



**CHALICE**  
GOLD MINES LIMITED

# CHALICE GOLD MINES LIMITED

## HIGHLIGHTS

### Quarterly Report – 31 March 2006

#### Eastern Goldfields

- Higginsville
- Chalice

#### Activity

- IPO completed 24 March 2006, raising the maximum of \$7.5 million
- Drilling underway at Higginsville and Chalice Gold Mine
- 6,500 metres of RC/diamond drilling planned, as part of an overall 11,500 metre program, in the first quarter post IPO
- 31,000 metres of drilling planned for the first year post IPO

#### West Pilbara

- Yandeearra

#### Ground Position

- 150 km<sup>2</sup> at Higginsville adjacent to Avoca Resource Limited's Trident gold discovery (24 targets, 6 of which warrant immediate diamond/RC drilling)
- 170 km<sup>2</sup> at Chalice Gold Mine (2 immediate diamond drilling targets, including extensions to the existing Chalice Deeps resource)
- The large Yandeearra gold project in the West Pilbara adjacent to Range River Gold Limited's Indee Gold Project and DeGrey Mining Limited's Wingina Well and Mount Berghaus gold discoveries
- Funded exploration of almost an entire greenstone belt at the Gnaweeda gold project, through a \$1,500,000 joint venture with Teck Cominco. Minimum spend by Teck Cominco of \$140,000

#### Murchison

- Gnaweeda

#### Laverton

- Wilga

#### CAPITAL STRUCTURE

##### Issued Capital:

Shares	72,800,000
Options	6,075,000

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## 1. HIGGINSVILLE

### 1.1 Principal Targets

Drilling commenced at Higginsville in mid-April 2006. 4,000 metres of RC/diamond drilling is planned at Higginsville over the next quarter.

Chalice Gold Mines Limited's exploration focus lies on 24 targets at Higginsville, 6 of which are considered to warrant immediate RC or diamond drilling, applying a similar geological interpretation of exploration potential to that applied at Avoca Resources Ltd's (Avoca) recent high grade discovery at Trident.

In particular, 10 kilometres of strike of the Poseidon Thrust, inferred to be the controlling structure of gold mineralisation at Trident, lie within Chalice Gold Mines' Higginsville project and are either untested or contain significant drill results which warrant follow-up drilling.

Drilling has commenced at the Mitchell Basement North Target, and will continue to include the Mitchell Basement South and Poseidon Footwall prospects. No results are available to date.

### 1.2 Location and Tenure

Chalice Gold Mines' Higginsville gold project comprises 34 tenements covering 150 km<sup>2</sup> of granite-greenstone belt centred on the old Higginsville gold mining centre (Figure 1).

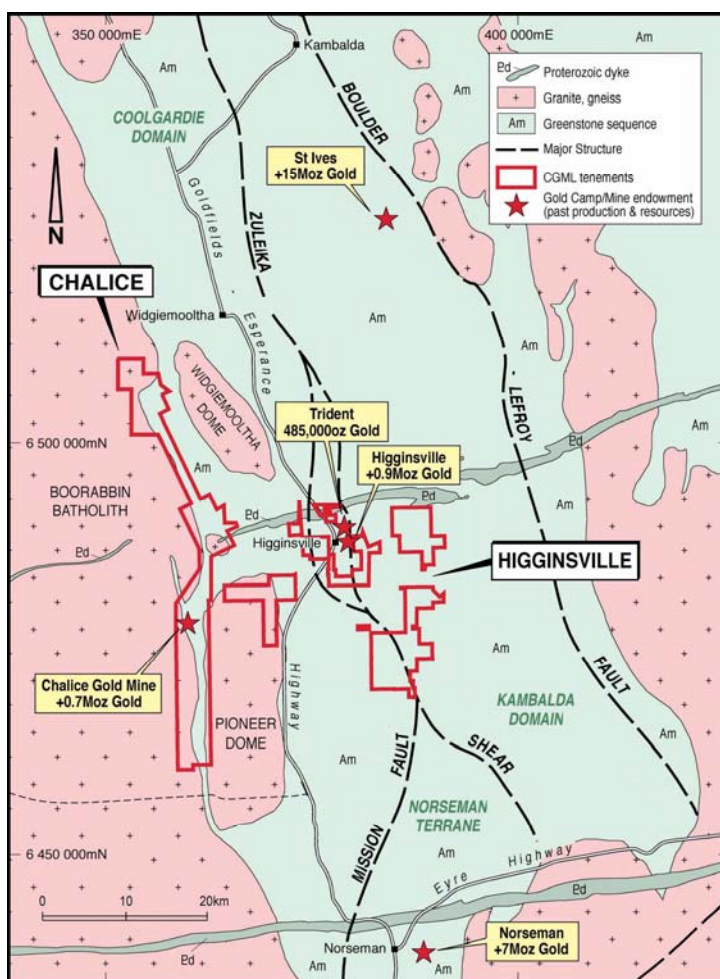


Figure 1 : Higginsville and Chalice Projects - location and regional geology

The Higginsville region is notably located between the world class St Ives and Norseman gold mining centres. Historical open pit and minor underground operations in the Higginsville mining centre have previously produced around 690,000 ounces of gold. Higginsville lies contiguous to and to the south of Avoca's recent high grade discovery at Trident.

### 1.3 Exploration History and Potential

Previous exploration by Resolute Limited (Resolute) identified a number of anomalies and mineralised targets on the tenements now owned by Chalice Gold Mines including numerous significant drilling intercepts warranting further review (Figure 2).

