ANNUAL AND FINAL REPORT OF EL28945

Burt Plain

5th March 2012 to 27th February 2019
Aileron Project NT

NAPPERBY	SF5309	1:250,000
NAPPERBY	5452	1:100,000
AILERON	5552	1:100,000

Datum: GDA 94 zone 53

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

Report No. 2019-13
Australia Mining and Gemstone Co. Pty Ltd
By Mingjin HOU & Shi HUANG
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1. SUMMARY

Aileron Project is situated in the southern of Central Desert Shire in the central part of Northern Territory, approximately 142 kilometers northwest 323 degree of Alice Springs. EL28945 belong The Burt Plain, Historical exploration focused on uranium.

EL28945 is granted in March 2012, the tenement covered 39 graticular blocks on Aileron region, located about 22km west-Southwest of Aileron roadhouse in the Northern Territory of Australia. Eastern areas of EL28945 located in Aileron station and western areas of EL28945 belong Napperby Station, the EL28945 is cover with Aeolian sand, just low outcrop basement rocks is late Proterozoic Vaughan Springs Quartzite (Pav) at the Ngalia Basin edge. There are many station tracks and fence lines crossing the tenement.

During 2012-2014, open file Geophysical data in ER-Mapper format were obtained from the Northern Territory Geological Survey, these data was merged and processed in-house. In September 2012, Australia Mining and Gemstone Co. Pty. Ltd (AMG) staff entranced EL28945 areas, the most areas of EL28945 are covered by Aeolian sand. AMG exploration target for gold and copper.

2. LOCATION AND ACCESS

EL28945 is located in the northern part of Burt Plain and west-southwest of Aileron, about 142 kilometers northwest of Alice Springs in the Northern Territory (Figures 1).

The exploration license is accessed by unsealed roads and station tracks from the Napperby Station and Aileron Station Roads, these roads connect to Stuart Highway and Tanami Road, the Tanami Road crossing with Stuart Highway at 20 kilometers north of Alice Springs, Between Alice Springs and Yuendunu road was seal with pitch.

