



EL26901-AVON DOWNS

Fourth Annual Report and Surrender Report for EL26901

For the Period 17th March 2009 to 21st February 2013

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REPORT DATA SHEET

DATE	27 February 2013
PROJECT NAME	Avon Downs
REPORT TITLE	Fourth Annual Report and Surrender Report EL26901
TENEMENT HOLDER	Century Hill Pty Ltd
TENEMENT NO.	EL26901
KEYWORDS	Georgina Basin, Middle Cambrian, Phosphate
TYPES OF WORK	Acquisition of digital data sets and evaluation of historical company reports, phosphate market research, prospect assessment, costing of drilling program
COMMODITY (TARGET)	Phosphate
TECTONIC UNIT	Georgina Basin, Nicholson Sub-basin
GEOLOGICAL AGE	Proterozoic, Palaeozoic, Tertiary
NEARBY TOWNS	Camoweal
GEOLOGICAL MAPS	Avon Downs SF53-04 1:250,000 NT geological Map Sheet
AUTHOR	B. Townsend

SUMMARY

EL26901-AvonDowns, lies within the Georgina Basin and was acquired for its potential to host rock phosphate. This report is the Surrender Report for the tenement. The tenement consisting of 198 blocks was granted on 17 March 2009, on 17 March 2011 100 blocks were relinquished, and on 17 March 2012 a further 49 blocks were relinquished. The tenement was surrendered 21 February 2013. During the reporting period the following work was carried out:

- Acquisition of publically available geological digital data
- Acquisition of publically available geophysical data
- Evaluation of Open File Exploration Data & evaluation for potential exploration targets
- The blocks retained for the current year were considered worthy of continued exploration however after contraction of funding sources during the period and the lack of success of joint venture initiatives, it was decided to allocate funds elsewhere and surrender the tenement. No exploration work was carried out during the current operational year.

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1.0 INTRODUCTION

Consolidate Global Investments (CGI) has 5 tenements in the Northern Territory prospective for rock phosphate mineralisation, one of these tenements, EL26901 is the subject of this report is located within the Georgina Basin as shown in Figures 1-3.

The tenement is in the name of Century Hill Pty Ltd which is a wholly owned subsidiary of Consolidated Global Investments Limited (CGI), A.C.N 009 212 293.

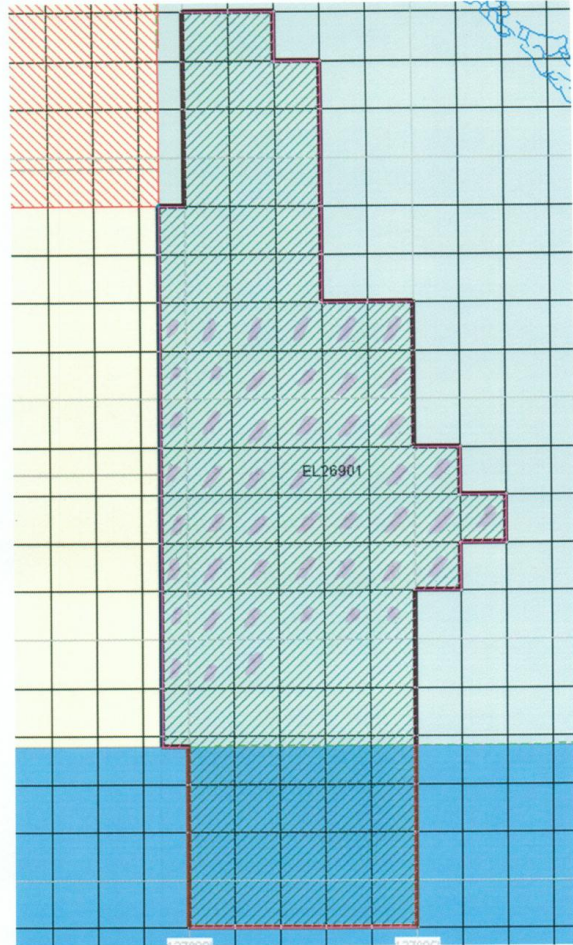
CGI recognises the importance of phosphate mineralisation. Phosphate rock is the basis for a major world industry for the manufacture of phosphate fertilizers and phosphorous-based chemicals. Phosphorite deposits are widespread in the Proterozoic and Cambrian sediments of Australia although with the exception of the Georgina Basin they are small and uneconomic. Within the Georgina basin the Duchess Deposit in Northern Queensland was in production between 1975-1978 and 1981-1982. The total resource at Duchess is 1000mt @ 17-18% P₂O₅, (DSO is >= 30% P₂O₅).

Phosphate Rock occurs as an agglomeration of apatite either as fluoroapatite FP₂O₅, apatitic apatite, microcrystalline apatite and crystalline apatite.

Tenement details are given in Table 1.

Table 1-Tenement Schedule

Tenure ID	Ownership	Name	Approval Date	Expiry Date	Size (Blocks)	Area Km ²	Mineral Field	Rent \$	Expenditure \$
EL26901	Century Hill Pty Ltd	Avon Downs	17/03/2009	16/03/2015	49	76.5	Tennant Creek	2,215	56,000



Blocks to be
Retained
49

FIGURE 1 - EL26901 – Map Showing Retained Blocks Post March 2012 Relinquishment

1.1 PROJECT LOCATION, RELIEF & VEGETATION

EL26901 is located some 1330 km south-east of Darwin and some 330km east of Tennant Creek and some 60km south-east of the Wonarah Phosphate Deposit within the Barkly Tableland region within the Tennant Creek Mineral Field of the Northern Territory see Figure 2-4. The tenement is located within the Avon Downs (SF53-04) 1: 250 000 NT Geological Survey Map Sheet.

