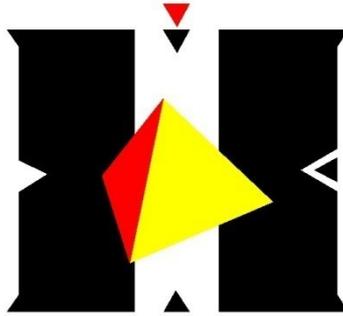


# Retention Licence 1/2008 Mariposa

## Relinquishment Report

February 2017



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Coordinate system used in maps and diagrams within this report is MGA55 (GDA94), unless otherwise specified.

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## **Abstract**

Australian Hualong P/L has held retention licence RL1/2008 from early 2013. The licence was part of a collection of tenements acquired from Creat Resources Holdings Limited, comprising part of a fairly diverse (geologically speaking) project package.

Australian Hualong's medium to long term objective for Mariposa was to confirm, extend and develop the known Irish-style limestone-hosted lead and zinc resource as additional feed for a larger scale lead-zinc project (centred upon the Oceana Deposit) envisaged for the Zeehan area.

Recently however, inline with a rationalisation of the tenements held by the Company, it was decided to relinquish RL1/2008 Mariposa in its entirety.

No specific field activities were undertaken during the period of tenure. General work performed included resurrection of the former Creat Resources online drill hole database, and collation of block model and other 3D data pertaining to Mariposa. This digital data, mostly in Surpac format is included with this report as digital Appendix 1.

# 1 Introduction

Australian Hualong P/L (AHL) is a privately owned resources company incorporated in NSW and owned by Mr. Zhian Zhang.

RL1/2008 was originally granted to ZZ Exploration (a then 100%-owned subsidiary of Creat Resources Holdings Limited) on February 20, 2009 for a period of 2 years, and applied to all Category 1 minerals. Australian Hualong P/L acquired RL1/2008 from Creat Resources Holdings Limited on 26<sup>th</sup> March 2013.

## 1.1 Location

RL 1/2008 covers approximately 3 km<sup>2</sup>, and is located 5km south east of Zeehan, Western Tasmania.

