



ASX: CYL

# Quarterly Activities Report

Quarter ended 31 December 2018

## SUMMARY

- **Four Eagles Project**

Compilation of first half 2018 drilling results provided first evidence of multiple, vertically stacked zones of mineralisation at Hayanmi gold deposit, including:

- 1.0 metre @ 18.1g/t Au from 243 metres in FEDD019

RC/blade drilling resumed on Hayanmi and Boyd's Dam gold prospects

Initial results of 2018-19 RC/blade drilling program yielded additional gold intersections from both Boyd's Dam and Hayanmi gold deposits, including:

- 7.0 metres @ 8.44g/t Au and 1.0 metre @ 32.6g/t Au (FERC233 – Boyd's Dam)
- 9.0 metres @ 2.6g/t Au (FERC229 Hayanmi)
- 6.0 metres @ 3.7g/t Au (FERC230 – Boyd's Dam)
- 5.0 metres @ 3.4g/t Au (FERC232 – Boyd's Dam)

- **Tandarra Project**

Retention Licence RL006660 was granted by the Victorian Department of Economic Development Jobs, Transport and Resources (DEDJTR)

Catalyst and joint venture partner Navarre Minerals Limited completed the Joint Venture Agreement covering the continuation of Tandarra Project operations

- Bulk cyanide leach assays continue to confirm initial gold assays from both Four Eagles and Tandarra projects
- Air core drilling resumed over gravity targets in the Macorna project

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## INTRODUCTION AND OVERVIEW

In the December 2018 Quarter Catalyst Metals Limited ("Catalyst" or "the Company") has essentially completed the compilation and interpretation of the results of exploration conducted through the first half of the calendar year, designed follow-up programs and commenced drilling for the 2018-19 field season.

Catalyst has significant interests in two retention licences (RL's) and twelve (12) exploration licences (EL's) and applications over the Whitelaw Belt - an area of approximately 75 kilometres long, and 5-10 kilometres wide commencing immediately north of the outcropping Bendigo Goldfield and parts of parallel structures to the east and west (Figure 1).

The Whitelaw Belt is the structural zone thought to control the emplacement of the Bendigo gold deposits, and to extend in generally northerly direction in favourable Ordovician rocks beneath the covering veneer of younger Murray Basin sediments. In particular, the Four Eagles and Tandarra gold projects (respectively about 55 kilometres and 40 kilometres north-northwest of Bendigo) contain gold discoveries similar in style to the historic Bendigo gold deposits (Figure 1). In addition to these gold discoveries, this belt and adjacent, similar structures remain largely untested or at best sparsely tested and highly prospective for the discovery of new gold deposits of Bendigo and Fosterville styles.

**The highlights of the quarter's activity are found:**

- in the Four Eagles Project; in the emerging characterisation of multiple mineralised zones at Boyd's Dam and Hayanmi gold deposits and encouraging initial intersections from the first drilling of the 2018-19 field season.
- in the Tandarra Project; the recognition of multiple mineralised structures at the Tomorrow gold deposit, the grant of long term title in the form of a Retention Licence over the project area and the successful completion of Joint Venture arrangements covering the continuation of project activities after Catalyst's completion of its earn-in obligations to secure 51% interest in the venture.

**FOUR EAGLES JOINT VENTURE (RL006422, EL5508, EL5295, EL(App)006887, EL(App)006859) (CATALYST 50%)**

Catalyst holds a 50% interest in the Four Eagles Gold Project with the other 50% held by Gold Exploration Victoria Pty Ltd (GEV) (a wholly-owned subsidiary of Hancock Prospecting Pty Ltd). Current exploration is jointly funded by Catalyst and GEV.

Retention Licence (RL) 006422 flanked by the remaining EL's comprises the Four Eagles Gold Project and covers an envelope of gold mineralisation about 6 kilometres long and 2.5 kilometres wide. Three prospects have produced high grade gold mineralisation (Hayanmi, Boyd's Dam and Pickles (formerly "Discovery") while another to the south-east (Cunneens (formerly "Eagle 1")) has revealed a number of gold occurrences over a 3-kilometre strike length.

**Boyd's Dam and Hayanmi RC Drilling**

Compilation of the results of drilling conducted during 2018 has enabled a clearer understanding to be reached of the extent and continuity of mineralisation comprising both the Boyd's Dam and Hayanmi gold deposits and their controlling geological features. In each case additional RC drilling is required to improve definition of mineralised zones to enable modelling and the estimation of resources.

The 2019 drilling program commenced in November 2018 with RC drilling at Hayanmi (2 holes) and Boyd's Dam (13 holes), totalling 1,928 metres. Four of the seven holes for which results have been received have produced significant intersections (listed below and shown on Figures 3 and 5).

- **7.0 metres @ 8.44g/t Au from 44 metres down hole in FERC233 (Boyd's Dam)**
- **1.0 metre @ 32.6g/t Au from 96 metres in FERC233 (Boyd's Dam)**
- **6.0 metres @ 3.68g/t Au from 45 metres incl. 1.0 metre @ 16.7g/t Au in FERC 230 (Boyd's Dam)**
- **5.0 metres @ 3.4g/t Au from 97 metres incl. 1.0 metre @ 12.5g/t Au in FERC232 (Boyd's Dam)**
- **9.0 metres @ 2.6g/t Au from 85 metres including 1.0 metre @ 16.1g/t Au in FERC229 (Hayanmi)**

## Hayanmi Diamond Drilling

Seven diamond drill holes were completed at Hayanmi on four traverses. The holes were designed to test targets interpreted from shallower RC drilling as prospective for repeat gold bearing structures below the high-grade zones encountered in 2017 and 2018 RC drilling programmes and was funded jointly by the Victorian Government under the 'TARGET' co-funding scheme. The geological detail available from drill core clarified actual structural relationships and discovered two new deeper zones of mineralisation with strong quartz veining and alteration, arsenopyrite and traces of visible gold.

