



ANNUAL REPORT Combined E24453, E24463 & E24533

NGALIA REGIONAL PROJECT

PERIOD ENDING 6 FEBRUARY, 2008

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SUMMARY

Exploration License E24453 is part of the Ngalia Regional Project and it immediately surrounds the Bigrlyi project (ERL's 46 to 55 inclusive) located 390 kilometres (by road) northwest of Alice Springs. The Ngalia Regional Project is 100% owned by Energy Metals Limited and the Bigrlyi Project is a Joint Venture between Energy Metals Limited with 53.3% (operator), Valhalla Uranium (a subsidiary of Paladin Resources Ltd) with 41.7% and Southern Cross Exploration NL with 5%.

Uranium mineralisation was discovered at Bigrlyi by a joint venture managed by Central Pacific Minerals (CPM) in 1973. In the period 1974 to 1982 the project was subject to several major drilling campaigns, with some 413 holes (total 37,500m) completed. Subsequent to 1982 CPM completed metallurgical testing and resource calculations, with a global resource of 809,000 tonnes at 3.43 kg/t U₃O₈ for 2,770 tonnes of contained U₃O₈ delineated at Bigrlyi (note that these resources are not JORC 2004 compliant). Field activities conducted in the period 1983 to 2004 were limited to maintenance of the core shed.

In May 2005 Energy Metals acquired a 53.3% interest in, and assumed management of, the Bigrlyi project through the purchase of the interests of CPM and Yuendumu Mining Company NL. In September 2005 Energy Metals listed on ASX after raising \$3m, primarily to fund exploration at the Bigrlyi and Ngalia Regional Projects.

Exploration undertaken in the period 06 February 2007 to 06 February 2008 included:

- Airborne Geophysical survey measuring radiometrics, gravity and topography.
- Compilation of historical data
- Converting historic data to digital format
- Clearing access to sites, tracks and drill pads
- Surface prospecting.
- Completion of CLC notifications and aboriginal heritage surveys

Expenditure for the period was approximately \$210,070

INTRODUCTION

The Ngalia Regional project comprises ten 100% owned exploration licences (total area 2,840 km²) located in the Ngalia Basin, between 180 and 350 km northwest of Alice Springs in the Northern Territory (Figure 1 & 2). Seven of these tenements are contiguous and enclose the Bigrlyi project as well as containing a number of uranium occurrences including the Malawiri prospect (EME 52%) and the Walbiri prospect (EME 42%). The remaining 3 applications cover discrete uranium anomalies located southwest of the Bigrlyi deposits.

