at the Martin Prospect Anomaly A, data from the 2016 EM programme will be reprocessed to determine if any additional conductive anomalies are present in the greenstone sequence. Soil and rock-chip geochemistry will then determine if there is additional support for mineralisation and any conductive targets with coincident geochemistry within the greenstone belt will be prioritized for drilling.



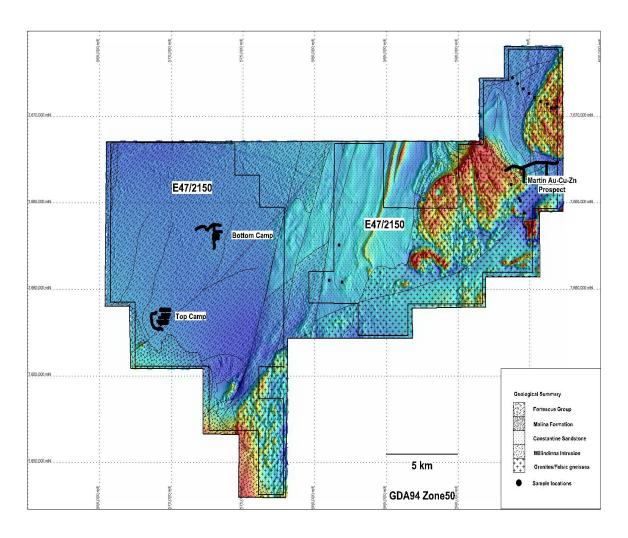


Fig 3. Simplified geology of the Croydon Top Camp Project overlain onto the recently acquired image of total magnetic intensity.



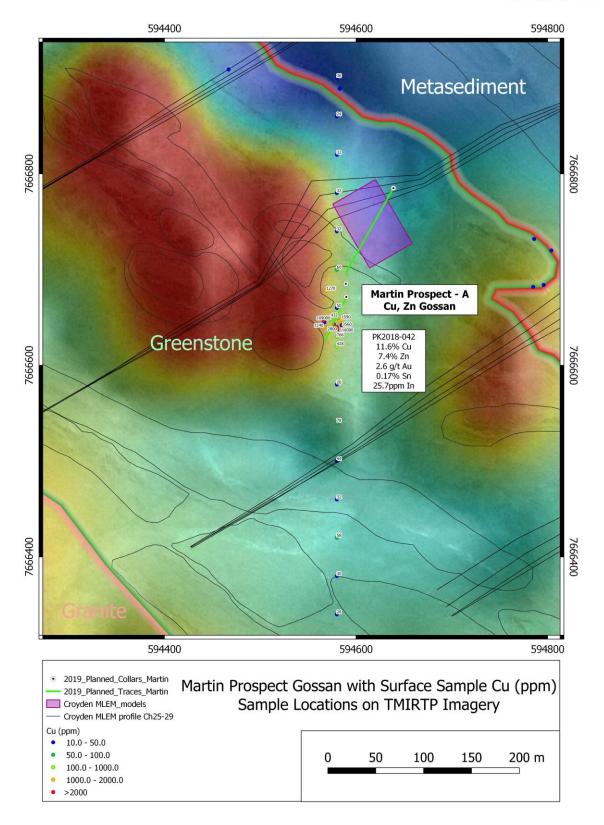


Fig 4. Outlines the geology associated with the gossan at Martin Prospect Anomaly A overlain on the high resolution magnetics with traces of the EM lines, responses, conductive target and proposed drill traces (two inclined and one vertical).



Yarraloola Project - West Pilbara

Yarraloola is CZR's most advanced iron-ore project, located about 100km southwest of Karratha and covers an area of 896km² (Fig 5) The tenements contain **+90Mt @ 53% Fe (calcining to Fe @ 60%) of indicated and inferred JORC compliant CID** (Pisolitic ironstone) in the Robe Mesa, Robe East Extension and P529 deposits. The resource includes a higher grade surface interval on the Robe Mesa of 24.9Mt @ 56% Fe (calcining to 62.7% CZR:ASX 7th December 2015, 8th February 2016, 26th April 2017, 9th May 2017).

Yarraloola also host the largest target the Company has drilled for iron-ore mineralisation in the Ashburton magnetite project. This volcanic-hosted magnetite mineralisation is a new style for the West Pilbara and is now considered to be in a similar geological setting to the FMG Iron Bridge Project. Davis tube results from RC and diamond-core from the Ashburton have reported mass recoveries up to 42% and the concentrates with a P80 of 22 microns report Fe greater than 67% and SiO₂ less than 5% (CZR:ASX 28th April 2016, 3rd August 2016, 1st June 2017).

No field activities have been undertaken during the Quarter, however the company has continued to strategise the development of the Robe Mesa project, including discussions with potential third party partners, particularly against the backdrop of an improved pricing environment for iron ore.

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 25-50km 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 419km², 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.

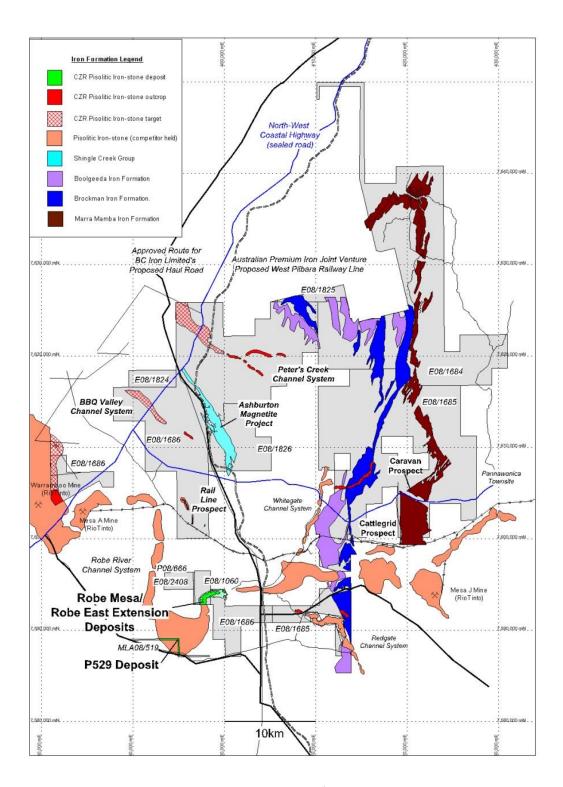


Fig 5. Yarraloola tenements showing the location of Robe Mesa, Robe East Extension and P529 pisolitic ironstone deposits, the Ashburton magnetite project and the traces of the major ironformations in the West Pilbara of Western Australia.



ABOUT COZIRON RESOURCES LIMITED

Coziron Resources Limited has exploration focussed on the Yarraloola (853km²), Shepherd Well (193km²), Croydon Top-Camp (317 km²) and Yarrie (357.5km²) Projects in the Pilbara region and Buddadoo (210km²) 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.



<u>Coziron Resources Ltd – Changes to the Tenement Schedule in the past Quarter</u>

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	M08/519	85%	Application	
Yarraloola	West Pilbara, WA	P08/666	100%	No Change	
Yarraloola	West Pilbara, WA	P08/669	NIL	Relinquished	
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	
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Buddadoo	Mid-west, WA	E59/1350	85%	No Change	
Buddadoo	Mid-west, WA	E59/2349	85%	Application	