AusIndo Minerals and Energy Pty Ltd

EPM 19457

Texas Minerals Exploration Project

SURRENDER (FINAL) REPORT

27 September 2013

“TEXAS MINERALS EXPLORATION PROJECT”

TEXAS PROVINCE, QUEENSLAND

Surrender Report

27 September 2013

Prepared for: **DNRM - MINES**
DEPARTMENT OF NATURAL RESOURCES AND MINES

On behalf of: **AUSINDO MINERALS & ENERGY PTY LTD**

Prepared by: **KING COAL MINING SERVICES**

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1.0 INTRODUCTION:

1.1 Summary

This report summarises the exploration undertaken by AusIndo Minerals and Energy Pty Ltd (ACP) on the 100 sub-blocks submitted for surrender from Exploration Permit for Minerals (EPM) 19457. EPM 19457 was originally granted to ACP on 30 January 2013 for a period of 5 years expiring on 29 January 2018.

EPM 19457 is located approximately 230km west south-west of Brisbane, and 15km south south-east of the Texas township. EPM 19457 immediately adjoins adjacent to EPM 19503 Texas, also held by ACP, on its western, southern and eastern boundaries. EPM 19503 was granted to ACP on 3 July 2012 and both tenures constitute ACP' s exploration tenures for the Texas Mineral Exploration Project.

ACP carried out the following work during the period:

- Review of previous work
- Collation, capture and digitising of previous stream sediment sample data
- Image processing and interpretation of geophysical data

As a result of a review of this data , no follow-up targets were identified.

It has been decided to surrender all sub-blocks back to the Department and to not continue the exploration work programme on the Texas Minerals Exploration Project.

After surrendering the adjoining EPM 19503, also held by ACP as part of the Texas Minerals Project, the strategy was to concentrate exploration on a condensed target on the western side of EPM 19457, however a lack of funding has prevented ACP from retaining any tenure in this region. ACP acknowledges the area as 'high risk' however we believe the alteration zones found between the north-south regional fault lines is under-explored.

1.2 Climate, Topography and Land Use

Long-term average annual rainfall trends are slightly above 650mm per year, with the heaviest rainfall generally occurring from December to February. Mean temperatures range from winter lows of slightly above 11C to summer highs around 27C.

The topography of the area is moderately rugged and is drained by numerous creek systems feeding the Dumaresq River.

Cattle and sheep grazing are a major industry in the Texas area, but there are signs of diversification taking place. Deer, ostrich and goat farming are emerging, as is a diverse rural production, including fruit, vegetable crops, herbs, peanuts and olives.

1.3 Location, Road and Rail Access

The Project is located approximately 230km west south-west of Brisbane, which equates to around 300km by road. A non-operational rail corridor connects the western side of ACP' s Project area to the rail head of Inglewood, 48km to the north. Inglewood is on the South Western Rail Line allowing options to the port of Brisbane, or possibly to Gladstone via the proposed Wiggins Island Coal Export Terminal rail line. The freight-only Southern Rail Line is 34km to the east of the Project and offers the same alternatives to port as the South Western Line. Road transport dominates freight movement currently in the Texas area with all major eastern seaboard locations accessible via the Bruxner, Cunningham and Newell Highways.

The Project is located within the Goondiwindi Regional Council zone, an area of 19 292 sq. km, with a population of around 11 410 people. Texas (population around 693) is the closest township.