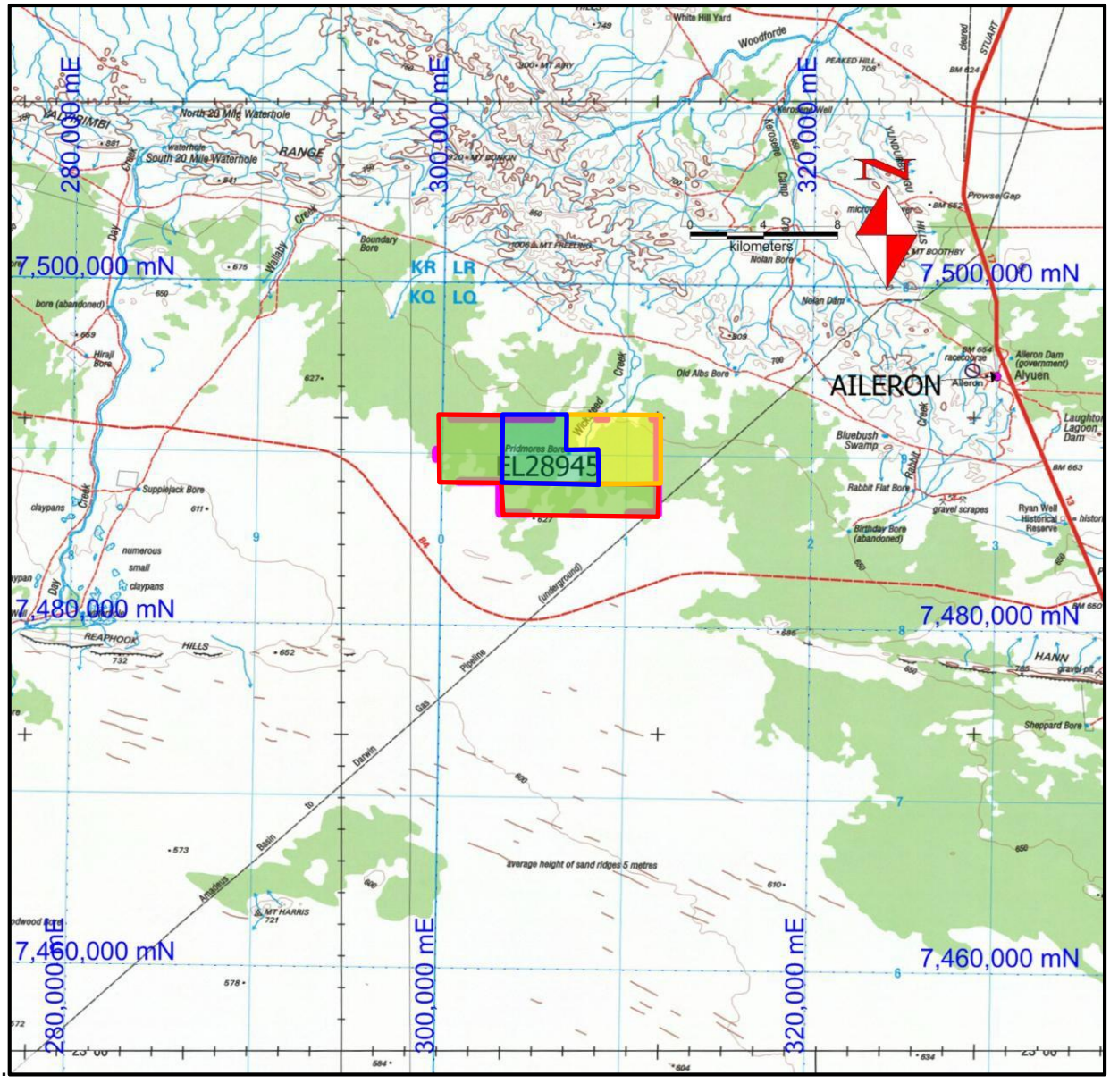

Figure 1 Location Map of EL28945 (blue blocks retained)

These stations homestead built a few dirt track in eastern and southern of the tenement. These station keeps access gates closed and it was necessary to approach the homestead directly to make contact with the proprietors.

3. TENEMENT STATUS AND OWNERSHIP

EL28945 was granted to Australia Mining and Gemstone Co. Pty. Ltd on 5th Marth 2012 for a term of 6 years. It comprises 39 graticular blocks (123.52 sqkm) at first, after

three times reduction, the EL's area is 5 graticular blocks (15.84 sqkm), see Figure 2. There are no other mining leases or mineral claims within the License area. List of Graticular blocks covering EL28945 shows in Table 1.



Figure 2: Graticular blocks covering EL28945 (blue blocks retained)

Table 1 Graticular blocks covering EL28945

SF532318A	SF532318G	SF532318B	SF532318F	SF532318H

Background land tenure under EL28945 is part of Aileron station and Napperby Station (Figure 3).The contact details being: **Aileron Station** (Waite River Holdings Pty Ltd); Phone:08 8956 9705; fax 08 8956 8535; **Napperby Station** (phone 08 8956 8666; fax 08 8956 8660).

The region has a semi-arid continental climate. This following description is drawn from Stewart (1982):"The climate is characterized by long hot summers when temperatures regularly exceed 40°C, and short mild winters. The average rainfall is about 280mm, most of which falls between November and March, but both frequency and amount are erratic." (Stewart, 1982)

