

# **ANNUAL EXPLORATION REPORT EL28239**

## **JERVOIS REGION**

**8th March 2016 to 7th March 2017**

## **JERVOIS REGION COPPER PROJECT NT**

<b>HUCKITTA</b>	<b>SF5311</b>	<b>1:250,000</b>
<b>JERVOIS RANGE</b>	<b>6152</b>	<b>1:100,000</b>

**Datum: GDA 94 zone 53**

**Titleholder: Australia Mining and Gemstone Co. Pty. Ltd**  
**ABN: 86 114 395 247**

**Report No. 2017-013**  
**Australia Mining and Gemstone Co. Pty. Ltd**  
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**1<sup>st</sup> May 2017**

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## **1. SUMMARY**

EL28239 is located in the Jervois region, EL28239 approximately 251 kilometres east northeast 65 degree of Alice Springs. The exploration rationale for EL28239 is based on its location in the eastern Arunta, an area of high prospectivity for a variety of minerals including Cu-Ag-Pb-Zn deposits, W-Mo vein deposits, Sn-Ta-W vein deposits and uranium . Copper mineralisation in the Jervois Range area was found in 1929, the main mineralization occurs in the Bonya Schist which is part of Division II of the Arunta Orogen. Mineralization occurs over several kilometres and is thought to have originally been volcanogenic in origin.

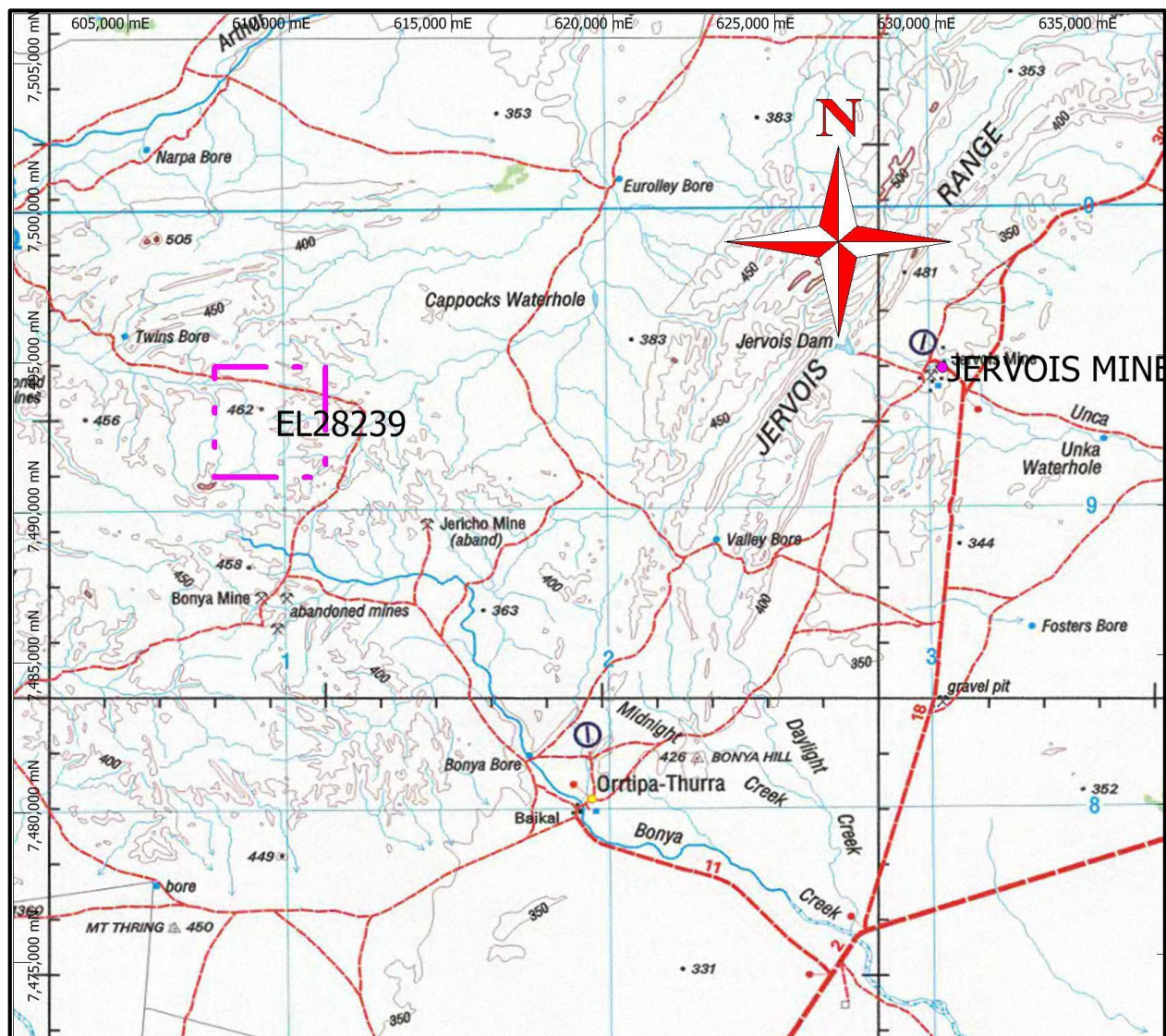
The following sequence has been recognized in the mineralized belt.