This zone of mineralisation appears to have a gentle plunge to the south as shown on the longitudinal projection in Figure 3 and can be observed in holes FEDD016, FEDD017 and FEDD019. The associated arsenic values of up to 5,000ppm provide further support of the presence of a mineralised system. All holes had weak gold values with a best intersection of **1.0 metre @ 18.1g/t Au in FEDD019**. This zone will require further testing adjacent to the now-defined anticlinal axis where the highest-grade gold is usually found to occur.

Mr Bruce Kay, Catalyst's Technical Director, stated, "Results of diamond drilling at Hayanmi have shown evidence of stacked zones of mineralisation beneath the shallow gold zones similar to those previously discussed at Boyd's Dam. Further diamond drilling will be required at both of these prospects to confirm the structure and presence of high-grade gold shoots".

Full location data on the above drilling were provided in Appendix 1 in each of the ASX announcements dated 30 October 2018 and 29 January 2019 together with Summaries of Sampling Techniques and Reporting of Exploration Results according to the JORC Code 2012 Edition. Maximum gold values in each hole were also tabulated in the same reports.

## TANDARRA GOLD PROJECT (RL006660) (CATALYST 51%)

Catalyst (through its 100%-owned subsidiary Kite Operations Pty Ltd (Kite)) has earned a 51% interest in the Tandarra Gold Project by the expenditure of \$3.0 million on exploration (completed in June 2018) whilst Navarre Minerals Limited retains a 49% interest. Under the terms of the joint venture agreement, future exploration will continue to be managed by Catalyst and will be jointly funded by Catalyst and Navarre.

A Retention Licence (RL006660) for the Tandarra Gold Project was granted and registered by the Victorian Department of Economic Development, Jobs, Transport and Resources (DEDJTR) during the December 2018 Quarter. The Retention Licence has a term of 10 years and provides security of tenure to conduct advanced drilling and assessment programmes aimed at progressing the project to resource estimation, scoping studies and possible feasibility and mining. The Retention Licence replaces Exploration Licence EL4897.

The Tandarra Gold Project is situated along the Whitelaw Fault Corridor which is considered to be a major structural control of gold mineralisation north of Bendigo. It is located about 40 kilometres north-northwest of Bendigo, west of the settlement of Dingee (Figure 1).

Due to the details of the Joint Venture Agreement being finalised during the December 2018 Quarter, activity on the Tandarra Project was limited to completing the compilation and interpretation of 2018 first half drill results to enable the design and budgeting of the 2019 program. With the assay results on the final hole (DDT018) still outstanding, the key outcome of this work is recognition in deeper diamond drilling below the Tomorrow gold-mineralised zone of multiple west-dipping shear zones with associated quartz veining and alteration, arsenopyrite mineralisation and some gold values.

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The best of these is recorded in DDT015: **31.0 metres @ 1.16g/t Au from 261 metres down hole**. The structural pattern and intersection evidences potential for vertically stacked multiple gold-mineralised lodes within the Tomorrow Zone (Figures 6 and 7).

Full location data on the above drilling were provided in Appendix 1 in the ASX announcement dated 27 April 2018, together with Summaries of Sampling Techniques and Reporting of Exploration Results according to the JORC Code 2012 Edition. Maximum gold values in each hole were also tabulated in the same report.

### **BULK LEACH ASSAY PROGRAM**

Bulk cyanide leach assays are conducted on larger samples (~2 kg) as checks on all RC and DD samples returning anomalous values in initial 25 gm aqua regia acid leach analyses. These have been received during the quarter for all remaining RC and DD samples from both Four Eagles and Tandarra projects and in both projects have continued to provide positive correlations with initial assay values. This result provides continuing reassurance that results produced by drilling are not subject of severe nugget effects. This is important in grade estimation for any resource analysis.

### **SEBASTIAN PROJECT (EL5533 CATALYST 100%)**

The Sebastian Project is located at the southern end of Catalyst's Whitelaw Belt tenement block (Figure 1).

New corridors of potential gold mineralisation previously identified remain to be followed up by further air core (AC) drilling.

### **MACORNA BORE PROJECT (EL5521 CATALYST 100%)**

The Macorna Bore Project is located at the northern end of Catalyst's Whitelaw Belt tenement block (Figure 1).

AC drilling commenced to test gravity targets identified during 2018. 31 holes (total 3,183 metres) had been completed at quarter end. This program is being funded jointly by the Victorian Government under its TARGET co-funding scheme.

### **REGIONAL EXPLORATION (EL006507 AND EL006670 CATALYST 100%)**

There were no material developments during the December 2018 Quarter on Catalyst's EL006507 (Drummartin) or EL006670 (Boort), situated to the east and to the west respectively of the Whitelaw Belt (Figure 1)

### **PROGRAM FOR MARCH 2019 QUARTER**

AC and reverse circulation (RC) drilling programs commenced during the December 2018 Quarter will continue throughout the March 2019 Quarter, along with a diamond drill (DD) program commencing early in January 2019. RC and DD programs will focus on the more advanced gold deposits and prospects while AC drill programs will be used to continue exploratory work, as detailed below.

#### ***Four Eagles Project***

RC drilling programs at Boyd's Dam and Hayanmi are mainly targeting particular gaps in interpretation of the continuity of gold mineralisation, in support of anticipated modelling of resources.

Diamond drilling commenced in early January 2019 to test the Pickles gold zone for the first time since 2012. The Pickles Zone has delivered some strong gold intersections but is more difficult to test by RC or AC drilling because the Murray Basin cover is approximately 100 metres thick.