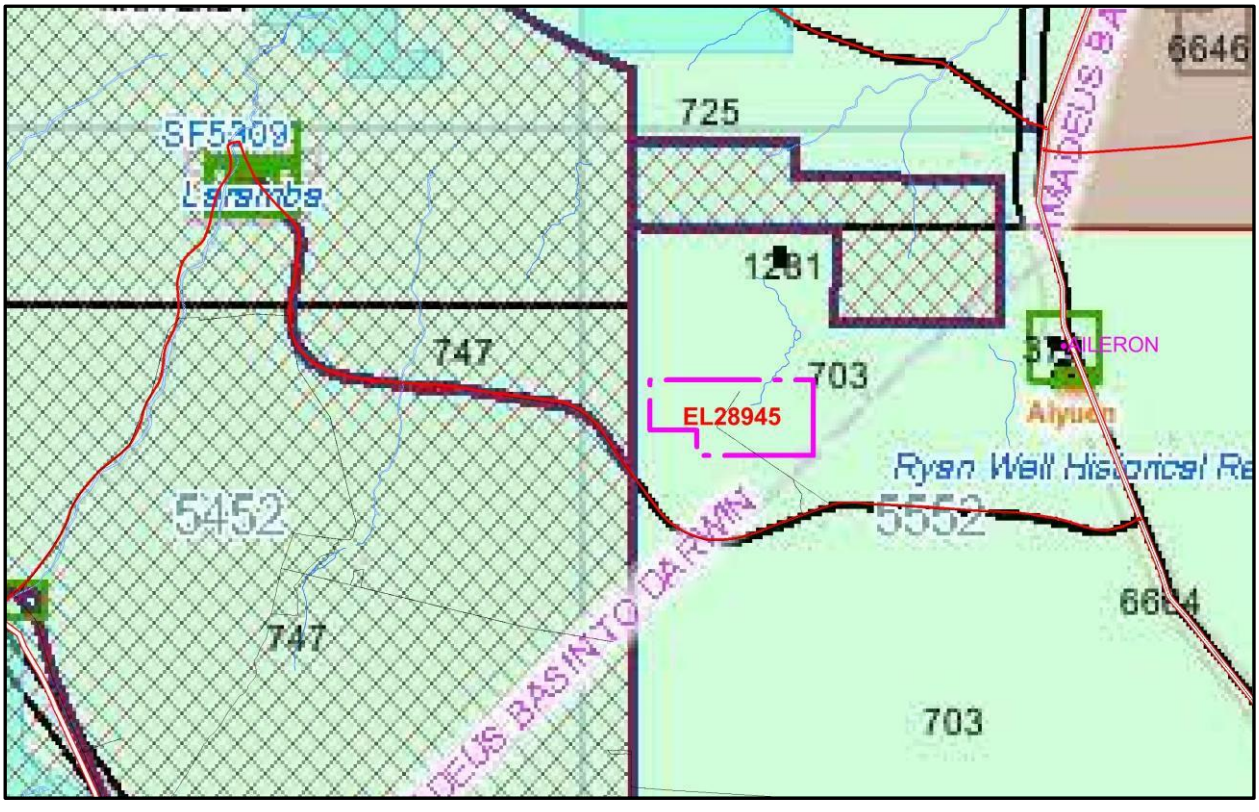

Figure 3 Landholders and Lease Numbers displayed inside EL28945

4. GEOLOGY

REGIONAL GEOLOGY

EL28945 covers the northern edge of the Ngalia Basin and parts of the surrounding Arunta Block. The Ngalia Basin is a large 300 km long by 70 km wide east west trending intra- cratonic basin, which contains up to 5000 meters of late Proterozoic to Carboniferous aged fluvial and marine sediments. These sediments were derived from the surrounding Uranium enriched early to mid-Proterozoic granites and metamorphic rocks of the Arunta Block.

The Arunta Block is composed of metamorphic basement lithology's, which have been intruded by later granites. Three areas are recognized within the Arunta Block, The northern, central and southern provinces. The Ngalia basin sits between the northern and central provinces. Formation of the Arunta Craton is divided into three stages. The earliest phase (2000mya) comprises mafic, felsic and aluminous granulite and calcsilicate

rocks of the Strangways Metamorphic Complex, which comprises most of the Central Province. The second phase of formation is dominant in the northern and southern provinces and comprises aluminous and silicious sediments with a few mafic flows and sills. The third phase is less extensive and is found as ortho-quartzite outliers scattered around the northern and southern provinces. (Shaw 1990)