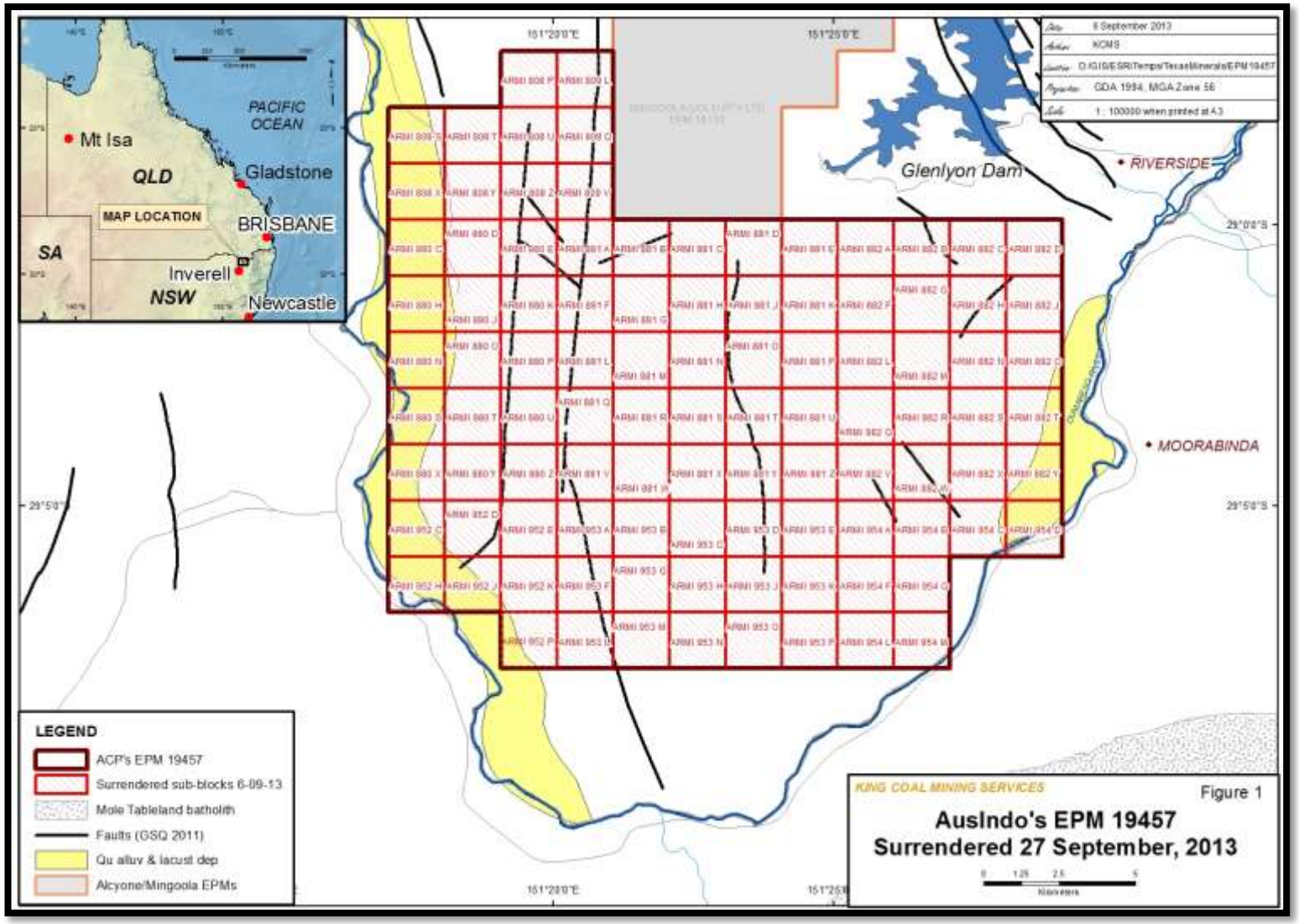

Figure 1: Sub-blocks making up EPM 19457. All sub-blocks are to be surrendered.

2.0 GEOLOGY

2.1 Regional Geology and Structure

The regional structural history of the Texas area has involved a somewhat complex sequence of geotectonic movements which have been termed the Texas Orocline. The regional Tectonic history of areas covered by the Texas Orocline have been extensively discussed by several authors (Rosenbaum, 2010; Leitch,1974; Olgers and Flood, 1970; Lennox and Flood, 1997; Offler and Murray, 2011) and a mega-sinistral movement has been proposed to explain the imprinted regional texture/cleavage imprinted on the rocks throughout the area.

The New England Orogen is the easternmost and youngest component of the Tasmanide orogenic collage of eastern Australia. It comprises a Devonian to Carboniferous volcanic arc, forearc basin and accretionary wedge terranes, attributed to the convergent plate boundary of eastern Gondwana. The orogen can be subdivided into a northern segment and a southern segment, separated by Mesozoic sedimentary rocks of the Clarence–Moreton Basin. The southern New England Orogen is proposed to constitute a weakly deformed forearc basin in the west (Tamworth Belt) and accretionary wedge metasedimentary rocks in the east Tablelands Complex. These are separated by the Peel-Manning Fault System.

In the area of the Texas Orocline, the Tamworth Belt is predominantly covered by younger sedimentary rocks and is exposed only in the eastern limb of the orocline. The accretionary wedge rocks (Tablelands Complex) in this area are widely exposed and are represented by the Texas beds (Olgers et al., 1974), a sequence of volcaniclastic turbidites characterised by minor chert and jasper, altered mafic volcanic rocks and limestone.