Figure 8 shows the interpreted gold structures at Pickles and the locations of the four planned diamond drill holes. The proposed programme will follow up some of the previous intersections recorded:

- **6.0 metres @ 82.7g/t Au from 123 metres in FE328**
- **3.0 metres @ 9.71g/t Au from 120 metres in FE380**
- **3.0 metres @ 59g/t Au from 102 metres in FE663**
- **3.0 metres @ 9.7g/t Au from 139 metres in FE811**
- **0.7 metres @ 8.4g/t Au from 167.7 metres and 0.75 metres @ 15.3g/t Au from 170.4 metres in FEDD007**
- **3.7 metres @ 4.7g/t Au from 170.3 metres in FEDD001**

The objective of the limited programme is to gain initial structural information on the main anticlines that appear to control the three trends of gold mineralisation at the Pickles Zone.

Subsequent diamond drilling programs will continue to test the potential of vertically stacked multiple gold deposits in the structural zones within the Boyd's Dam and Hayanmi corridors. A small program at Boyd's Dam will also provide initial testing of the geotechnical and hydrogeological characteristics of the covering Murray Basin sediments

#### ***Tandarra Project***

An extensive program of RC drilling is planned for the March 2019 Quarter, targeting particular gaps in interpretation of the continuity of gold mineralisation, in support of anticipated modelling of resources and northerly and southerly extensions of the main Tomorrow gold mineralisation.

Diamond drilling to test additional targets for vertically stacked gold-mineralised horizons below shallow mineralisation is scheduled to commence late in the March 2019 Quarter

Exploratory AC drill programs have been designed to extend the Macnaughton mineralised zone to the west of Tomorrow (Figure 6) and to follow up gold occurrences encountered in earlier (2017, 2018) reconnaissance testing of geophysical targets throughout RL006660. These programs are expected to commence during the March 2019 Quarter.

#### ***Drummartin Project EL006507***

Preparations will be made for proposed June 2019 Quarter AC drilling of structural targets generated from regional gravity data interpretation.

#### ***Boort Project EL006670***

Preparations will be made for proposed June 2019 Quarter AC drilling of structural targets generated from regional gravity data interpretation.

#### ***Golden Camel Project EL5449, EL5490***

Preparations will be made for proposed June 2019 Quarter AC drilling of structural targets and following up mineralisation identified in the 2018 drill program.

## CORPORATE

The annual general meeting of the Company was held on 28 November 2018 with a new Constitution being adopted by shareholders.

### Enquiries to:

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### *Corporate summary (at 31 December 2018)*

ASX trading code:	CYL
Quoted shares:	70,212,444
Unquoted options:	1,000,000
Cash balance at end of quarter:	\$4.1 million
Postal address:	PO Box 778 Claremont, Western Australia 6910
Telephone:	(+61 8) 6263 4423
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E-mail:	admin@catalystmetals.com.au
Web-site:	www.catalystmetals.com.au

### *Tenement directory*

Project	Tenement number	Beneficial interest
<b>Victoria</b>		
Four Eagles	RL006422	50%
	EL5295	50%
	EL006887	50% (application)
	EL006859	50% (application)
	EL006894	100% (application)
Tandarra	RL006660	51%
Pyramid	EL5508	50%
Raydarra East	EL5509	100%
Sebastian	EL5533	100%
Raydarra	EL5266	51% (earning in via farm-in agreement)
Macorna Bore	EL5521	100%
Drummartin	EL006507	100%
Boort	EL006670	100%
Golden Camel	EL5490 and EL5449	50.1% (earning in via farm-in agreement)

Retention Licence RL006660 was granted during the quarter to replace EL4897. Application was made during the quarter for three new exploration licences, EL006887, EL006859 and EL006894.

No other interests in mining tenements or farm-in or farm-out agreements were acquired or disposed of during the quarter.

### **JORC Reporting of Historic Navarre Exploration Results**

*Although Catalyst was not involved in previous exploration at the Tandarra Gold Project, it has elected to update the information to comply with the JORC 2012 Code. The results had been publicly reported by Leviathan Resources Pty Ltd (ASX code LVR) (December 2004 to January 2007), Perseverance Corporation Limited (ASX code PSV) (January 2008 to March 2011) and Navarre Minerals Limited (ASX code NML) (March 2011 to September 2015) in numerous announcements during the stated periods under the JORC 2004 Code. Catalyst has limited knowledge on how the data was collected but has had to make assumptions based on the available historic data generated by these companies.*

*Full location data on the Tandarra drill holes and a Summary of Sampling Techniques and Reporting of Exploration Results according to the JORC Code 2012 Edition were included in the Company's ASX announcement dated 1 September 2014.*

### **Competent person's statement**

*The information in this report that relates to exploration results is based on information compiled by Mr Bruce Kay, a Competent Person, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Kay is a non-executive director of the Company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 (the JORC Code). Mr Kay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*Much of the historical information relating to the Four Eagles project was prepared and first disclosed under the JORC Code 2004. This information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was reported.*

*Information relating to the Tandarra project was first disclosed by previous tenement holders under the JORC Code 2004. This information has been subsequently reported by the Company in accordance with the JORC Code 2012, refer to announcement dated 1 September 2014 and the quarterly activities report dated 31 July 2014.*



