# ASX Announcement

21 OCTOBER 2010

energia minerals limited
ABN: 63 078 510 988

# Quarterly Activities Report
# Period Ending 30 September 2010

**ASX Code** EMX

**ABN** 63 078 510 988

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**Board of Directors**
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Tony Iannello
Non Executive Chairman
Max Cozijn
Non Executive Director
Ian Walker
Non Executive Director
Leigh Bettenay
Alternate Director

**Company Secretary**
Jamie Armes

## Key Points:

## Exploration – WA Uranium Projects

- **Major new resource extension drilling program (~5,000m)** to commence at the **Carley Bore uranium deposit** (12.2Mt @ 280ppm $U_3O_8$ for 7.46Mlbs of $U_3O_8$) in late October 2010 (Nyang Project).
- **Drilling to focus predominantly within the Exploration Target[1] of 10-15Mlbs of $U_3O_8$** to the south of the resource area. Historic drill intercepts extend for at least 1.2km south of the Inferred Mineral Resource with no drilling for 20km.
- Planning underway for **extensive regional exploration drilling at Nyang and Onslow** early in the 2011 field season.
- **Initial metallurgical testing** including Bottle Roll tests to determine dissolubility of the uranium minerals and acid consumption **currently being finalised** to determine the amenability of the deposit to In Situ Recovery (ISR). Results of this work will be published in the coming Quarter.
- Prospectivity of Energia's Table Top Project (Application E45/2886) highlighted by recent exploration results at Encounter Resources' (ASX: ENR) Yeneena project located to the northwest.

## Exploration – SA Uranium Projects

- A **65 line kilometre ground gravity survey** completed within the Company's two granted tenements in the uranium-rich Frome Basin in South Australia, with preliminary results **indicating extensions of the palaeochannels** into the project area.
- Heritage agreements and field clearance procedures to commence next Quarter so that **initial drill testing can proceed next year.**

## Corporate and Business Development

- **Strong cash position of $4.5 million** as at 30 September 2010.
- Continued progress with efforts to secure the **grant of key tenement applications** covering the **Novazza and Val Vedello uranium projects in Italy**.

# Carnarvon Basin Projects, WA – 100% EMX

The Company's **Carnarvon Basin Uranium Portfolio** (*see Figures 1 and 2*) comprises the Nyang Project (including the Carley Bore deposit) and the Onslow Project. These projects cover a total area of 1,800km$^2$ in the Carnarvon Basin of Western Australia.

Several Palaeochannel-hosted, redox-controlled, "roll-front" uranium deposits are located within this emerging uranium province, including Paladin's 24Mlb Manyingee Deposit, Energia's 7.5Mlb Carley Bore Deposit and Cauldron Energy's 4.8Mlb Bennett Well Deposit (*see Figure 2*).

## Carley Bore, Nyang Project (WA)

Energia Minerals achieved a major milestone subsequent to the end of the previous Quarter with the announcement of a **maiden JORC compliant Inferred Mineral Resource estimate for the Carley Bore deposit, located within the Nyang Project,** on 27 July 2010.

This Mineral Resource, which was achieved within the first seven months of the Company's ASX listing, is summarised below:

- **12.2 million tonnes at 280ppm $U_3O_8$ for 7.46 million pounds $U_3O_8$ (100ppm $U_3O_8$ cut-off)**

In addition to the Inferred Mineral Resource estimate, the Company also established an Exploration Target[1] of **10-15 Mlbs of $U_3O_8$ at a grade of between 200 and 500 ppm $U_3O_8$** in the immediate strike extensions to the resource area.

The location of this Exploration Target in relation to the Inferred Mineral Resource at Carley Bore is shown on Figures 3 and 4. The Company notes that drilling intercepts of potential economic significance extend for at least 1.2km south of the Inferred Mineral Resource, and that there is no drilling at all for some 20km to the south of this within Energia's tenements.

During the September Quarter, work at Nyang focussed on obtaining approvals for further resource drilling, undertaking scoping studies for hydrogeology and ecological issues, as well as ongoing metallurgical testing of core samples.

All approvals are now in place for the next phase of step-out drilling, which is scheduled to commence in late October 2010.

This program will largely be focused within the Exploration Target area, immediately south of the Carley Bore resource, with 35-55 holes for 3,000 – 5,500m planned in this area. In addition, a traverse of 11 reconnaissance holes will be drilled in the southernmost part of E08/1646. This southern line will test the extent of the palaeochannel defined earlier in the year by a ground gravity survey (*see Figure 3*).

[1] *The Exploration Target is conceptual in nature and has yet to be fully drill tested. There has been insufficient exploration (ie. close-spaced drilling) to define a JORC compliant mineral resource and it is uncertain if future exploration will result in the determination of a further mineral resource within it.*

### *Other Studies*

Energia is proceeding with technical studies to determine the Carley Bore deposit's amenability to in situ recovery ("ISR"). Initial metallurgical testing including Bottle Roll tests to determine dissolubility of the uranium minerals and acid consumption is being finalised.

The results of this work will be published in the December 2010 Quarter.

Groundwater and hydrogeology are other key areas to be considered for ISR. Accordingly, Rockwater Pty Ltd has completed a desktop groundwater study and initial scoping for a monitoring borefield and pump testing. This work is planned for early in the 2011 field season.