The project can be accessed via the bitumen Barkly Highway, located some 30km north of the northern edge of the tenure from Camoweal (in Queensland) or Tennant Creek (in Northern Territory) and then via dirt tracks. Black soil plains are common within and around the license

The tenement is located in the Barkly Tableland region which is typified by low topographic relief.

Vegetation in the Tableland region is dominated by open savannah woodland and grassland. Taller and more abundant trees are restricted to the banks of the major drainage systems which only flow for short periods after storms.

1.2 SETTING

The majority of phosphate deposits worldwide (130+) are of Neoproterozoic-Cambrian in age with the most abundant being in the early-to-middle Cambrian with later deposit peaks during the Middle Permian, Late Cretaceous-Palaeocene and the Mesozoic. These phosphogenic occurrences occur as a result of an up-welling of phosphate-rich deep ocean waters. Phosphate Rock occurs as an agglomeration of apatite either as fluoroapatite FP_2O_5 , aphanic apatite, microcrystalline apatite and crystalline apatite.

Phosphate rock is the basis for a major world industry for the manufacture of phosphate fertilisers and phosphorous-based chemicals. Within Australia phosphorite deposits are widespread in the Proterozoic and Cambrian sediments, with middle Cambrian rocks of central and northern Australia hosting several major phosphate deposits in Queensland (Georgina Basin) which include:

- Duchess-Phosphate Hill
- Lady Annie
- D Tree

Whilst within the Northern Territory the Georgina Basin is host to the following Phosphorite deposits:

- Wonarah
- Alexandria
- Alroy
- Highlands Plains

Middle Cambrian shallow marine sediments close to basin edges or basinal highs are likely targets for phosphorite mineralisation. Both the Georgina and Daly Basins shallow marine sediments were laid down in the Middle Cambrian.

Exploration has discovered a number of phosphate deposits within the Georgina Basin however little to no phosphate exploration has been carried out within the Daly Basin.

With the completion of the Darwin to Alice Springs Railway line bulk commodity mineralisation within reasonable trucking distance of the railway line makes the possibility of a phosphate development more feasible from the Northern Territory.

Whilst the Georgina Basin hosts the largest number of phosphate deposits the Daly Basin is of a similar age and prospectivity with virtually no phosphate exploration conducted to date within it.

The Wonarah Phosphate deposit is owned by Minemakers Limited and contains a JORC Inferred resource of 1105mt @18% P₂O₅. The project lies 80km east of the Arruwurra Phosphate deposit (131mt @ 18.6% P₂O₅-Minemakers Limited). The location of the Minemakers Project is given in below. Minemakers has commenced trial mining and has shipped a trial parcel of ore out of the Darwin port in early 2010.



LOCATION OF THE WONARAH PHOSPHATE DEPOSIT



PHOSPHATE PROJECT LOCATIONS, NORTHERN TERRITORY

FIGURE 2-PROJECT LOCATION

2.0 REGIONAL GEOLOGY

The Project is located within the Georgina Basin a large intracratonic basin that stretches into Queensland with some 60% of the basin located in the NT. The basin is filled with platform carbonates with interspersed sandstone and shale horizons typical of relative uplift and erosion.

The basin has been subdivided into several sub-basins, namely the Barkley, Undilla and Southern Basin. The Antrim Plateau Volcanics and their equivalents floor these basins sequences unconformably.

The Middle Cambrian succession has been subdivided into two depositional sequences with three discrete phosphogenic episodes.

Sequence 1 (Early Middle Cambrian) - terrigenous siliciclastic rocks, peritidal and shelf carbonate rocks, carbonaceous shale and phosphatic carbonate rocks

Sequence 2-(Middle Cambrian) - siliciclastic and carbonate rocks, phosphorite and phosphatic limestone, and carbonaceous shale.

Sequence 2 is host to the major phosphate deposits e.g. the Wonarah, Alexandria and Alroy deposits in the Northern Territory. All three appear to be hosted in the Wonarah Formation, although others have assigned the Wonarah deposit to the Gum Ridge Formation (sequence 1)

Details of the stratigraphic succession are given below after Khan et al with basin locations given in Figure 3.

