

Gulkula Mining Company Pty Ltd

ABN 21 153 861 806

First Annual Report

For the Period 11 August 2014 to 10 August 2015

EL30226 Dhupuma Plateau

SD5304 Gove, 6273 Gove - Northern Territory

Commodity:	Bauxite
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1 ABSTRACT

Exploration Licence (EL) 30236 (Dhupuma Plateau) held by Gulkula Mining Proprietary Limited is located on the Gove Peninsula in northeast Arnhem Land about 30km south of Nhulunbuy. EL 30226 was granted on the 11 August 2014 for a period of 6 years over an area of 68.55 km² (32 blocks). This land is administered under the Aboriginal Land Rights Act 1975 (ALRA). The exploration target is bauxite mineralisation analogous to the Gove deposits currently being mined by Rio Tinto Alcan, and which have formed through the intensive weathering of Cretaceous sediments during the Tertiary. During the reporting period Gulkula exploration has focussed on completing reconnaissance geological and sampling traverses over the north, south and central areas of the plateau, a maiden drilling program comprising 182 vacuum-lift drill holes for 690.5 metres and flora, fauna and cultural heritage surveys. Results of this work have identified a number of areas of potential bauxite mineralisation which will be further explored in the second year of tenure.

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2 INTRODUCTION

This is the first annual report for EL30226 (Dhupuma Plateau) and has been prepared to present exploration activities undertaken during the period 11 August 2014 to 10 August 2015 for bauxite.

3 TENURE STATUS

Exploration Licence EL 30226 (Dhupuma Plateau) was granted on 11/08/2014 to Gulkula Mining Company Pty Ltd for a period of 6 years. The project lies within North East Arnhem Land (Figure 1) which is subject to the Aboriginal Land Rights Act 1975 (ALRA).

Tenement details are listed in Table 1 below.

Table 1: Tenement Details

Tenement No.	Tenement Name	Ownership	Grant Date	Area Granted	Blocks
EL30226	Dhupuma Plateau	Gulkula Mining Company Pty Ltd.	11/08/2014	68.55 km ²	32

4. LOCATION AND ACCESS

The Dhupuma Plateau is a narrow irregular plateau, located 30km south of the township of Nhulunbuy on the Gove Peninsula in north-east Arnhem Land, Northern Territory (Figure 1) and is administered via the Aboriginal Land Trust. Active mining commenced at Gove in 1970. Bauxite resources are currently being mined in the region and ore is exported by Rio Tinto Aluminium.

Access to the project is via the Central Arnhem Highway south from Nhulunbuy (30km) or east from Darwin (1012km).

5. PHYSIOGRAPHY

EL 30236 lies within the transition zone between the Arafura Fall and Gulf Fall physiographic sub-divisions due north of Port Bradshaw (Rawlings et al., 1997). The tenement surrounds the Dhupuma Plateau which has an average elevation of approximately 105m and a gentle southerly slope with steep breakaways on the northern and southern sides including tributaries draining respectively to the Latram River and Dalywoi Bay and Port Bradshaw.

