

Annual Report EL 23726

“801” Project

Barkly Highway, NT

For the Period ending 31 July 2010

**Tenement Holder: Jacaranda Minerals Pty Ltd (50%) and
Minerals Australia Pty Ltd (50%)
Date: August 2010**

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and Resources
Minerals Australia Pty Ltd - Perth
Jacaranda Minerals Pty Ltd - Melbourne**

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Electronic data file for EM survey *EL23726_082010_1_location.txt* provided separately

SUMMARY

EL 23726, granted to Conarco Minerals Pty Ltd on 1st August 2003 for a period of six years. The EL as granted comprises an area of 149 blocks (approximately 460 sq km) and is located on Dalmore Downs pastoral lease, 260km east of Tennant Creek in the Northern Territory of Australia. In August 2009 the area of EL23726 was reduced to 41 blocks.

In December, 2007, Conarco Minerals entered into a Joint Venture, the Jacaranda Alliance JV, with Hancock Prospecting Pty Ltd in Perth, W.A. (HPPL), to carry out exploration on all Conarco tenements including EL23726. The Joint Venture partners are Jacaranda Minerals Pty Ltd, a company wholly owned by the principals of Conarco Minerals, and Minerals Australia Pty Ltd a wholly owned subsidiary of Hancock Prospecting Pty Ltd. In June, 2008 the tenement was transferred to Jacaranda Minerals Pty Ltd (JML) and Minerals Australia Pty Ltd (MAPL) in equal shares.

In late 2002, Conarco, while carrying out a regional reconnaissance geochemical survey, discovered strongly anomalous geochemical lead (750ppm Pb) and arsenic (150ppm As) in weathered Cambrian sediments at a location named "801" Literature search by Conarco also discovered drill holes previously drilled in the area containing anomalous lead values up to 370ppm Pb.

Follow-up work by Conarco defined a broad area within EL 23726 containing anomalous lead geochemistry with coincident magnetic response defined from interpretation of the NTGS Barkly airborne geophysical survey. Additional magnetic modeling also revealed several magnetic targets for kimberlite bodies. The targets range in depths from 100m to 200m.

An MMP for a drilling program, submitted by Minerals Australia Pty Ltd, was approved by DPIFM in June 2007 and Authorisation No. 0367-01 was issued on 28 June 2007.

The drilling programme approved by DPIFM in 2007 was commenced in July 2008 when a drilling contractor was finally obtained after completing a contract on the adjacent Wonarah phosphate deposit. To the end of July, 2009 five core holes were completed for a total of 1296 meters.

In June-July 2010 a ground electromagnetic (EM) survey was carried out over the most northwesterly part of EL23726. Seven lines of moving loop EM were completed over previously identified magnetic anomalies in that part of the EL to locate possible conductors and/or resistors which may indicate potential for base and/or precious metal mineralisation.

1. TENURE

Jacaranda Minerals Pty Ltd and Minerals Australia Pty Ltd are the registered owners of respective 50% interests in EL 23726 which is located on the Dalmore Downs pastoral lease owned by Mr. Sterling Buntine. The area of the EL is subject to registered Native Title claims DC02/2 and DC01/30, the claimants being represented by the Northern Land Council.

EL 23726, with 500 blocks (1600km²) in area, was granted on the 1 August 2003 for a period of six years, expiring 31 July 2009. A portion of EL 23726 was following a compulsory reduction of the area in June 2005. From 1 August 2006, the area was reduced to 149 blocks (460 km²).

An application for a six (6) month deferral of reduction was submitted on 31st July 2007 due to the difficulty encountered in contracting the services of a drilling company to do the planned drilling. A waiver for 12 months to 31st July 2008 was granted by the DPIFM in September 2007 with exploration commitment at \$100,000.

A six month extension of time to reduce the area of the EL was granted by DRDPIFR on 20th August 2008. Nomination of 41 blocks to be retained was submitted in July 2009 and approved on 20th August 2009 for a period of two years. The current area of EL23726 is shown in Figure 1.