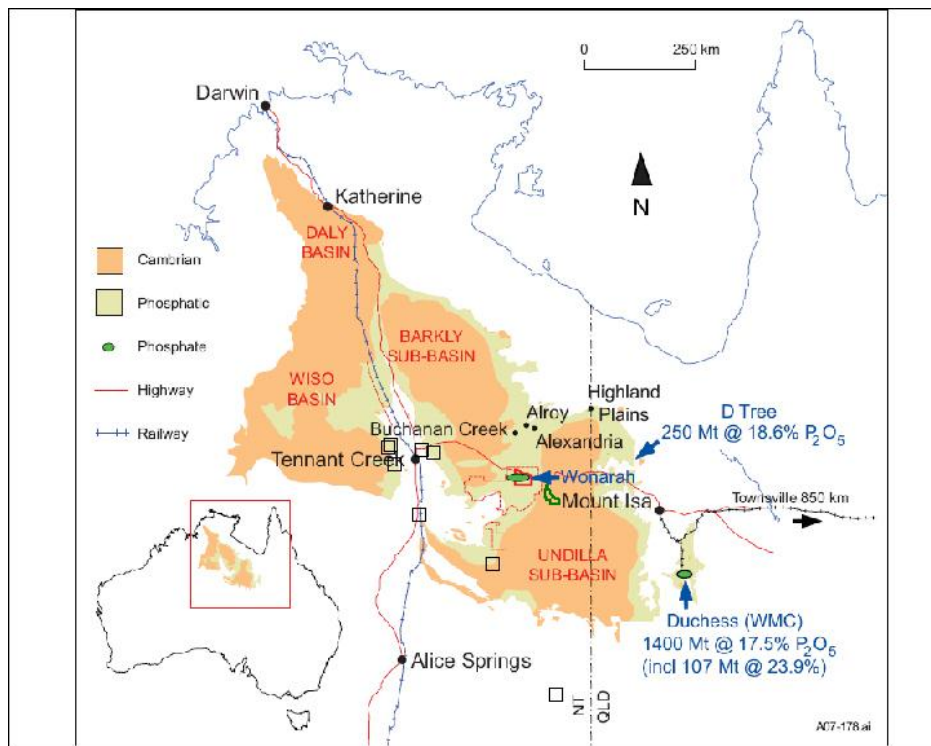
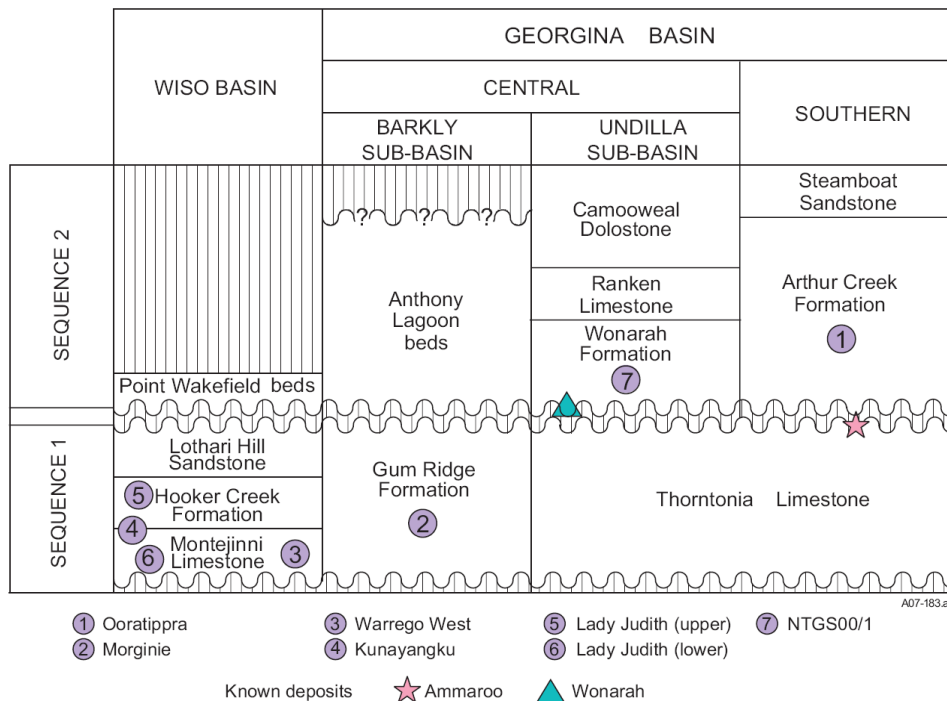


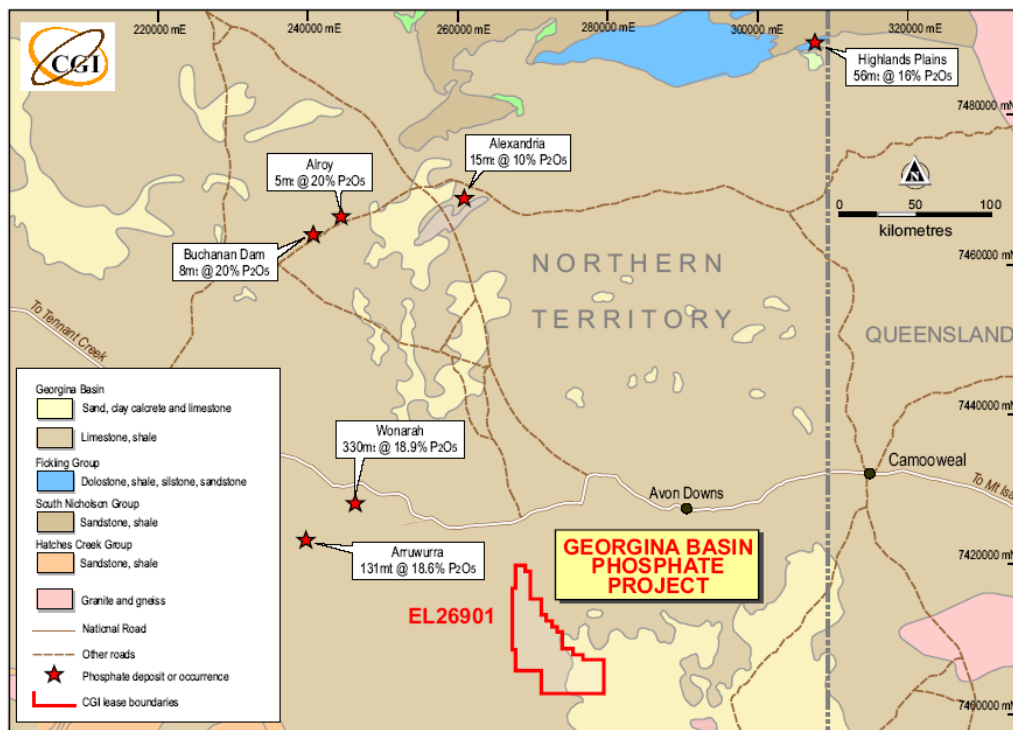
Figure 3- Simplified geology of the Georgina, Wiso and Daly basins showing the distribution of phosphorite facies deponents and major phosphate deposits. Source: Khan et al.