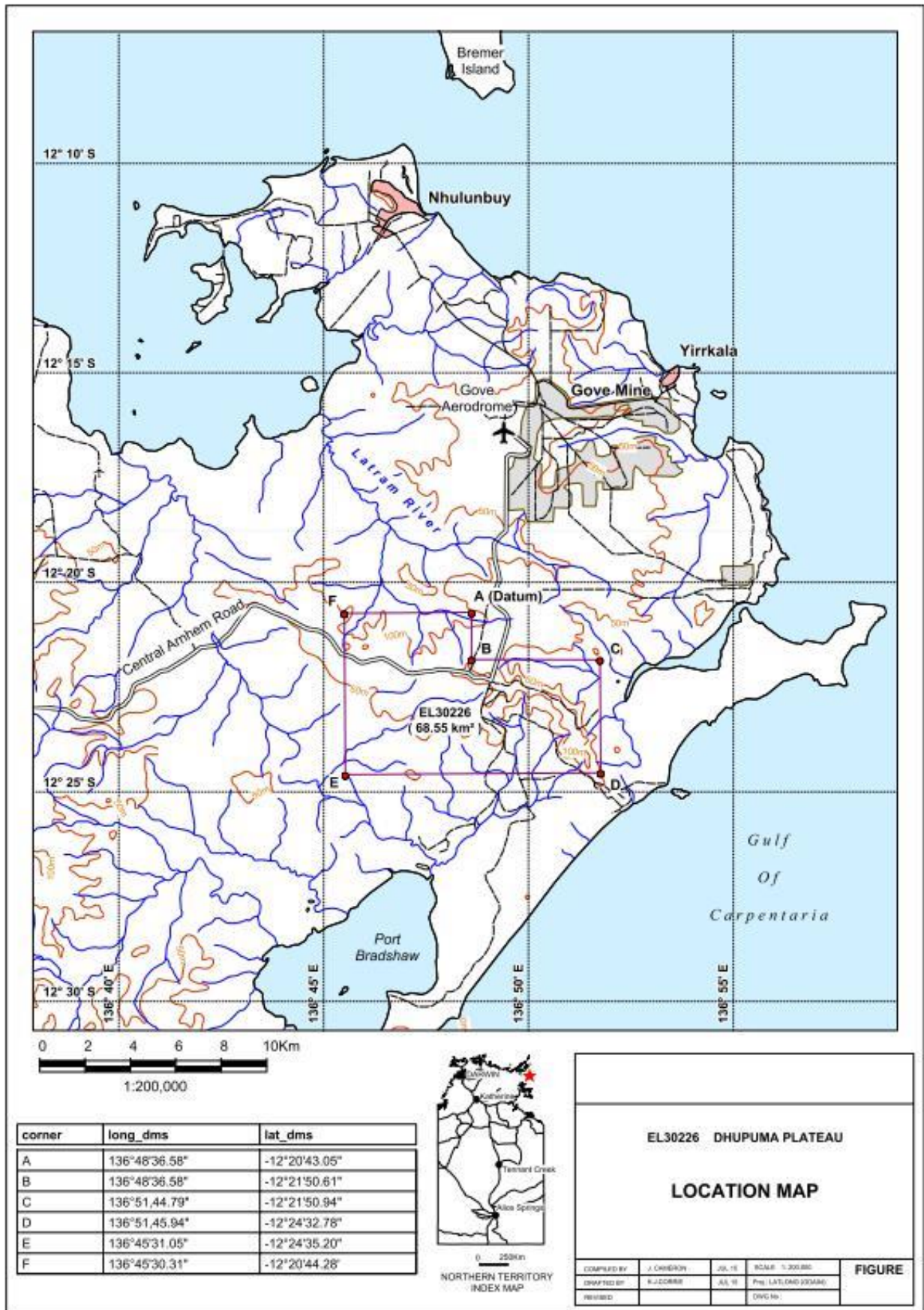


Figure 1: Location Map EL30226

6 GEOLOGY

The geology of the Gove Peninsula in the area where the bauxite deposits are developed comprises Palaeoproterozoic (ca 1870Ma) metasediments, mafic gneiss and intrusives of the Bradford Complex overlain by a 100-200m thick sequence of Lower Cretaceous sandstones and claystone of the Yirrkala Formation (Figure 2). During the Tertiary period, the region underwent extensive lateritisation resulting in bauxite development such as that seen at Gove. Beneath the laterite profile at Gove, the Yirrkala Formation consists mainly of friable, kaolinised arkosic sandstone and quartz sandstone with minor claystone interbeds. While several occurrences of bauxite have been recorded in the east Arnhem area, further large economic deposits outside of the Gove mine site have not been discovered.

The main plateau hosting the Gove deposits is gently undulating and is typically 30-60m above sea level (ASL), significantly lower than the surface of the Dhupuma Plateau which ranges between 85-115m ASL. The thickness of the bauxite sheet in the Main Gove Plateau deposit reportedly averages about 3.7 m, and ranges from absent at plateau edges and on hill crests to 10 m thick in topographic swales. At Dhupuma Plateau the thickness of the bauxite horizon is reported by previous workers as ranging between 3- 11m thick.

The deposit type sought is lateritic bauxite derived from the weathering of aluminous sediments in a tropical to sub-tropical environment. Up to eight discrete layers are recognised in a complete bauxite laterite profile (Figure 3) including from surface: topsoil; loose pisolitic bauxite; cemented pisolitic bauxite; tubular bauxite; lower nodular bauxite; nodular ironstone; mottled zone; and saprolite. Not all bauxite sections contain the full bauxite profile.