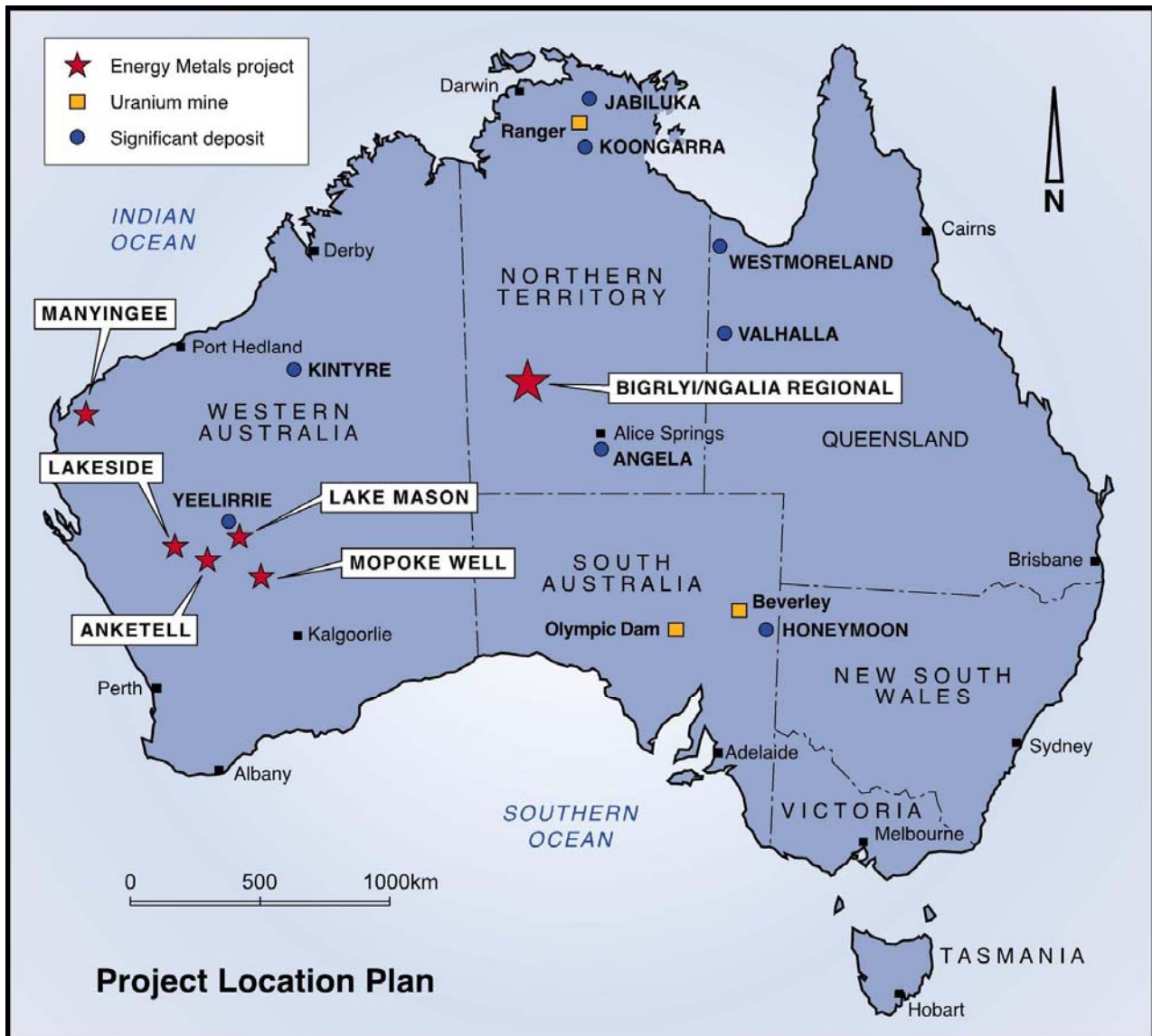


Figure 1: Location of the Bigrlyi/Ngalia Regional Projects (NT).