The Arunta Block underwent deformation and metamorphism during the Proterozoic, including the intrusion of granites, some of which are highly uraniferous, particularly those from around 1750mya. During the late Devonian and early Carboniferous the Arunta Block was extensively disrupted by thrust faulting, particularly along the boundary between the northern and central provinces. (Shaw 1990)

The Ngalia Basin developed around 900mya and comprises a succession of basal late Proterozoic continental and possibly marine sediments overlain by continental fluvioglacial sediments. Later sedimentation during the Cambrian and Ordovician resulted in epicontinental sediments including carbonates. Uplift during the Alice Springs Orogeny resulted in the deposition of Devonian to Carboniferous fluvial sediments. Subsequent deformation of the basin has resulted in folding and faulting, with major thrust faults, strong folding and over turning of lithology along the northern margin of the basin. Deformation in the south is less intense with only gentle folding along the southern margin (Freeman et al 1990).

LOCAL GEOLOGY

The tenement is underlain by basement rocks of the Aileron Province (According to the web-site of the NTGS (December, 2004)) basement rocks in the Aileron region comprise part of: "… the Arunta Region, a complex basement inlier in central Australia that has undergone a prolonged history of sedimentation, magmatism and tectonism extending from the Paleoproterozoic to the Paleozoic. The Arunta Region can be subdivided into the three, largely fault bounded terranes with distinct geological histories: the Aileron, Warumpi and Irindina Provinces. The Aileron Province comprises greenschist to granulite facies metamorphic rocks with protolith ages in the range 1865-1710 Ma. It forms part of

the North Australian Craton and is geologically continuous with the gold-bearing Tanami and Tennant Regions to the north. In contrast, the Warumpi Province comprises amphibolite to granulite facies rocks with protolith ages in the range 1690-1600 Ma, and is interpreted to be an exotic terrane that accreted to the southern margin of the North Australian Craton at 1640 Ma. The Irindina Province in the Harts Range region comprises Neoproterozoic to Cambrian metasediments that formed in a major deposition center within the Centralia Super basin. It underwent high-grade metamorphism and deformation during Ordovician" (480 - 450 Ma).

The Arunta Basement in this region is further subdivided into the Central and Southern Provinces by the Redbank Thrust Zone, a major north dipping crustal-scale northwest trending structure. The oldest rocks of the Central Province that underlies Burt Plain are mafic and felsic granulites of the Strangways and Narwietooma Metamorphic Complexes that were deformed, metamorphosed and intruded by megacrystic syntectonic granites during the Strangways Orogeny around 1760-1750Ma. Rocks of the Narwietooma Complex are more widespread comprising mafic granulites.

The EL28945 area is typified by flat sandy plains overlying gneiss and granites of the Arunta Block (figure 4). Sandy and calcrete soils are found extensively within the Ngalia basin to the North and overlying the Arunta Block of the tenement area. A number of isolated Quartzite hills emerge from the plain within south of EL28945 area and north of Napperby road. The vegetation in the area consists of acacia scrubland associated with grasslands and minimally modified pastures in places. Taller eucalypts are present within and along the main drainage systems.

Except Aeolian sands covered in EL28945, basement rock is late Proterozoic Vaughan Springs Quartzite (Pav), it outcrop in southern edge of EL28945, , petrology was consisting Thick-bedded quartzite, ferruginous quartzite, granule and pebble conglomerate.