Outback Ecology has completed a desktop flora and fauna evaluation and provided recommendations for ongoing studies, including the establishment of baseline geochemistry frameworks for ongoing monitoring.

## Onslow Project, WA

The Onslow Project covers an area of 450km$^2$ at the northern end of the Carnarvon Basin (*see Figures 1 and 2*). Geophysical interpretation of the gravity data acquired in April 2010 has recently been completed (Figure 5). The main Dunns Channel is a prominent geophysical low. This has been sparsely drill tested and is known to contain anomalous uranium in its upper (southern) extents.

There are also a number of north-trending potential tributary channels to the Dunns Channel and these are in general poorly drilled to date. In addition several as-yet poorly defined but likely channels are present in the northeast of the project area.

Follow-up gravity traverses are planned early in 2011 in order to prioritise drilling targets in this area.

Heritage clearances for an initial 6-hole reconnaissance aircore program comprising 750-1,500 metres of drilling will be completed in November 2010 and this drilling program may also be completed by the end of the year, subject to rig availability.

This will provide information on target depths and drilling conditions for a larger (4-6,000m) drilling program across all new targets at these projects in 2011. Energia is working collaboratively with the Thalanyji representatives to schedule heritage clearances for this larger program.

# Table Top WA – 100% EMX

Energia has an Exploration Licence application (E45/2886) of approximately 194km$^2$ in the Paterson Province of central northern Western Australia, located approximately 15km northwest of the Kintyre deposit (77Mlb $U_3O_8$ at 0.15%) (*see Figure 6*).

Energia's application is predominantly underlain by the Coolbro Sandstone, the basal unit of the Yeneena Basin, host to the large Telfer copper-gold deposit and the Nifty copper deposit.

Geoscience Australia and the Geological Survey of Western Australia have published a publicly available regional airborne electromagnetic survey. Energia has interpreted this data and modelled a number of targets in proximity to the regionally extensive Kintyre Fault.

Interest in the area is increasing, with Encounter Resources Ltd (ASX: ENR) recently reporting high-grade copper intercepts on its tenements adjacent to Energia's application.

## South Australia Projects – 100% EMX

Energia Minerals holds two granted tenements covering an area of 200km$^2$ in the Frome Basin and six granted tenements covering an area of 1,400km$^2$ in the Gawler Craton of South Australia (*see Figure 7*).

In the Frome Basin, the Company is targeting sandstone-hosted, roll-front uranium mineralisation within palaeochannels similar to the nearby Honeymoon, Four Mile and Beverley deposits. In the Gawler Craton, the main target is copper-gold-uranium mineralised systems of the iron-oxide-copper-gold-uranium ("IOCGU") type, similar to Olympic Dam, which is located in the same geological province.

### Frome Basin Projects

During July, the Company completed a ground gravity survey of 650 stations (65 line kilometres) to define drilling targets. Final interpretation is not yet complete but there are indications that palaeochannels extend from the south into the project area. These channels are known to host uranium mineralisation some 30-40km south of Energia's tenements.

In the next Quarter, Energia Minerals will seek to execute heritage agreements and complete field clearance procedures so that planning approvals can be obtained for initial drill testing.

### Gawler Craton Projects

Ground Gravity Surveys were completed on EL3680 (Blythe Creek) in July for a program of 440 ground gravity stations (44 line kilometres) to assist with drill planning.

All of the Gawler tenements lie within the area covered by the Arabunna Native Title. Energia has commenced negotiating a heritage agreement in preparation for field clearances over all priority geophysical targets.

## Italy Projects – 100% EMX

The Company has two applications for uranium tenements in the Lombardy Region of Northern Italy – Novazza and Val Vedello – and seven granted base metal exploration licenses at Gorno.

The two applications overlie previously identified uranium mineralisation. At Novazza, an Exploration Target of **2.5-3.0Mlb between 0.1% and 0.2% $U_3O_8$** has been established. The Project also includes over 6km of established underground development with no ore mining conducted to date.

Italy is the world's largest electricity importer and has one of the highest costs of electricity in the European Union ("EU"). The country was once a world leader in nuclear power technology, but closed this industry down entirely in the late 1980s. The country is now targeting 25% of its power needs to be produced from domestic nuclear reactors by 2030, an objective which would require the construction of 8 – 10 nuclear reactors.

A geological review is underway on the granted base metal licenses.

## Other Australian Projects – 100% EMX

No field work has been undertaken on Energia's other projects (all in application stage) located in Northern Territory and Queensland (*see Figure 1*) pending grant of these tenements.

## Corporate

Energia Minerals expanded its exploration team during the Quarter with the appointment of Alex Aaltonen as Senior Project Geologist. Alex is an experienced geologist who will initially focus on the planning and implementation of the exploration programs in the Carnarvon Basin.

As at 30 September 2010, the Company has $4.5 million cash on hand. Please refer to the attached Appendix 5B for further information.

The Company has 69,500,005 ordinary shares on issue, with 27,000,000 shares subject to escrow for 2 years to 24 December 2011 and 3,000,000 shares escrowed for 12 months to 17 December 2010.