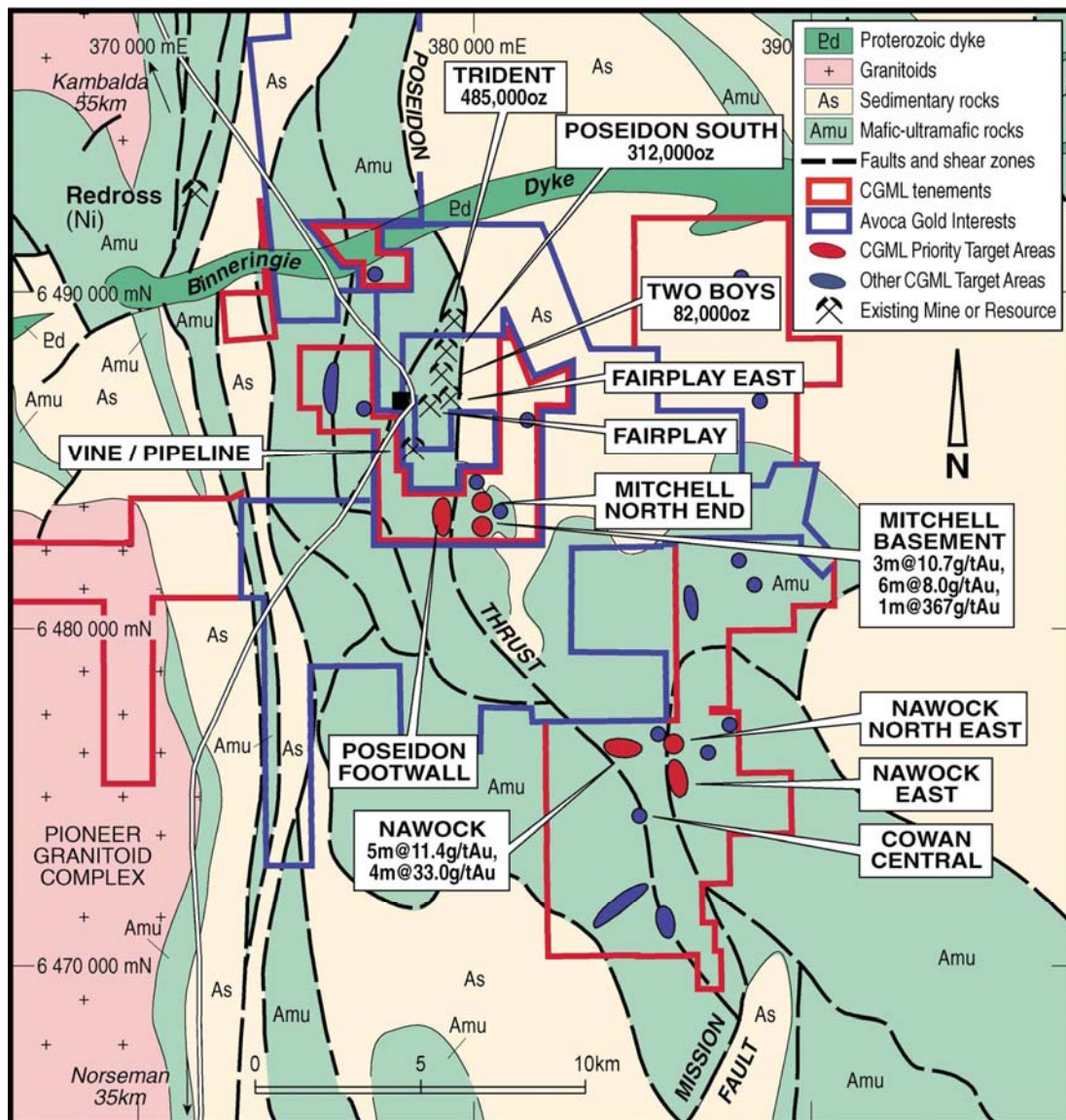


Figure 2 : Higginsville Project - tenements, interpreted geology and exploration targets

Exploration by Avoca has outlined further mineralisation at the Trident deposit, which lies just to the north of the Poseidon South open pit, and approximately 5km north along strike of Chalice Gold Mines' key Higginsville tenements. The most recent quoted indicated resource for Trident is 2,990,000 tonnes at 5.0 g/t gold for 485,000 ounces, with recent drilling intersections announced as including 27 metres at 88g/t from 355 metres, including 10 metres at 229g/t gold from 369 metres in drill hole HIGD047.

An extensive review of gold exploration targets within Chalice Gold Mines' Higginsville project area has outlined 24 exploration targets, ranging from mineralised systems with significant drill hole intercepts through to geological targets containing both prospective structure (eg, sections of, and splays off, the Poseidon Thrust) and prospective stratigraphy (differentiated gabbroic or doleritic rocks).

Chalice Gold Mines considers its Higginsville project's mineralisation model is similar to that at Trident and that it is significant that previous shallow drilling in the project area has not tested the deeper stratigraphic and structural contacts that have been the focus of Trident exploration to date.

Four of the priority prospects at Chalice Gold Mines' Higginsville project (Figure 2) include:

- **Mitchell Basement North:** located just west of the Mitchell palaeochannel open pit mine.

Aircore drilling has intersected significant gold mineralisation in weathered basalt beneath approximately 15 metres of transported cover on the western flank of the Mitchell palaeochannel.

The best intersections occur on drill section 6483050 mN (Figure 3), including 3 metres at 10.68 g/t Au from 58 metres in MAC1812 and 3 metres at 1.55 g/t Au from 67 metres in MAC1813.

Follow-up RC drilling is proposed to test for extensions of, and/or possible repeats of this mineralisation.