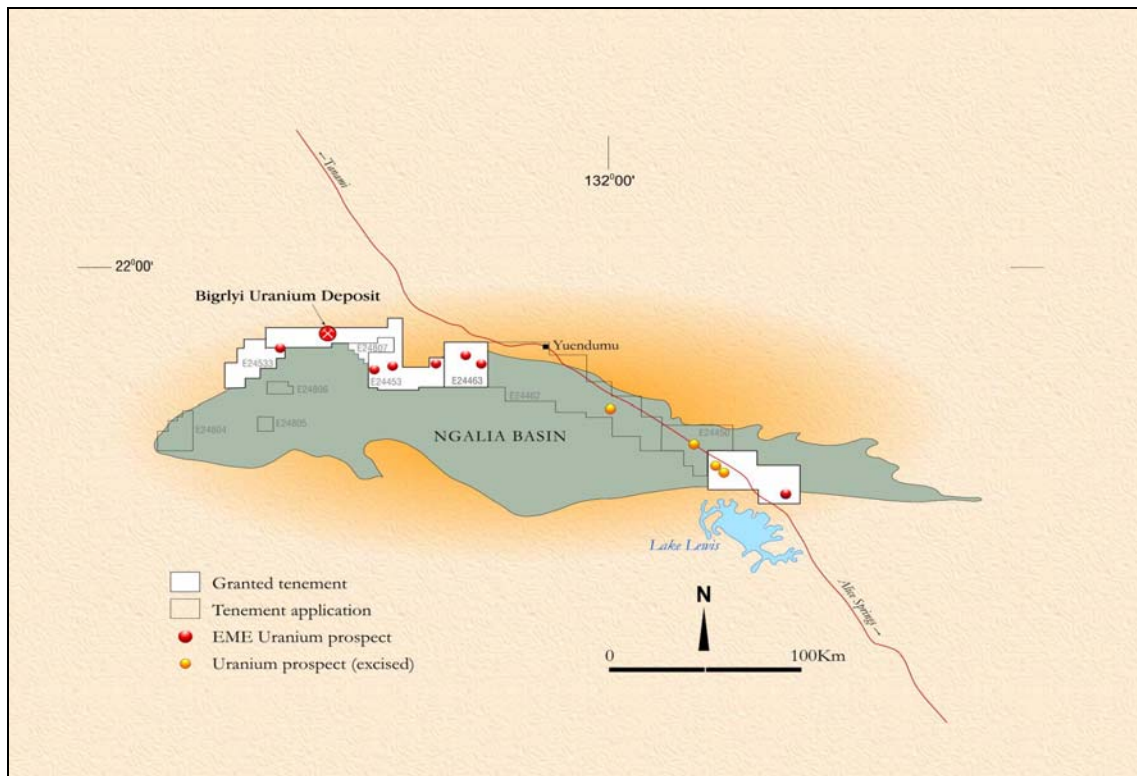


Figure 2: Granted Tenements of the Bigrlyi/Ngalia Regional Projects (NT).

Four exploration licences, including E24453 enclosing the Bigrlyi project, were granted in the March 2006 quarter, with E24807 (abutting E24453) granted in August 2006.

PREVIOUS WORK

Bigryli and Ngalia Regional Projects

Exploration on the Ngalia Regional and Bigryli Projects commenced in August 1971 with the granting of Authority to Prospect (A to P) 2677 valid for one year. This A to P was converted to Exploration Licence 605, and renewed annually to October 1977. Exploration on this property was managed by Central Pacific Minerals NL on behalf of various joint venture partners including Magellan Petroleum Australia Ltd, Agip Nucleare Pty Ltd, Urangesellschaft mBH & Co. and the Atomic Energy Commission.

Early exploration on the property involved airborne radiometric surveys in 1972 and 1974, radiometric ground traversing and geological mapping. The Bigryli Prospect was found in 1973 and in 1974 mapping and trenching located uranium mineralisation at a number of the 16 anomalies now comprising the Bigryli Project. These anomalies occur intermittently over a 11.5 km strike length within the Treuer Range and south of prominent strike ridge formed by the Vaughan Spring Quartzite.

In 1974, eight inclined diamond core drill holes totaling 506.6m were completed in the main surface occurrences of mineralisation (holes BPD1 to 8 incl.). In April 1975, eight vertical rotary percussion drillholes were drilled to test the Bigryli Anomaly 15 uranium target; these were holes BPH1 to 8 incl., for 702m, testing below mineralized outcrop and subcrop. The results of the April 1975 drilling programme indicated a steeply dipping lens of uranium mineralisation extending to a depth of at least 50m and a length of 110m, with 4 of the holes intersecting significant mineralisation.

Later in 1975 a further 127 holes (BPH9 to BPH135), for a total of 11,232.53m, were drilled, testing the prospective horizon at Anomalies 1 to 10 and 12 to 15 inclusive. Some encouraging results were recorded, for example for Anomaly 4 the best result recorded was in hole BPH55 reporting 10,600ppm U_3O_8 (10.6 kg/tonne) and 8333ppm vanadium, by analysis, from 7m to 13m, which compares with the result of converting the down-hole gamma logging counts, which resulted in a uranium grade of 5645ppm eU_3O_8 from 2.0m to 11.5m.