In general the bauxite mineralogy of the Gove deposits is composed of gibbsite and minor boehmite, particularly in the upper levels of the profile. Silica is present as free quartz and in kaolinite and haematite and goethite are the main iron oxide constituents.

7 GEOPHYSICS

The project area is covered by a regional scale aeromagnetic survey flown for the NTGS in 1990-92 (Rawlings et al., 1997). The radiometric data can be used to distinguish the laterite covered areas from those of both basement and Quaternary sand cover. Thorium is mostly immobile in chemical weathering environments, and as such the intensity of the Thorium channel relative to the Potassium and Uranium channels can be used as a first pass proxy to estimate the degree of in situ weathering over a given area e.g Firenczi, 2001 Figure 56.

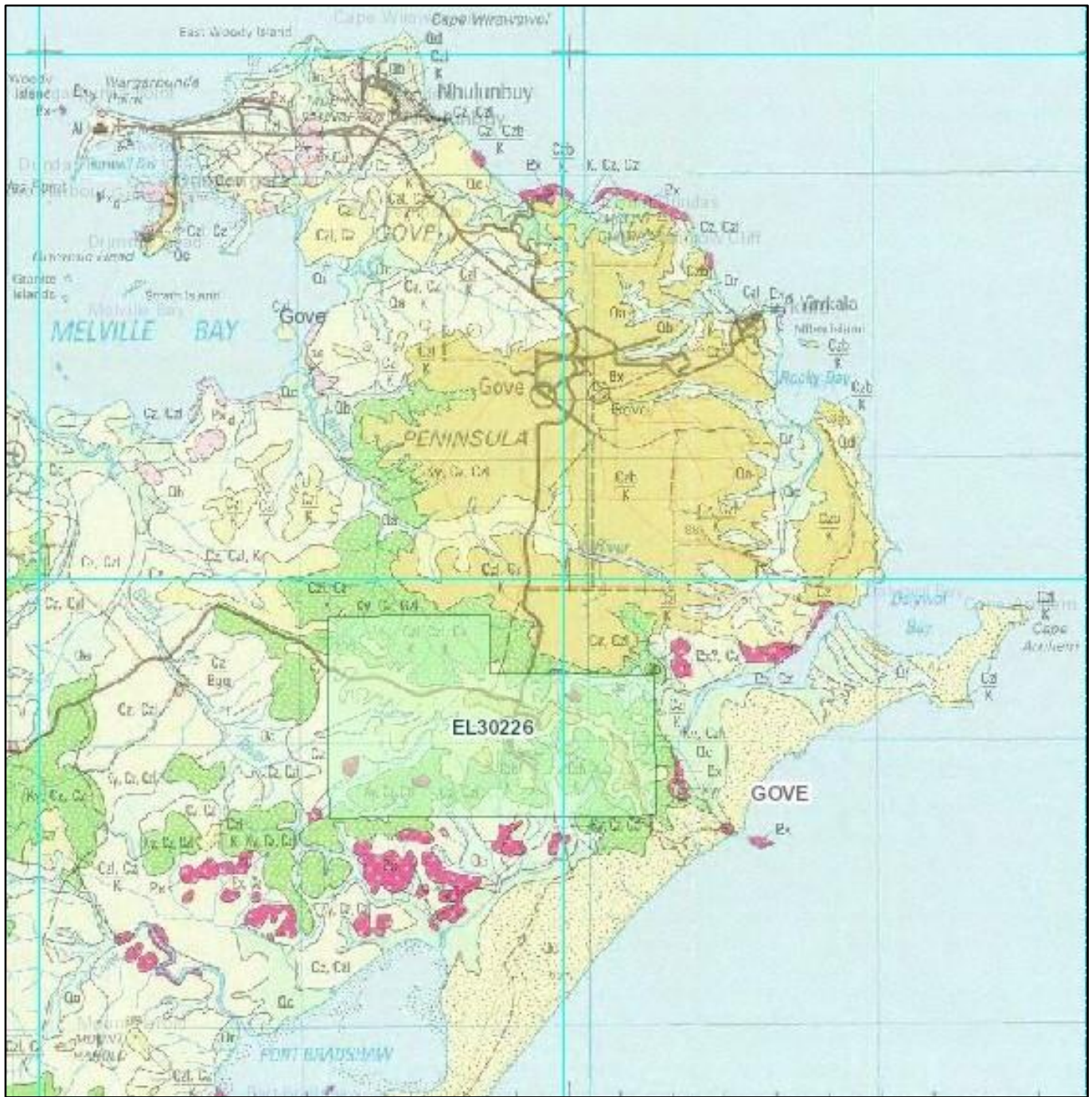


Figure 2 Regional geology of Gove Peninsula and Dhupuma Plateau EL30226.

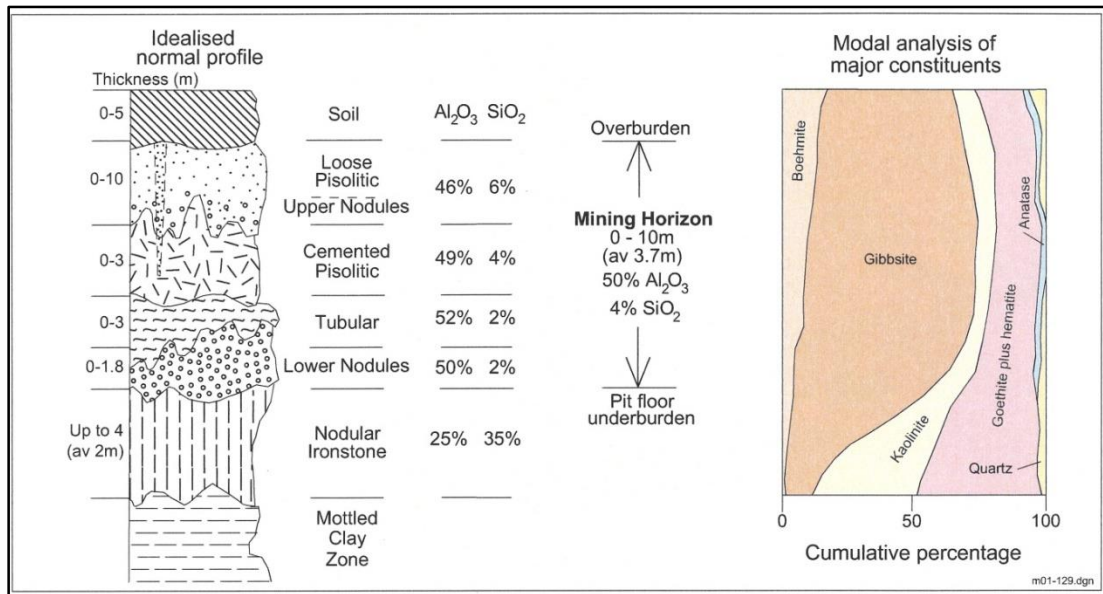


Figure 3 Gove area bauxite profile (Source: Firenczi 2001)

8 PREVIOUS EXPLORATION

Previous exploration open file data on EL30226 is limited. While anecdotal evidence suggests that the Dhupuma plateau area has been explored at some level for bauxite most previous work described was undertaken by the Northern Territory Government (the NT Geological Survey and the NT Mines Branch) as part of their regional geology and mineralisation programs between 1964 -1997.

In 1964 seven RAB and two diamond holes were drilled upon the plateau. The drilling was undertaken to determine foundation conditions for satellite tracking antenna sites. The seven RAB holes are reported to have intersected weakly cemented pisolitic bauxite, ranging from 1.8-4.3m thick, underlain by tubular bauxite. One diamond hole (DDH3) is reported as intersecting at least 4.1m of tubular bauxite (Hickey 1987).

Firenczi (2001) reports some 55 water boreholes were drilled in the central portion of Dhupuma Plateau with various holes intersecting a bauxite layer that ranges between 3.5 – 11m in thickness.

9 EXPLORATION ACTIVITIES DURING THE REPORTING PERIOD

During the first annual reporting period exploration activities undertaken included a literature study, desktop review of available aeromagnetic/radiometric survey/Landsat data and interpretation of the geology using published geological maps as part of the regional targeting work, reconnaissance mapping and sampling of the plateau area, a maiden drilling program over the central area of Dhupuma Plateau and baseline flora and fauna and cultural heritage surveys.