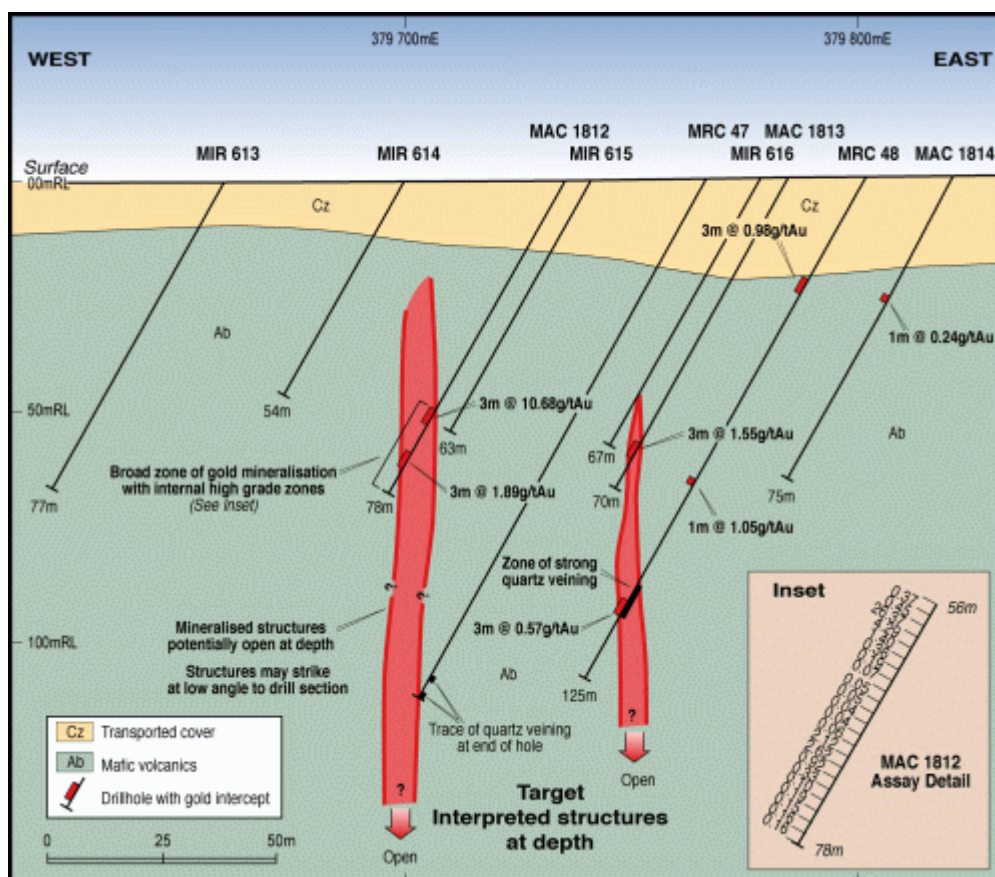


Figure 3 : Mitchell Basement North Prospect – cross-section 6483050mN showing gold targets



- **Mitchell Basement South:** The prospect is located directly to the west of the Mitchell palaeochannel open pit, and to the east of the interpreted position of the Poseidon Thrust.

Here, aircore and RC drilling has intersected numerous zones of gold mineralisation in weathered basaltic bedrock beneath transported cover on the western flanks of the palaeochannel (Figure 4).

Significant intersections include 4 metres at 93 g/t Au from 31 metres, including 1 metre at 367 g/t Au from 32 metres in MAC1835, 4 metres at 7.25 g/t Au in MAC1844 from 32 metres, 6 metres at 7.98 g/t Au in MRC0032 from 40 metres and 1 metre at 121 g/t Au in MAC1807 from 70 metres (end of hole).

The mineralisation may be associated with a flat lying splay off an interpreted structure on the basalt-ultramafic contact located immediately to the east. The structure can be traced north and south of the section and remains untested by drilling. Follow-up RC drilling is proposed.

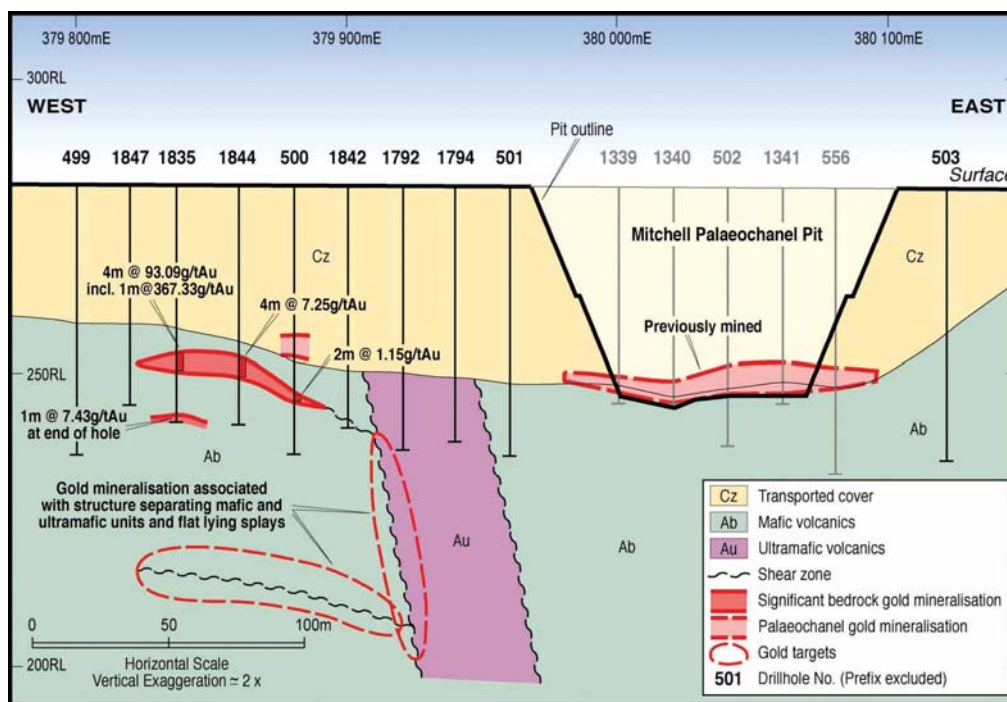


Figure 4 : Mitchell Basement South Prospect – cross-section 6482560mN showing gold targets