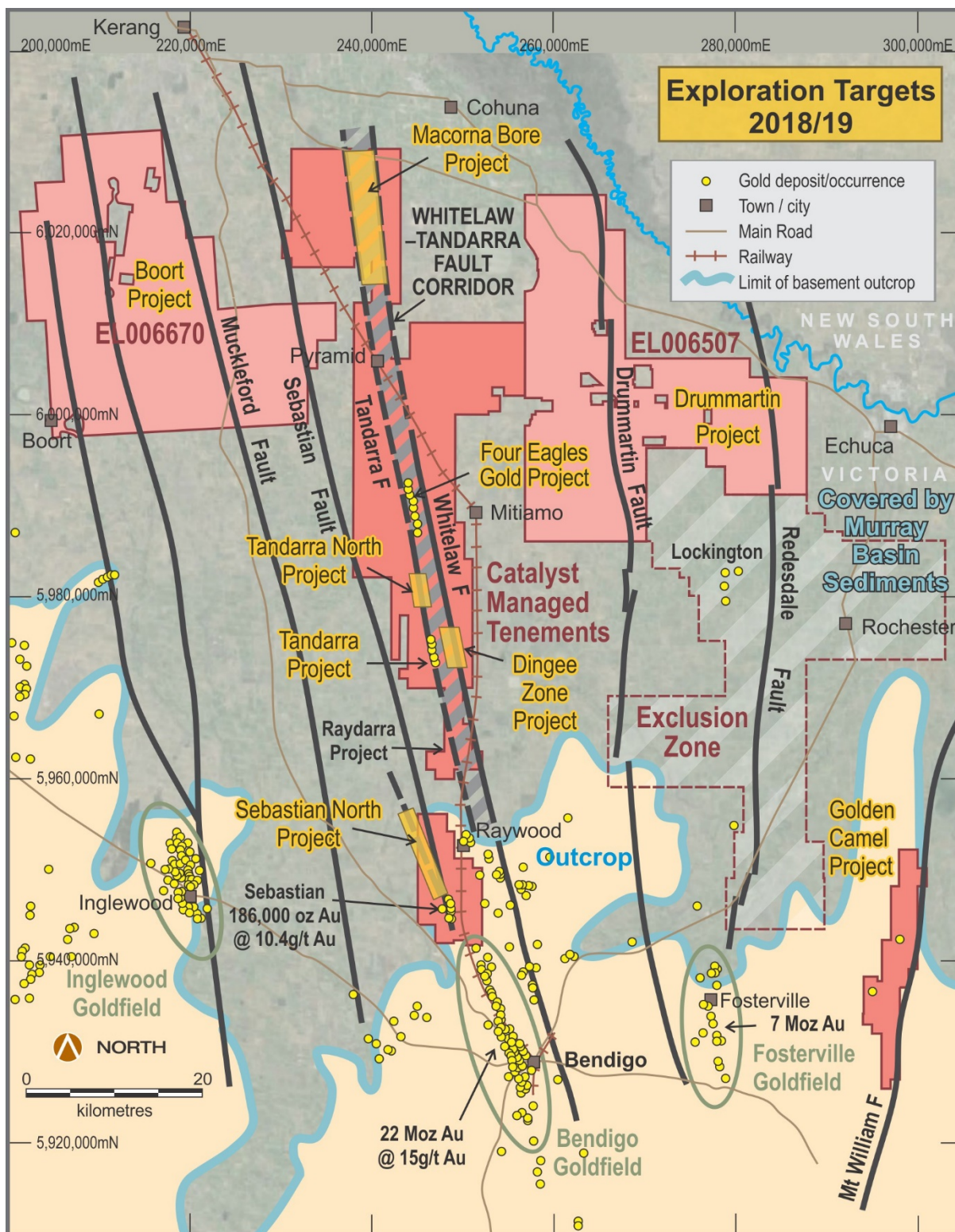
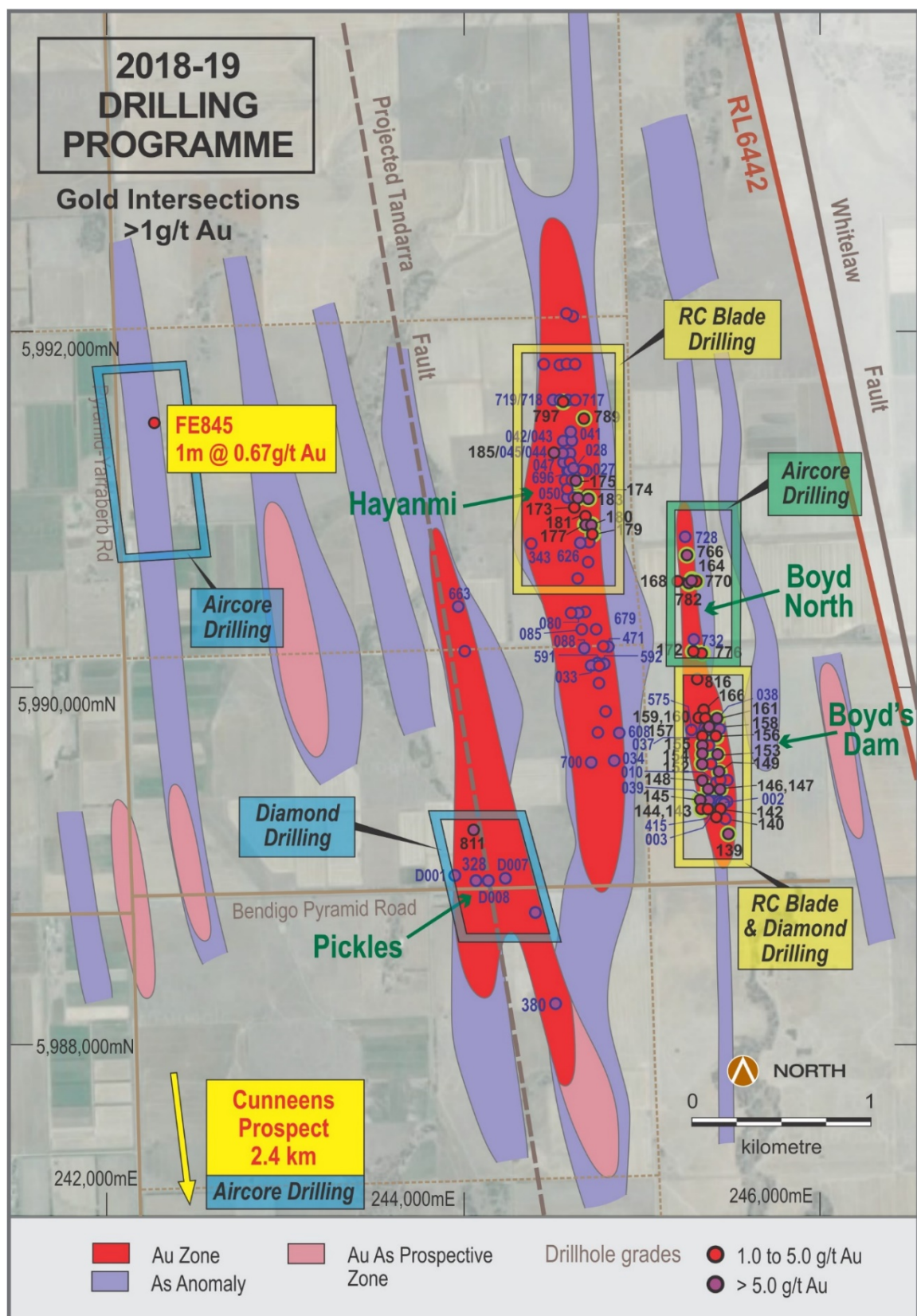
