



*Annual Report*

**AO-ZHONG INTERNATIONAL MINERAL RESOURCES**

Third Annual and Final Report for EL28300

18/03/2011 to 05/06/2014

Taylor/Home Of Bullion 1: 100 000 Sheet

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## Digital Data Files

Type of File	Description of file	Name of title	File name
Report file	annual report text	EL 28300	EL28300_2014_01_AS.pdf
Figure	Targets on Remote Sensing Interpretation map	EL 28300	EL28300_2014_02_AS_Figure7.jpg



## ABSTRACT

This project is wholly owned by Ao-Zhong with a purpose for copper. In the Year 3, a site visit and the remote sense anomaly verification have been done in seven defined areas. 45 specimens were collected for Physical property test. No valuable geological information supports the further work. No work planned and it is to be surrendered.



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## 1 Introduction

Ao-Zhong International Mineral Resources(Ao-Zhong) holds 100% of the Exploration Licence (EL) 28300. Its main target is copper. It is in the Taylor/Home Of Bullion 100K sheets and BARROW CREEK 250k sheet.

The details of the licences are displayed below:

Table 1 Tenement Details

Licence Number	Date of Grant	expire time	Size blocks/sqkm	Owner	Covenant
28300	18/3/11	17/3/17	141 / 450.95	AO-ZHONG	\$ 83,500

In 2013, a waiver of reduction was granted by DME, so the tenement retains all the blocks.

## 2 Back Ground Information

### 2.1 Location and Access

Exploration licence 28300 lies between the Stuart Highway on the west and the Darwin railway line to the east about 300km north of Alice Springs, Figure 1. The nearest settlement to the area is the Wycliffe Well Roadhouse about 55 km to the north. Access to the licence from Alice Springs is via the sealed Stuart Highway and then station tracks.

The area of the licence can be broken into three distinct topographic regions. The north eastern corner is extremely flat, sparsely vegetated and sand dune covered with rare outcrop. South west of the dune country is the Osborne Range a pair of parallel quartzite ridges. The Osborne Range is a major impediment to travel across the licence. South and west of the ranges the ground is generally flat to gently undulating with poorly defined creeks and minor outcrop. Vegetation is mostly spinifex and acacia trees which can restrict movement.

### 2.2 Regional Geology

North of the Osborne Range most of the area is covered by Quaternary aeolian sand



with only minor rock outcrops. The oldest rocks exposed have been mapped as Palaeoproterozoic biotite-quartz-feldspar gneiss. Unconformably overlying the gneiss is the Strzleckie Volcanics which is described as tuffaceous siltstone and arenite, porphyritic dacite and rhyolite and quartz arenite. The Prospect D is hosted by this unit.

The Osborne Range is made of quartz arenite and quartzite with some basal conglomerate which belongs in the Illoquara Sandstone Member.

South west of the Osborne Range are outcrops of the Strzleckie Volcanics and the Ali-Curung Granite. Like the north east of the licence the South west is extensively covered by Quaternary sands and alluvium.

### **2.3 Previous Exploration**

A great deal of exploration work has been done in and around EL 28300. The principle commodities sought have been base metals hosted in a similar geological to that at Prospect D and the Home of Bullion mine. Other explorers have also looked for gold and precious metals, uranium, rare earths and heavy minerals.

Exploration methods used have been airborne geophysics (magnetic, radiometrics and EM) and ground based geophysics including EM, gravity, magnetic, radiometric and an Induced Polarisation (IP) survey. Geochemical sampling has included stream sediments, soils, rock chips and vacuum drilling to bed rock samples. RAB, RC and diamond drilling have all been done. None of the work done located any mineralisation away from the known deposits.

Figure 2 and 3 show the distribution of the sampling work done.

Despite the large amount of work done copper and associated base metals, Ni, Pb and Zn remain as the commodities of most potential. Other commodities generally associated with pegmatite like tin, tungsten and tantalum are possibilities. Uranium is also possible. Figure 4.