9.1 Reconnaissance

Initial geological reconnaissance of the Dupuma Plateau mapped significant pisolitic bauxite horizons both on the plateau surface and in borrow pits off the plateau on the northern and western edges over an area of approximately 10km².

Further reconnaissance mapping and sampling was undertaken over the western, eastern and southern areas of the plateau in order to identify the areal extent of potential bauxite mineralisation within the project (Figure 4). A total of 76 rockchip samples were submitted to Bureau Veritas in Perth for sample preparation and analysis. Samples were dried at 105°C and the total sample crushed and then split using a riffle-splitter with a sub-fraction pulverized to a nominal 90% passing 75 microns for analysis. Samples were analysed for total oxides (Al₂O₃, BaO, CaO, Cr₂O₃, Fe₂O₃, K₂O, MgO, MnO, P₂O₅, SiO₂, SO₃, TiO₂, V₂O₅, ZrO₂) by XRF (BV code XF101), H₂O/LOI by Thermo Gravimetric Analysis furnace (BV code TG002).

The samples returned Al₂O₃, SiO₂ and LOI results ranging between 20.7 – 53.5%, 4.45 – 40.5% and 11.57 – 28% respectively and highlighted the western, southern and eastern extensions of the plateau area as warranting further investigation. Full results are included in Appendix 1.

9.2 Drilling

In September 2014 a maiden drilling program comprising of 182 vacuum-lift drill holes for 690.5 metres (Table 2) was undertaken to delineate the areal extent of bauxite mineralisation in the central and northern areas of the plateau.

Table 2: Drilling Summary

Hole Type	Holes	No of Holes	Min Depth	Max Depth	Total Metres	Azimuth and Dip
Vacuum	GA14001-GA14182	182	2.0m	7.5m	690.5	Vertical

A grid was established by using a bulldozer operated by a traditional owner group to put in a surveyed east – west baseline by tramping along the marked survey line with the blade raised 10 cm above the ground surface in order to move fallen trees, surface boulders and termite mounds while minimising the potential impact to the environment. The bulldozer tramped around standing trees.

Drilling was carried out by 'Yearlong Contracting' using a tractor mounted vacuum-lift drill rig. Shallow (2-7.5 m) 48mm diameter holes were drilled vertically in order to intersect mineralisation at an approximate 90 degree angle. Vacuum drilling was selected due to its proven performance in laterite terranes. It is a cost effective drilling method that produces good sample recoveries and accurate interval depths. The vacuum drilling method involves drilling each individual interval to the target depth with the sample sucked out of the hole through the inside of the drill string and deposited in a vacuum flask. At the end of each interval the driller halted drilling and turned off the vacuum system so the interval sample can be recovered from the vacuum flask before continuing to drill the next interval.

Drilling was undertaken on a nominal 200m x 50m grid established with a surveyed and cleared east – west baseline across the plateau and handheld GPS surveyed cross-lines at 200m intervals. Drill holes were spaced at 50m intervals along the baseline and cross-lines as shown in Figure 5.

The vacuum drill hole samples were collected over 0.50 m intervals into pre-numbered and tagged calico bags. The end of each drill hole was determined by monitoring the ground penetration rate and sample geology. A representative sample of around 25gms, for each drilled interval were washed and stored in marked sample trays for each drill hole. These samples are retained in secure storage on site.

A total of 743 drill samples and 55 field duplicates and standards were submitted to Bureau Veritas in Perth for sample preparation and analysis. Samples were dried at 105⁰C and the total sample crushed and then split using a riffle-splitter with a sub-fraction pulverized to a nominal 90% passing 75 microns for analysis. Samples were analysed for total oxides (Al₂O₃, BaO, CaO, Cr₂O₃, Fe₂O₃, K₂O, MgO, MnO, P₂O₅, SiO₂, SO₃, TiO₂, V₂O₅, ZrO₂) by XRF (BV code XF101), H₂O/LOI by Thermo Gravimetric Analysis furnace (BV code TG002).