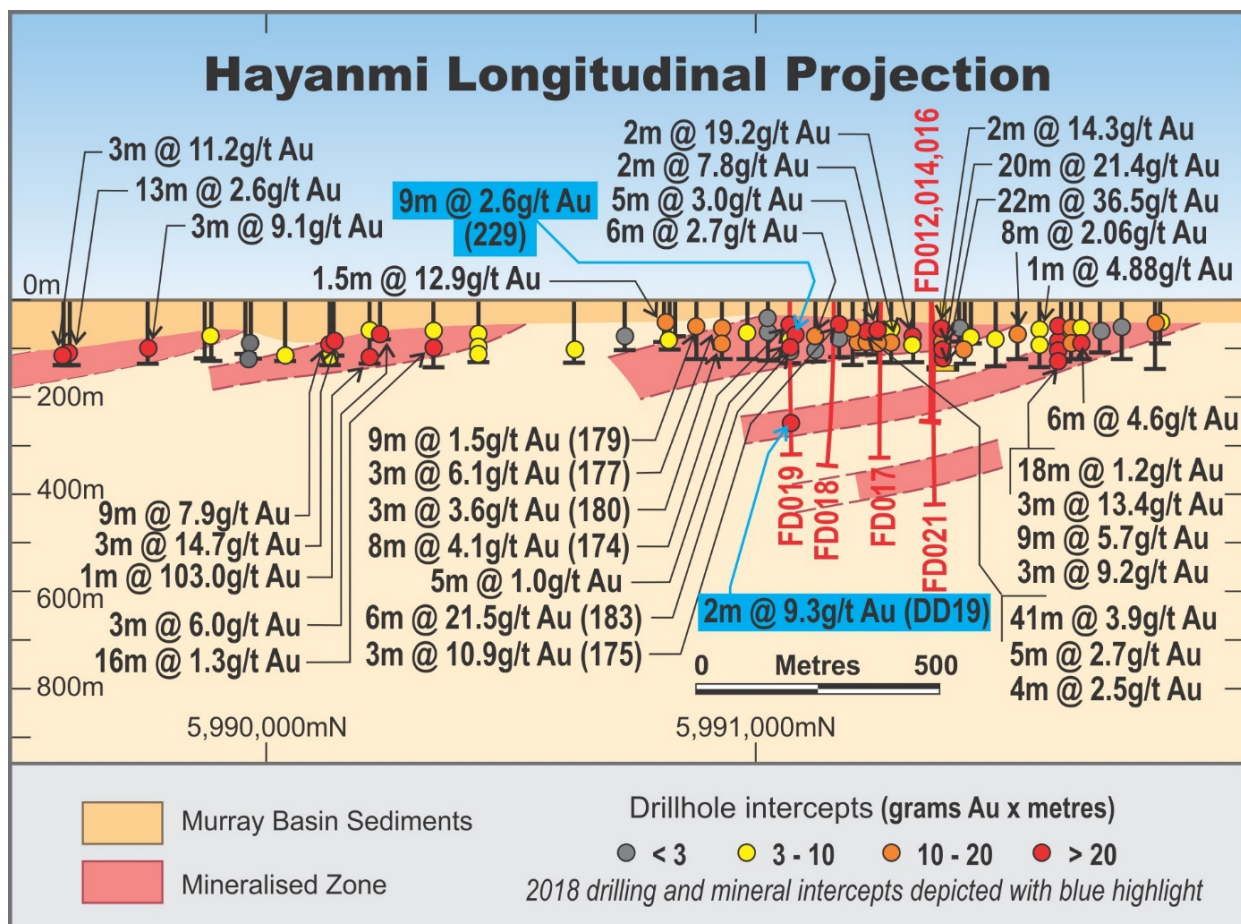