- **Poseidon Footwall:** a package of mafic volcanic and/or intrusive rocks located in the footwall of the Poseidon Thrust (Figure 5).

This package and structural position is host to mineralisation at the Poseidon South, Two Boys and Fairplay mines, and the Trident prospect, to the north (shown schematically in Figure 6).

The target is developed under shallow transported cover, and is considered by Chalice Gold Mines to not have been adequately drill tested to date.

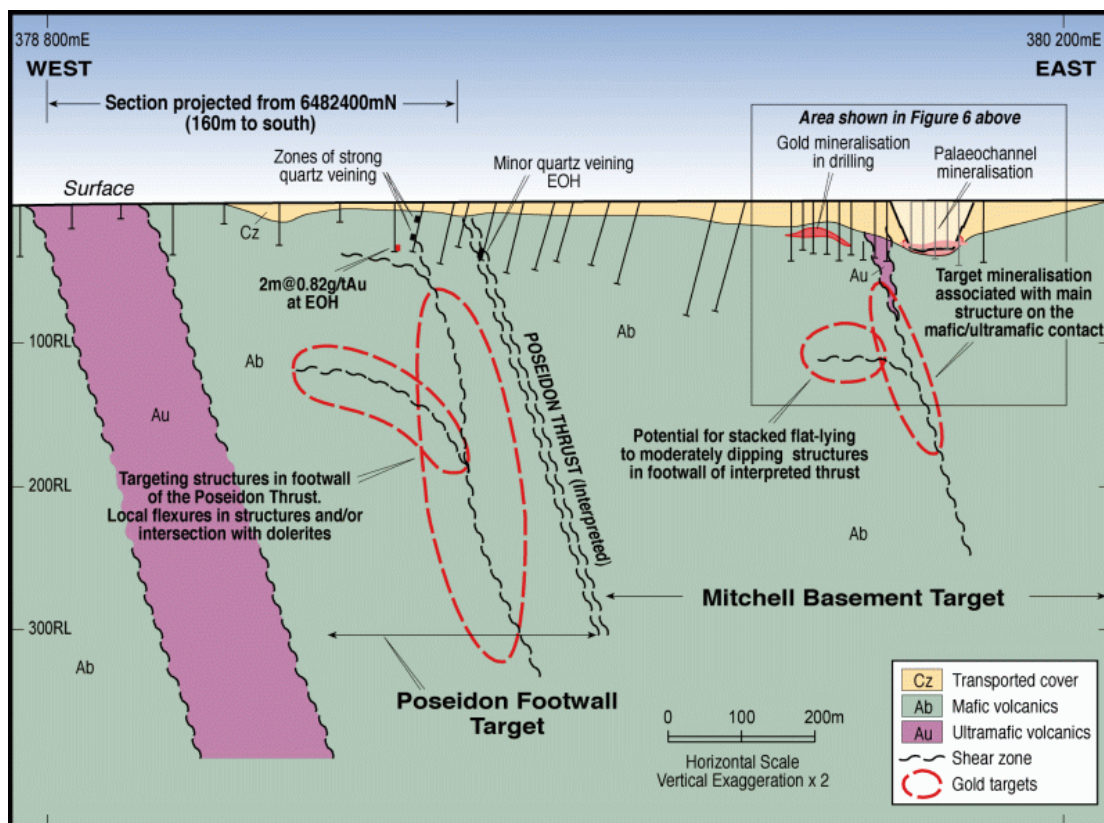


Figure 5 : Poseidon Footwall Prospect – composite section on 6482560mN, with inferred targets