Upper: Quartz-chlorite and quartz-magnetite schist, Knotted (and alusite, cordierite) schist containing lode rocks; Lower: Gneiss.

EL28239 is granted on the 8 March 2011, in 2012-2014, Australia Mining and Gemstone Co. Pty. Ltd (AMG) continue dispose history date using MapInfo; in addition, AMG staff reconnaissance the lease. AMG is undertaking mapping and regional geochemical stream sediment and soil sampling in 2015.

## **2. LOCATION AND ACCESS**

EL28239 is located in the Jervois region approximately 251 kilometres NE-ENE of Alice Springs on the Huckitta 1:250,000 map [SF53-11] . The EL28239 lies about 20km west of the Jervois Mine on Jervois Pastoral Lease – NT portion 366 (Figures 1).

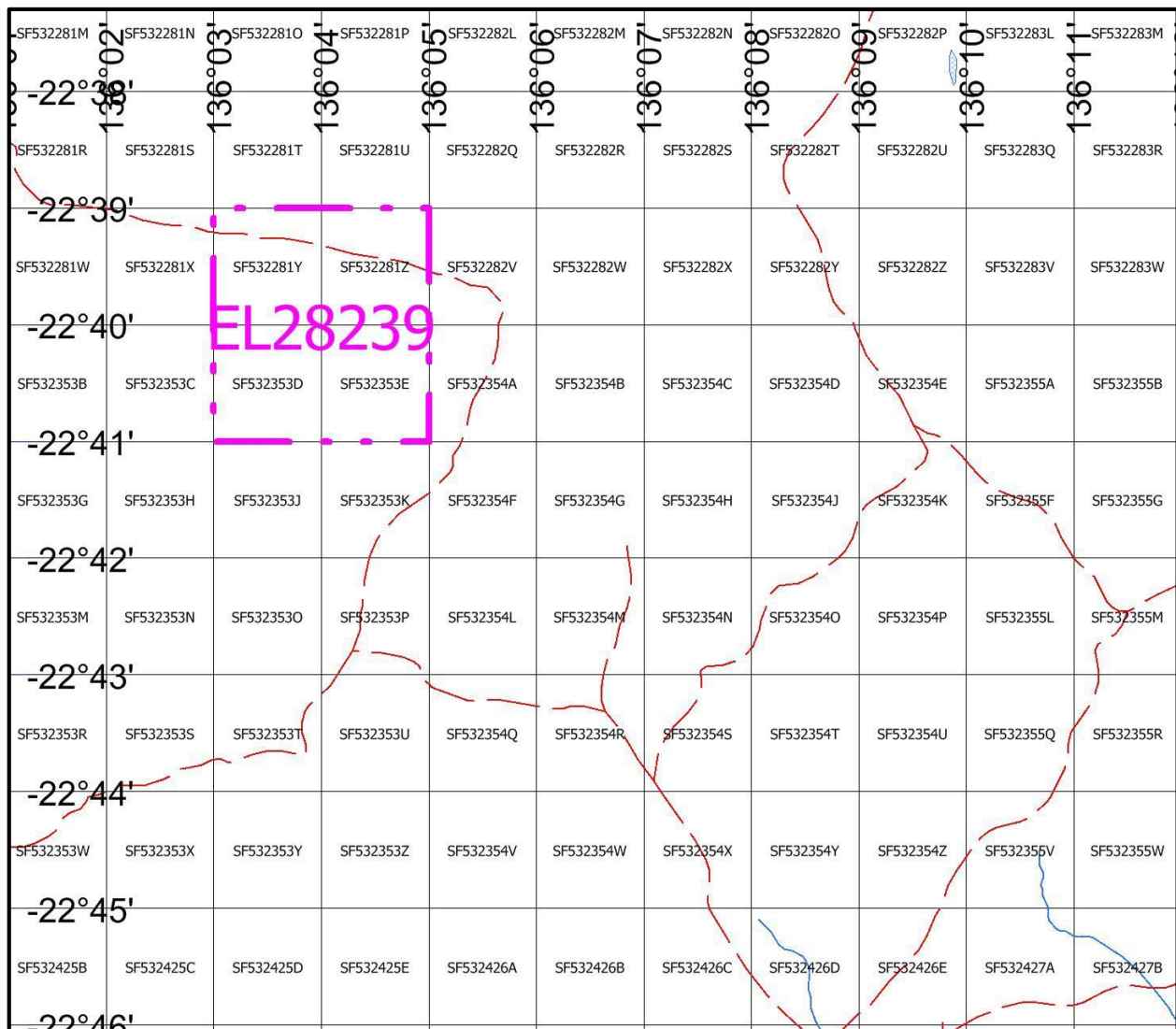


**Figure 1 Location Map of EL28239**

Bush tracks and graded fence lines provide access across EL28239 and cross-country 4WD vehicle passage is possible to many areas.

### **3. TENEMENT STATUS AND OWNERSHIP**

EL28239 was granted on 8th March 2011 for a term of six (6) years. EL28239 show a square and comprises 4 graticular blocks (12.68 sq km) (figure 2) , There are no other