A total of 23 samples from drill holes GA14027, GA14124, GA14139 and GA14140 (all within the northern block of the plateau) and one field duplicate were analysed for available alumina and reactive silica by microwave digestion with ICP determination (BV code MD001). Individual sample results from within the mineralised intervals ranged from 29.8 to 50.8% available alumina and 0.9 to 5.6% reactive silica and averaged 45.2% and 3.2% respectively.

Full Results are included in Appendix 2-5

The geological and analytical data from this work suggests there is a significant development of bauxite within the northern and central areas of the plateau which has the potential to be of a commercial interest.

9.3 Drill Hole Survey

Drill hole collar positions were surveyed by Cross Survey and Development Consultants from Nhulunbuy using RTK Leica units. Drill hole co-ordinates were provided in Latitude and Longitude and Easting and Northings and quoted to one decimal place based on datum MGA94 using zone 53. Elevation was quoted to three decimal places. Refer to data in Appendix 2

9.4 Resource Estimation

Drilling at Dhupuma Plateau was undertaken on a nominal 200m x 50m grid with drill holes spaced at 50m intervals along the baseline and cross-lines as shown in Figure 5. The results from analysis of the drill hole data indicates that the area drilled has the potential to host a bauxite resource. The drill hole data spacing is deemed sufficient to establish the degree of geological and grade continuity appropriate for an Inferred Mineral Resource estimate.

Work underway to determine a maiden mineral resource for the project is well advanced and should be finalised in the second year of the EL.

9.5 Flora and Fauna Survey

The Dhupuma plateau surface area comprises predominantly relatively uniform regrowth vegetation. The priority exploration area was cleared of all vegetation in the 1950/60's for the construction of the European Launcher Development Organisation (ELDO) satellite tracking station and support infrastructure. The regrowth vegetation is dominated by *Eucalyptus tetradonta* and *E. miniata* open forest with tussock grass understorey.

Flora and fauna studies included a literature review, consultation and dry season (2014) and wet season (2015) field surveys.

Relevant literature and database searches were also conducted to identify fauna and fauna habitats likely to occur in the exploration area. The following resources were consulted as part of the survey:

- Senior Traditional Owners of the area
- The Dhimurru Aboriginal Corporation representatives
- Consultation with regional flora and fauna experts
- Rio Tinto Alcan
- Dhimurru Aboriginal Corporation fauna survey reports of adjacent areas including reports by Dhimurru Aboriginal Corporation on IPA (Indigenous Protected Areas)
- Proposed Katherine to Gove Gas Pipeline Draft Environmental Impact Statement 2013
- Northern Territory Department of Land Resource Management website <http://www.lrm.nt.gov.au>
- Northern Territory Geological Survey Report 13 2001
- Australian Government Department of Environment <http://www.environment.gov.au>

The 'Commonwealth Protected Matters Search Tool' was used to produce a list of threatened plants and animals as defined by the Environmental Protection and Biodiversity Conservation Act 2000. No species listed by that search were found to be present at the time of the surveys.

Wet season and dry season surveys in 2014 and 2015 confirmed that fauna within the exploration area do not include fauna of conservation significance. It was confirmed that 3 feral animals (cane toad, buffalo, pig) are resident or traverse the Exploration License Area.

A full copy of the survey reports are included in Appendix 6 and Appendix 7 respectively.

9.6 Cultural Heritage Survey

A preliminary inspection of the site, with Traditional Owners, was conducted in early 2014 which was followed up with a heritage sites field assessment over the EL in June 2015. The

Traditional Owners of the Land participated in both surveys. No sites, objects or other items of heritage significance were identified during this work.

The Northern Territory Heritage database does not indicate any heritage sites in the proposed exploration area. The nearest registered site is 'Wurrwurrwuy (stone pictures) within the area known as Manydjarraarna-Nanydjaka. The stone pictures are approximately 13km to the east northeast of the exploration area.

10 CONCLUSIONS AND RECOMMENDATIONS

The first year of exploration on EL30226 has identified a number of areas of potential bauxite mineralisation. The result from analysis of the maiden program drill hole data indicates that the area drilled has the potential to host a bauxite resource. Further exploration to define and delineate this and additional resources is warranted in the second year of tenure.