### 1.1.1 Site Location

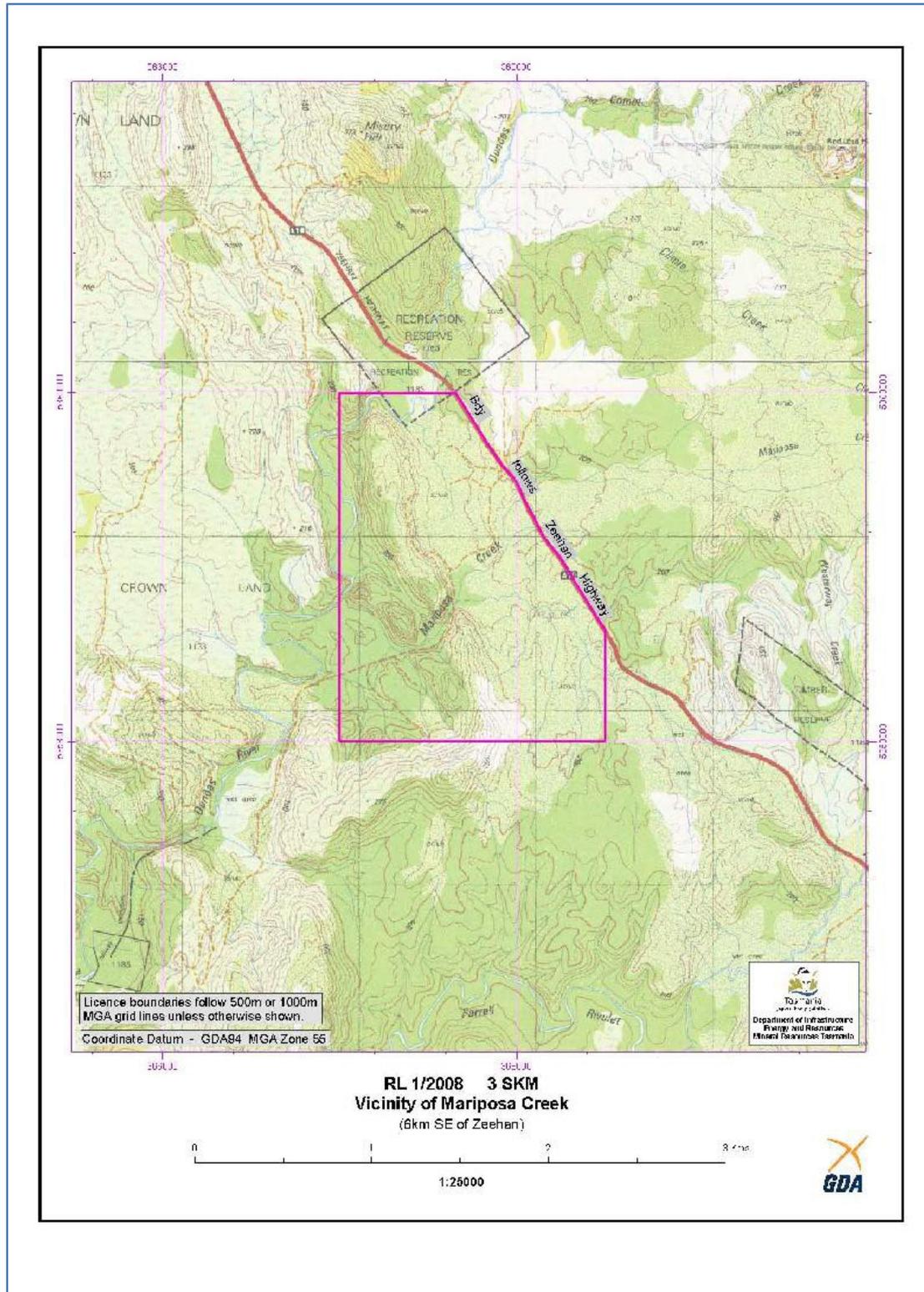


Figure 1: Location of the Mariposa Retention Licence

The Zeehan Highway follows the eastern boundary of the tenement for approximately 1.5km and provides road access to RL1/2008 via the Mariposa track. The tenement is located adjacent to Exploration licence 20/2002, which is also held by Australian Hualong P/L.