During the quarter following the receipt of shareholder approval on 24 June 2010, the Company issued 21.4 million unlisted options to directors and employees of Energia Minerals. The grant of 21 million options was originally identified in the prospectus at the time of listing.

Keren Paterson .

Keren Paterson
Managing Director

## About Energia Minerals

Energia Minerals Limited is positioned to capitalise on the growing demand for nuclear energy as a key component of the alternative energy mix. Energia Minerals is a highly focused uranium exploration and development company with an exciting portfolio of projects in Australia and Italy covering over 5,500km$^2$ in 21 granted tenements and 9 under application.

In the Carnarvon Basin Uranium Province of Western Australia the Company has a Maiden Inferred Mineral Resource of **7.5Mlb @ 280ppm $U_3O_8$ at Carley Bore** located to the south of Paladin's Manyingee (24Mlb) and Cauldron's Bennett Well (4.8Mlb) deposits.

For further information on the company please go to www.energiaminerals.com or email info@energiaminerals.com.

**Competent Person Statement:**
Information in this release that relates to Exploration Results and the Exploration Target are based on information prepared by Dr Leigh Bettenay who is a Fellow of the Australian Institute of Geoscientists and a full-time employee of Energia Minerals Limited. Dr Bettenay has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Bettenay consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.
The Mineral Resource at Carley Bore is based on information compiled by Dr Leigh Bettenay who is employed by Energia Minerals Limited and Mr Neil Inwood who is employed by Coffey Mining Limited. Mr Inwood visited the site from 23-25 April 2010 and Dr Bettenay last visited the site at this time also.
Dr Bettenay is the Competent Person responsible for the drilling assay database, QA/QC validation and density measurements. Mr Inwood is the Competent Person responsible for the resource estimation and classification.
Both Dr Bettenay and Mr Inwood have sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".
Both Dr Bettenay and Mr Inwood have consented to the inclusion in this release of the matters based on his information in the form and context in which it appears.