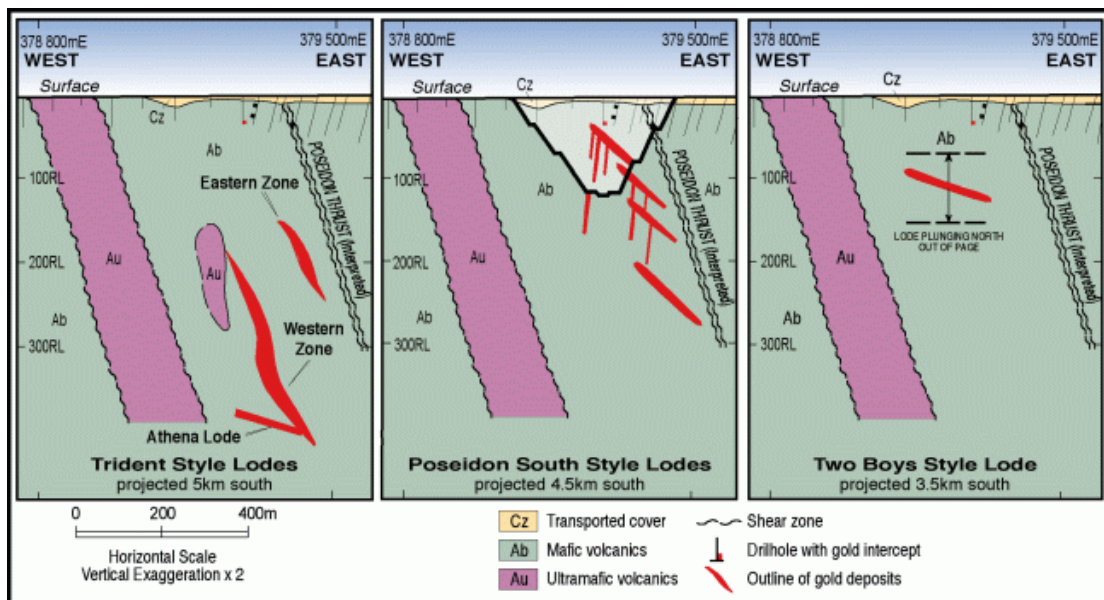


Figure 6 : Poseidon Footwall Prospect with Higginsville-style deposits shown schematically, projected along strike of the Poseidon Thrust on to Section 6482560mN



## 2. CHALICE GOLD MINE

### 2.1 Principal Targets

Chalice Gold Mines has identified 2 key initial targets for diamond drilling in the Chalice mining lease (Figure 7) with a further 5 that warrant early follow up aircore or RC drilling in the regional tenements.

Drilling in the Chalice mining lease commenced in late April 2006.

### 2.2 Location and Tenure

The Chalice project comprises 49 tenements covering 172.5 square kilometres of granite-greenstone belt along the western margin of the Norseman-Wiluna belt within the Widgiemooltha-Higginsville district of the Archaean Eastern Goldfields Province of Western Australia (Figure 7).

The Chalice project is centered on the Chalice Gold Mine, which produced over 550,000 ounces of gold (at an average grade of over 5g/t) from open pit and minor underground operations between 1995 and 1999.

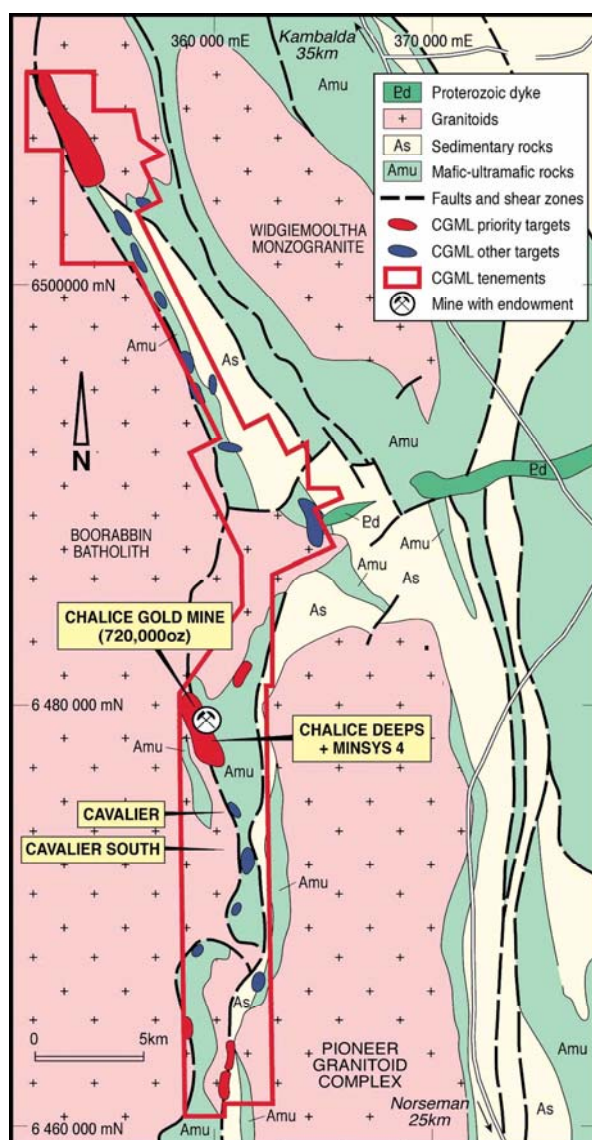
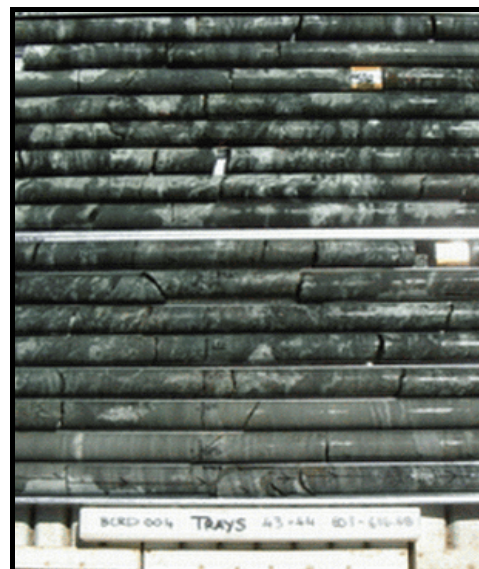