Copper- Copper is associated with both the Home of Bullion mine and Prospect D although the styles of mineralisation are different. Figure 2 and 3 show the distribution of the exploration sampling that has been done in the licence. Most of the work has been done on the south western side of the Osborne Range. On the north eastern side of the range the only work done has been vacuum and RAB drilling along lines by Aberfoyle Resources. Examination of the regional magnetic data (plan10) suggests their work has been located too far to the east.

Pegmatite- To the west of the exploration licence are several small mines that have produced tin, tungsten and tantalum from pegmatite. Deposits of this type are not



considered a primary target but as part of the assessment the potential must be examined.

Gold- To the north west of the licence, but in the same stratigraphic position as the licence Normandy Posideon located the Koroda gold prospect. Normandy have explored for gold on the south west side of the Osborne Range but again there has been little work on the north eastern side.

Uranium- some exploration work has been done for uranium without much success. There is a very weak uranium anomaly on the northern side of the Osborne Range that warrants investigation in the field.



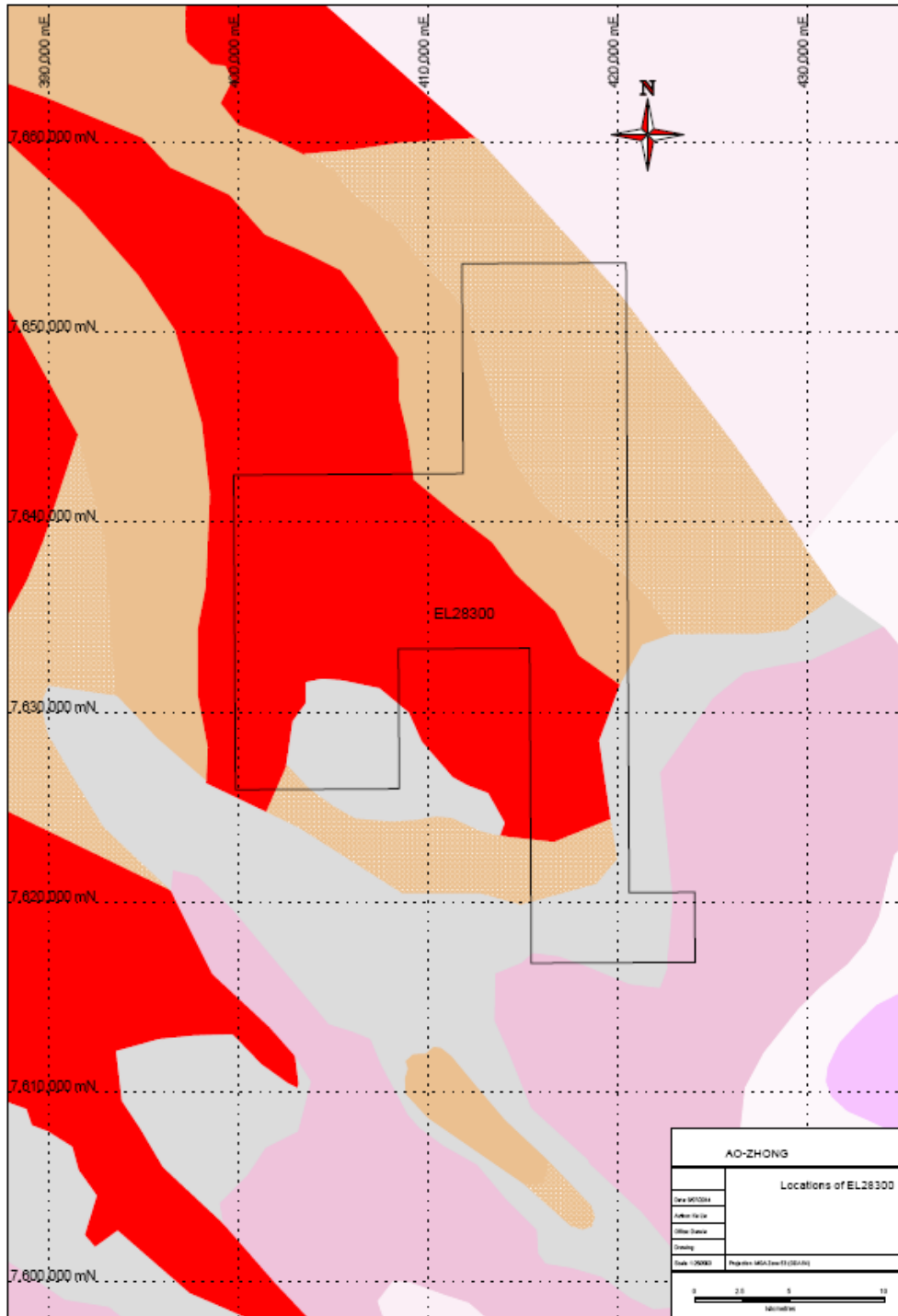
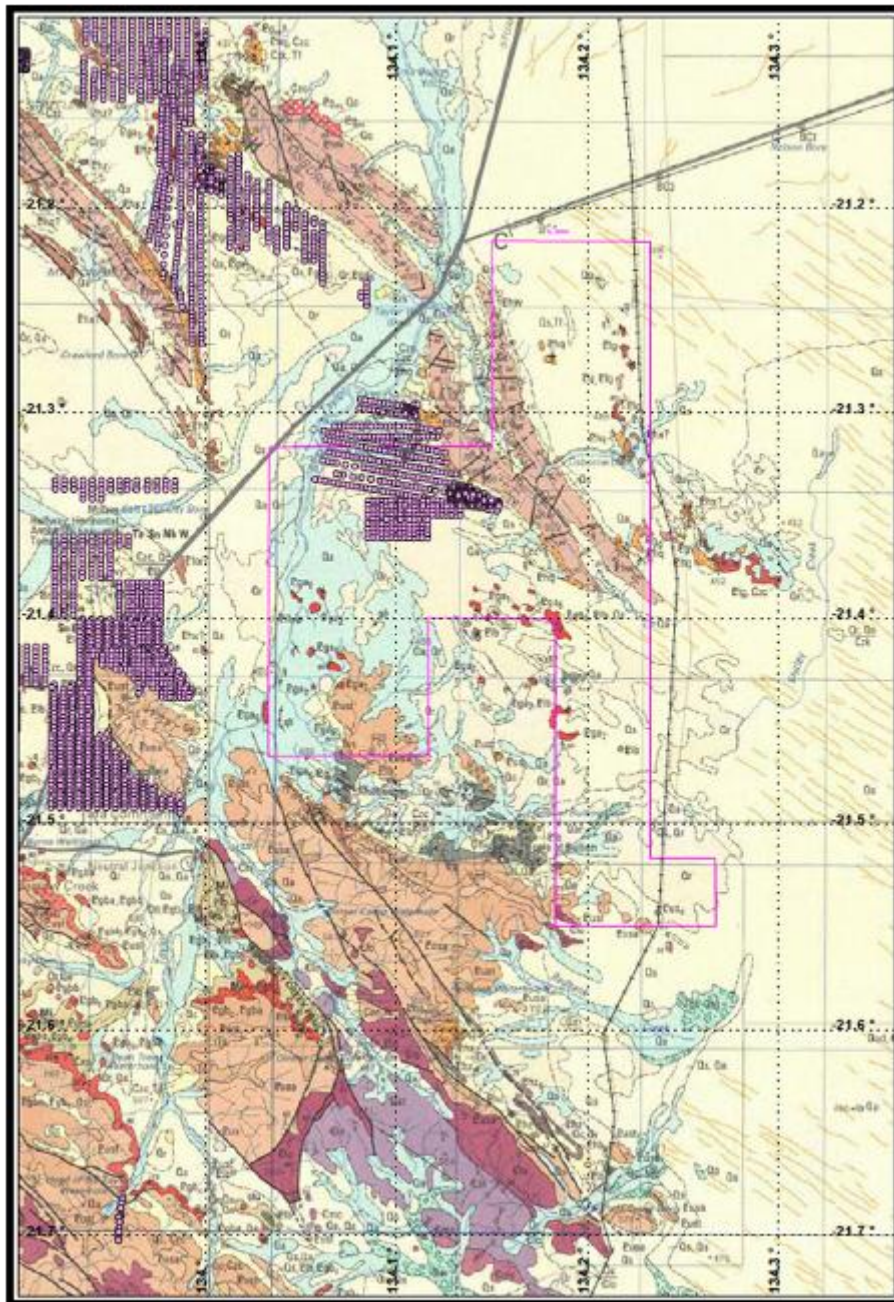