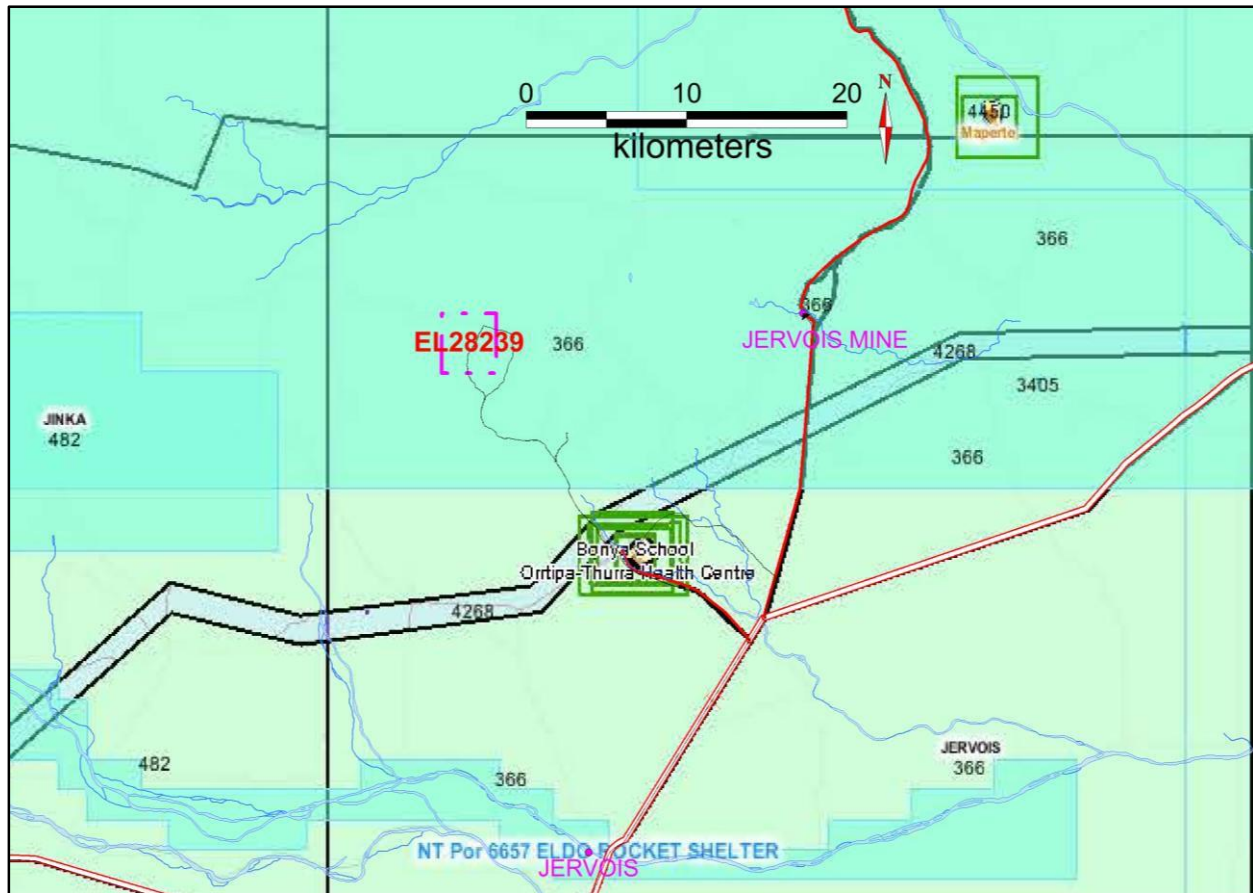


mining leases or mineral claims within the license area. List of Graticular blocks covering EL28239 as follow: SF532281Y, SF532353D, SF532281Z, SF532353E.

Background land tenure under EL28239 is part of:

The land tenure is Perpetual Pastoral Lease 962 “Jervois”— NT portion 366. No details of registered and recorded sites have been sought from the Aboriginal Areas Protection Authority (“AAPA”).