1.1.2 Land Tenure

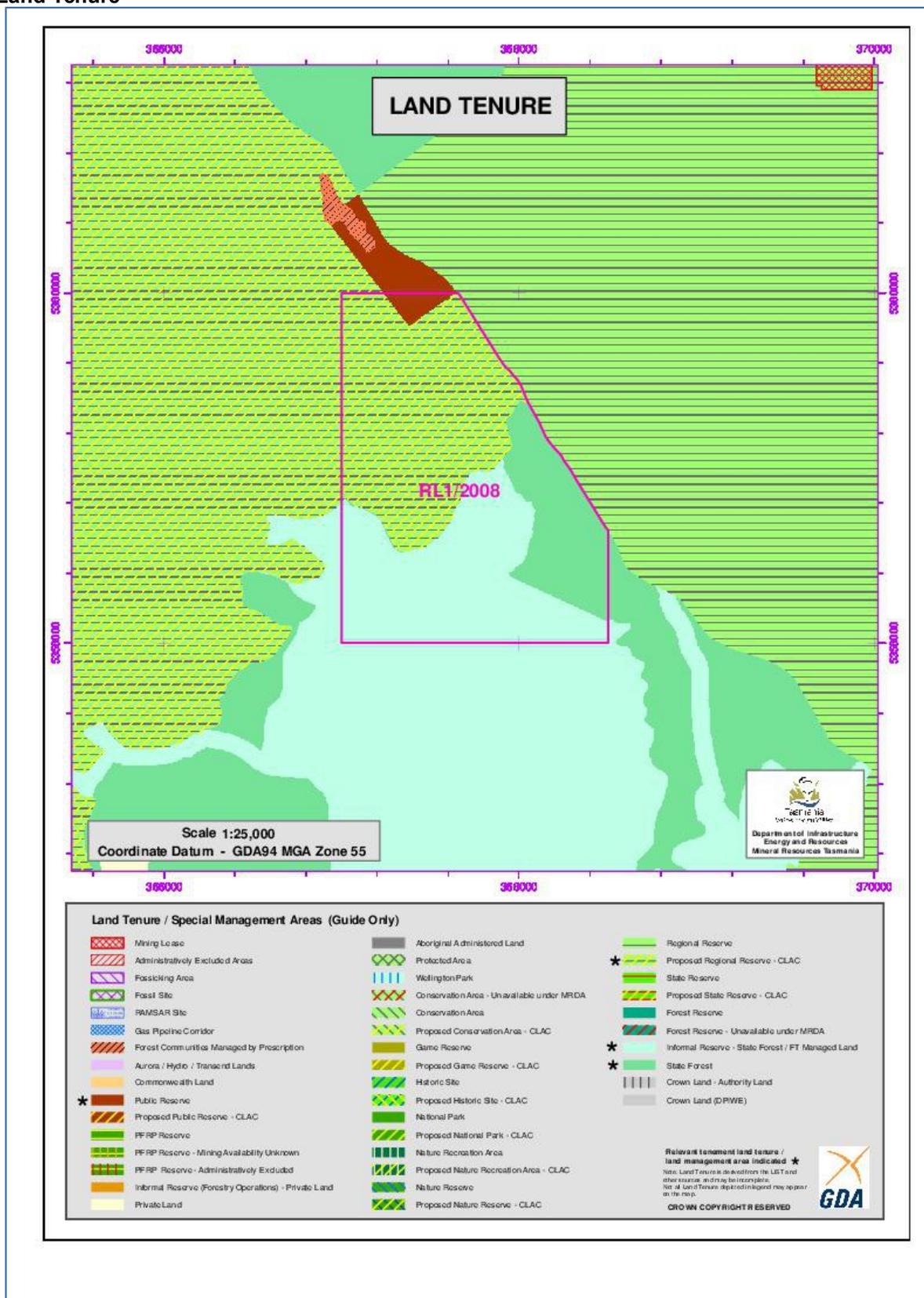


Figure 2: Land Tenure, Mariposa RL1/2008

## 2 Geology and Previous Work

### 2.1 Previous Mining and Exploration within RL1/2008

The Mariposa prospect is one of a series of limestone-hosted base metal prospects located around Zeehan which have been subjected to substantial previous mineral exploration. The Oceana lead/zinc deposit provided much of the impetus for such exploration to be undertaken over all the outcropping areas of the Gordon Limestone in the general Zeehan area (Tear 2005a).

The original Mariposa deposit began its mine life in the 1890's as a small trial mining exercise with a shaft and underground drives developed with production amounting to "1000 tons of milling ore" at 33% Pb and 17ozs Ag Cadwallader (1951). Various attempts at re-opening the mine ensued until North Broken Hill undertook a diamond drilling campaign in the early 1950's. This work identified a resource and included a scoping study with some estimation of mining costs, but the reports contain no maps and hence four of the twelve drill holes cannot even be located. Macintyre Mines completed some exploration in the 1970's, drilling one diamond hole just south of the main Mariposa Lode (Bates 1972). This intersected weak lead/zinc mineralisation in the expected position.

In the 1980's the area was held as an exploration licence by AMOCO/CYPRUS who subjected the ground to a systematic search looking to find an Irish-type carbonate hosted lead/zinc deposit. This included drilling of the main Mariposa Lode and substantial trenching over the whole carbonate outcrop at Mariposa. Significant mineralisation and geochemical anomalism was encountered but follow up work was limited (Ellis 2002, Jones & Kary 1983 and Kary 1985). CRAE P/L were the subsequent explorers in the mid 1990's and completed an extensive aircore drilling programme coupled with some diamond drilling and other geological studies including mineralogy (Parkinson 1994, Parkinson, 1995, Tear, 1996 and Tear & Russell, 1997). Again significant mineralisation and geochemical anomalism was discovered but follow up work was not completed.

### 2.2 Prospect Geology

The base metal mineralisation that occurs at Mariposa is hosted by calcarenites and calcsiltites of the Ordovician-aged Gordon Limestone. The sequence is steeply dipping to the west with the Crotty Quartzite overlying the limestone, forming a distinct topographic high, possibly as a faulted contact. The footwall to the limestone is believed to be a faulted contact, now called the Mariposa Fault, juxtaposing the limestone with the older Cambrian Dundas Group of sediments and volcanics. Within the limestone is a distinctive non-calcareous, mudstone unit with coarse bioclastic material called the Lords Siltstone. Regionally-related reflux dolomitisation has occurred across the upper part of the limestone creating a vuggy dolomite unit. A siderite alteration zone with anomalous lead/zinc values was identified in the base-of-hole aircore samples, from the CRAE P/L work, that is concomitant with the faulted eastern contact. For the main Mariposa Lode, now called the Western Lode, the lead/zinc mineralisation is associated with a seemingly strata-parallel, siderite replacement unit. Galena is the dominant sulphide species in conjunction with lesser amounts of sphalerite. This lode has been the subject to the majority of the previous diamond drilling. The eastern lodes are weakly defined due to limited shallow drilling, but they are perceived to be steeply dipping and strata-parallel.

On face value, the structure for Mariposa has been presented as quite straightforward i.e. a steeply dipping package of limestone, fault bounded on its eastern margin and conformably overlain by sandstones of the Crotty Quartzite. However it is believed that there is another level of structural complexity, mainly associated with faulting, that may

not have been appreciated in the CRAE and AMOCO mapping. In particular the occurrence of cross faults offsetting the geology, a faulted Crotty Quartzite contact and the possibility of shallower bed dips in the northern part of the area. There is some doubt as to the dip direction of the Mariposa Fault.

Also from the 1990's CRAE P/L end-of-hole aircore samples it is possible to delineate additional stratabound dolomitic alteration. This may be due to either reflux dolomitisation or base metal mineralisation. Weathering of the Gordon Limestone produces black clays which accumulate in the valley and can form a surficial deposit ranging from <1m to 50m thick. Other surficial deposits include washed-in sand and gravel from eroded Crotty Quartzite forming deposits on the western flank and the floor of the limestone valley.