The Texas beds are overlain by Early Permian clastic sedimentary and volcanic rocks. The nature of the similarity in rock types between Permian and pre-Permian has made resolution difficult however the presence of Permian strata

has been clearly established by identified marine fossil fauna from the Permian sequences (Sorby, 1976). These rocks have been interpreted to be deposited in rift basins, associated with widespread extension that affected eastern Australia during the Early Permian The youngest sedimentary rocks in these basins are of Artinskian age. Contemporaneously with the deposition of the Early Permian rift basins, S-type granitoids have been emplaced. A series of such granitic plutons in the eastern limb (Bullangang, Mt You You, Ballandean, and Jibbinbar), together with the Bundarra Granite in the western limb, mimics the shape of the Texas Orocline. A later phase of magmatism, involving voluminous I-type granitoids and arc-related volcanic rocks, intruded at 260–220 Ma. The general trend of this magmatic field is NE–SW, crosscutting the oroclinal structure. This has provided a useful foundation for determining mineral occurrences and the type of mineralization potential in the area.

2.2 Local Geology

The Texas Minerals Exploration Project is situated mainly within surficial rock exposures of the Late Devonian to Early Carboniferous Texas beds, a volcaniclastic flysch type sequence of greywacke, mudstone slate and chert and intraformational andesitic volcanics and limestones containing Visean corals. The entire sequence was strongly folded by pre-Permian deformation involving thrusting and gravity sliding. The uniformly fine-grained limestone ranges from off white through grey and red to black with mottled and veined varieties. The Texas Beds are intensely deformed and their thickness has as yet is not determined.

The Texas beds are overlain with probable unconformity and or faulted contact with overlying Permian rocks by bands of early Permian rocks including the Silver Spur Beds. The younger Early Permian Silver Spur Beds are dominated by steeply-dipping to vertical sequences of rhythmically interbedded mudstone and arenite. In most instances these are extremely difficult to distinguish from similar sediments in the Texas beds. The bedding

thickness and sand:mud ratio within the Permian sequences can vary substantially. Fine-grained interbeds often show development of low-grade metamorphism and pencil cleavage. Sandy horizons often exhibit internal lamination and are preferentially silicified. Relatively thin (generally <20cm) pebble- to cobble-rich horizons are common within sandy beds. These comprise rounded to well-rounded clasts, mostly >3cm in diameter, within a sandy matrix. Rare pebbles and cobbles also occur within muddy beds. Thicker (metre-scale) diamictite/conglomerate beds are also common throughout the mudstone and arenite sequences.