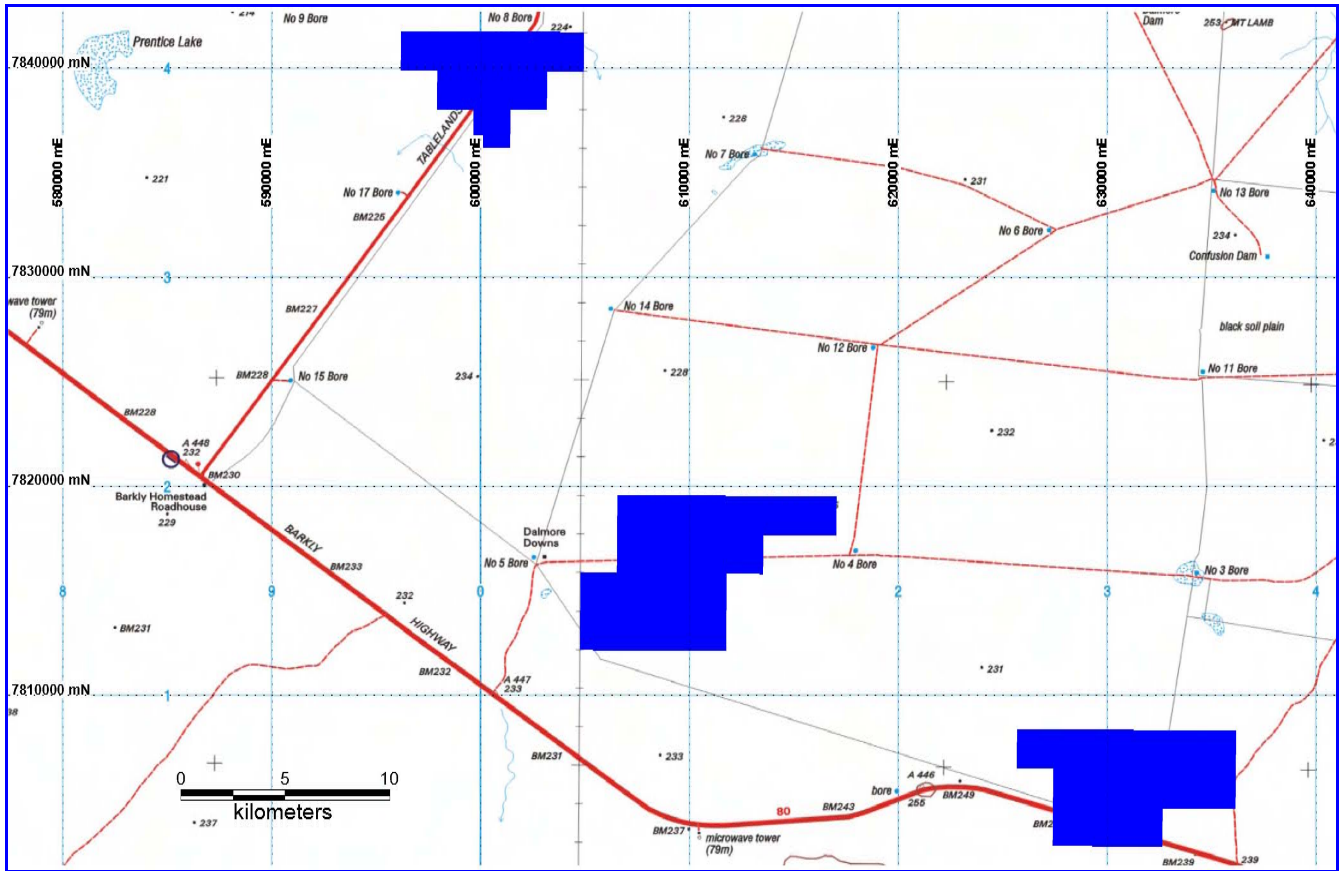
The tenement schedule for "801" is as follows:

TENEMENT NUMBER	EL	23726
REGISTERED HOLDER		Jacaranda Minerals Pty Ltd (50%) & Minerals Australia Pty Ltd (50%)
GRANT DATE		01-Aug-03
EXPIRY DATE		31-July -11
CURRENT AREA		41 blocks
ANNUAL RENTAL		\$6,560 plus GST
EXPENDITURE COMMITMENT 2008-09		\$80,000

2. INTRODUCTION

EL 23726 was granted to Conarco Minerals Pty Ltd on 1st August 2003 for six years. The EL as granted comprises an area approximately 460 sq km in two separate blocks located on Dalmore Downs pastoral lease near the Barkly Homestead Roadhouse in the Northern Territory. The EL was reduced to 41 blocks in August 2009. A location map of the current EL is shown in Figure 1.