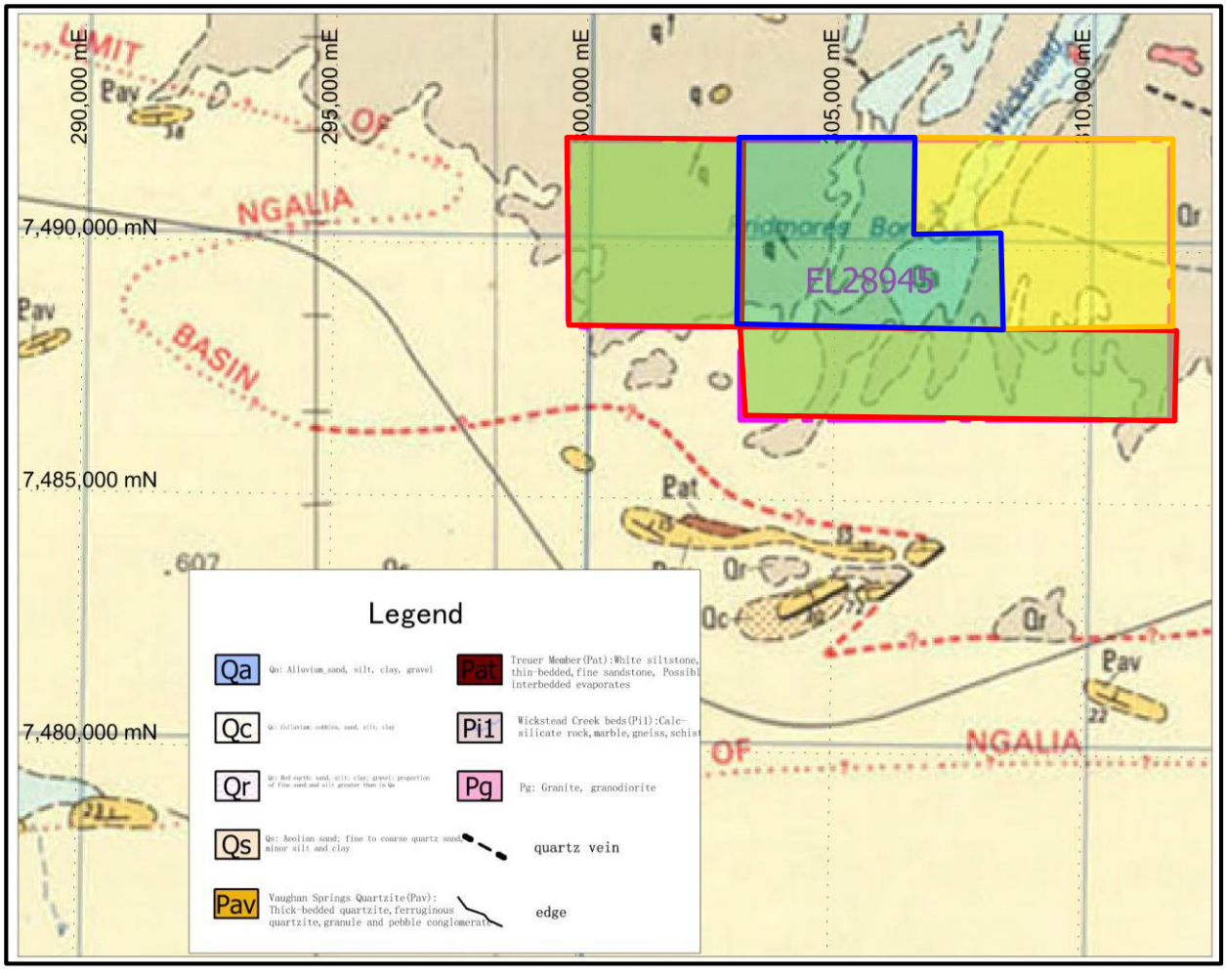

Figure 4 Geological Map of EL28945 (1:250000 geologic map)

5. PREVIOUS EXPLORATION

No MODAT occurrences are located on EL28945, nor was NTGS open-file data on previous exploration covered EL28945, Much lease of the work undertaken outside of EL28945. The historic tenements, their report numbers and comments from abstracts are listed below.

CRA Exploration Pty Ltd hold EL753 in 1973, This license covered a large area of Burt Plain from Mt Harris west of Native Gap, east to the low hills southwest of Sheppards Bore. CRA's interest in Burt Plain was for sedimentary uranium. Mapping of the outcrops SW of Sheppard's Bore, recognized as potential sources for secondary uranium, found foliated granite with common quartz-hematite-pyrite veins. Scintillometer readings up to 2000cpm were recorded but assays returned up to 36ppm U and 50ppm Th. Grades were too low for primary targets, no secondary (calcrete) mineralization was found and the area was relinquished.