2.1 PROJECT GEOLOGY

The tenure is overlain primarily by Cainozoic sediments of colluvial sand, silt, clay, ferricrete and manganese which overly the Camooweal Dolstone a sequence of pale microbial dolstone with siliceous concretions. The Camooweal Dolstone was laid down in the Middle Cambrian and occurs as outcrop in the west and north-east of the tenure. This sequence lies stratigraphically above the Wonarah Formation and is composed of similar shallow marine lithologies.

2.1.1 WONARAH DEPOSIT GEOLOGY

The Wonarah deposits occur along the flanks of the Alexandria – Wonarah High. There are two mineralised rock types at Wonarah – Mudstone Phosphorite and the Chert Breccia Phosphorite. The Mudstone Phosphorite contains most of the mineralisation, forming friable and fine grained beds 2 metres to 10 metres thick with grades up to 40% P₂O₅ but typically between 20% and 30% P₂O₅. The Chert Breccia Phosphorite occurs beneath the Mudstone Phosphorite with a gradational boundary and contains discrete clasts of chert breccia in a phosphorite matrix. The grade ranges from 5% to 20% P₂O₅ but is typically between 10% and 15% P₂O₅.



GEORGINA BASIN PHOSPHATE PROJECT, REGIONAL GEOLOGY

FIGURE 4-REGIONAL GEOLOGY

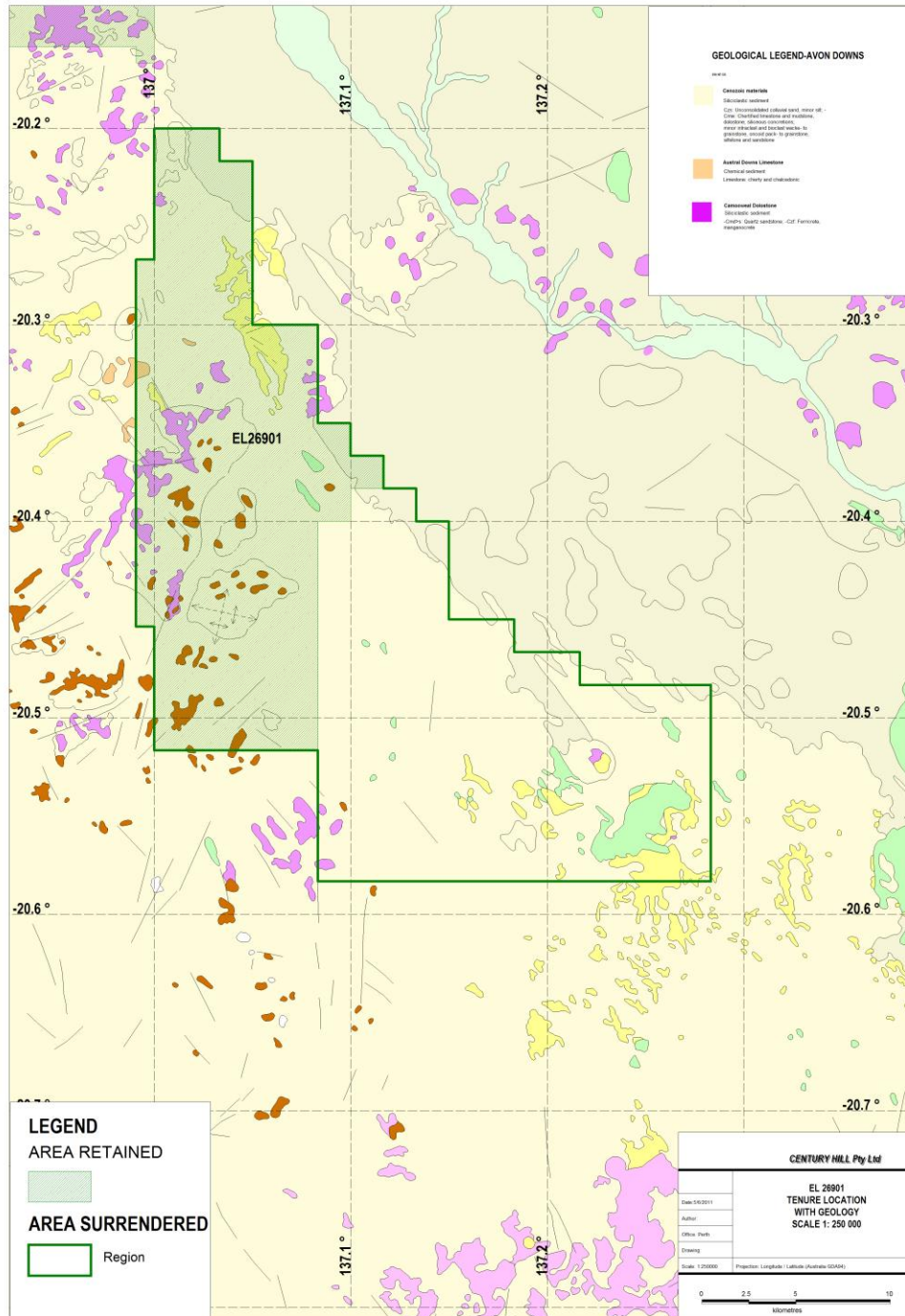


Figure 5-Project Geology (post 2011 surrender)

The 1:250 000 Avon Downs NT GS mapping shown in Figure 5 shows that the majority of the tenure is overlain by recent sediments however there are sufficient outcrops of Camoweal Dolstone which lies stratigraphically over the Wonarah formation. The occurrence of these Middle Cambrian sediments within the tenure makes this tenure prospective for phosphate mineralisation.