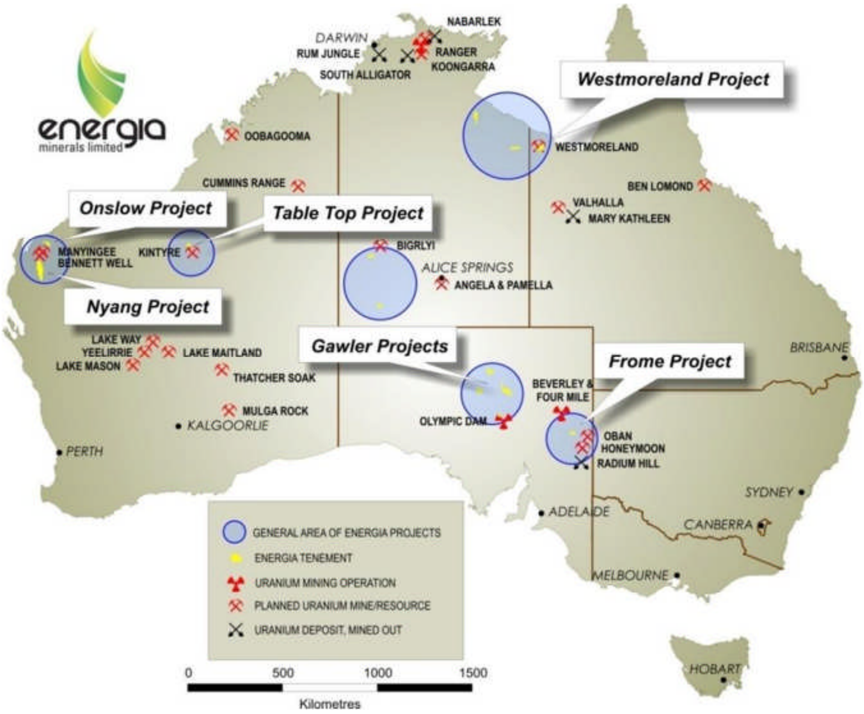


**Figure 1 -** Energia Minerals – Australian Project Locations

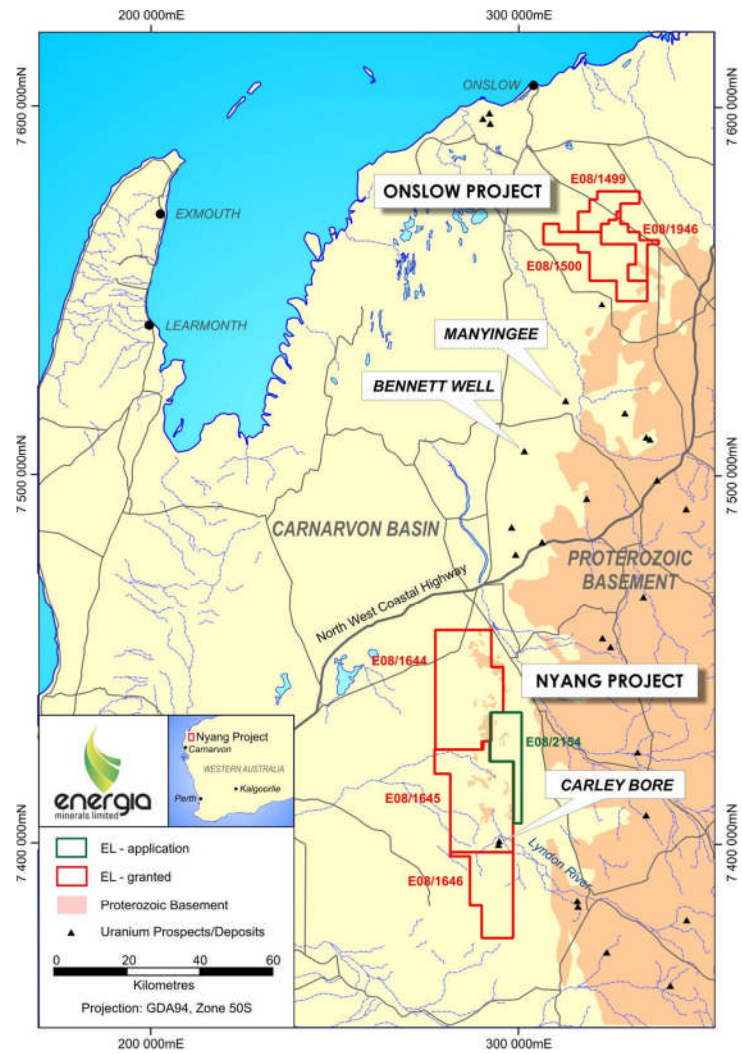


**Figure 2** - Location of the Nyang and Onslow Projects in Carnarvon Basin

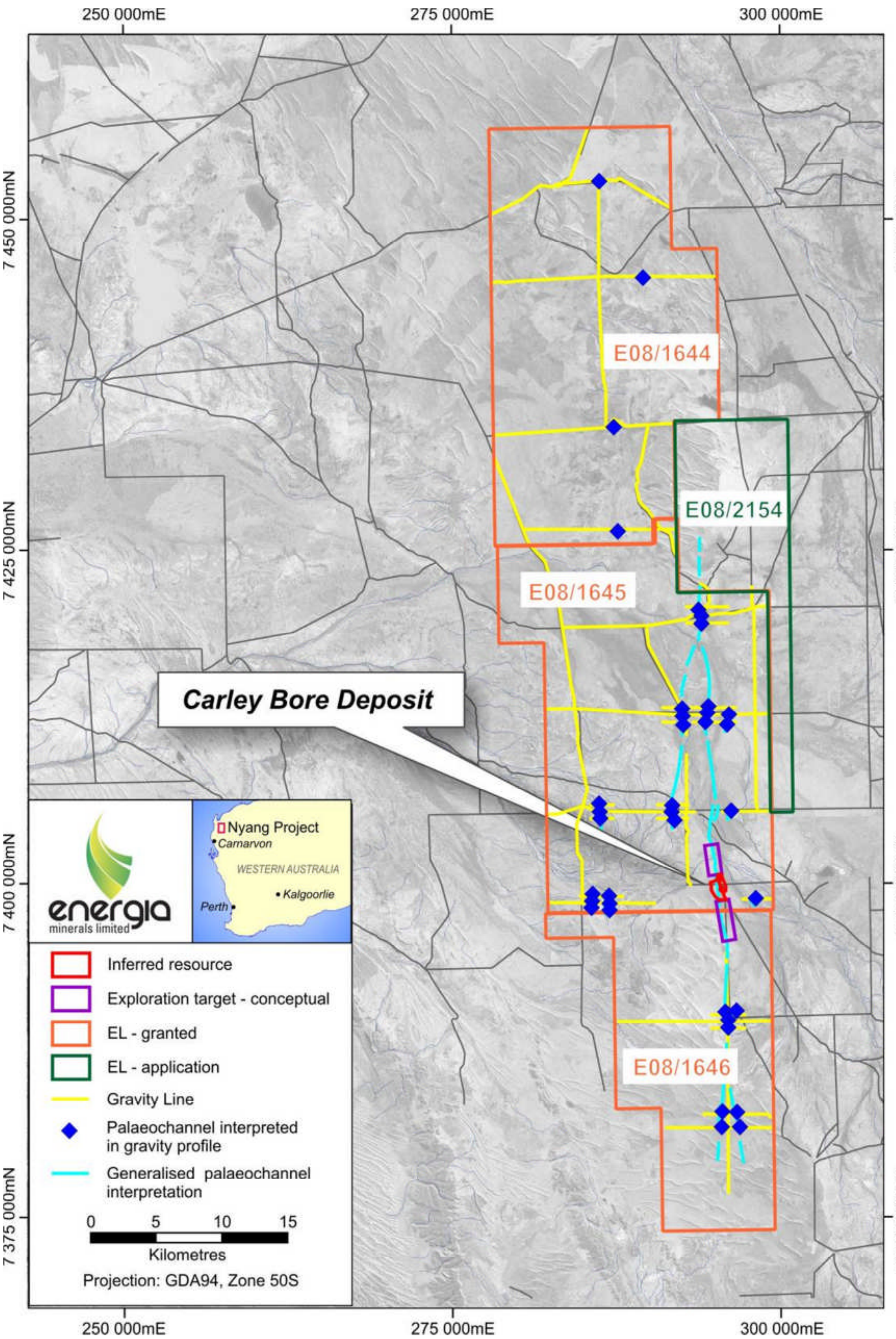