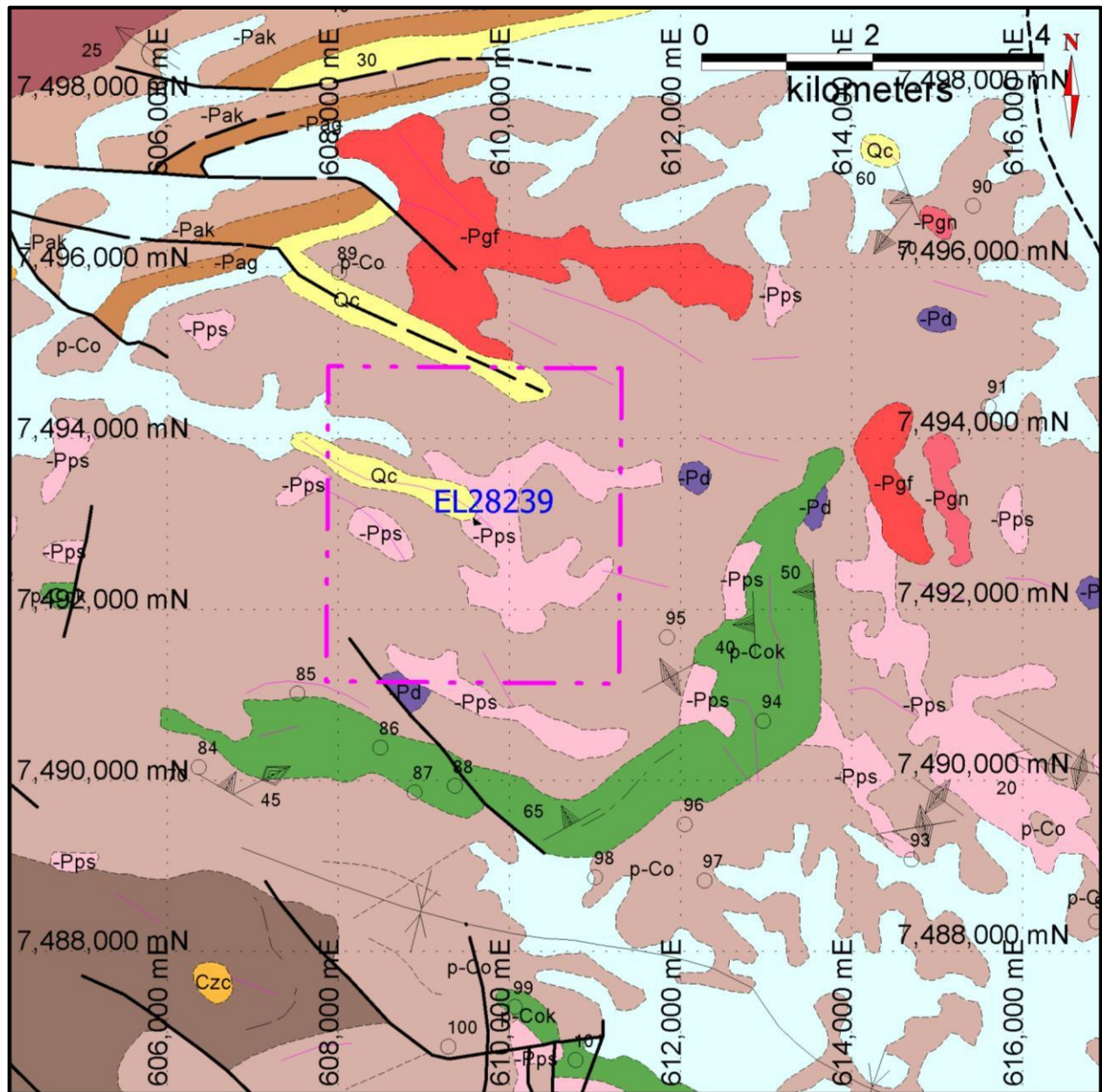


**Figure 3 Landholders and Lease Numbers displayed inside EL28239**

#### **4. GEOLOGY**

EL28239 occurs in the eastern part of the Arunta Orogenic Domain, a sequence of predominantly metamorphosed sediments now represented by a series of mica-aluminum silicate rich schists and gneisses, cut by a complex network of regional and local scale EW and NW–SE anastomosing faults (figure 4).

In the Jervois area, EL28239 occur Pegmatite (Pps) and Schist (Bonyia schist, P<sub>o</sub>: Miscovite schist, biotite muscovite schist, andalusite schist). These metamorphic occur as isolated outcrops surrounded by extensive soil and sand-covered plains. The dominant



**Figure 4 Geological Map of EL28239**

rock type is quartzo-feldspathic gneiss and commonly grades into biotite-rich gneiss. Migmatite occurs in both rock types. Feldspathic quartzite and schistose, mica-bearing quartzite are also present and frequently contain tourmaline. Other rock types include biotite schist, layered magnetite-quartz rock, calc-silicate rocks, and megacrystic granitic gneiss. The rocks are intruded by several plugs of unnamed granite.

Schistose biotite-garnet gneiss, sillimanite gneiss, amphibolite, and biotite gneiss of the “Iridina Gneiss” also occur in the area.

## **5. PREVIOUS EXPLORATION**

In 1973, L.A. Johannsen submitted CR19790133 (EL1865), a total of thirty days was spent in the field, look for copper and scheelite.