3.0 EXPLORATION ACTIVITY

3.1 OPEN FILE RESEARCH

Only minor historical exploration for phosphate has been conducted in the vicinity of EL26901 with no actual phosphate exploration being conducted on CGI's lease. The only exploration carried out within EL26901 was by CRA in 1985. CRA carried out stream sediment sampling for diamond and diamond indicator minerals but returned nothing significant.

The vast majority of work carried out has been for diamond exploration which involved airborne magnetic surveys, location of dipole magnetic anomalies which were then shallow drill tested as a means of identifying kimberlitic intrusions, none of which were located. These surveys included radiometric surveys. Radiometric anomalies were ground truthed for uranium mineralisation but no uranium mineralisation was located. In addition a large number of lag and some stream samples were collected for diamond and indicator minerals. Only micro diamonds were found.

Phosphate exploration commenced in the late 1960's with companies conducting regional scout drilling to define the extent and development of phosphate mineralisation in Cambrian sediments at the base of the Georgina Basin succession some 250km north-east of CGI's lease.

Recorded phosphorite exploration began in 1967 on the Alexandria-Alroy-Buchanan Dam and Wonarah prospects when IMC Development Corporation (IMC) commenced a drilling program which intersected phosphorite horizons on the margins of the Precambrian.

The Alexandria-Alroy-Buchanan Dam phosphate deposits are located some 250km north-west of the CGI lease whilst the Wonarah/Arruwurra deposits are located some 75km west of the lease.

Alexandria-Alroy-Buchanan Dam Area

The Alexandria-Alroy-Buchanan Dam deposits are owned by Phosphate Australia Ltd. **IMC** reported results in one drill hole which averaged 6.1 metres at 15.6% P₂O₅ from

48.8 metres, including up to 18% P₂O₅ in parts. While IMC's reports indicated that further work was planned, there are no records of further exploration.

In 1968, Pickands Mather and Co International (PMI) carried out reconnaissance drilling at Alroy and identified two prospects, Area No1 and Area No2 (now called Buchanan Dam). After limited follow-up drilling, PMI reported the following thickness and grade averages:

Alroy Area No 1 (two holes):

- Hole A2-2a: 6.1 metres at 10.0% P₂O₅ from 18.3 metres, including 1.8 metres at 14.5% P₂O₅ from 18.3 metres, in weakly calcareous to non-calcareous sediment.
- Hole A-10-70: 6.4 metres at 12.0% P₂O₅ from 16.2 metres, including 4.6 metres at 15.5% P₂O₅ from 17.4 metres, in weakly calcareous to non-calcareous sediment.

Buchanan Dam (Alroy Area No 2 (one hole)):

- Hole A-12-70: 6.1 metres at 25% P₂O₅ from 12.2 metres, in carbonate rich sediment.

The higher grade phosphorites were hosted by calcic mudstones and claystones and minor limestone.

In 1971, Minoil Services Pty Ltd (Minoil) completed further broad spaced drilling in the Alroy area to drill test the phosphatic zones for base metals with one hole returning a 3m intersection of shale with max values of Ag -5 ppm, As -700 ppm, Cd -50 ppm, Co -2000 ppm, Cu -1500 ppm, Mn -17.0%, Pb -8000 ppm and Zn -8000 ppm. No high grade phosphate was intersected in the hole but the interval with the high base metal mineralization also had a high radioactive count. In another hole 800m to the south, higher than average base metal levels were recorded in the phosphatic zone. Minoil concluded that the area had the potential for a sedimentary deposit of base metal mineralization but did not deem the phosphorites as requiring further exploration.

In 1976, ICI Australia Limited (ICI) drilled nine rotary/percussion drill holes for a total of 219.5 metres at Alroy on EL 1081 which covered Areas No 1 and 2 over a broad area and difficulty correlating the phosphate mineralized zones.

From 1976 to 1977, ICI explored the Alexandria area for extensions to the low grade phosphorite deposits located by IMC in 1968-70. Seven rotary/percussion holes were drilled in this zone but only very low grade phosphate was intersected. ICI ceased exploration in 1977.

Wonarah Deposit

The Wonarah deposit held by Minemakers Limited is located 75km west of EL26901.

IMC commenced drilling for phosphate mineralisation in **1970**; the drilling returned significant thicknesses of phosphate mineralisation. The phosphorite does not outcrop at this locality and was located at depths of 17m to 45m and reached a maximum thickness of 18 metres at the eastern end of the deposit. IMC made several pre-JORC estimates of the mineralisation present with the highest grade being 280Mt at 18.98% P₂O₅ (applying an 18% P₂O₅ cut off). Scoping studies were unfavourable and IMC relinquished the prospect.

Between **1978 and 1999** the ground was held by a variety of companies which included ICI, CRAE, Indo Mines (JV with Rio Tinto-RTE), and these companies carrying out drilling, metallurgical test work and feasibility studies.

After additional infill drilling in **2001**, a new resource estimate was undertaken which reported an Inferred Mineral Resource of 72Mt at 23% P₂O₅ (at a cut off grade of 15%).

RTE withdrew from the joint venture in **2002** due to the remoteness of the project and Indo sold the project to Minemakers in **2006**. Minemakers have recently announced a JORC & NI43-101 Compliant Inferred Resources* at 1,258Mt @ 12% P₂O₅.

During **2001-02**, RTE completed field work on the outcropping Upper Gum Ridge 40km south-west of Wonarah where the Arruwurra phosphate deposit was located. Minemakers have recently announced a resource of 131mt @ 18.6% P₂O₅ at Arruwurra (included in the overall Wonarah Resource *).

3.2 TOPOGRAPHY

A topographic map of EL26901 in Figure 6 shows a topographic high within the central western area of the tenure which is largely coincident with the outcropping Camoweal Dolstone and which may mark the edge of a basinal high. Basinal highs coincident with phosphatic Middle Cambrian Sediments provide excellent targets for phosphate exploration.