In 1976 some 123 holes (BPD136 to BPD258) for 9,901.86m, were drilled at Bigryli to follow up the better drilling results of the 1975 programme. The drilling concentrated on testing Anomalies 2, 4, 8 and 15. This programme extended at depth the uraninite mineralisation of Anomaly 4 and Anomaly 15 with the mineralisation of Anomaly 15 shown to pitch westerly over a length of 200 metres and remaining open at depth.

Shallow reconnaissance drill testing of the uranium bearing Unit C horizon easterly under cover from Anomaly 15, was carried out on 10 traverse lines each approximately 250m apart. On four of these lines from 900m to 2,200m east of Anomaly 15, weak [200 to 700 ppm eU_3O_8] uranium mineralisation was intersected over narrow widths down-hole. Typically only one to two holes were drilled on each of these widely spaced traverses.

In 1977 a further 104 holes were drilled in the Bigryli Project, comprised of 31 diamond core holes (3516.26m) and 81 (including precollars) percussion holes (4964.11m). The core holes were drilled to test known mineralisation at Anomalies 2, 3, 4, 6, 7, 8, 14 and 15, whilst the percussion drilling was used to test these anomalies and Anomalies 1, 5 and 16. During this programme all uranium grades were calculated from logging the natural gamma radiation with a few check analyses carried

out by AMDEL. This programme extended the known and better grade uranium mineralisation at Bigirlyi and the extent of the mineralisation calculated for Anomalies 2, 4, 8 and 15. The bulk of the mineralisation was contained within Anomaly 15.

In 1977 Exploration Licence 605 expired and an application for EL 2710 (Wanyilpa) over 793 square kilometers was made to cover the Bigirlyi Project and surrounds, by the Central Pacific Minerals managed joint venture, now composed of Agip (Australia) Pty Ltd, Urangesellschaft (Aust) Pty Ltd and Offshore Oil NL. This tenement was granted on 15 July 1981 and field exploration recommenced during 1981 and 1982.

During 1981 and 1982 a programme of drilling was undertaken focused on testing Anomaly 15 and Anomalies 4 and 5. During these two years 43 holes totally 5211.95m were drilled of which 1321.55m was rotary percussion (frequently as precollars) and 3890.4m was diamond core drilling. Drilling was initially small diameter coring which was subsequently upgraded to larger NQ core size (diameter 47.6mm). Core recoveries were reported as being rarely less than 95%.

All completed holes were geophysically logged and uranium grades calculated as eU_3O_8 values for the mineralized intervals. The testing of Anomaly 15, whilst slightly increasing the extent of the mineralisation, was predominantly directed to increasing the level of certainty of the known mineralisation, by closer spaced drilling.

Previous testing of Anomaly 4, an area lacking good rock outcrop, had indicated that uranium mineralisation occurring in Unit C (at the contact with Unit D) was of secondary importance to previously little-known mineralisation in a narrow white rock band within Unit D. During the 1982 programme, drilling increased the extent of the uranium mineralisation at Anomaly 4 and tested Unit D mineralisation.

The northern margin of the Ngalia Basin and the Arunta Inlier basement to the north have been the focus of substantial regional exploration since the discovery of uranium mineralisation in the region in the early 1970's. Exploration has been for a wide variety of mineralisation, particularly uranium, in both the Ngalia Basin sediments and the Arunta Inlier granites and metasediments and for diamonds, gold and base metals in the Arunta Inlier.

The following summaries the more significant programmes of exploration for uranium near to or along the northern margin of the Ngalia Basin covered by Energy Metals exploration licence E24453.

In 1979 Afmeco Pty. Ltd. carried out a programme to test the extent of uranium mineralisation in the basal unit of the Mount Eclipse Sandstone at the Dingo's Rest North and Dingo's Rest South uranium prospect. Dingo's Rest is located approximately 20 kilometres southeast of the Bigirlyi uranium deposit and extends over a 3 kilometre north-south striking basal section of the Mount Eclipse Sandstone. Afmeco drilled, 8 percussion (2,504.1m) and 9 diamond core holes (4,153.1m) within an area 3 kilometres by 6 kilometres, westerly and down-dip from Dingo's Rest. The best result recorded by Afmeco was recorded in hole DIN12 where from 312.8m to 313.4m a mineralised sediment assayed 1,760ppm uranium and 1,130 ppm vanadium.