Figure 3: Mariposa lodes, looking North, from Tear (2006).

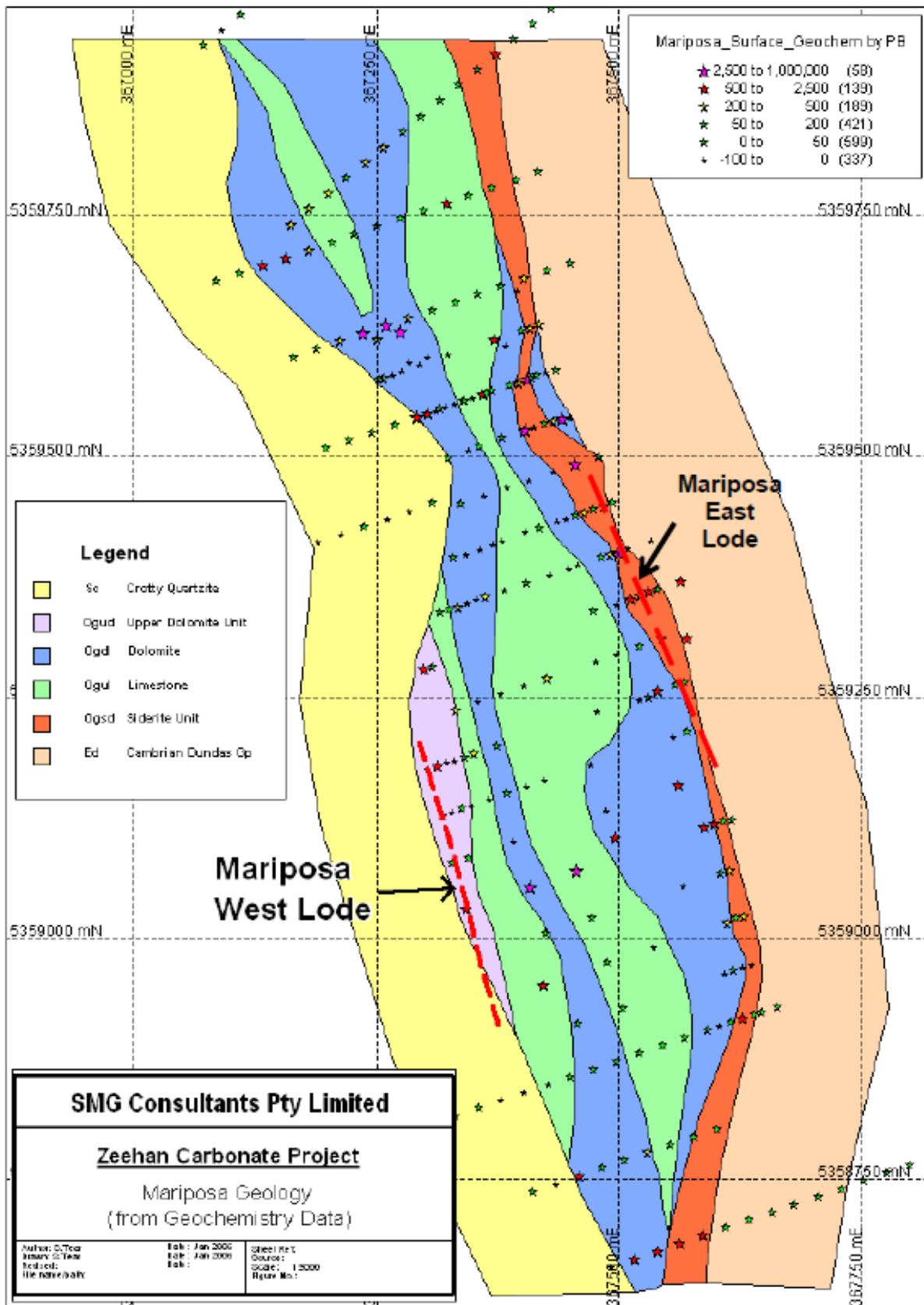


Figure 4: Mariposa local geology after Tear (2006).

## **3 Exploration Activities**

### **3.1 Exploration-related activities**

During the period of tenure, no ground-based exploration was conducted within the boundaries of the licence.

There was an intention to drill some relatively deep diamond drill holes at Mariposa to investigate the grade and thickness of known mineralisation at depth below the old historic workings, however the Company focussed their drilling efforts on the Oceana deposit instead, which was deemed a higher priority undertaking.

## **4 Environmental Activities**

During the tenure period no environmental works were required to be carried out by the company, and no activities were undertaken by the Company that had an adverse impact on the environment. Visual inspection of the site was made on a quarterly basis to monitor any potential impact by activities, past and present.

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