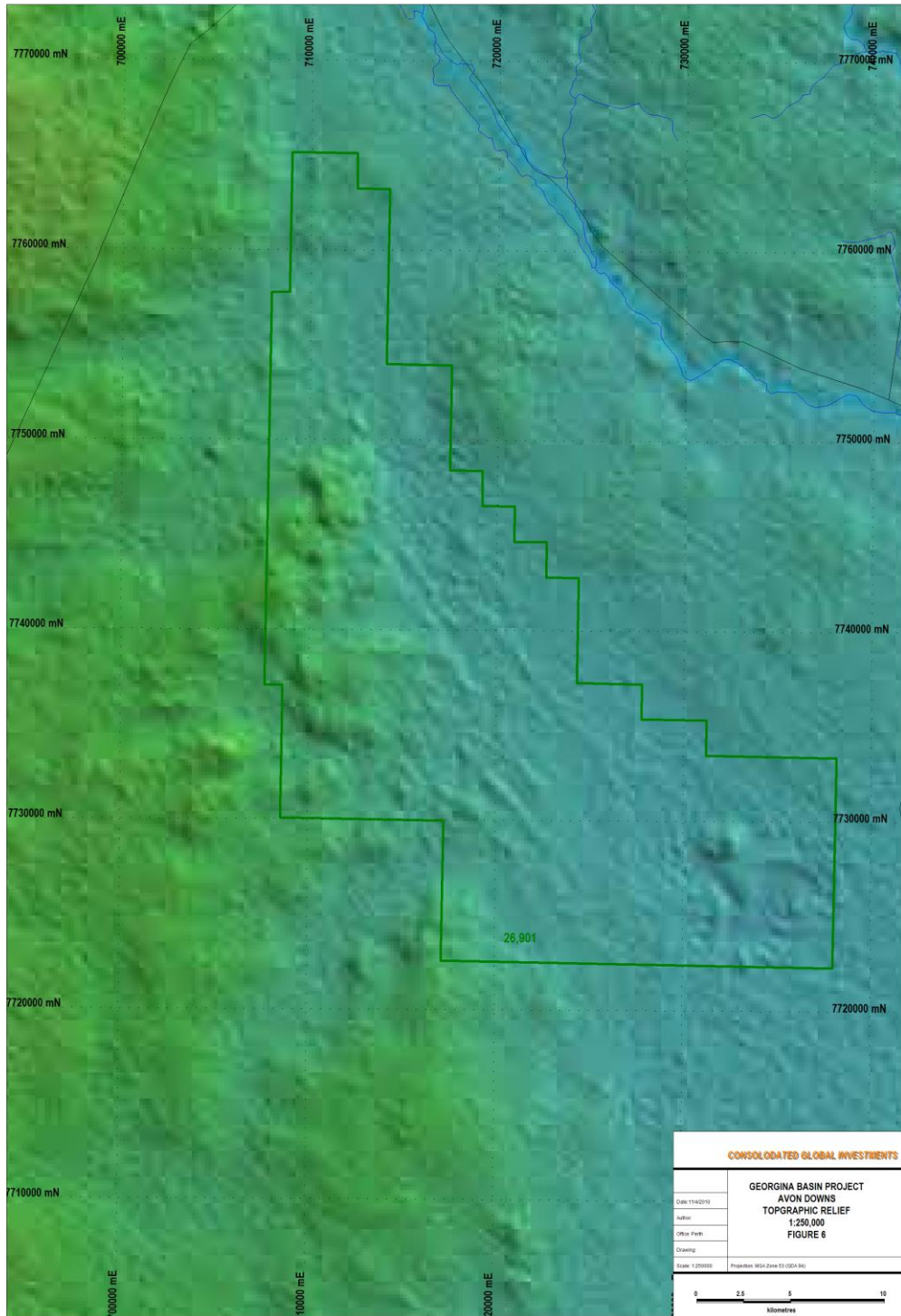


Figure 6 – Topographic Relief

3.3 GEOPHYSICS

Various geophysical data sets were acquired from NT Geological Survey. The datasets are a compilation of NTGS and AGSO data from the 1960's to present with various line spacing. The gravity is based on 11km grid by BMR in the 1960's and 1970's.

3.3.1 GRAVITY

The gravity over EL26901 given in Figure 7 clearly shows a number of gravity highs which are coincident with the topographic highs detailed in 3.2 above and the Camoweal Dolstone seen in Figure 5.

The coincident gravity and topographic highs beneath Middle Cambrian shallow marine sediments provide an excellent target for phosphate mineralisation.