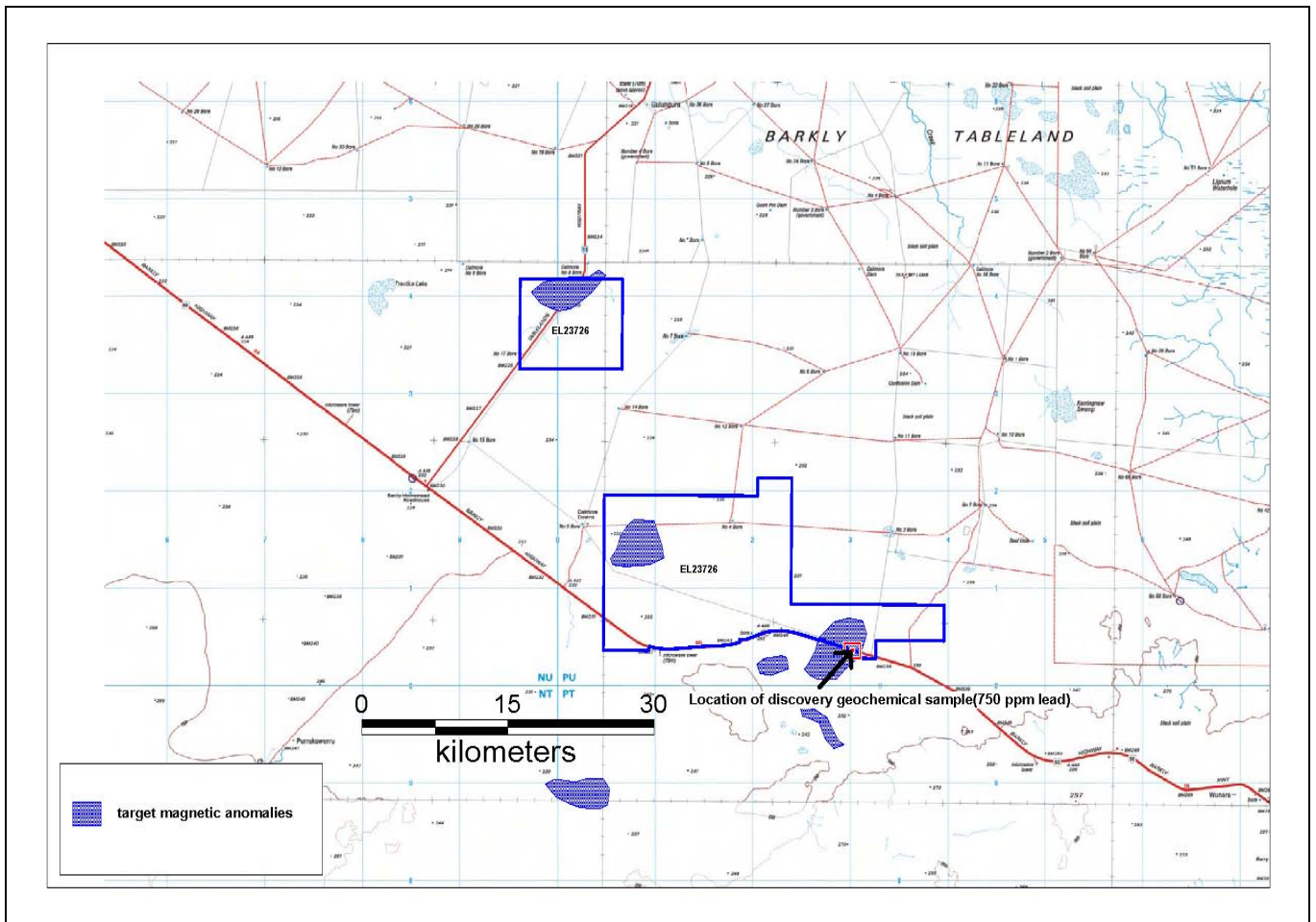
Figure 1: EL23726 location map (EL as at August 2010)



In late 2002, Conarco, after carrying out a regional reconnaissance geochemical survey, discovered strongly anomalous geochemical lead (750ppm Pb) and arsenic (150ppm As) in weathered Cambrian sediments. Conarco named this location "801". A follow-up literature search by Conarco identified previous exploration drill holes in the area containing anomalous lead values up to 370ppm Pb.

Subsequent work by Conarco defined a broad area within EL 23726 containing anomalous lead geochemistry with coincident magnetic response defined by interpretation of the NTGS Barkly airborne geophysical survey. Additional magnetic modeling also revealed several magnetic anomalies interpreted as being possibly caused by intrusive kimberlitic bodies. Estimated depths to these targets range from 100m to 200m. The locations of the "discovery sample" and of the magnetic anomalies identified by Conarco are shown in Figure 2.

Figure 2: Location of original magnetic anomalies



In December, 2007, Conarco Minerals entered into a Joint Venture, the Jacaranda Alliance JV, with Hancock Prospecting Pty Ltd in Perth (HPPL), WA to carry out exploration on all Conarco tenements including EL23726. The Joint Venture partners are Jacaranda Minerals Pty Ltd, a company wholly owned by the principals of Conarco Minerals, and Minerals Australia Pty Ltd a wholly owned subsidiary of Hancock Prospecting Pty Ltd.

A Mine Management Plan (MMP) for a core drilling program, submitted by Minerals Australia Pty Ltd, was approved by DPIFM in June 2007 and Authorisation No. 0367-01 was issued on 28 June 2007.

Five diamond core holes were drilled in EL3726 during July and August 2008. Completion of this drilling programme followed over twelve months of delays caused by the non-availability of suitable drill rigs due to the then Australia-wide mining and exploration “boom”.