**Figure 3 -** Nyang Project showing location of Inferred Resource, Exploration Target and identified palaeochannels

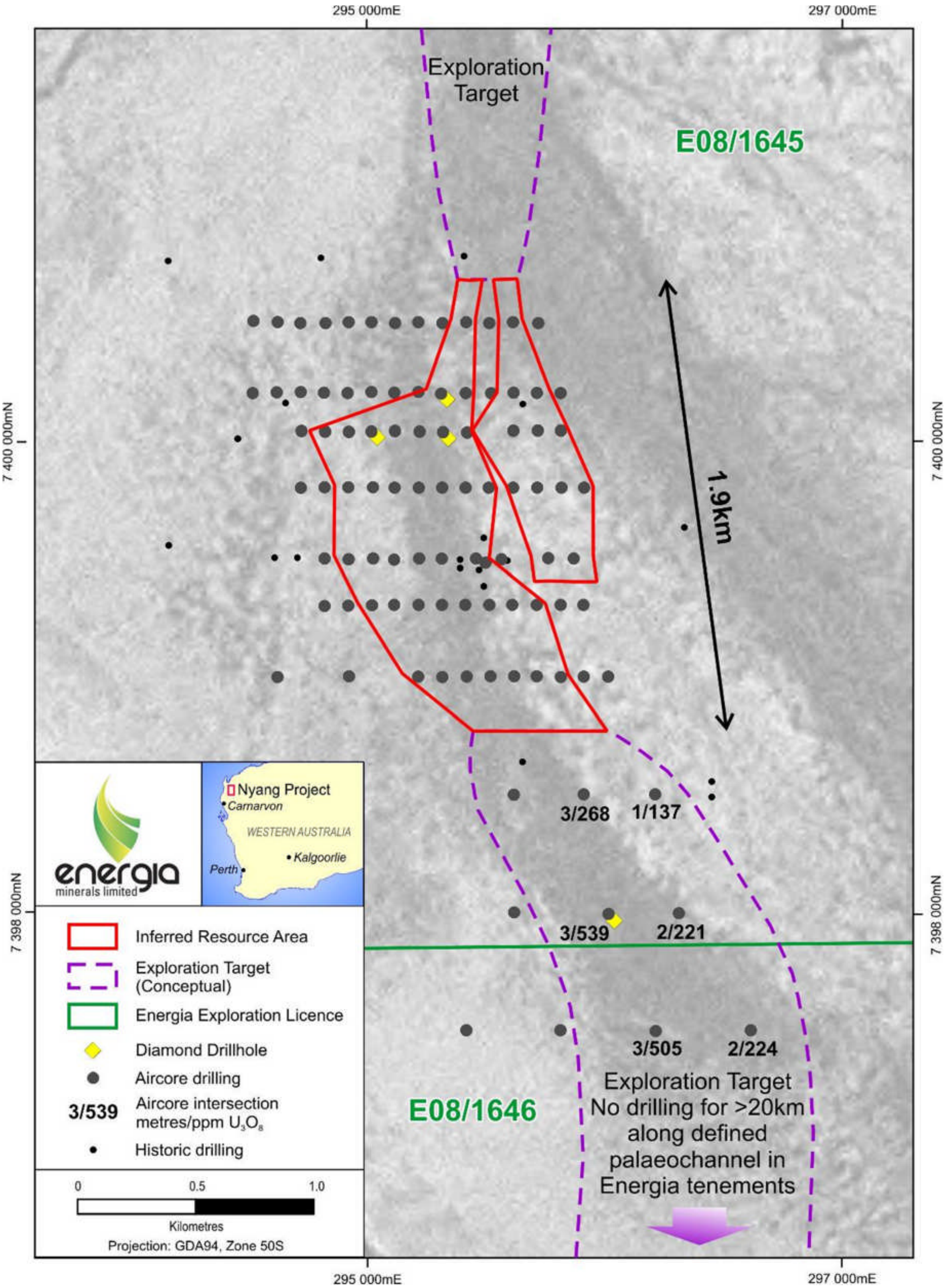


**Figure 4** - Carley Bore Prospect, Nyang Project, showing outline of Inferred Resource estimate and conceptual exploration target