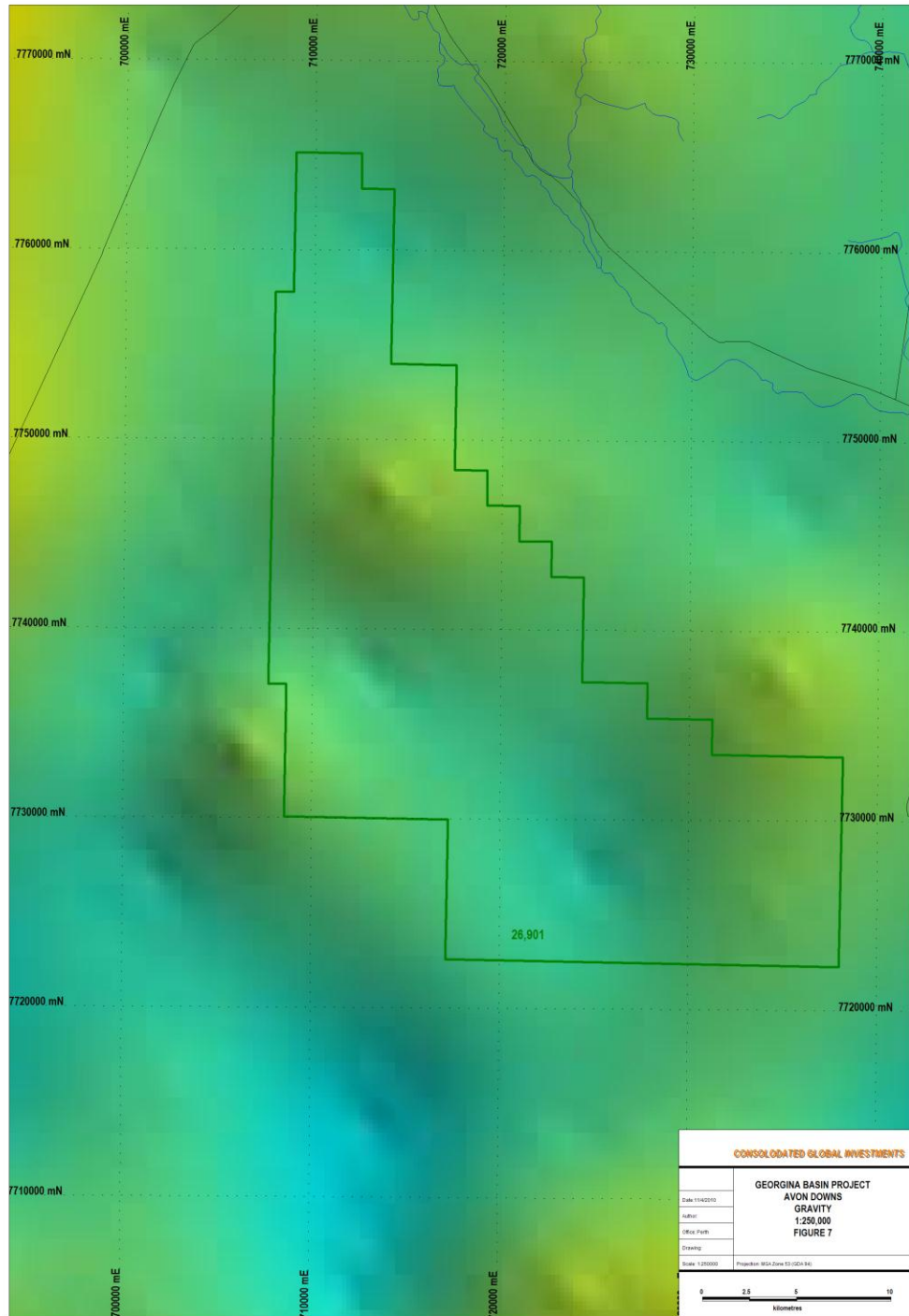


Figure 7 – Gravity

3.3.2 AIRBORNE GEOPHYSICS

The airborne magnetic image in Figure 8 defines a magnetic high which is coincident with outcropping Camowéal Dolstone, the topographic high and the gravity high. The magnetic intensity suggests that the Middle Cambrian sediments are underlain by volcanic, possible equivalents of the Antrim Plateau Volcanics which provide an excellent inter basinal ridge (high) for the development of phosphatic sediments.