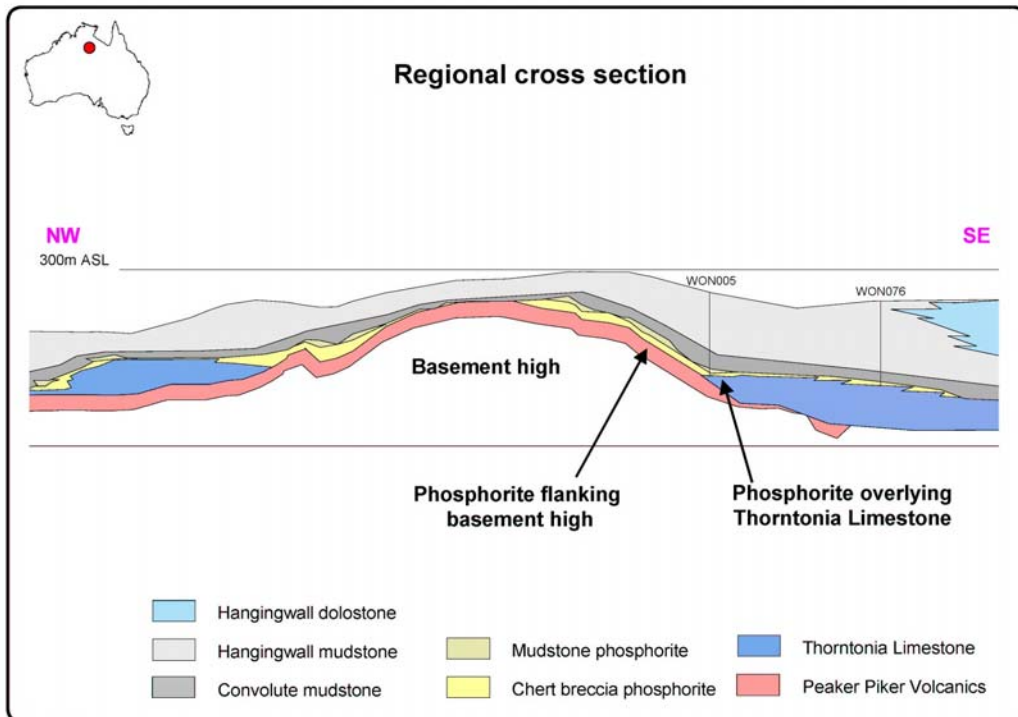
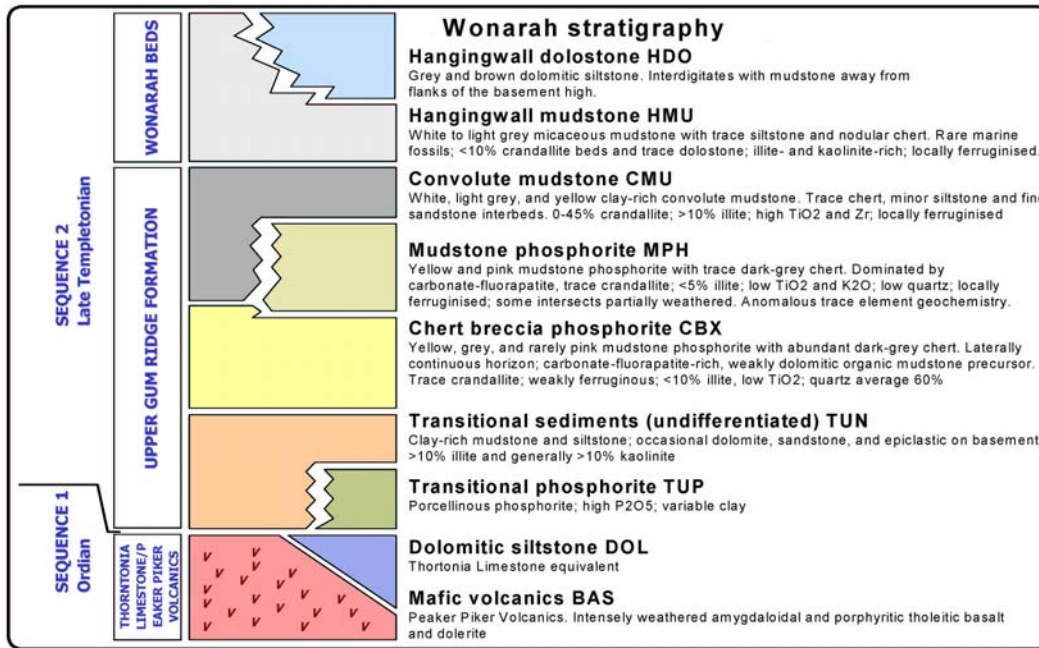
In June-July 2010 seven lines of moving loop EM were designed to test the magnetic anomalies on the northwesterly block of EL23726. A 100m square loop with an in-loop receiver and 50m stations was used.