Figure 1: Whitelaw Gold Belt Tenement Holdings showing major Catalyst managed projects

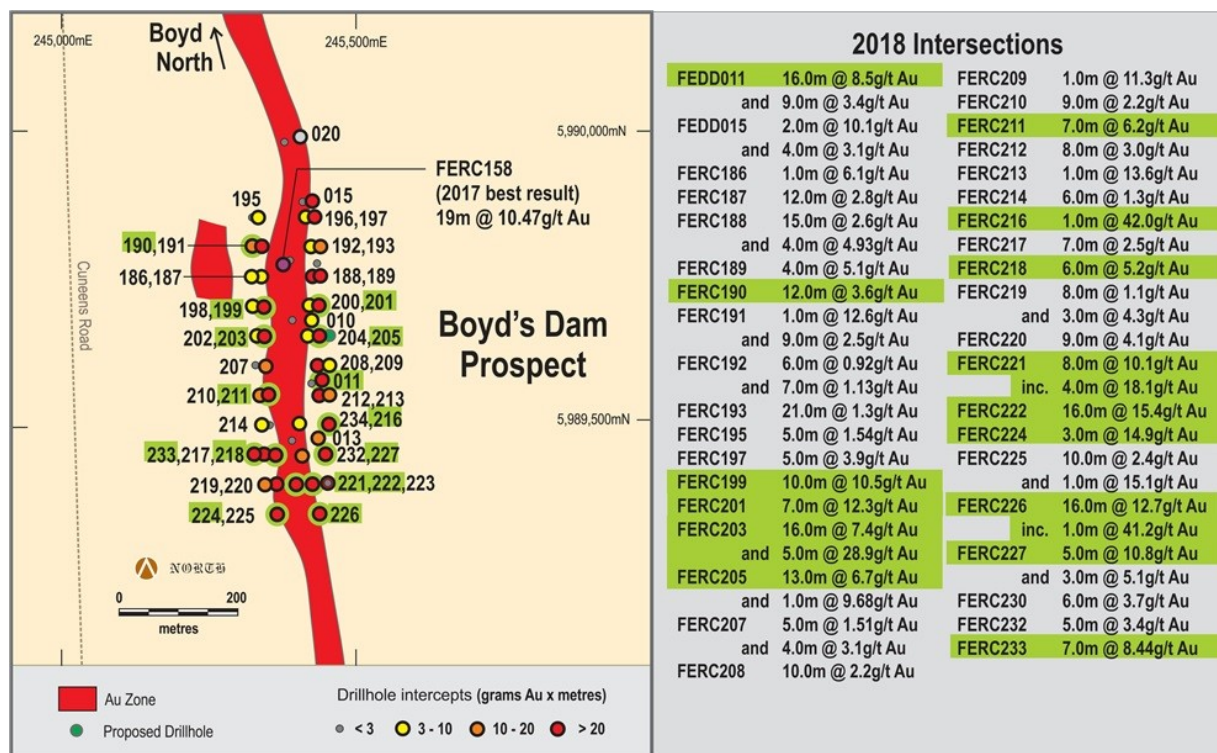




**Figure 2: Four Eagles Gold project showing location of gold trends and prospects. Plan does not show 2018 RC and diamond drillholes which are shown on Figures 3 and 5**

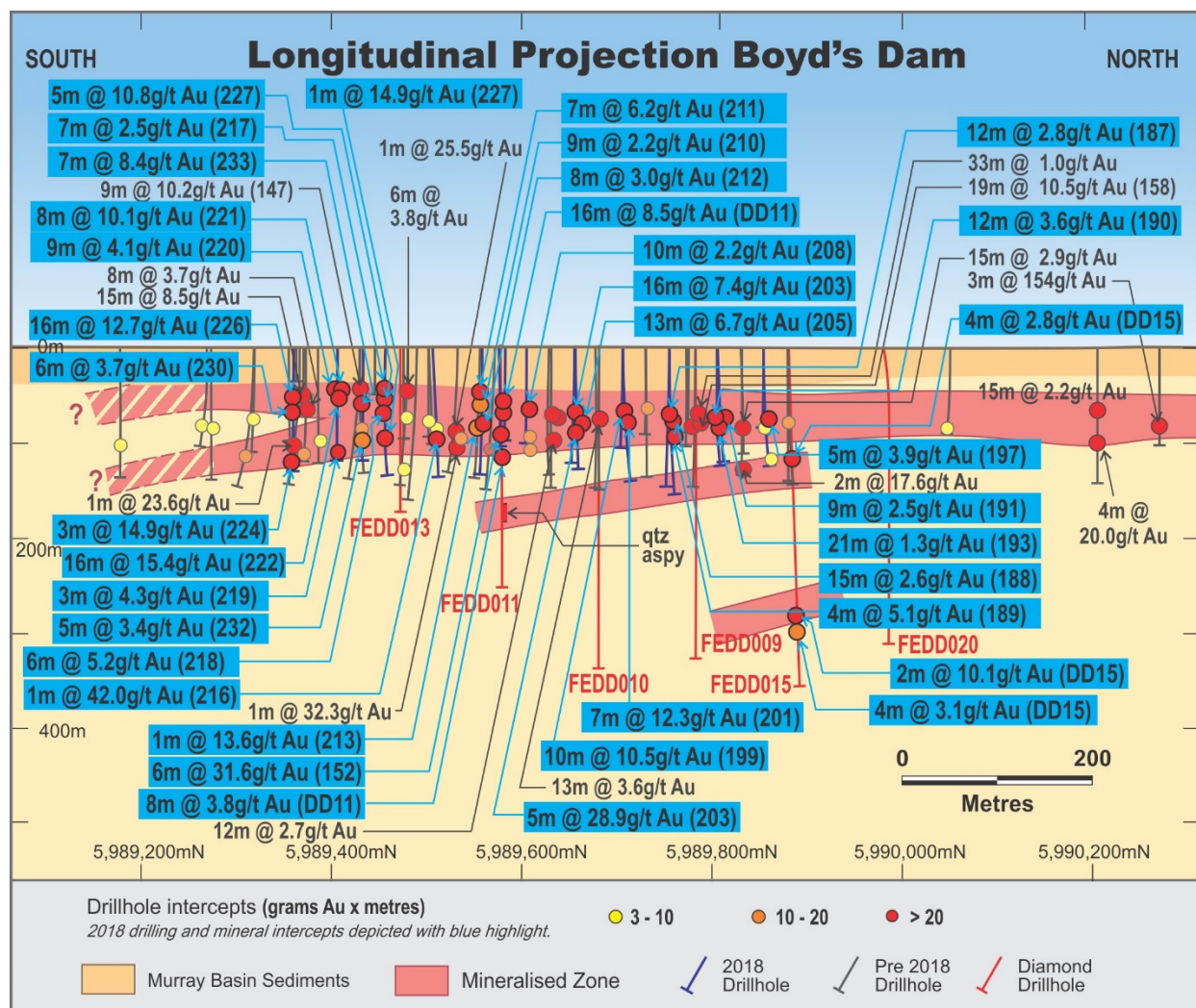


**Figure 3: Hayanmi longitudinal projection showing possible stacked zones of gold mineralisation interpreted from RC and diamond drilling**



**Figure 4: Boyd's Dam Plan view showing position of 2018 RC and Diamond drill collars and significant results**





**Figure 5: Longitudinal Projection of Boyd's Dam Prospect showing areas of RC and diamond drilling in 2018. Significant drill intersections from 2018 are highlighted in blue.**