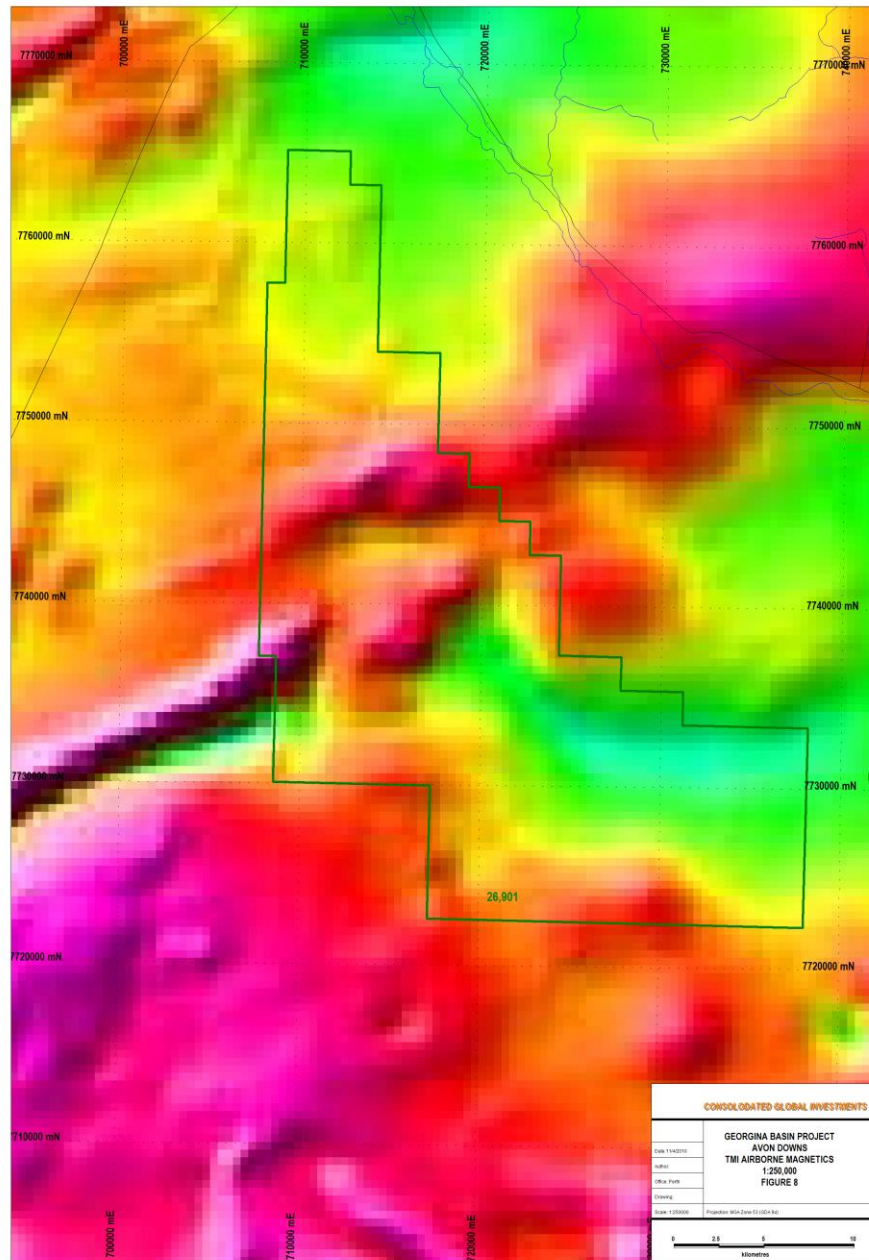


Figure 8 – TMI Airborne Magnetics

3.2.3 AIRBORNE RADIOMETRICS

The radiometric image shows no anomalism within the tenure however immediately east of the western boundary there is a marked change in intensity which possibly marks the basin deposits.

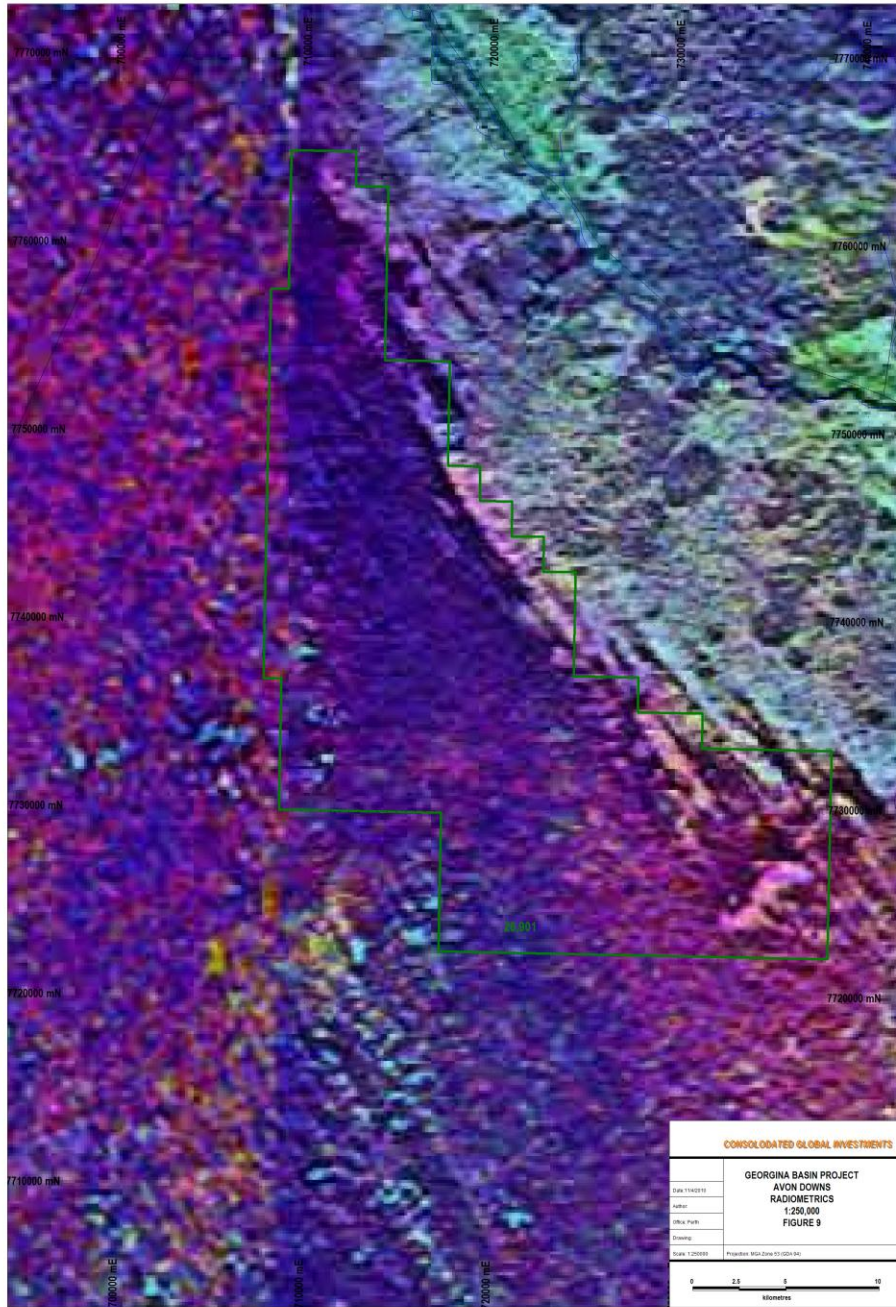


Figure 9 – Airborne Radiometrics

4.0 FUTURE WORK

The blocks retained for the current year were considered worthy of continued exploration however after contraction of funding sources during the period and the lack of success of joint venture initiatives, it was decided to allocate funds elsewhere and surrender the tenement. No exploration work was carried out during the current operational year.

4.1 REFERENCES

- Geological Survey Record-NT-2007/003-M Khan, PA Ferenczi, M Ahmad, PD Kruse- Phosphate testing of water bores and diamond drill core in the Georgina, Wiso and Daly basins, Northern Territory
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