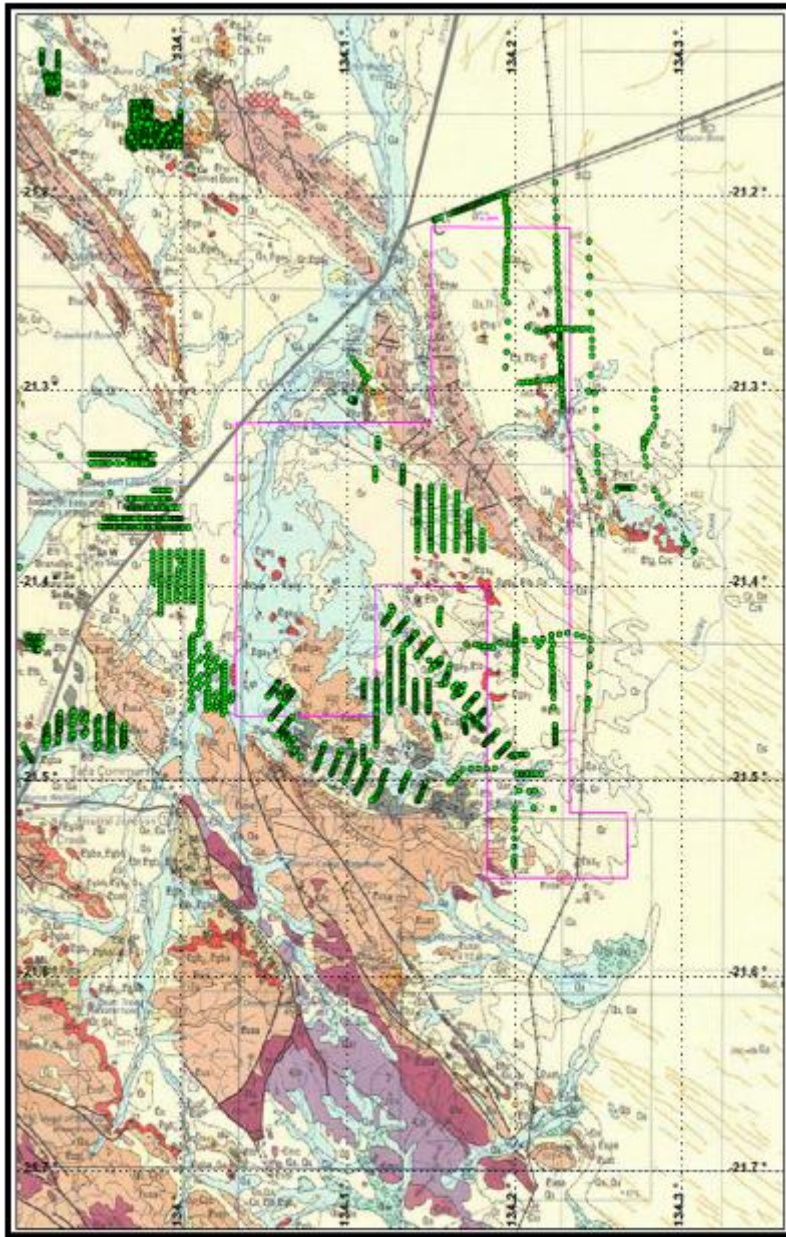
Figure 1 location of EL28300



*Figure 2 Historical Soil Sample Locations*

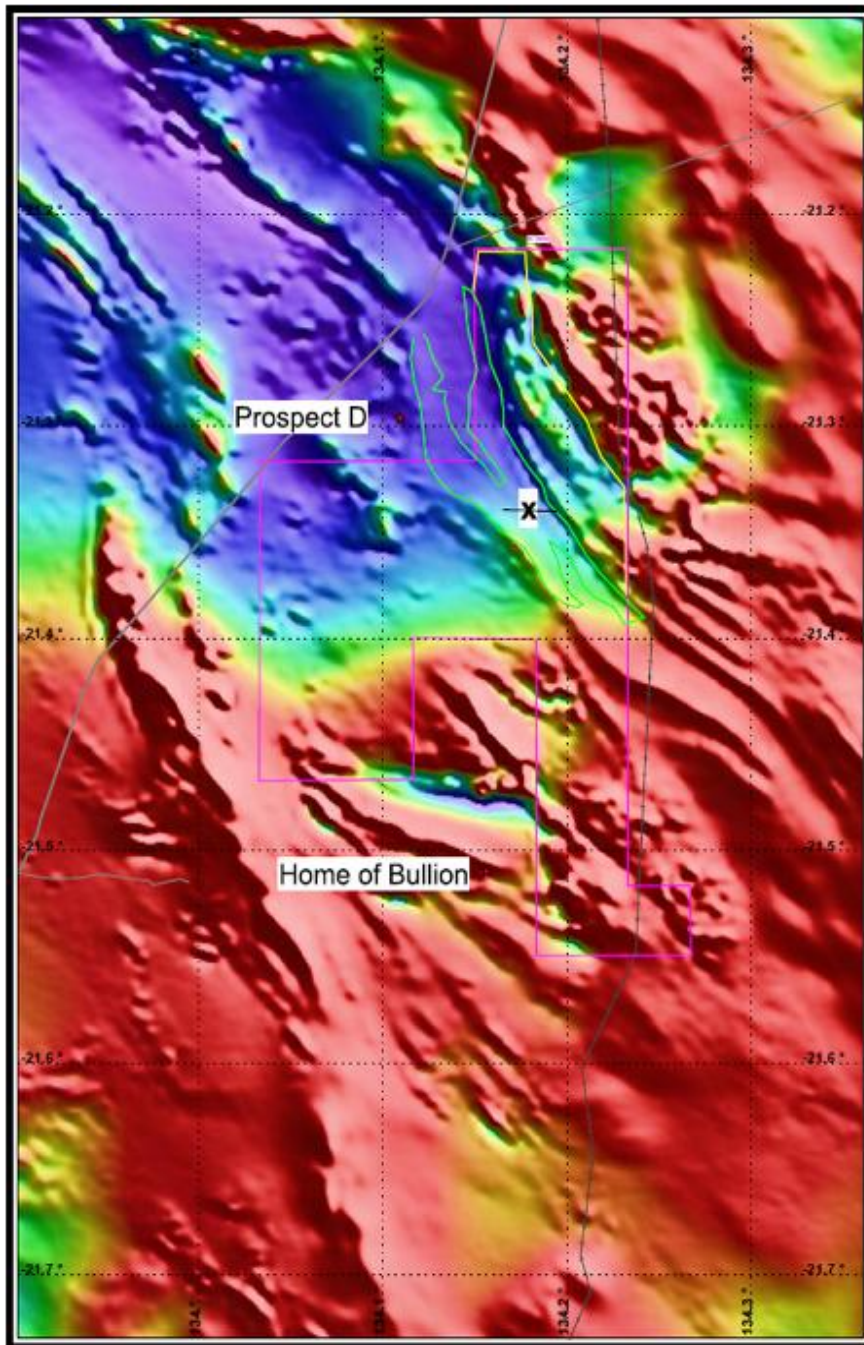
(The pink dots show the locations of the soil samples collected over and along strike from the Prospect D Mineralisation. All of the soil sampling has been done on the southern side of the Osborne Range. The Range is a syncline and the same geology is present on the northern side of the Range.)