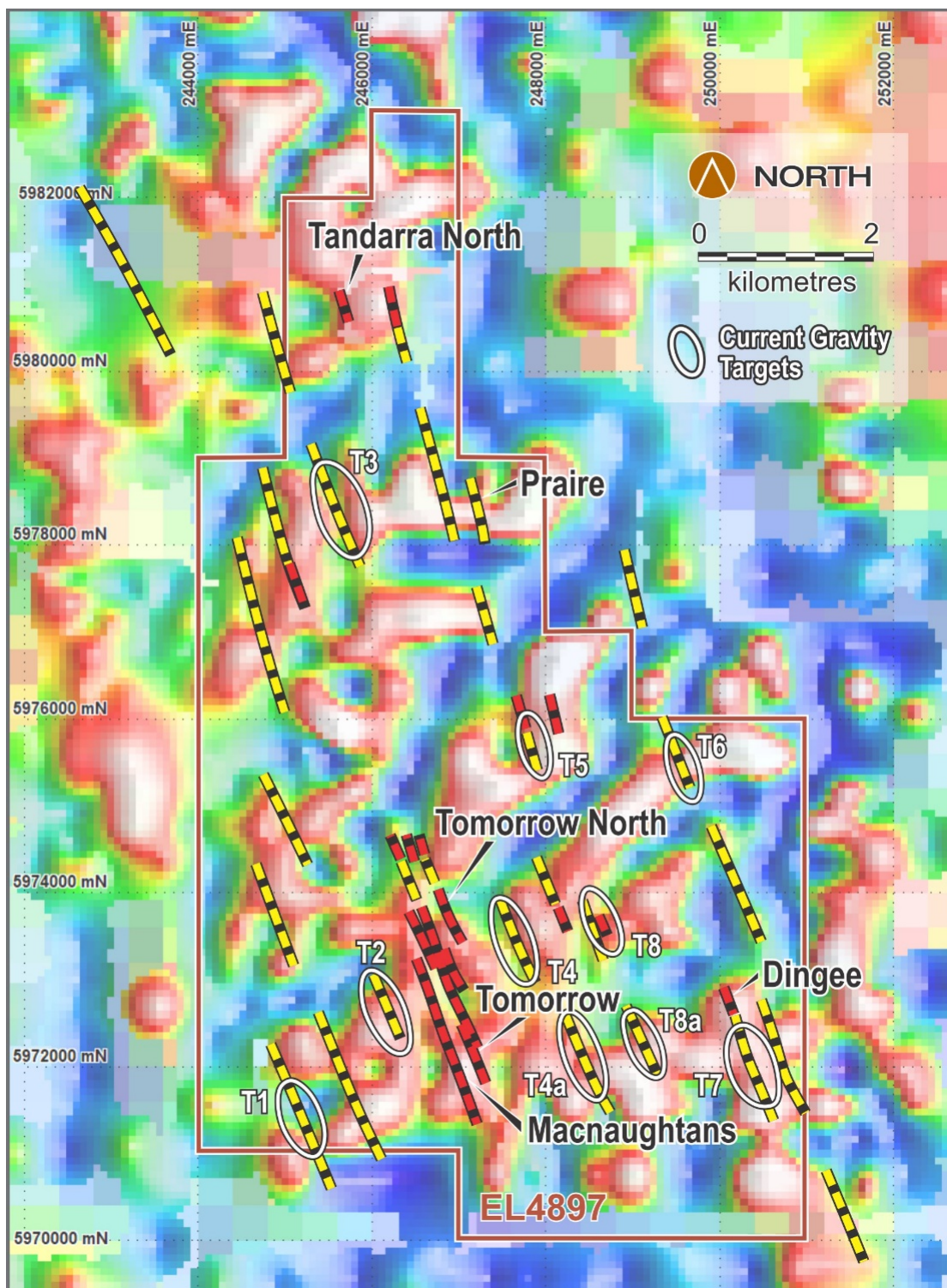
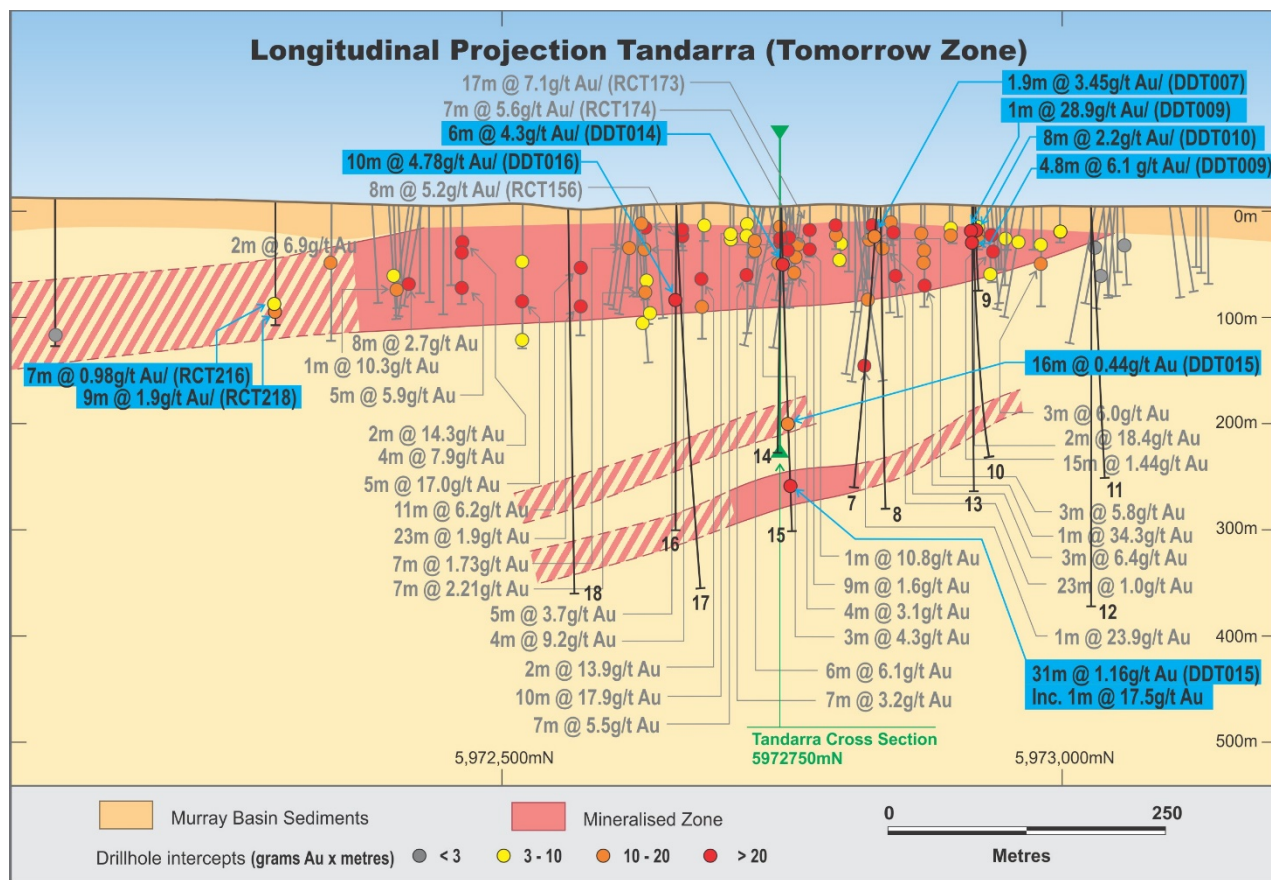