3. GEOLOGICAL SETTING

The “801” tenement is located in the central western Georgina Basin, a large late Proterozoic to early Palaeozoic basin extending across much of eastern Northern Territory and northwest Queensland. The tenement straddles the northeast-southwest trending Alexandria-Wonarah Basement High, an early Cambrian structural ridge separating the Brunette and Undilla Sub-basins.

Basement in this area are Mesoproterozoic sediments and volcanics overlain by Early Cambrian Peaker Piker volcanics. The volcanics are tholeiitic in composition, and comprise amygdaloidal and porphyritic basalts and dolerite. The volcanics are overlain by dolomitic rocks equivalent to the Thornton Limestone, and overlain by dolostone, mudstone, and phosphorite of the lower Middle Cambrian Upper Gum Ridge Formation, and mudstone, siltstone and dolostone of the Middle Cambrian Wonarah Beds (Figure 3).

Figure 3: Local stratigraphic setting
(Partial Relinquishment Report for EL22167 Wonarah 5 and EL22168 Wonarah 6, 2nd July 2002 NT Report 25614)



4. PREVIOUS EXPLORATION

IMC

The Wonarah phosphate deposit to the south-east of the “801” tenement was identified in 1967 by the US industrial minerals and chemicals group, IMC Development Corporation (“IMC”). Between 1967 and 1970 IMC undertook regional mapping, geophysical, drilling and test work activities in the Wonarah region, including the area containing EL 23726.

In the period to March 1970, IMC drilled 294 non core holes totaling 11,660m in the region, and delineated a phosphate resource at Wonarah of 669 million short tons of 15.73% P₂O₅ (using a 10% P₂O₅ cut-off) including 532 million short tones at 16.74% P₂O₅ (using a 14% P₂O₅ cut-off) and 307 million short tons at 18.98% P₂O₅ (using an 18% P₂O₅ cut-off). The global resource at Wonarah identified by IMC totaled 1,955 Mt @ 14.4% P₂O₅.

A few holes drilled by IMC within EL 23726 returned anomalous Pb values some up to 370ppm (IMC drill hole W019). Locations of these IMC drill holes were provided in the 2004 Annual Report.

CRAE

During 1983-1984, CRA Exploration Pty Ltd (“CRAE”) carried out an exploration program for phosphate in an area immediately to the south of the Wonarah deposit. CRAE completed a low level (80m) aeromagnetic survey at 1km line spacing which suggested potential for phosphorite at 20-30m depth. Although tracks and drilling grids were prepared CRAE withdrew from the project due to low prevailing world phosphate prices and the lack of infrastructure at the time in central Australia.

In 1992, CRAE (and later Rio Tinto) explored the area for diamonds south of the Barkly Highway on the Joildung and Barry Caves 1:100,000 map sheets. A total of 21 loam samples were collected over weak magnetic anomalies and one 0.175ct microdiamond and one non-kimberlitic chromite were recovered. The distribution of microdiamonds and kimberlites occurring in the Northern Territory and the location of gravel and loam samples collected in the Barkly region by various explorers for diamond were provided in the 2004 Annual Report.

5. WORK COMPLETED BY CONARCO/INDO (2002–2006)

Regional Sampling Program – Conarco (2002)

In late 2002, Conarco discovered strongly anomalous geochemical lead (750ppm Pb) and arsenic (150ppm As) in weathered Cambrian sediments at a location named “801” while carrying out a regional geochemical reconnaissance survey. This area was subsequently applied for by Conarco under the application ELA 23726.

Conarco also demonstrated that the Pb anomalism, especially at the 750ppm site, was related to sub-cropping siliceous breccia. The breccia was interpreted to be a weathered silicified “crackle breccia” typical of MVT, Pb-Zn mineralisation.

Magnetic Modeling – Conarco (2003)

Following the encouraging sample results, Conarco undertook a review of the NTGS 2001 Barkly Airborne Geophysical Survey which was flown on 400m line spacing.

Magnetic modeling of the geophysical data was undertaken by Conarco using a software package called Quickmag. Conarco’s modeling revealed a large (20km²) magnetic anomaly co-incident with the location of the 750ppm Pb sample anomaly at “801” (Attachment 2). Several magnetic dipole anomalies reflecting possible kimberlite type intrusions were also interpreted within EL 23726 (refer to Annual Report year ending July 2005).

Magnetic Modeling – Indo Mines (2004)

Following the formation of a joint venture between INDO and Conarco, INDO undertook a review of the Conarco data base and commissioned consultant geophysicists, Southern Geoscience, to review the data relating to the NTGS 2001 Barkly Airborne Geophysical Survey.

Southern Geoscience also compared Conarco’s modeling of the magnetic data over EL 23726 using a software package called Potent. The Potent modeling used by Southern Geoscience produced similar depths to that of the Quickmag modeling for just over half of the models (refer to Annual Report year ending July 2005). Magnetic anomalies C2, C4 and E4 are significantly deeper, while E2 and E3 are significantly shallower.