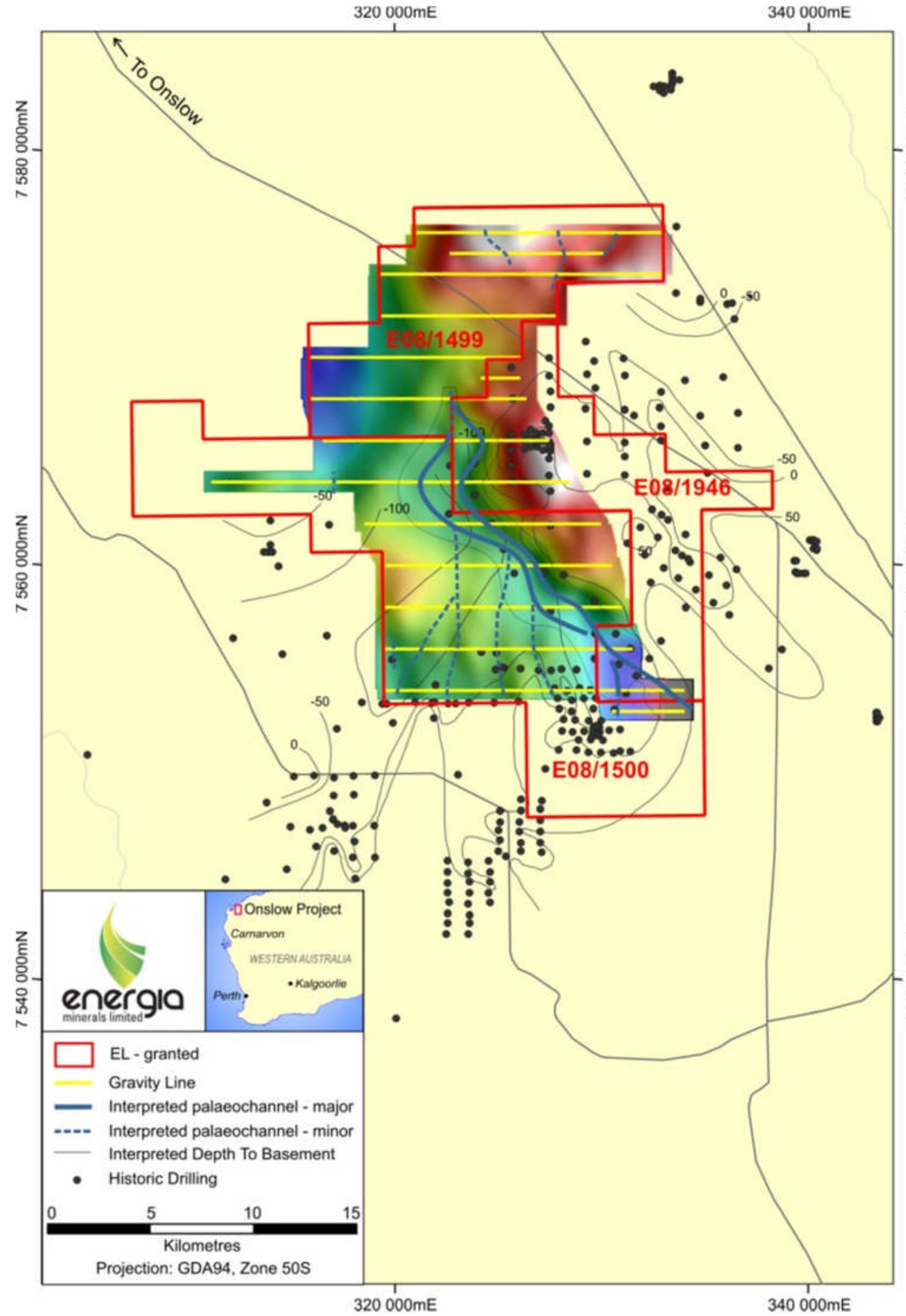


**Figure 5 -** Onslow Project showing gravity image, gravity traverse lines and interpreted palaeochannels with all known historic drilling.