Figure 6: Tandarra Gold Project showing location of Gravity and DGPR geophysical targets.





**Figure 7 Longitudinal Projection of Tomorrow Zone showing location of Diamond and RC Drilling**

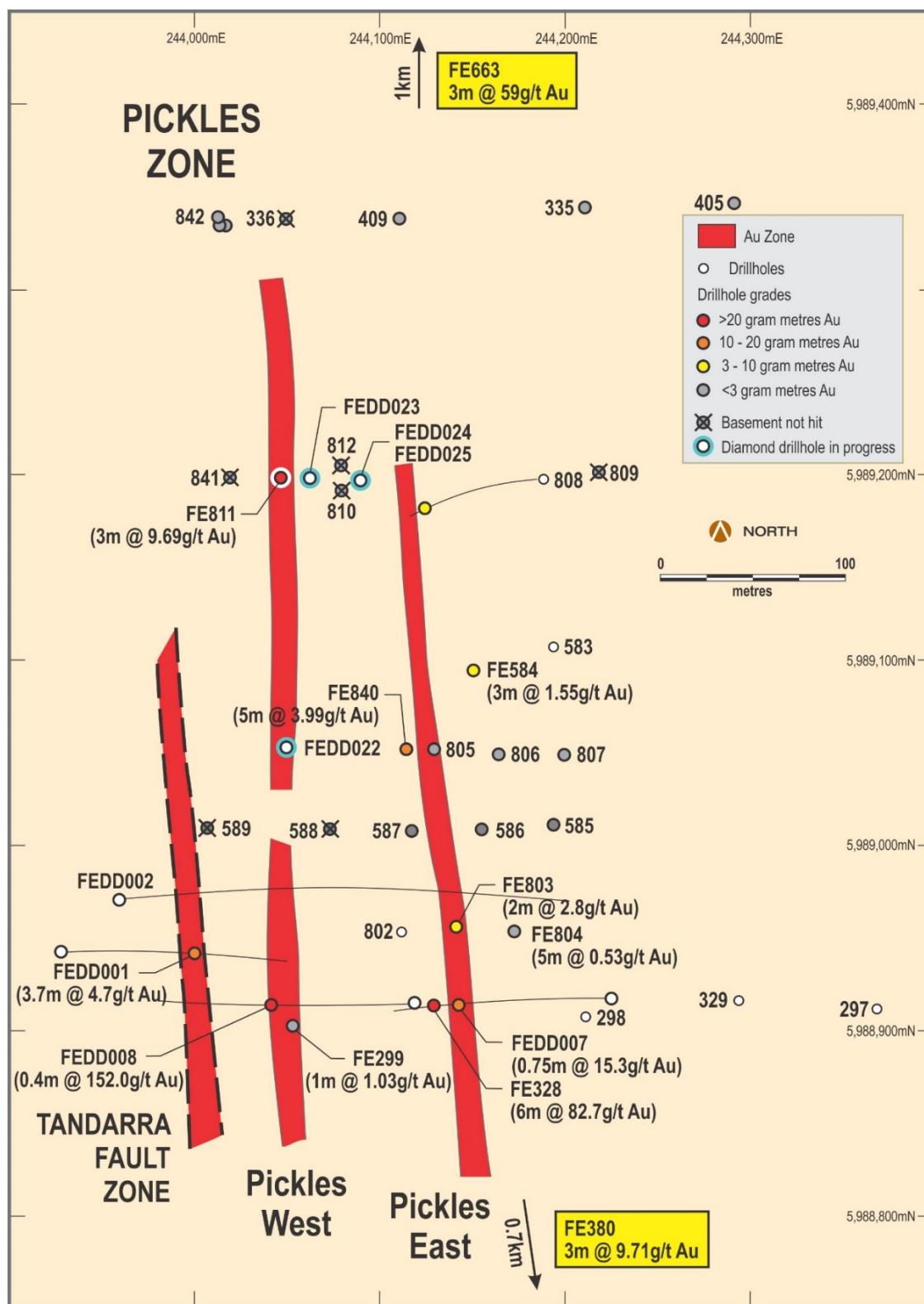


Figure 8: Pickles Prospect Plan view showing potential gold structures and location of initial diamond drill holes.