In 1990 Lachlan Resources Limited carried out a drainage geochemical survey of 313 samples over the basal sector of the Ngalia Basin and immediately underlying Arunta Inlier rocks from the Dingo's Rest location north and westerly to Waite Creek, a distance of approximately 100 kilometres. Samples were analysed for copper, lead, zinc, arsenic, silver and gold. Four weakly anomalous areas were located.

In 1999 Rio Tinto Exploration reported on the results of a 3 year programme undertaken on a 1,497 square kilometre exploration licence that covered the northern flank of the Ngalia Basin and extended over the Arunta Inlier to the north. The tenement covered the Bigrlyi Project and the Dingo's Rest Prospect.

Rio Tinto concluded that their Anomaly 44 was the only anomaly containing visible secondary uranium mineralisation, as torbernite, which was concentrated along the contact between granite and a quartz vein, with a semi-continuous anomalous zone over 1 kilometre. Sampling of the sporadic high grade zones returned a maximum of 3.95 kg/tonne uranium. Rio Tinto concluded that the potential for a large, high-grade, continuous zone of mineralisation was very low.

Regional Geophysics Datasets

Rio Tinto carried out programmes of airborne radiometrics and magnetics with ground follow-up, soil and rock geochemistry, magnetics and gravity surveys. Rio Tinto drilled 7 RC holes (528m) and 2 diamond core holes, testing potential kimberlite diatremes by RC drilling and magnetic targets by core drilling, without success.

The 4,500 line kilometre radiometric survey identified four zones of anomalism including the Bigrlyi Project Area and the outcropping Mount Eclipse Sandstone of the Patmungala Syncline. A third zone was associated with a younger megacrystic granite 10 kilometres north of the Patmungala Syncline. From initial inspection of the radiometric data the strongest anomalies in the fourth zone were located in an area where the eastern closure of the Patmungala Syncline is in contact with the strongly faulted and quartz veined, uranium enriched, young megacrystic granite, the Yarungayi Granite. Fifteen anomalies were identified and six followed up by ground investigations.

Database Compilation

Compilation of a drillhole and assay dataset for the Bigrlyi project was initiated in 1997 as part of the geostatistical study of the Anomaly 15 deposit. This dataset has been progressively expanded with drillhole collar and assay data for Anomaly 4/5 compiled during 2002; data from Anomaly 6, 7 & 8 added during 2003 and data from the intervening drilling between Anomaly 8 (in the west) and Anomaly 14 (in the east) entered in 2004.

Drillhole collar locations were recorded in prospect grid coordinates and prospect relative level (a detailed survey will be required to tie the prospect grid to the GDA datum). Drillhole collar attitude, depression and azimuth (grid) were recorded together with the drillhole total depth information. Most drillholes had been surveyed downhole during drilling and the drillhole attitudes were recorded by depth in a survey file.

To date a total of 301 drillholes, 584 survey records, 725 assays and more than 180 radiometric grades have been compiled. All the data files were imported into a spreadsheet format for future use.

Energy Metals assumed management of the Bigrlyi project in May 2005 following the purchase of a 53.3% interest in the project. Work completed by Energy Metals in the period May to November 2005 included compilation and digital capture of historical data, establishment of radiation management procedures for future work and rehabilitation of the core shed area at Bigrlyi. Access

tracks were refurbished and a water bore at Anomaly 6 was cleaned out and tested ahead of drilling programs planned to commence late 2005. A water sample was also submitted for analysis.

Compilation of Historical Data

Energy Metals received the first tranche of exploration data from previous managers CPM (mainly comprising geological plans and the drillhole database referred to above) in May 2005. These data were reviewed, 1:2,000 scale geological plans were scanned and digitised and GDA coordinates for a number of holes were located in the field using a conventional GPS (accuracy 5-10 metres), enabling historical data (local grid base) to be merged with previously acquired regional datasets. Most data captured was pertaining to the Bigryli prospect with the regional geophysical datasets compiled for E24453.