*Figure 3 Historical Vacuum Drill Hole Locations*

(The green dots show the locations of drill holes used for geochemical sampling. Most of the work has been done along strike of the Prospect D mineralisation and Home of Bullion mine. The drilling to the north of the Osborne Range is too far north to have tested the northern limb of the syncline in the same stratigraphic position as the Prospect D mineralisation.)



*Figure 4: EL 28300 Airborne Magnetic Imagery*

(The green line shows the distribution of the magnetically quiet Osborne Range Quartzite. The work area is the northern limb of the syncline which, in the southern limb hosts the Prospect D mineralisation.)



### 3 Work in 2011

A soil sampling work was done. The sampling area traverses across the Strzleckie Volcanics marked as "A" to "O" are shown on plan "EL 28300 Soil S lines on Google". (Figure 5)

The red dashed lines on the plan indicate the positions of magnetic "highs" that may be caused by thinner cover or more iron rich rocks in the Strzleckie Volcanics. The green and pink dots show the position of drill holes and soil sample sites.

The traverses are spaced at 1000m intervals and were sampled at 250m spacing from the edge of the Osborne Range as shown. 250 samples (including duplicates) were collected and assayed by the ARM20 method provided by the Amdel.

The results of the widely spaced soil sampling, completed in 2011 have been examined and a decision to undertake further soil sampling made. The original sampling was undertaken to try and identify Cu, Ni mineralisation similar to that at Prospect D. In this regard the results are disappointing with no obvious Ni, Cu mineralisation or anomalism detected. However, the elements, gold, arsenic, and zinc appear to be anomalous in defined areas and are considered worthy of additional work.