The automated modeling shows no responses within 100m of the surface, but a reasonable scatter of model solutions is in the range of 100m to 200m. The results should be taken as general guide to depths across the area.

Review of Magnetic Modeling – Indo Mines (2005)

In 2005, INDO undertook a review of the magnetic modeling completed in 2004 (refer to Annual Report year ending July 2005). The work undertaken by Southern Geoscience indicated similar depths to that of the Conarco modeling for just over half of the models. Some of the magnetic anomalies were significantly deeper, while some were significantly shallower, however in general, the targets range in depths from 100m to 200m. Work also completed during 2005 involved the plotting of the magnetic targets in suitable format and the compilation of additional maps comparing the magnetic targets against regional gravity and digital elevation (refer to Annual Report year ending July 2005).

Preparation for Drilling Program – INDO (2005/2006)

Indo commenced preparations in late 2005 and the first half of 2006 for a drilling program to test a number of the magnetic anomalies. The preparations involved native title/site clearance programs by INDO for the proposed drilling program. Ground truthing of specific targets by Conarco were to take place following clearance.

Preparation for Drilling Program – HPPL/CONARCO (2006-2007)

Minerals Australia, a subsidiary of HPPL, submitted an MMP to the DPIFM in May 2007 for a drilling program of 5 holes, each to a depth of 250m (total 1250m) to test a number of the magnetic anomalies. Authorisation No. 0367-01 was issued by DPIFM on 28 June 2007 in respect of this work.

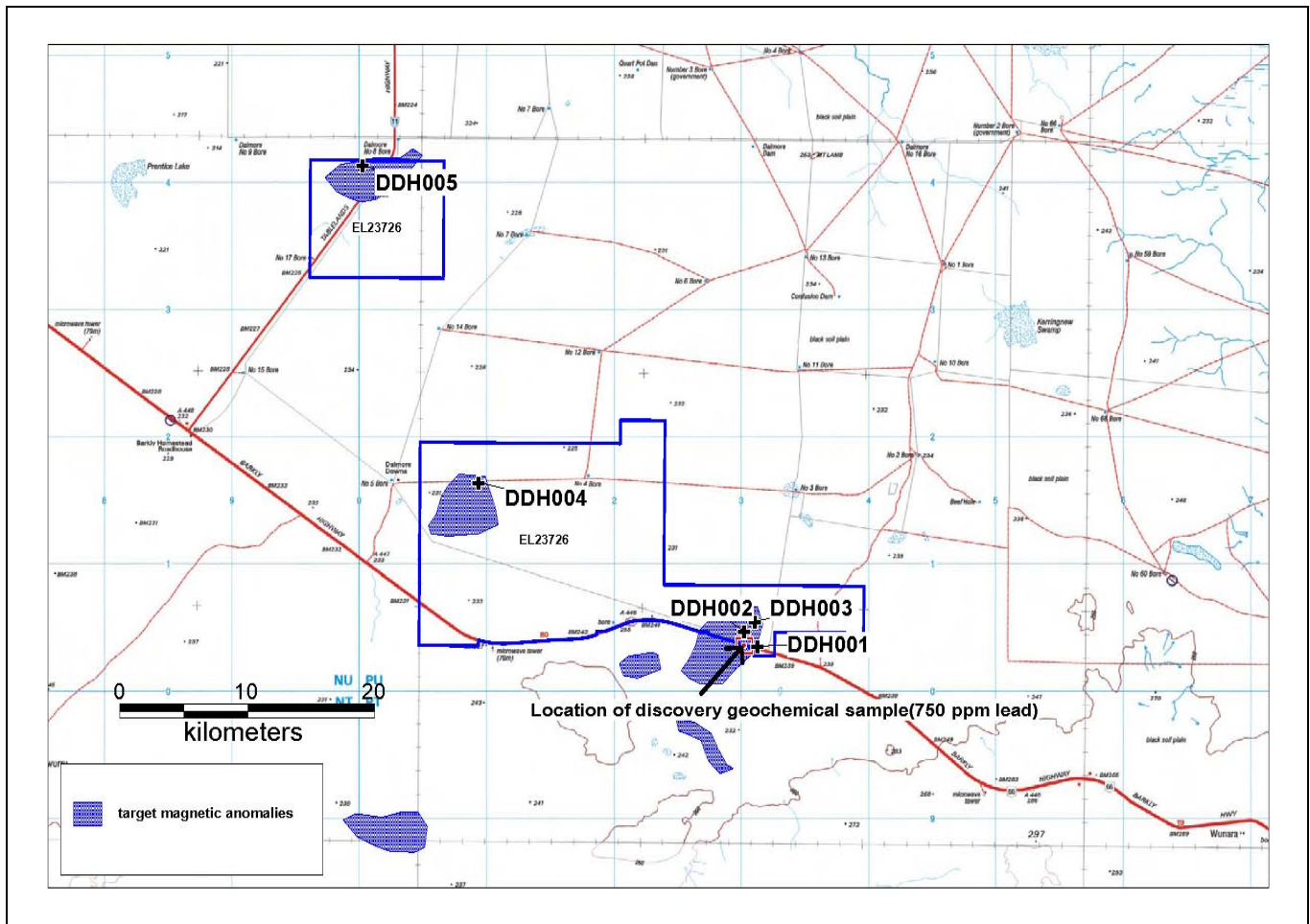
A field visit was made to the area by geological consultants for the JV, Bill Fraser and Peter Collings. The purpose of their visit was to;