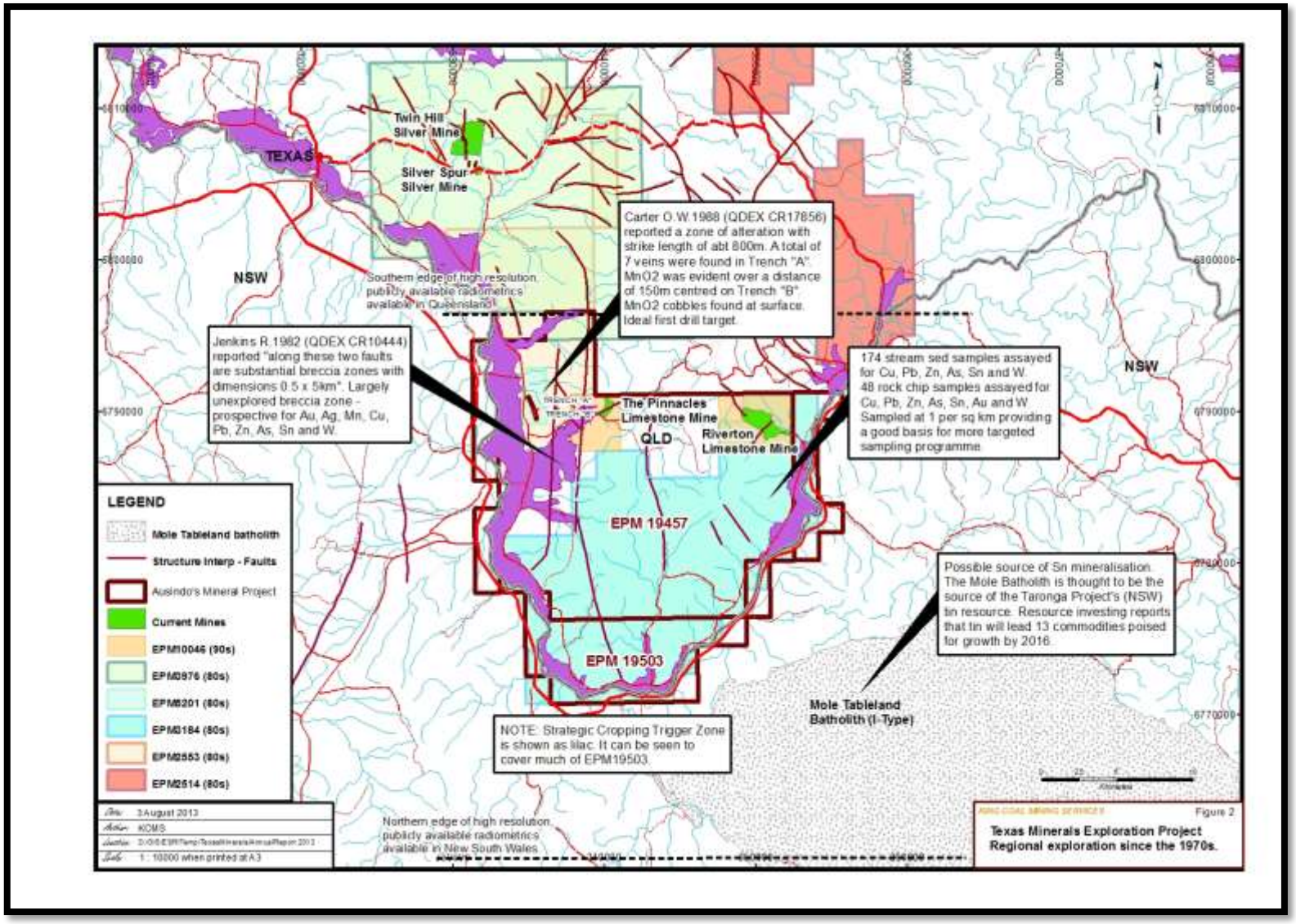

Figure 2: Regional exploration summary and location of Strategic Cropping Trigger Zone.

3.0 TENURE DETAILS

The Department of Natural Resources and Mines granted 100 sub-blocks to AusIndo Minerals and Energy Pty Ltd on the 30 January 2013. The 100 sub-blocks, listed in Table A and located in Figure 1, are to be surrendered to the Department.

Table A: 100 sub-blocks to be surrendered to DNRM

BIM	BLOCK	Sub-blocks
ARMI	808	P S T U X Y Z
ARMI	809	L Q V
ARMI	880	C D E H J K N O P S T U X Y Z
ARMI	881	A B C D E F G H J K L M N O P Q R S T U V W X Y Z
ARMI	882	A B C D F G H J L M N O Q R S T V W X Y
ARMI	952	C D E H J K P
ARMI	953	A B C D E F G H J K L M N O P
ARMI	954	A B C D F G L M

4.0 WORK PROGRAMME

A review has been conducted of the regional mapping reports prepared after field reconnaissance by the Bureau of Mineral Resources, Geoscience Australia and the Geological Survey of Queensland (Donchak et al., 2007) and several University Geological Theses written on the area. The Department of Mines and Energy' s QDEX exploration report system was accessed extensively to review previous mineral exploration data available in the many exploration reports for both coal and minerals over the tenure area. More recent papers on the regional tectonics and formation of the Texas Orocline were also reviewed in the context of determining a regional structural perspective for minerals exploration in the area.

No drilling was conducted during the period, nor is planned in the future due to the lack of determined targets on the basis of the observed geology. Any future exploration or drilling program for the next period would be on the basis of further field reconnaissance, ground truthing and field interpretations.

Other work undertaken included:

- Collation and capture of previous stream sediment sample data
- Image processing of public domain geophysical data
- Review and interpretation of geochemical and geophysical data
- Acquisition of commercially available satellite imagery
- Field reconnaissance along public access
- Desk top research and geological reporting

Some regional airborne geophysical imagery was provided to ACP by Graham Jenke, a consultant geophysicist with Southern Geoscience Consultants in Perth. These images have been attached as Appendix A.

5.0 CONCLUSIONS

ACP initially applied for the maximum 100 sub-blocks granted as EPM 19457, to cover as much of the area within the most southerly part of Queensland between Texas and Stanthorpe, bounded by the Dumaresq River. A further 41 sub-blocks were applied for (granted as EPM 19503) several months after applying for the main target area, EPM 19457. The thinking was that the land surrounding EPM 19457, and the western extent of EPM 19457, might be required as a 'catch-all' should any targets identified in EPM 19457 extend to the Queensland / New South Wales border. This thinking was prompted by the primary target within EPM 19457 being located on the western edge of that tenure (see Figure 2), and also by speculation that the Mole Batholith, located to the south-east of the Project area (see Figure 2), could be a source of mineralisation within the Project area.