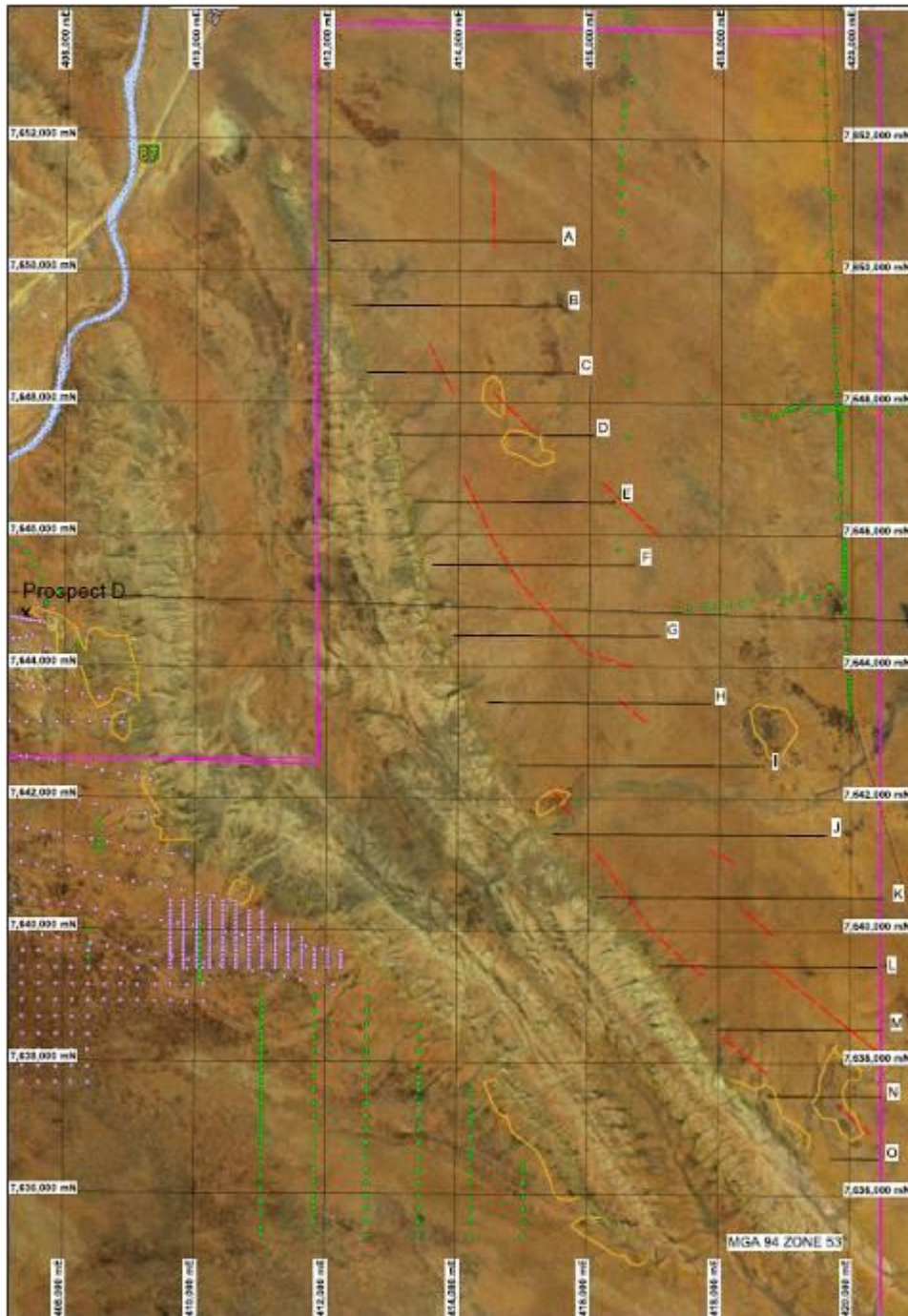


Figure 5 EL 28300 Soil S lines on Google





## 4.2 Remote Sensing Interpretation

Based on the SPOT-5 and ETM+ image, AO-ZHONG contracted the interpretation work to another subsidiary from AO-ZHONG's parent company. The remote sensing image and alteration anomaly maps have been generated and 7 abnormal zones outlined with numbers in Figure 7 .





## 5 Anomaly Verification

Seven targets were defined by the comprehensive interpretation (Figure 10). In the Year 3, a site visit and the remote sense anomaly verification have been done in the seven zones. Several points were observed in every zone (Table 2). Most area is covered by red Quaternary sand. 45 specimens in the tenements and 7 near the copper deposit of Home of Bullion were collected for Physical property test (Table 3, 4). No valuable geological information supports the further work.

Table 2 Observing points in EL28300

EL	Zone	Observing points ID	Coordinates		Geological Description
			X	Y	
EL28300	II	YG01	415807	7619667	Biotite feldspar quartz sandstone
		YG02	415793	7620086	Belt-shape silicoferrite rock
		YG03	415695	7620378	red Quaternary sand
	IV	YG04	418985	7626308	Schist in a small area
	III	YG05	416169	7630001	Biotite granite in a small area
		YG06	416524	7630116	
		YG07	416398	7630139	Schist in a small area
		YG08	416202	7630292	red Quaternary sand
	I	YG09	403646	7625991	Red and brown quartz sandstone
	VII	YG10	402514	7631449	red Quaternary sand
		YG11	402125	7631434	
		YG12	403065	7632781	Scatter biotite granites
		YG13	402549	7634144	
		YG14	402122	7634015	
		YG15	401498	7634364	
	V	YG16	411083	7638441	red quaternary sand
		YG17	412209	7637945	
		YG18	413042	7637377	
	VI	YG19	419828	7643098	scatter micaschist
		YG20	419310	7643000	
II	D01	415592	7617346	Grey quartz sandstone	
	D02	415791	7617596	Grey quartz sandstone	
	D03	415962	7618590	quartz sandstone	
	D04	415807	7619667	Biotite feldspar quartz sandstone	
	D05	415815	7619890	Coarse sandstone	



