

# *Cala Resources Pty Ltd*

ACN 102 672 711

## Annual Report EL 17/1991 Mathinna

29 May 2005 – 29 May 2006

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## **1. Summary**

EL 17/1991 is being explored by Cala Resources Pty Ltd for gold bearing, quartz veins.

The targets are high-grade gold bearing reefs containing more than 50,000 ounces and which are similar in style to the Mains and Loanes Reefs at the New Golden Gate Mine in adjacent tenement 43M/89

In the reporting period Cala has focused on further technical investigations and capital raising. To this end Cala has secured an underwritten agreement for \$5 million, with the first \$2 million (development funding) to spent on the project within the next 12 months. One of the main goals of the development funding is to expand known resource at Mathinna to a minimum of 100,000 ounces of gold.

## **2. Introduction**

EL 17/1991 “Mathinna” is an exploration licence of two square kilometres in size, is centred on the township of Mathinna approximately 65 km east of Launceston.

Cala Resources Pty Ltd now holds the tenement, which has previously been held by Connemarra Gold Mines Pty Ltd, in joint venture with Defiance Mining NL, Alex White and Resolute Samantha Ltd.

The licence is a mixture of private land on alluvial flats along the South Esk River and State Forest in the adjacent hilly country. Access is generally good with a sealed road to Launceston, via the Fingal Valley, and strategically placed gravel roads throughout the tenement

## **3. Conclusions and recommendations**

- In the previous round of drilling on this tenement, Cala intersected several metres of quartz reef (MTO110), containing high levels of arsenopyrite and pyrite. This intercept is believed to confirm the strike extensions of the Mains Reef. Although gold grades were minimal, this important intersection is approximately 100 metres from any previous workings on this reef.
- Further drilling is planned along strike of this intersection, at 20m metre spacings in an attempt to locate further high grade shoots within this reef, similar to the shoot that was worked previously in this reef structure.

#### **4. Geology & production**

EL 17/91 lies near the southern end of the 90-km long north-north-west trending, line of gold deposits that extend from Mangana in the south to Lyndhurst on the north coast.

The gold deposits occur as auriferous quartz reef, hosted in Mathinna Beds, a folded sequence of Silurian-Ordovician age sediments. The Mathinna Beds are intruded by younger, Devonian-Carboniferous age granites and are in part overlain by Permo-Triassic glacial marine sediments, Jurassic dolerites and Tertiary basalts.

The gold bearing veins are structurally controlled and occur in a range of orientations and form within zones of shearing and tectonic deformation. Typical vein features are:

Width	0.1-1.0m	Up to 10m
Length	10-100m	Up to 350m
Depth	<100m	Up to 580m
Grade	15-30g/t	Cut off 10g/t
Strike	Variable	NW to NE dominant
Dip	Typically steep	70-80 °
Mineralogy	Quartz, arsenopyrite, pyrite	Minor galena, chalcopyrite, sphalerite

This overall geological setting is very similar to the high grade, quartz vein style mineralisation in the slate belts of central and eastern Victoria, which has historical production of approximately 80Moz.

The first gold in Tasmania was discovered at Mangana in 1852. As exploration extended north, further discoveries were made in the Lyndhurst – Mangana belt, including at Mathinna.

In this first phase of mining, production peaked around 1884 and the main activity in the Lyndhurst-Mangana belt was concentrated on the southern section between Mangana and Alberton within a 70km by 5km belt of deformed sediments.

In about 1887, a Mr A Loane discovered a reef (Loanes Reef) in the abandoned adit of the Golden Gate Mine. Sinking a shaft to evaluate this reef and additional reef was discovered (Main Reef). These two reefs were subsequently mined down to about 280m depth and produced about 100,000 oz of gold.

Early mills were basic stamp and gravity, which recovered most of the course free gold, but gold associated with sulphides was lost.

An important feature of the area is that many of the quartz veins never outcropped and were only discovered during underground development aimed at other veins

## **5. Summary of work completed**

Cala conducted a RC drilling program in the previous reporting period in an attempt to locate strike extensions of Sophies, Dylans and the Main reefs and also high grade shoots within these structures.

This small drill program was located on the very northern end of the tailings sand at Mathinna

The drilling program proved to be problematic due to several factors, the main of these being the wrong rig configuration, which lead to difficulty with collaring holes through the tailings sands.

The approved program was to be eight 70m RC holes drilled due west at an inclination of 70 degrees and was a continuation of previous fence drilling conducted by Defiance Mining NL, with fences at 20 metre spacings and holes located along fences at 20 metre intervals. This program was designed to intersect the short strike length of high-grade shoots, generally 20 to 40 metres.

Due to rig configuration problems and timing issues, several holes located near the creek were abandoned due to water problems in the low lying areas, these holes were moved to higher ground away from the depression that appeared to be carrying the ground water above the bed rock and below the tailings sands.

The rig configuration also made it impossible to drill to the required depth and drilling was extremely slow, at one stage taking over an hour to drill 1 metre. Holes were then shortened to 30 metres and almost every hole needed several attempts to be collared.

This was extremely disappointing as holes down to 70m would have intersected the Main reef at three different depths and given a much better idea of the size of the reef intersected.

Samples were taken every metre and four metre composites were submitted SGS Analabs at Burnie for assay of gold and arsenic. Assay for gold was fire assay and the detection limits for gold was 0.01ppm. Arsenic was assayed using Aqua-regia digest with an AAS finish, the detection limit was 50ppm.

In hole number 110, the bottom 22 metres were submitted as one metres samples, along with the four metre composite samples and assayed as above. Minor Galena was also observed in the 6-7m intersection of this hole, but the samples were not assayed for lead.

## **6. Proposed future exploration**

In the period from May 2006 to May 2007, Cala plans to drill approximately 48 shallow RC drill holes along strike to the west of the last drill program and continue the drill pattern as fences at 20 metre spacings and holes located at 20 metre intervals along the fences. This is designed to intersect un-drilled parts of the Mains reef to locate further high-grade shoots within this structure. Cala's program cost for EL 17/1991 is expected to be in the range of \$50,000 for the year to 29 May 2008.

Cala also intends to further investigate the strike extensions of the reef that the Dylans and Sophies shoots are located within.

If encouraging results were forthcoming, Cala would expect to continue this program further to the north, along strike, in coming years.

## **7. Expenditure statement**

*For the period 29 May 2005 to 29 May 2006.*

<b>Item</b>	<b>Cost \$</b>
Drilling	0
Assays	0
Accommodation	0
Salaries & Wages	18,280.67
MRT costs	406.26
Vehicles	1,772.00
Consumables	888.72
Office/admin	100.00
<b>Total</b>	<b>\$21,447.65</b>

## **8. References**

Jackson, D. Defiance Mining NL, Annual Report for EL 17/91 to 29 May 1999.

Colville, R. 1998 Connemarra Gold Mines Pty Ltd, Mathinna gold project, Annual Report on Exploration Licence 3/97 to 19<sup>th</sup> of September 1998.

MacDonald, G.1996. Resolute Samantha Ltd, Annual Report 1995 EL 17/1991 "Mathinna".