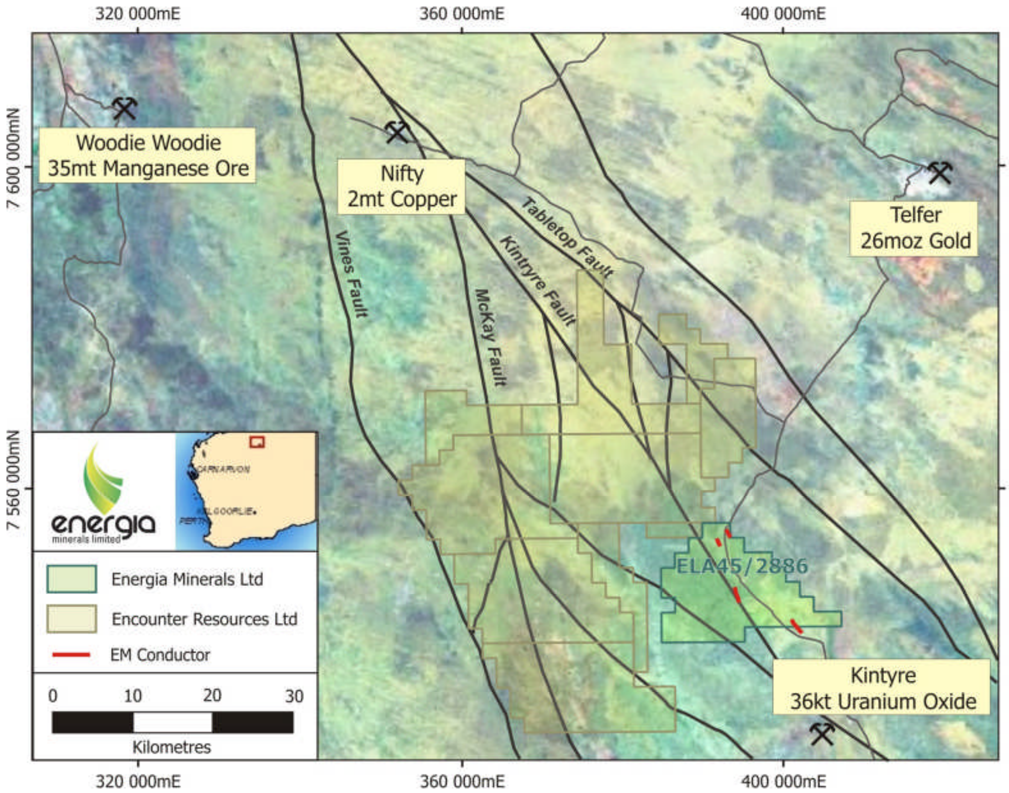

**Figure 6 -** Location of Energia Mineral's Table Top Exploration Application E45/2886

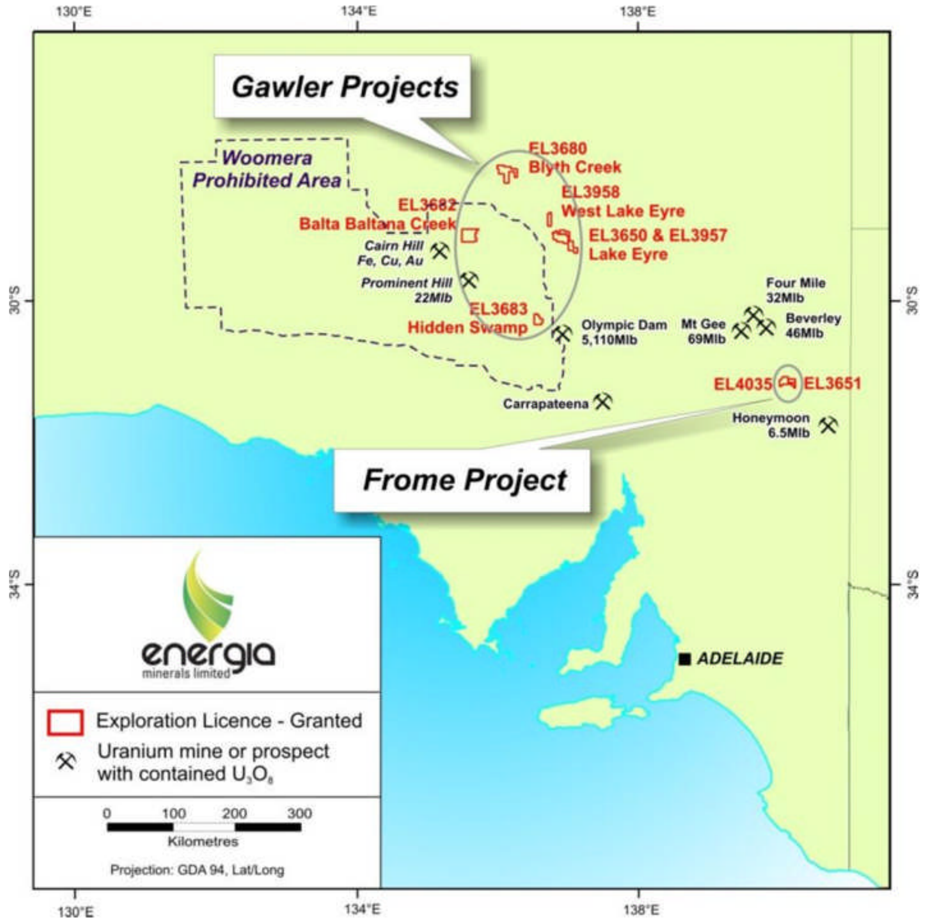


**Figure 7 -** South Australian project locations, Gawler Craton and Frome Basin

*Rule 5.3*

# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

ENERGIA MINERALS LTD

| ABN | Quarter ended ("current quarter") |
|---|---|
| ABN 63 078 510 988 | 30 September 2010 |

## Consolidated statement of cash flows

| | **Cash flows related to operating activities** | | Current quarter $A'000 | Year to date $A'000 |
|---|---|---|---|---|
| 1.1 | Receipts from product sales and related debtors | | - | - |
| 1.2 | Payments for | (a) exploration and evaluation (net) | (508) | (508) |
| | | (b) development | - | - |
| | | (c) production | - | - |
| | | (d) administration (net) | (164) | (164) |
| 1.3 | Dividends received | | - | - |
| 1.4 | Interest and other items of a similar nature received | | 60 | 60 |
| 1.5 | Interest and other costs of finance paid | | - | - |
| 1.6 | Income taxes benefit received | | - | - |
| 1.7 | Other | | 3 | 3 |
| | **Net Operating Cash Flows** | | **(609)** | **(609)** |
| | **Cash flows related to investing activities** | | | |
| 1.8 | Payment for purchases of: | (a) prospects | - | - |
| | | (b) equity investments | - | - |
| | | (c) other fixed assets | (6) | (6) |
| 1.9 | Proceeds from sale of: | (a) prospects | - | - |
| | | (b) equity investments | - | - |
| | | (c) other fixed assets | - | - |
| 1.10 | Loans to other entities | | - | - |
| 1.11 | Loans repaid by other entities | | - | - |
| 1.12 | Other (provide details if material) - Bonds | | - | - |
| | **Net investing cash flows** | | **(6)** | **(6)** |
| 1.13 | Total operating and investing cash flows (carried forward) | | (615) | (615) |

+ See chapter 19 for defined terms.