In 1989-1991, Rosequartz Mining NL holding EL6260, Exploratory work carried out includes: geological reconnaissance/37 rock chip samples/61 bulk cyanide leach drainage samples/61 duplicate drainage samples for base metal analysis. Analyses for Au, U, Cu, Pb, Zn, As has been carried out. No samples drop in EL28239.

In 1991-1996, Normandy exploration limited holding EL6993&EL7505, Exploratory work carried out includes: geological reconnaissance/rock chip samples/stream sediment samples/drilling. Analyses for Cu, Pb, Zn, Ag, As Bi, Cd, Mo, Fe, Mn, Co, Ni has been carried out. No drill drop in EL28239. An old working -“Xanten” drop in EL28239, open cut copper. Copper-bearing lenses are small and rarely exceeds 3m in length. Visual estimate suggests that about 1,000 tonnes of copper ore may be mined.

“Xanten” location need adjust.

In 2006-2008, Imperial Granite & Minerals Pty Ltd holding EL24911, field reconnaissance trip was carried out in 10 March-Mid April 2007, it was found that whilst much of the EL contained open soil covered country with little outcrop, four samples were taken.

## **6. EXPLORATION DURING YEAR 1**

Work done during Year 1 of tenure consisted of a historic data compilation (figure 5). The results of previous work are outlined in the previous section (‘Previous Work’). Work done included checking:

a) historic tenure in MapInfo, using a MapInfo file supplied by DME (containing exploration



d) georeferencing relevant maps and plans into MapInfo to obtain locations of samples and mapped geology within EL28239.



## 7. EXPLORATION DURING YEAR 2

During Year two, AMG continue dispose history date information of the EL. In 25<sup>th</sup> -27<sup>th</sup> September 2012, AMG staff traversed 11.7km in EL28239 property, the lease outcrop Bonya Schist (P<sub>eo</sub>) and early proterozoic Samarkand Pegmatites (P<sub>ps</sub>, photo 1), there aren't find copper mineral in the lease.



Photo 1 bear tourmaline Pegmatites intrude in Bonya Schist

## 8. EXPLORATION DURING YEAR 3

The tenement didn't field work in 2013, AMG pay attention on the Kurinelli goldfield in Davenport range of Barkly region.

## 9. EXPLORATION DURING YEAR 4

During fourth year, the EL didn't implement field work, because AMG geologists carry out two projects exploration about copper with Panda Mining Pty Ltd in Flinders Ranges of South Australia in 2014.

## 10. EXPLORATION DURING YEAR 5

During fifth year, AMG reviewed all data concerning this lease from DPIR, and preparing the likely field work for next year.

## 11. EXPLORATION DURING YEAR 6

During sixth year, AMG reviewed all data concerning this lease from DPIR, and preparing the likely field work for next year.

## 12. PLANNED EXPLORATION FOR YEAR 7

Exploration is planned to target Au, Cu and W mineralization, programme include Field ground mapping / ground magnetic survey and rock chips survey over EL28239. A cost for the total proposal \$14,000.

## 13. EXPENDITURE

Expenditure (as supplied by Australia Mining and Gemstone) consisted of:

Table 1 Expenditure on EL28239

<b>Expense</b>	<b>\$</b>
Office Studies	\$3,000.00
Geological data processing	\$5,000.00
Geophysical data processing and interpretation	\$5,000.00
Overheads	\$1,000.00
<b>TOTAL</b>	<b>\$14,000.00</b>

## **14. CONCLUSION AND RECOMMENDATIONS**

There was some northwest strike Pegmatites intrude in Bonya Schist, but the least absence big tectonic (fault), there aren't find copper mineral in the lease, old Xanten history copper mining occurrence was drop out of the EL, it's location need adjust.

The lease need carry out mapping and look for fault in Bonya Schist, AMG geologist think copper mineralisation zone relate as tectonic zone of throughout Bonya schist.

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