WORK COMPLETED FROM 6TH FEBRUARY 2007 TO 6TH FEBRUARY 2008

Geophysical Survey

The major exercise for 2007 was an airborne geophysical survey measuring radiometrics, gravity and topography. In September 2007, GPX Airborne commenced a fixed wing airborne magnetic and radiometric survey for Energy Metals Limited in Vaughan Springs. The survey was flown using a Cessna 210 operated by Ozshore Pty Ltd. A total of 14932.09 line km was flown.

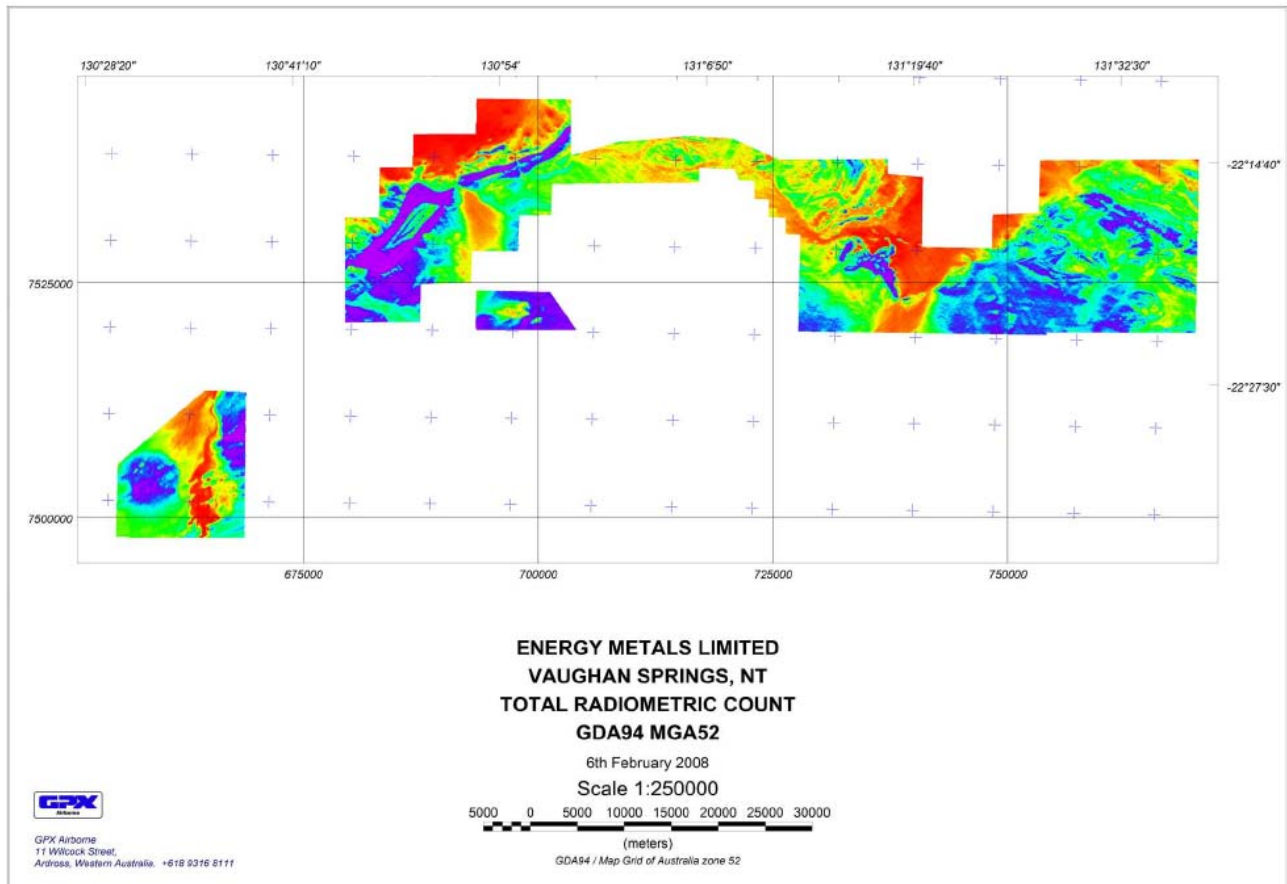


Figure 3: Radiometric Total Count Image

The data was reprocessed by Southern Geoscience Consultants, where the new data was meshed with previous flight lines by Rio, and covers the tenements in this report as well as the 2 other granted exploration licenses in the area.

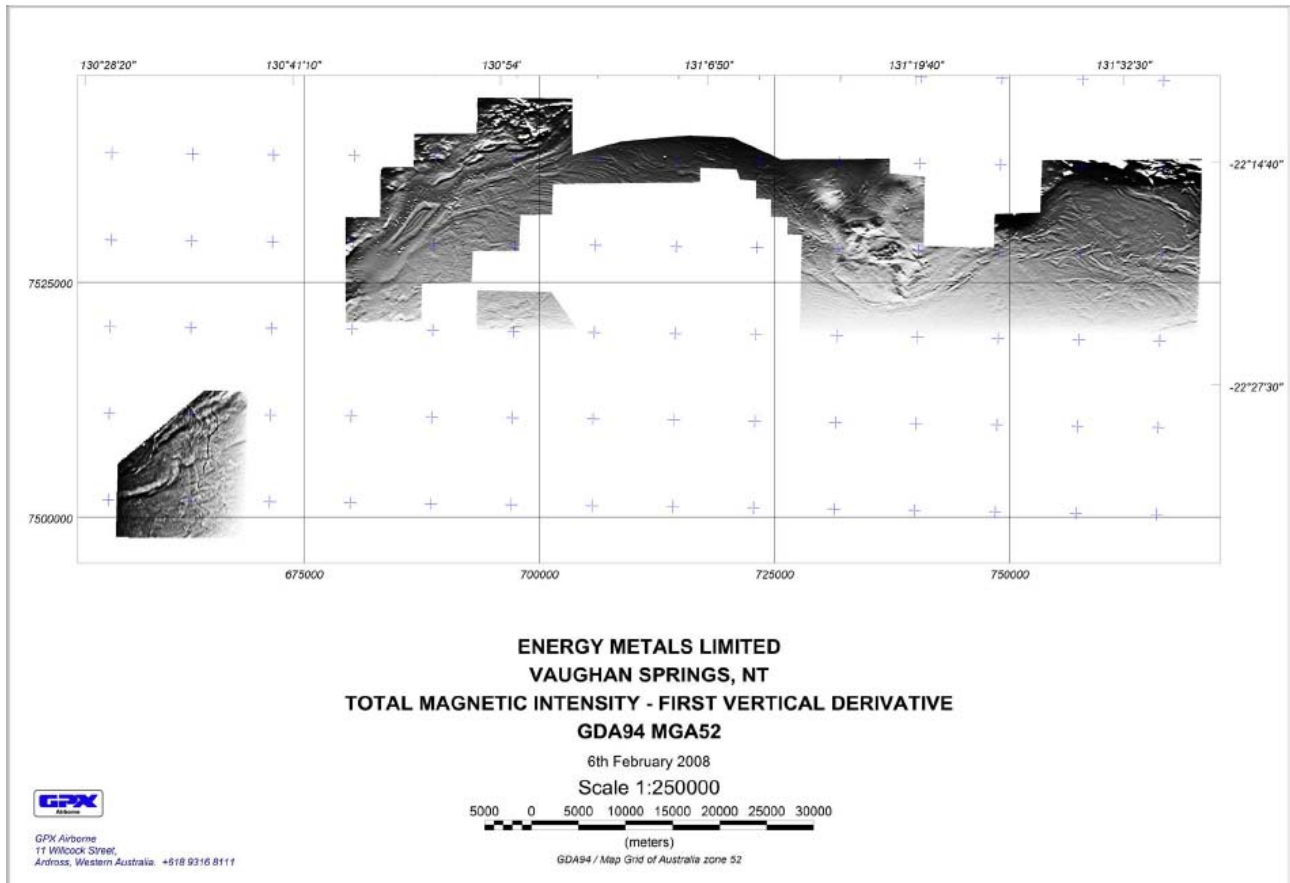


Figure 4: TMI – 1st Derivative image.