- attend a meeting on 20 June/2 July with Native Title claimants over the EL area, notified in writing to the Northern Land Council,
- carry out geological reconnaissance and collect additional geochemical rock chip samples from the areas in which drilling has been planned. Samples not assayed.
- locate with GPS and flag proposed drill sites to identify the amount of access clearing which will be required.

6. CORE DRILLING PROGRAMME – JACARANDA ALLIANCE JV (2008-09)

The core drilling programme was conducted between the 14th July 2008 and 6th August 2008. Five core holes (DDH001-DDH005) were completed for a total of 1296.2 meters at the locations shown in Figure 4. Drilling was contracted to Jerry's Drilling Service Pty Ltd. Summary details of the holes drilled are shown in Table 1.

Figure 4: Location and identity of core drill holes



The five boreholes targeted three magnetic anomalies previously modeled during the 2006-2007 period. The estimated depths to these anomalies were re-modeled in 2008. This modeling confirmed that drill holes to 250 meters would most probably identify the source of the anomalies. Consequently all five holes were drilled to at least 250 meters. This depth gained a reasonable understanding of the stratigraphy of the area.

Boreholes DDH005 and DDH004 were drilled into magnetic anomalies originally interpreted as being related to possible kimberlite- type intrusions.

Boreholes DDH003, DDH002 and DDH001 were drilled into an area of coincident magnetic and gravity anomalies interpreted as a target for possible Pb-Zn mineralization of the Mississippi Valley genetic type.

All drill sites, were returned to original state and/or rehabilitated. All boreholes were grouted from 20 meters depth to surface and casing pulled.

At the conclusion of the programme all core was transported to a covered storage area at Malanda in north Queensland.

Table 1: Details of core drill holes
(all holes in GDA94 MGA Zone 53)

Hole_id	Easting	Northing	RL	Azimuth	Dip	Depth(m)	Target
DDH001	631283	7803571	235	0	90	252.6	Coincident Pb and magnetic anomaly
DDH002	630246	7804743	239	0	90	246.6	Coincident Pb and magnetic anomaly
DDH003	631100	7805480	229	0	90	270.4	Coincident Pb and magnetic anomaly
DDH004	609375	7816424	230	0	90	252.2	Magnetic anomaly possibly related to kimberlite
DDH005	600288	7841346	220	0	90	284.4	Magnetic anomaly possibly related to kimberlite

Detailed results of the drilling programme are provided in the 2008-09 annual report for EL23726 ("Annual Report EL 23726 "801" Project Barkly Highway, NT For the Period ending 31 July 2009").