| | | | |
|---|---|---|---|
| 1.13 | Total operating and investing cash flows (brought forward) | (615) | (615) |
| | **Cash flows related to financing activities** | | |
| 1.14 | Proceeds from issues of shares, options, etc. (net of costs) | - | - |
| 1.15 | Proceeds from sale of forfeited shares | - | - |
| 1.16 | Proceeds from borrowings | - | - |
| 1.17 | Repayment of borrowings | - | - |
| 1.18 | Dividends paid | - | - |
| 1.19 | Other | - | - |
| | **Net financing cash flows** | **-** | **-** |
| | **Net increase (decrease) in cash held** | **(615)** | **(615)** |
| 1.20 | Cash at beginning of quarter/year to date | 5,114 | 5,114 |
| 1.21 | Exchange rate adjustments to item 1.20 | - | - |
| 1.22 | **Cash at end of quarter** | **4,499** | **4,499** |

## Payments to directors of the entity and associates of the directors
## Payments to related entities of the entity and associates of the related entities

| | | Current Quarter $A'000 |
|---|---|---|
| 1.23 | Aggregate amount of payments to the parties included in item 1.2 | 153 |
| 1.24 | Aggregate amount of loans to the parties included in item 1.10 | - |

1.25 Explanation necessary for an understanding of the transactions

1.23 Being Executive Director salaries and superannuation prior to over head recovery plus Non-Executive Director fees and superannuation.

## Non-cash financing and investing activities

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

None

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

None

## Financing facilities available

*Add notes as necessary for an understanding of the position.*

| | | Amount available $A'000 | Amount used $A'000 |
|---|---|---|---|
| 3.1 | Loan facilities | - | - |
| 3.2 | Credit standby arrangements/bonds | **90** | **53** |

## Estimated cash outflows for next quarter

| | | $A'000 |
|---|---|---|
| 4.1 | Exploration and evaluation | 1,000 |
| 4.2 | Development | - |
| 4.3 | Production | |
| 4.4 | Administration | 200 |
| | **Total** | **1,200** |

## Reconciliation of cash

| Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows. | | Current quarter $A'000 | Previous quarter $A'000 |
|---|---|---|---|
| 5.1 | Cash on hand and at bank | 299 | 214 |
| 5.2 | Deposits at call | 4,200 | 4,900 |
| 5.3 | Bank overdraft | - | - |
| 5.4 | Other (provide details) | - | - |
| | **Total: cash at end of quarter** (item 1.22) | **4,499** | **5,114** |

## Changes in interests in mining tenements

| | | Tenement reference | Nature of interest | Interest at beginning of quarter | Interest at end of quarter |
|---|---|---|---|---|---|
| 6.1 | Interests in mining tenements relinquished, reduced or lapsed | | | | |
| 6.2 | Interests in mining tenements acquired or increased | | | | |

## Issued and quoted securities at end of current quarter

*Description includes rate of interest and any redemption or conversion rights together with prices and dates.*

| | | Total number | Number quoted | Issue price per security (cents) | Amount paid up per security (cents) |
|---|---|---|---|---|---|
| 7.1 | **Preference +securities** *(description)* | Nil | Nil | - | - |
| 7.2 | Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through returns of capital, buy-backs, redemptions | -<br>- | -<br>- | -<br>- | -<br>- |
| 7.3 | **+Ordinary securities** | **69,500,005** | **39,500,005** | Various | Fully Paid |
| 7.4 | Changes during quarter<br>(a) Increases<br>(b) Decreases through return of capital, buy-backs | -<br>- | -<br>- | | |
| 7.5 | **+Convertible debt securities** *(description)* | Nil | Nil | - | - |
| 7.6 | Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through securities matured, converted | -<br>- | -<br>- | -<br>- | -<br>- |
| 7.7 | **Options** | | | *Exercise price* | *Expiry date* |
| 7.8 | Issued during quarter | | | | |
| | Unlisted-vested | 5,500,000 | - | $0.225 | 8 July 2015 |
| | Unlisted-vesting 26/10/10 | 4,500,000 | - | $0.25 | 26 October 2014 |
| | Unlisted-vested | 500,000 | - | $0.25 | 26 October 2014 |
| | Unlisted-vesting 3/3/11 | 250,000 | - | $0.25 | 3 March 2011 |
| | Unlisted-vesting 26/10/11 | 4,500,000 | - | $0.30 | 26 October 2014 |
| | Unlisted-vested | 500,000 | - | $0.30 | 26 October 2014 |
| | Unlisted-vested | 5,000,000 | - | $0.30 | 24 June 2015 |
| | Unlisted-vesting 3/3/12 | 250,000 | - | $0.30 | 3 March 2015 |
| | Unlisted-vested | 400,000 | - | $0.30 | 30 June 2015 |
| 7.9 | Exercised during quarter Unlisted Employee Options | - | - | - | - |
| 7.10 | Expired during quarter Unlisted Employee Options | - | - | - | - |
| 7.11 | **Debentures** *(totals only)* | Nil | Nil | | |
| 7.12 | **Unsecured notes** *(totals only)* | Nil | Nil | | |

+ See chapter 19 for defined terms.

## Compliance statement

1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX.

2 This statement does give a true and fair view of the matters disclosed.

Sign here:

Date: 21 October 2010]

Print name: **Jamie Armes**
(Company Secretary)