11. PROPOSED EXPLORATION ACTIVITIES FOR THE NEXT REPORTING PERIOD

The following exploration activities are proposed for the second annual reporting period of 11th August 2015 to 10th August 2016.

- Complete maiden mineral resource estimate
- A second phase of drilling at Dhupuma Plateau comprising 100m x 50m spaced infill drilling of the current area of interest and 200m x 50m drilling of the new target areas identified from the reconnaissance exploration
- Desktop and baseline hydrological studies
- Bauxite mining studies if warranted

12 REFERENCES

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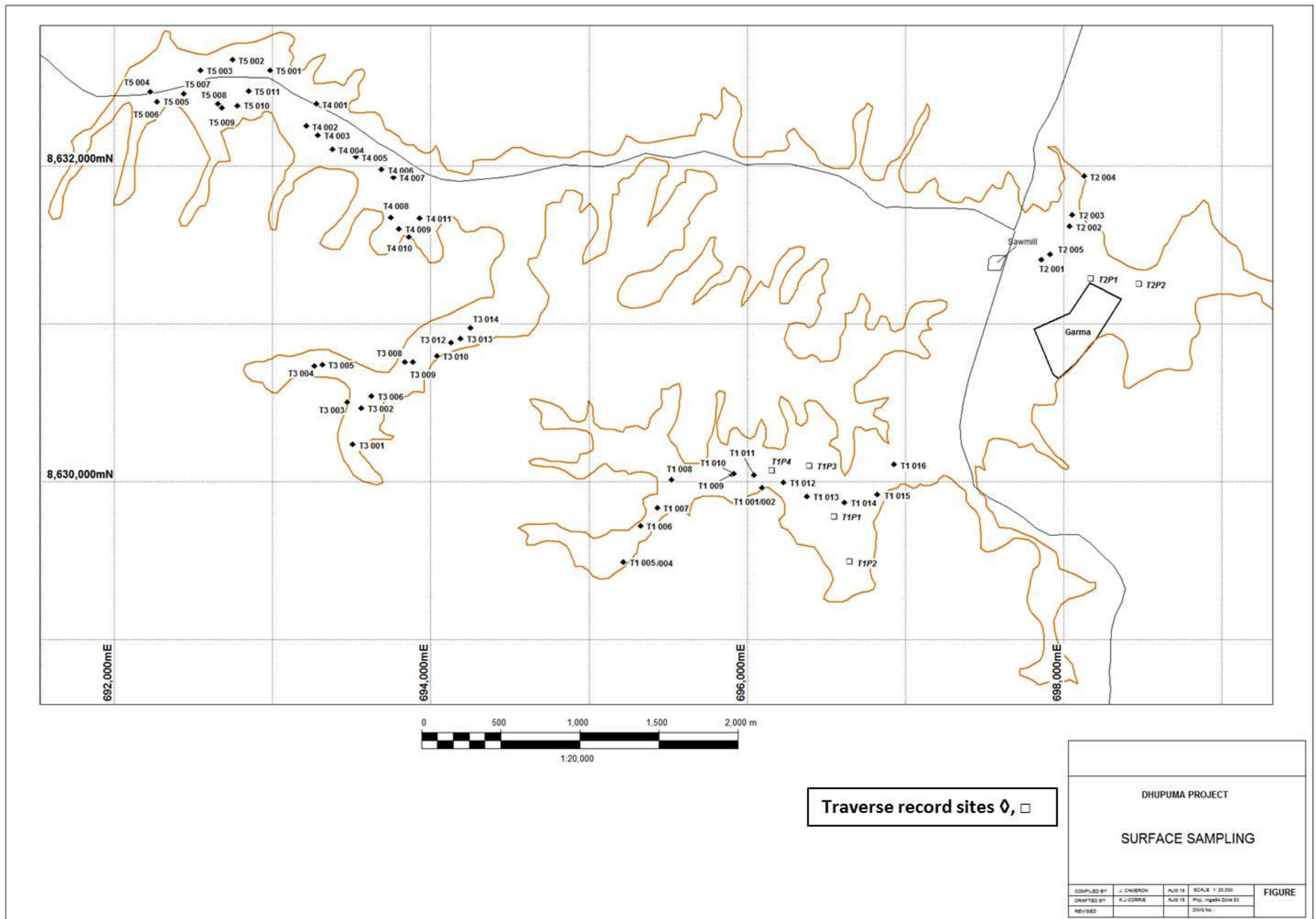


Figure 4 EL30266 Dhupuma Plateau Reconnaissance Traverse record sites.