Target generation within EPM 19503 itself was always expected to be unlikely. Any geophysical signatures from available airborne coverage over EPM 19503 is muted by the alluvial coverage of the Dumaresq River, and any foot traverse is prevented by the agricultural coverage within these rich cropping zones. In fact a good part of EPM 19503 is covered by Strategic Cropping Ground Trigger Zones, and so access could be restricted, particularly without strong geological evidence.

The significant volume of regional and detailed work over and near the Project area has allowed the various prospects within the Project to be viewed in perspective and to constrain speculation on likely structural controls on the areas of mineralisation. These more prospective areas all occur in central and western half of EPM 19457 and include:

- a comparative gravity high and the possibly-related anomalous, magnetic gradient on the western side of EPM 19457
- a number of alteration zones between the major North-South trending faults on the central and western side of EPM 19457. These faults could be interpreted and investigated as a continuation of the 'corridor' structure hosting the silver and polymetallic deposits currently being mined by Alcyone Resources Ltd to the north of the Texas Minerals Exploration Project. Similar mesothermal, disseminated, precious and polymetallic deposits, as well as massive sulphide mineralisation at depth are thought to be possible targets within this zone.

6.0 RECOMMENDATIONS:

This strategy of holding tenure over an excess area, covering all possible extensions before any definite target has been identified has changed. A lack of target generation within the eastern part of EPM 19457 and within EPM 19503, coupled with the current downturn in the enthusiasm to finance exploration, particularly at the more speculative end of the spectrum, has forced ACP in to a change of strategy. It is thought the best way forward, and the most cost effective, is to concentrate on the primary targets in the west of EPM 19457 – the gravity high and the slightly anomalous magnetic gradient,

and the 'alteration zone corridor' between the major North-South trending faults on the western side of EPM 19457, and then accumulate around targets found in these zones if necessary. However the Texas Minerals Exploration Project does not currently fit with ACP' s strategy to concentrate on project' s with less risk. For this reason ACP is to surrender EPC 19457.