Gutnick Resources NL hold EL10251 on 28th March 2002 for a period of six years, the property is based on a new genetic interpretation for the Witwatersrand mineralization in South Africa. These new hydrothermal models suggest that similar and related styles of mineralization may be present in Ngalia basin with similar structural and stratigraphic styles t to the Witwatersrand. Geophysical data including Landsat7 TM was reprocessed and modeled to address structural and stratigraphic features within the region.

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Imperial Granite and Minerals Pty Ltd hold EL24746 on 13th April 2006 for a period of six years, the property was purchased from them by Northern Mining Ltd during and explore for energy minerals. From the airborne EM survey that was completed in 2008 it has been possible to identify areas of little prospectively for relinquishment. A total of 198 blocks covering 625.19 square kilometers and representing approximately 49% of the total area of the license were proposed for relinquishment on 11 March 2009.

6. EXPLORATION DURING YEAR 1

In the first year, work on EL28945 by AMG was limited to desktop reviews and reconnaissance field trips. These field trips traverse included discussions with pastoralists. Access around the area was also assessed. The lease almost cover of with Aeolian sand (photo1), there is a little bit late Proterozoic Quartzite around edge of Ngalia Basins. No sampling was taken.



Photo1 Aeolian sand (eastern of EL28945)

7. EXPLORATION DURING YEAR 2

During the second year, AMG continues to dispose all historic data of the EL. AMG pay attention on the kurinelli goldfield in Davenport range of Barkly region. Because the most area of the lease is covered Aeolian, AMG decided to surrender the western area and south-eastern area of this tenement.

8. EXPLORATION DURING YEAR 3

During the third year, AMG didn't implement field work on EL28945, because AMG geologists carry out two projects exploration about copper with Panda mining pty ltd in Flinders range of South Australia in 2014.

9. EXPLORATION DURING YEAR 4

Work done during Year 4 included:

a) All data review and
b) Some geological survey

10.EXPLORATION DURING YEAR 5

Work done during Year 5 included:

a) All data review and
b) Some geological survey

11.EXPLORATION DURING YEAR 6

Work done during Year 6 included:

All data review, including geological, geophysical, geochemical date and former industry report we obtained from the web.

12.EXPLORATION DURING YEAR 7

During the seventh year (5th March 2018 to 27th February 2019), Literature research, Database compilation, report preparation, desktop studies was taken by AMG's geologists. We revalued the potential of EL28945.

Concerning the budget reduce of our company, AMG finally decided to surrender EL28945.

13.EXPENDITURE

During all of seven years (period 5th March 2012 to 27th February 2019)，All expenditures on EL28945 is $128,500 (as supplied by Australia Mining and Gemstone Co. Pty Ltd), consisted of:

Table 3 Expenditure on EL28945 during seven years

	Year 1	Year 2	Year3	Year4	Year 5	Year 6	Year 7
Office Studies	$3,000	$6,000	$6,000	$18,000	$15,000	$15,000	$2,000
field reconnaissance	$9,000						
Geological data processing		$6,000	$5,000	$3,000	$2,000	$3,000	$2,000
Geophysical data processing		$7,000	$7,000	$2,000	$2,000	$3,000	$2,000
Overheads	$1,800	$1,000	$1,000	$2,000	$1,000	$1,500	
Others	$2,200						
Total	$16,000	$20,000	$19,000	$25,000	$20,000	$22,500	$6,000

14.CONCLUSION AND RECOMMENDATIONS

The area was considered prospective for gold and copper, because the lease landform is flat and overlying by Aeolian sand, there is little outcrop of Quartzite in Ngalia Basins.
In 2018, AMG revalued the potential of EL28945 and finally decided to surrender this Exploration License.

15.REFERENCES

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Any information included in the report that originates from historical reports or other sources is listed in the "References" section at the end of the document.

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