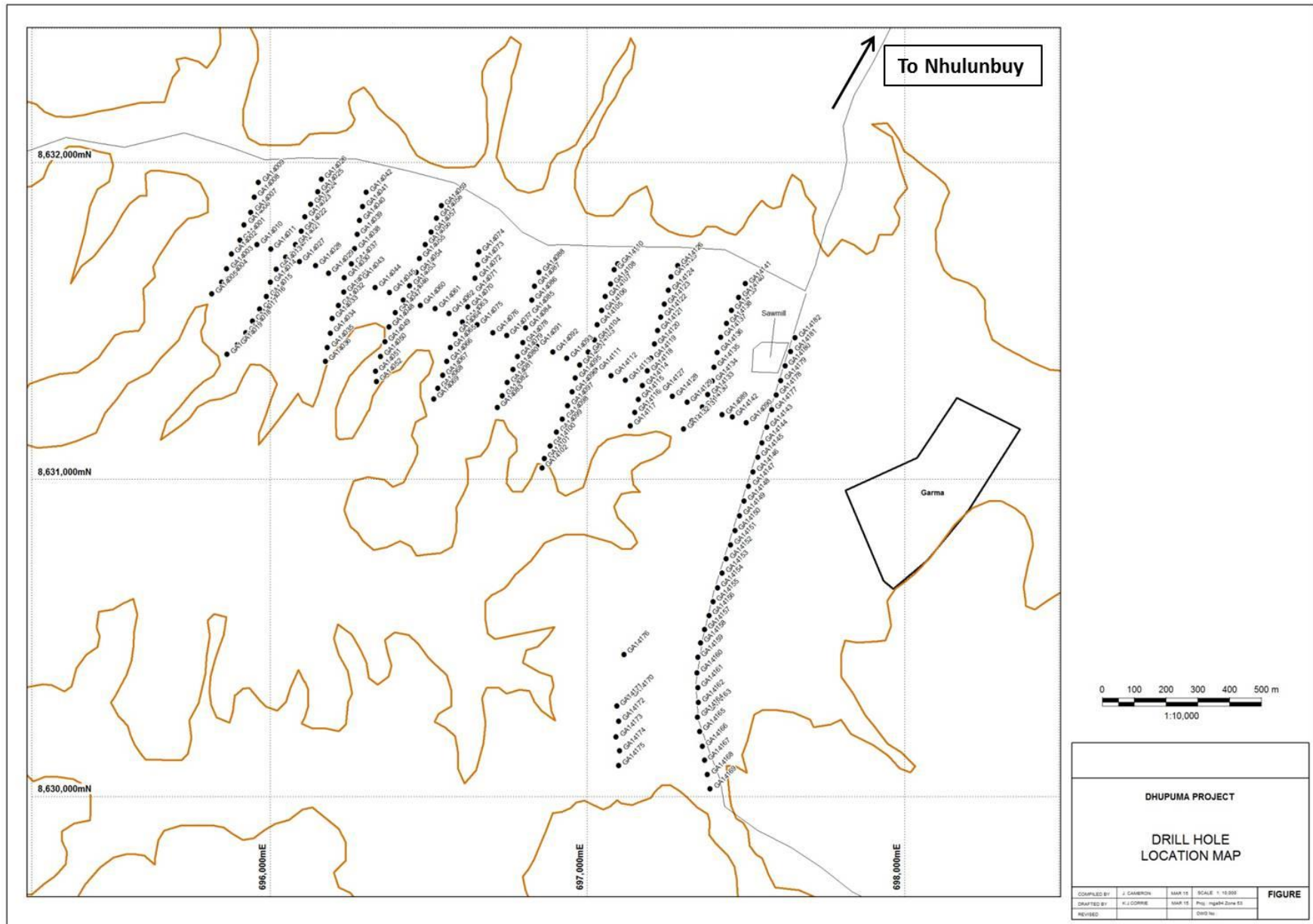


Figure 5 EL30266 Dhumupa Plateau Drilling Program – Drill hole location plan.