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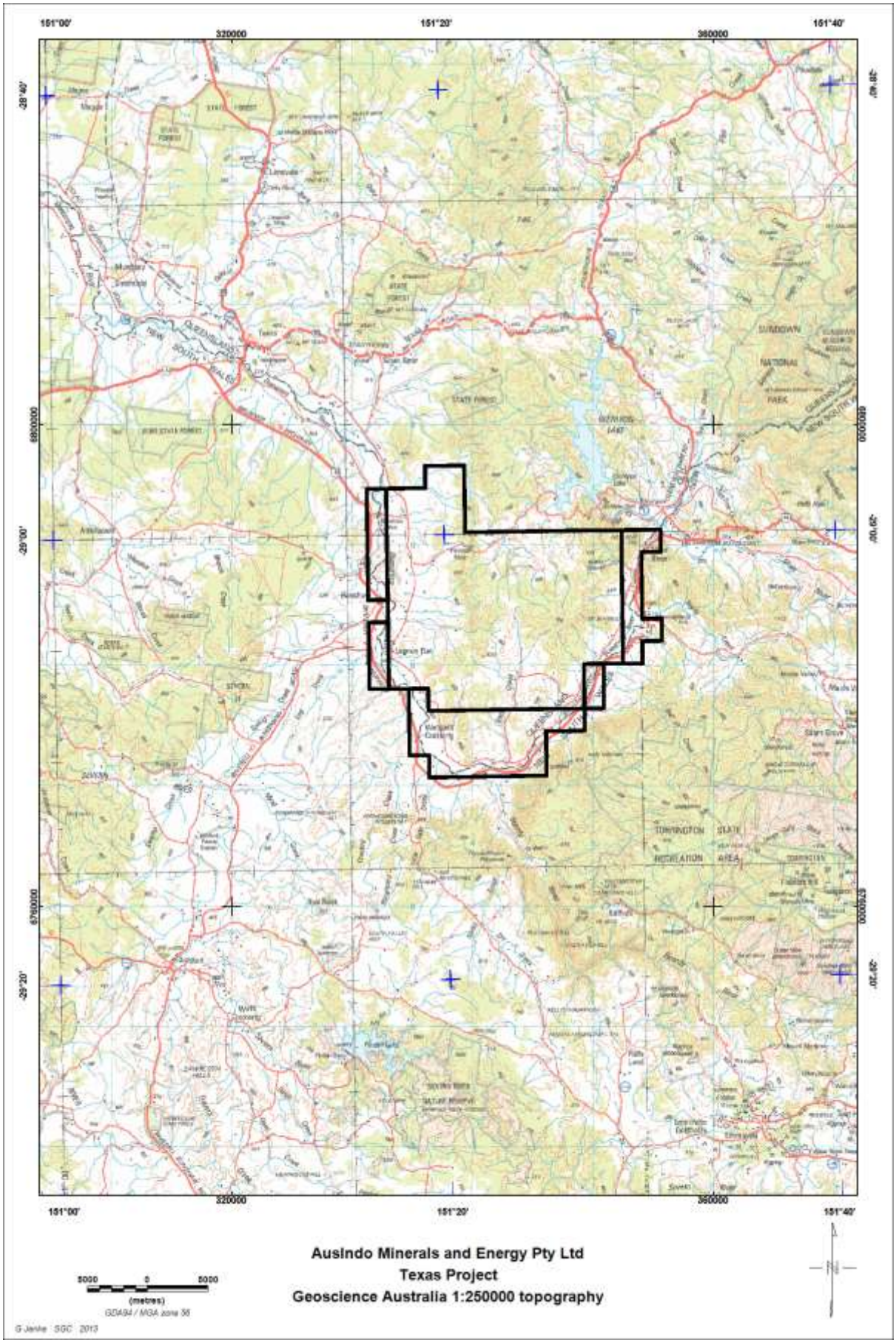
APPENDIX A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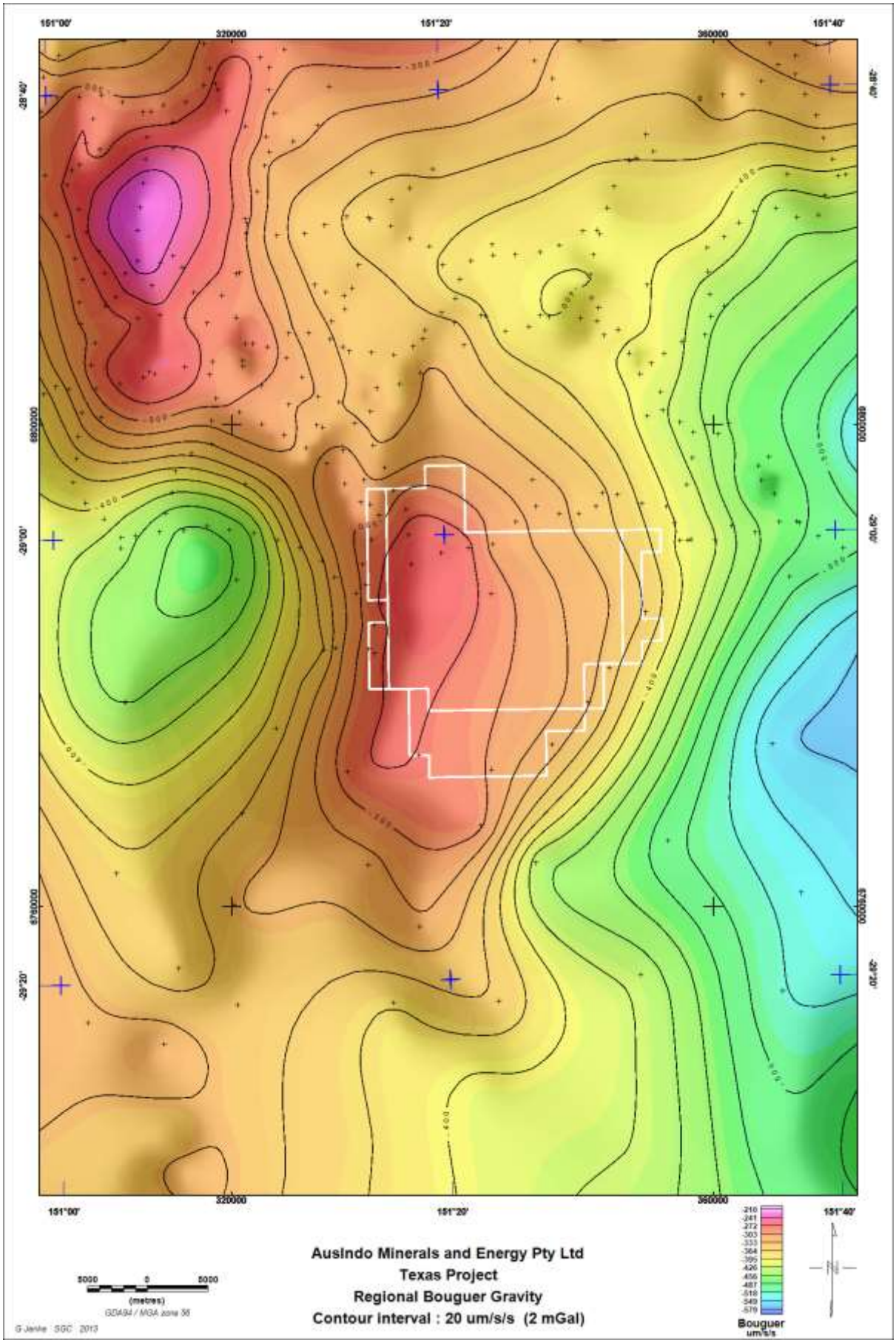