		D06	415793	7620086	Belt-shape silicoferrite rock
Home of Bullion Copper			412662	7620834	The copper mainly hosted in schist of Plb group and metapelite, and controlled by E-W fault.

Table 3 Specimens of EL28300

Sample ID	coordinates		stratum	name	remark
	X	Y			
WX001	412662	7620834	Plb	meta sandstone with	
WX002-WX003			Plb	biotite schist	
WX004-WX007			Plb	Copper ore	
WX008-WX012	415592	7617346	elo	quartz sandstone	
WX013	415670	7617451	elo	quartz sandstone	
WX014	415791	7617596	elo	quartz sandstone	
WX015-WX016	415934	7618239	elo	quartz sandstone	
WX017	415957	7618432	elo	Fine conglomerate	
WX018	415807	7619667	Pust	feldspar quartz	
WX019	415815	7619890	Pust	Coarse sandstone	
WX020	415795	7620091	Pust	Belt-shape silicoferrite	
WX021-WX022	415784	7620131	Plb	Meta sandstone	
WX023-WX026	418986	7626310	Plb	quartzite	
WX027-WX030	416169	763001	Pga	biotite granite	
WX031-WX033	416151	7630290	Pga	biotite granite	
WX034	416398	7630139	Plb	Meta mica sandstone	
WX035-WX036	403646	7625991	Pust	Coarse sandstone	
WX037-WX038	402549	7634144	Pga	granite	
WX040-WX042	402122	7634015	Pga	granite	
WX043-WX046	419826	7643096	Plb	micaschist	
WX047	419315	7642998	Plb	micaschist	
WX048-WX052	419241	7643054	Pga	biotite granodiorite	
TOTAL	52				



Table 4 Physical property parameters results

N o.	Name	magnetic susceptibility ( $10^{-5}$ SI)				remanence ( $10^{-3}$ A/m)				density ( $10^3$ kg/m <sup>3</sup> )			
		amou nt	max	min	geom etric avera ge	a m o u n t	max	min	arith metic al mean	am oun t	max	min	arith metic al mean
1	quartz	10	0.4	0	0.0					10	2.33	2.27	2.3
2	Copper ore	4	1181	16.7	2334.	2	131	85	105	3	3.27	3.16	3.2
3	biotite schist	2	14.3	17.2	16.5					1			3.01
4	Coarse	3	1	0	0.6					3	2.55	2.32	2.4
5	quartzite	4	0.2	0	0.0					4	2.46	2.74	2.58
6	biotite	7	3.9	0.1	3.0					7	2.57	2.02	2.3
7	granite	6	2.4	0.3	1.6					6	2.68	2.36	2.45
8	micaschist	5	2.8	0.6	1.4					5	2.73	2.58	2.64
9	granodiorite	4	2.5	2	2.4					4	2.71	2.29	2.5
1	Belt-shape	1			28.0					1			2.81
1	Meta	3	25.6	2	14.0					3	2.85	2.79	2.82

According to this trip, the whole area is mainly covered by red Quaternary sand layer, and no meaningful mineralization information found in the outcrops. Maybe there is schist which could host copper under the Quaternary layer in Zone II .



## **6 Proposed Exploration and Budget**

No work planned and it is to be surrendered.

## **7 Conclusions**

This project is wholly owned by Ao-Zhong with a purpose for copper. In the Year 3, a site visit and the remote sense anomaly verification have been done in the seven defined areas. 52 specimens were collected for Physical property test. No valuable geological information supports the further work. No work planned and it is to be surrendered.