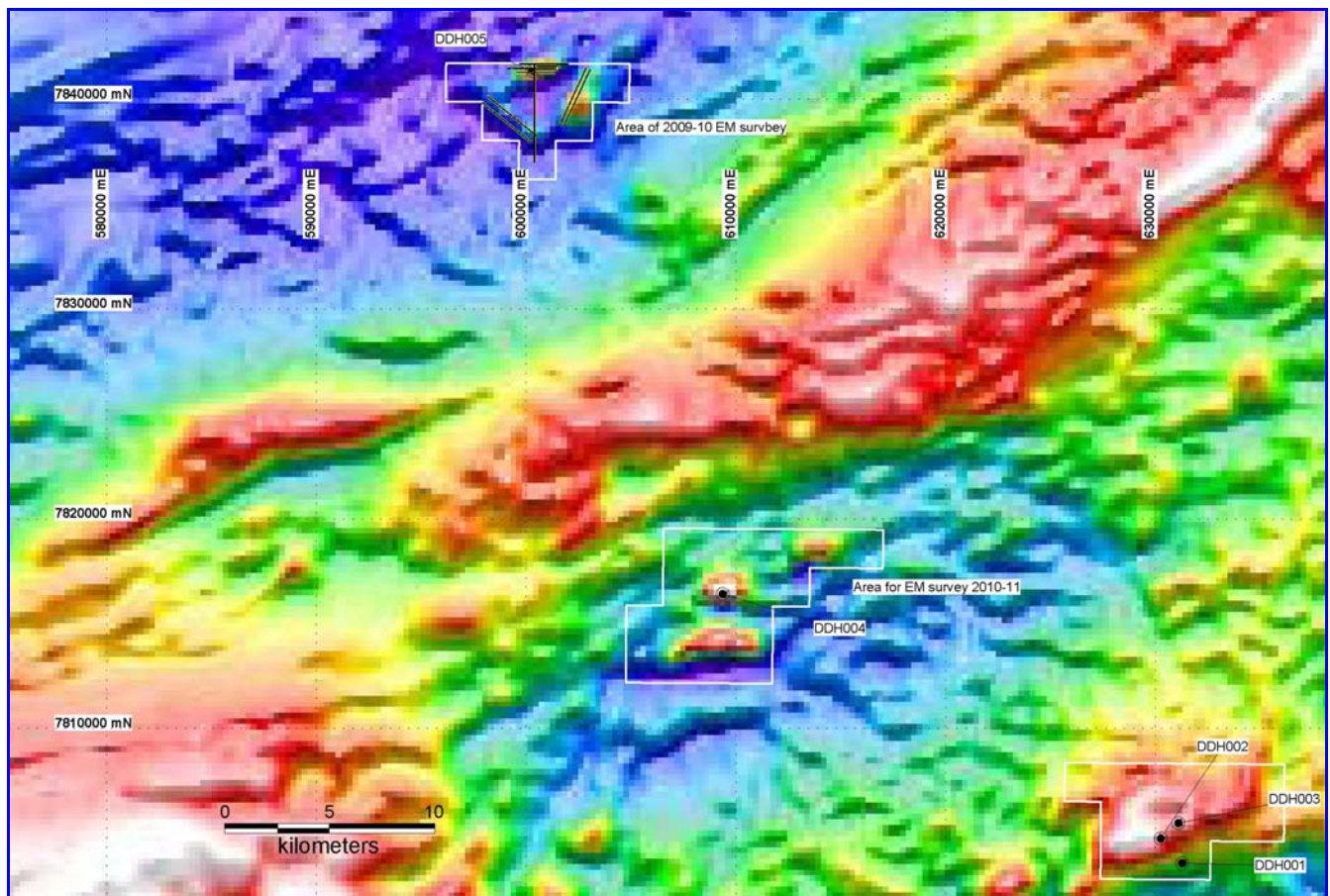
7. 2009-2010 ELECTROMAGNETIC (EM) SURVEY BY JACARANDA ALLIANCE JV

During June-July 2010 GEM Geophysical Services completed a ground electromagnetic (EM) survey over the northwestern block of EL23726. This survey was designed to further investigate the magnetic anomalies previously identified in the area.

A ground EM survey was chosen because the relatively small area of the targets made aerial techniques impractical. Ground EM methods also tend to achieve better depth penetration than do most aerial EM methods.

Seven lines of moving loop EM were designed to test the magnetic anomalies in the vicinity of core hole DDH0005. The location of the magnetic anomalies and core holes and the EM survey lines is shown in Figure 5. A 100m square loop with an in-loop receiver and 50m stations was used. This resulted in a total of 547 stations being collected on 26.95 km of lines.

Figure 5: Location of EM survey lines and existing JV core holes



The EM survey was somewhat interrupted by winter rainfall and some equipment problems. Consequently neither the raw or the processed EM data was available at the time of the preparation of this report. The data will be provided at a later date.

8. CONCLUSIONS

- The five core holes drilled in the 801 Prospect were in effect “wildcat” exploratory holes whose purpose was to investigate magnetic anomalies, a geochemical anomaly and some geological concepts.
- As proposed in the previous annual report, electromagnetic survey methods were used to explore for both conductors and resistors in the lithologies under the Cambrian carbonate sequence in the vicinity of existing JV core holes.
- The results of the EM survey completed during 2009-2010 have not been received at the time of writing of this report. It is hoped that the EM survey may identify targets for base and precious metal mineralisation.
- A further EM survey will be done over the magnetic anomaly in the vicinity of core hole DDH004 in 2010-2011.
- Any targets identified by EM surveys will be investigated by core drilling.

EXPENDITURE STATEMENT

Annual expenditure for EL 23726 from 1 August 2009 31 July, 2010 was \$88,550 as shown on the separate Expenditure Report.

PROPOSED EXPLORATION PROGRAMME 2010-11

The planned exploration program for 2009-10 includes;

- Aerial electromagnetic survey (EM) over magnetic anomalies in the vicinity of core hole DDH004 to identify any significant EM anomalies
- Core drilling to explore for base and precious metal mineralisation potentially associated with any EM anomalies defined.

PROPOSED EXPLORATION EXPENDITURE 2010-11

Ground EM survey	\$20,000
Geophysical Consultants	\$5,000
Core drilling	\$55,000
TOTAL	\$80,000