G Jenke SGC 2013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Regional Bouguer Gravity
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GDA94 / MGA zone 56
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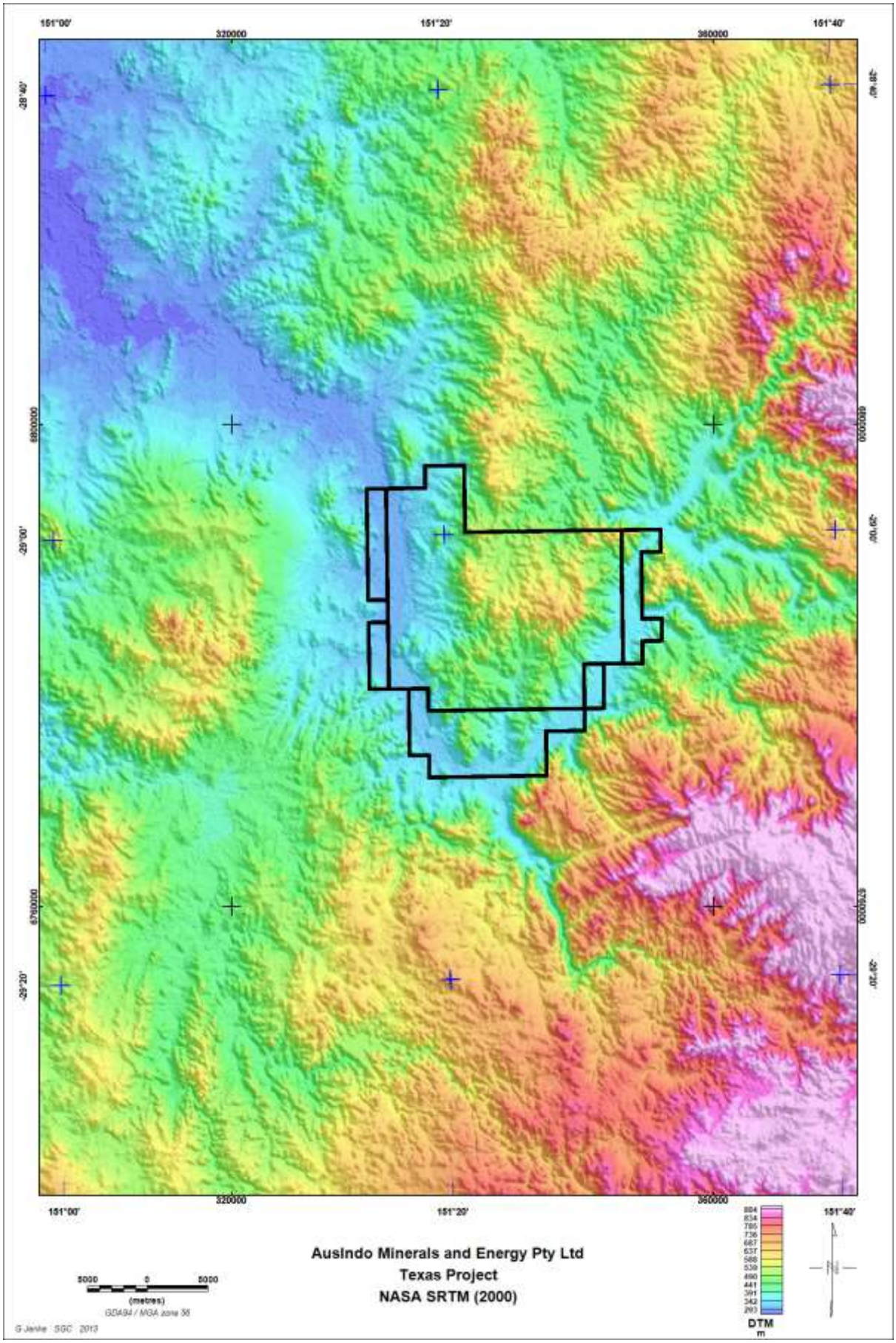
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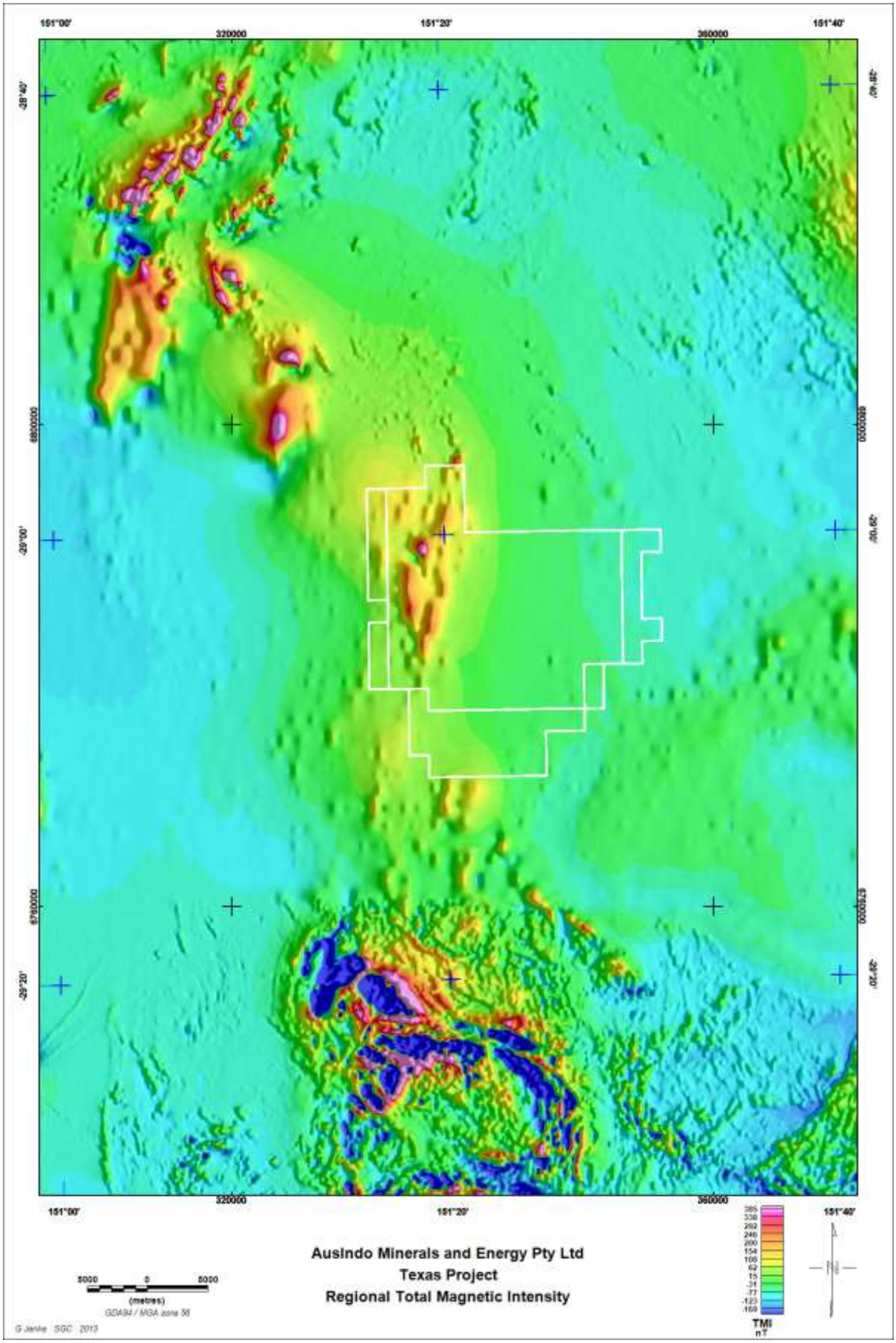
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