Figure 7 : Chalice Project tenements, interpreted



Previous RC drilling at Chalice



Chalice Deeps drill core showing intensely altered amphibolite

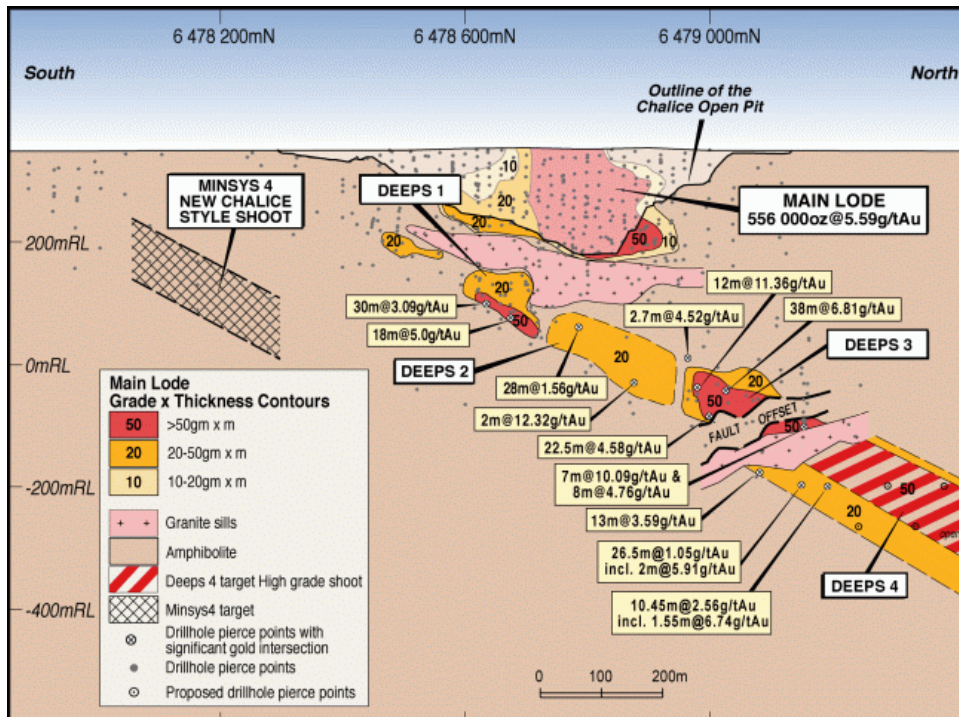


Figure 8 : Chalice Gold Mine long section - showing the existing open pit, down plunge extensions and exploration targets

### 2.3 Exploration History and Potential

The most significant historical mining was undertaken by Resolute and its corporate predecessors, including Samantha Gold NL (collectively referred to herein as Resolute). Resolute commenced mining at Chalice in May 1995 and ceased mining activities in early 1999.

Resolute mined 3.09 million tonnes of ore at 5.59g/t Au (for 556,000 ounces of contained gold) from open pit and minor underground workings developed above the Basal Pegmatite (Figure 8). Exploration beneath the open pit delineated further mineralisation, and at the cessation of mining Resolute had defined a further 162,700 ounces of gold resources (itemised in Table 1 below) around or below the open pit, including the Deeps 1 and Deeps 3 bodies.

Category	Tonnes	Grade g/t Gold	Ounces
Measured	300,000	3.3	31,800
Indicated	70,000	3.3	7,400
Inferred	1,200,000	3.2	123,500
Total	1,570,000	3.22	162,700

*Footnote:*

*This classification under the JORC code relies on the material assumption that further mineralisation of significant grade and width be discovered down plunge of the existing resources. Should no further mineralisation be discovered, the company may need to reassess the classification of these resources under the requirement of the Australasian Code for Reporting of exploration results, Mineral Resources and Ore Reserves ("JORC code") 2004 that Resources must have reasonable prospects for eventual economic extraction.*

Table 1 : Existing resources, Chalice Gold Mine



During 2005 Bullion Minerals Limited tested both the Main lode and Middle Ultramafic lode (or MUM lode), a second lode horizon developed around 20-30 metres below the Main lode horizon, in positions above and below the existing Chalice Deeps 3 mineralisation. Significant gold results (plotted in Figure 8) were reported from both lodes, indicating the Chalice gold mineralised system is open at depth down plunge from the historically defined resources, and that further MUM lode is developed below the limits of the current open pit.

Additional exploration targets along the Chalice line of strike include Minsys 4, located just south of the Chalice open pit, and the Cavalier and Cavalier South prospects (Figure 7), where historical exploration has produced highly anomalous gold results in drilling.

The delineation of new resources to extend the current inventory delineated at Deeps 1 and 3 will be the main focus of exploration and drilling activities at Chalice. Several targets are outlined below:

- **Extensions of Deeps 4:** diamond drilling of the Deeps 4 shoot in 2005 has demonstrated that the Chalice mineralised system continues at depth beneath a sub-horizontal granite dyke which previously defined the base of the Deeps 3 mineralisation.

The low to moderate grade intercepts encountered may be on the margins of more substantial high grade core.

An extended drill program is proposed to test the Main lode horizon seeking to identify the position of a possible high grade shoot.

- **MinSys 4** is located south of the open pit where the regionally north-northwest trending sequence swings into a northerly trend, the amphibolite package appears thickened compared to material along strike, and broad zones of alteration and gold anomalism are developed in drilling.

The pattern is consistent with the empirical controls on the Chalice open pit, and the system may represent the up-plunge expression of a new Chalice system developed at moderate depths (around 300 metres, as plotted on Figure 8).

A further 23 regional or mine site targets have been defined, 14 of which are considered to warrant initial or follow up RAB or aircore drilling.

### 3. YANDEEARRA

#### 3.1 Principal Targets

Chalice Gold Mines has identified 17 initial gold targets at Yandeearra, including 2 which are considered to warrant immediate RC drilling, and eight large untested gold in soil anomalies that are considered to warrant first pass RAB or aircore drilling. The proposed program includes RC and aircore drilling, scheduled to commence in June 2006.