Re-establish station tracks

Access to the Bigrlyi camp was upgraded in 2007. The camp serves as the hub for exploration in the Ngalia basin. The old Station track was re-cut from Anomaly 15 in the Bigrlyi Project to the fence at Davis Gap. The track then follows the fence line to the Vaughn Springs Road. This track is the main access in and out of the Bigrlyi Camp.

Access to Bigrlyi West was granted through re-establishing the track from Anomaly 1 to the Vaughn Springs Road. This track was heavily vegetated and required a bulldozer to cut a path through thick vegetation.

The access track leading from the Vaughn Springs Bore Road to the Bigrlyi Pass was re-cut as the old track has become a drainage channel. This track serves as the heavy vehicle access road.

All tracks were re-cut using the Bulldozer from Vaughn Springs Homestead. Fencelines were re-graded with their Grader.

Regional reconnaissance

Limited recon trips were done due the amount of supervision required on the Bigrlyi Joint Venture. Trips were made to the Patmungala and Bigrlyi East area, as well as Bigrlyi West and South Bigrlyi. These trips were brief and involved checking radiometric anomalies from historic aerial

surveys. These trips failed to find anything of significance; however their brief nature did generate the follow up 100m spaced aerial survey as described above.

Walbiri Logs into Excel

Historic Walbiri geological logs were typed into excel spreadsheet. Collars were located using High Resolution Satellite imagery as the area's roads and collars are still visible. The logs are yet to be uploaded to the Database as a migration to another database system is underway.

Heritage Clearances

CLC Heritage notifications were lodged for drilling activities in all 3 tenements. The CLC conducted clearances with TO's and gave permission to drill most of the holes. The holes were designed outside of designated Aboriginal Sensitive and Restricted zones

High Res Sat Photo

A high Resolution satellite photo was obtained for most of E24453 and E24533. This was both for presentations on the Bigrlyi deposit, but also to help generate exploration maps for step out drilling from the Bigrlyi deposit into 100% Energy Metals tenements. The photo is also used for regional recon exploration activities.

WORK PROPOSED FOR 2008

Work to be undertaken in the first quarter of 2008 will comprise the following:

- (i) Analysis of geophysical survey flown in 2007
- (ii) Ground scintillometer surveys over radiometric anomalies to define drilling targets;
- (iii) Scoping, budgeting, planning and sourcing equipment for prospecting, geophysical surveys, drilling and sampling;
- (iv) 1st pass Aircore and RC drilling into regional radiometric targets,
- (v) Continuation of digital data capture of historic exploration work;
- (vi) Calculation of a scoping study based on the 2008 resource for Bigrlyi which has implications on E24453 due to its location directly along strike;

In 2007, work on the Bigrlyi project, as well as wet season constraints, did not allow resources to be put into regional exploration on the combined tenements. As the Bigrlyi Project will commence drilling in the 2nd half of 2008, most of the work based out the Bigrlyi Camp can be focused on progressing exploration activities into drilling targets and known historic resources.

It is anticipated that exploration expenditure on E24453 for the year ending 06 February 2008 will exceed \$100,000.

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APPENDIX 1 – GPX AIRBORNE SURVEY LOGISTICS REPORT

As attached PDF file

APPENDIX 2 – SOUTHERN GEOSCIENCE PROCESSED GEOPHYSICS REPORT

As attached PDF file

APPENDIX 3 – GEOPHYSICAL DATA

In mailed CD