#### 3.1 Location and Tenure

Chalice Gold Mine's interests in the West Pilbara gold district (Figure 9) include a tenement package of over 1,400 square kilometres at Yandeearra, contiguous with both Range River's Indee Gold Project (with published resources of 529,000 ounces of gold, in several deposits) and De Grey's Turner River Gold Belt (including a published resource of 203,000 ounces of gold at Wingina Well).

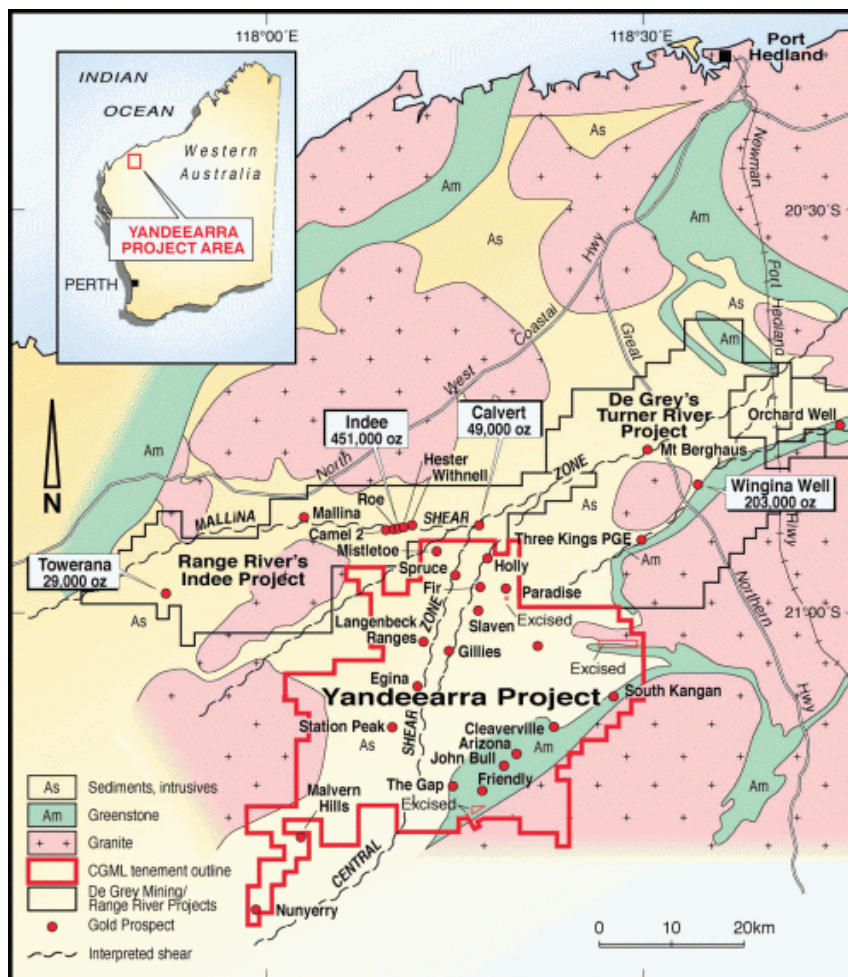


Figure 9 : West Pilbara Gold District – Yandeearra project location

Chalice Gold Mines has a 100% interest in the tenement package, subject to a royalty and alluvial mining rights being retained by the recently ASX listed company Primary Resources Ltd, and tenements in the Friendly Creek package subject to an option agreement with various vendors.

### 3.3 Exploration History and Potential

Most of the historical mines at Yandeearra have had only minor investigations for gold and base metal by modern exploration techniques. The limited amount of modern exploration completed within the region is due to a previous moratorium on mining and exploration within the Yandeearra Aboriginal Reserve.

Following the lifting of the exploration moratorium and the granting of a number of exploration licences, the Farno Group (Farno) undertook initial geological mapping, stream sediment sampling, grid soil sampling and first pass RAB drilling targeting gold and base metals in the Pilbara Well Greenstone Belt.

Pursuant to a joint venture with Farno, Bullion Minerals Limited completed further soil sampling and aircore, RAB, RC and vacuum drilling programs at several prospects within the project area, mostly in the Mallina Basin.

This work has outlined 17 significant gold in soil anomalies, of which 8 anomalies remain untested by drilling (Figure 10).

Of the 9 targets drill tested, each has reported significant gold results in broad spaced drilling, with 2 considered by Chalice Gold Mines to warrant immediate RC drilling.

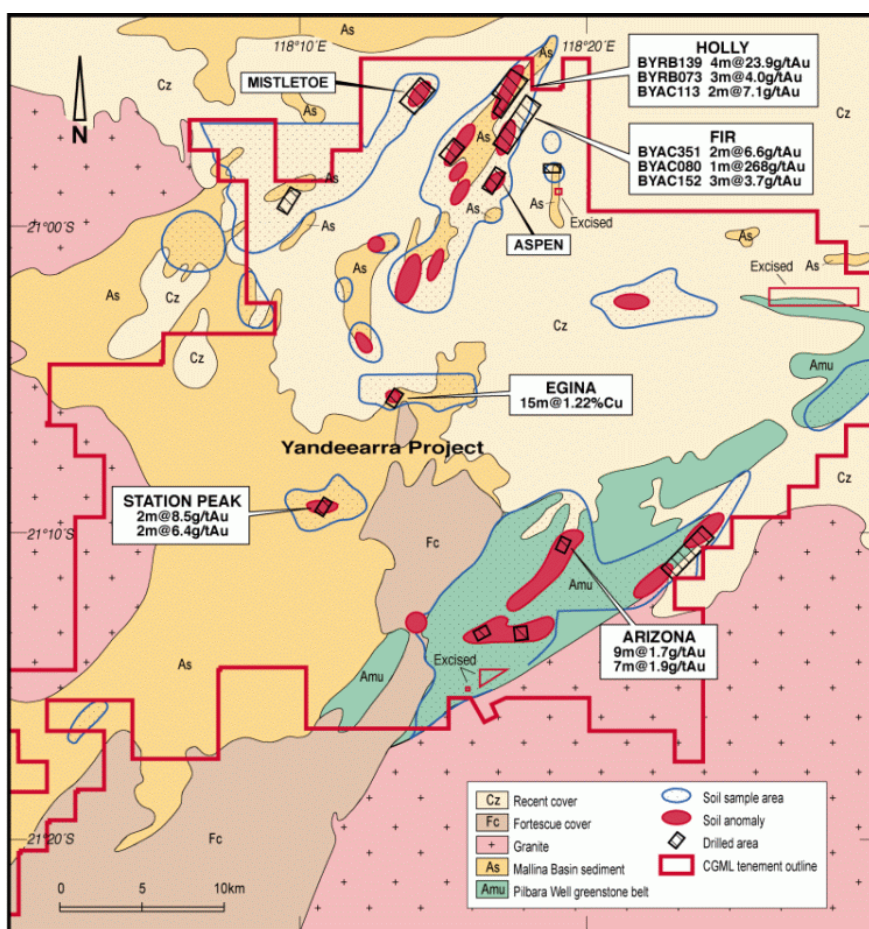


Figure 10 : Yandeearra Project – geology and summary of exploration work



## 4. GNAWEEDA

### 4.1 Project managed and funded by Teck Cominco

Chalice Gold Mines holds interests in over 470 km<sup>2</sup> of tenements covering almost an entire greenstone belt at its Gnoweeda project in the Murchison region, 30 kilometres east of Meekatharra, Western Australia (Figure 11).

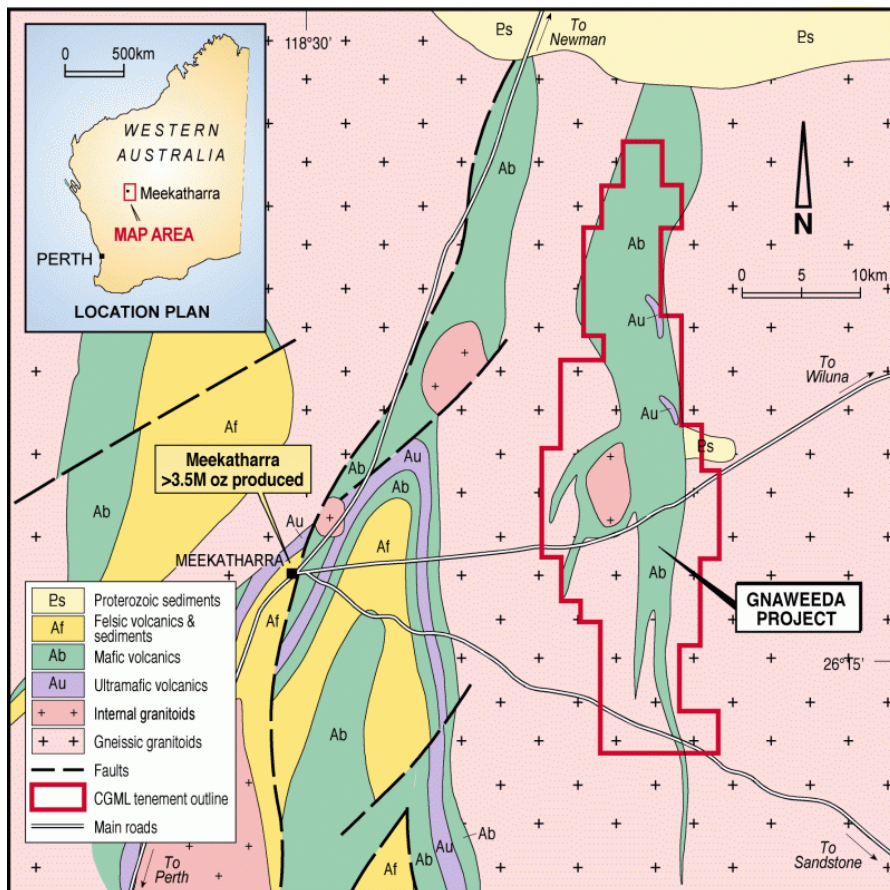


Figure 11 : Gnoweeda Project - location and regional geology

On 28 July 2005, an exploration joint venture was signed with Teck Cominco in respect of Gnoweeda. Under the agreement Teck Cominco can earn a 70% interest in the project by spending \$1,500,000 over three years (minimum expenditure of \$140,000).

Teck report that work completed in the quarter comprised historical exploration searches, a field visit and reinterpretation of data on the Turnberry Prospect. Data on the Turnberry Prospect was viewed using 3D software to gain an understanding of the mineralization architecture; both to identify major features trends that maybe used to explore the remainder of the belt and to target zones of high grade with further drilling.

A RAB drilling program is planned to commence in May, weather permitting. Recent high rainfall has resulted in access to the site being restricted till May 2006 at the earliest.



ANDREW BANTOCK  
Executive Chairman

The information in this report that relates to Exploration Results is based on information compiled by Mr John McIntyre, a full-time employee of Chalice Gold Mines Limited, who is a Member of the Australian Institute of Geoscientists. Mr McIntyre has sufficient experience in the field of activity being reported to qualify as a Competent Person as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves, and consents to the release of information in the form and context in which it appears here.