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**QUARTERLY ACTIVITIES REPORT  
ENDING 31 DECEMBER 2009**

**ASX  
RELEASE**

28 January 2010

**Large Calcrete Uranium  
Exploration Portfolio In  
Western Australia**

Website

[www.desertenergy.com.au](http://www.desertenergy.com.au)

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- Drilling identifies broad zone of anomalous uranium at Downs East Extension
- Uranium anomalies also identified at Kurrajong
- Previously unknown greenstone sequence identified at Bellview

**Highlights**

Initial drill testing of calcrete-uranium targets was completed at five projects in the northeast Yilgarn Region of central Western Australia: Barrambie, Kurrajong, Bellview, Maitland and Downs East Extended.

Anomalous uranium was intersected in wide spaced reconnaissance drilling at the **Downs East Extended Project**, which is located 44 km north-west along the interpreted line of the drainage from the major calcrete-hosted Yeelirrie uranium deposit being developed by BHP-Billiton.

Anomalous uranium results were also received from drill testing at the **Kurrajong Project**.

A new sheared and quartz veined greenstone sequence was discovered under the sand in wide spaced drilling at the **Bellview Project**, 20 km northwest of the Agnew gold mines.

The Annual General Meeting was held on 30 November 2009 and all motions passed.

**CALCRETE-URANIUM PROJECTS, NORTHEAST YILGARN,  
WESTERN AUSTRALIA**

**Reconnaissance Aircore Drilling**

In November 2009 reconnaissance aircore drilling was undertaken over uranium-channel radiometric and drainage anomalies at five of the Company's projects, first at the Barrambie Project (28 holes), then the Kurrajong (111 holes), Bellview (56 holes), Maitland (67 holes) and Downs East Extended (85 holes) Projects.

**Downs East Extended Project**

The Downs East Extended project consists of one granted tenement, E53/1404, which covers part of the interpreted upper drainage system to the Yeelirrie deposit. This tenement forms the eastern part of the Downs East project.

Previous exploration by Desert Energy at Downs East had discovered outcropping uraniferous calcrete with grab sample assays of 0.3% U<sub>3</sub>O<sub>8</sub>.

Wide spaced reconnaissance drilling at Downs East Extended has uncovered moderately thick (up to 5m thick) sheets of calcrete under wind-blown sand cover over the majority of the project area.

Hole number DEXAC069, in the south of the tenement, intersected 83ppm U in a 4-meter composite from 12m to 16m down-hole.

Adjacent holes (on nominal 400m by 1600m spacing) had intercepts of up to 20ppm U, which the Company considers is a high background value. In addition, a grab sample of blue-ish silcrete intersected at 5m to 6m in the same hole, assayed 75.3ppm U with 6ppb gold.

This intersect is supported by a number of adjacent holes with assay grades greater than 20ppm over a strike length of 1.6km. See attached Map.

Desert Energy considers both these uranium values to be highly anomalous, given the wide spaced nature of the drilling and composite sampling, and worth follow-up drilling. The significance of the gold value is uncertain at this stage.

Drilling on E53/1404 was on North-South lines designed to cut a prominent easterly-flowing drainage channel, seen as a dark "stain" on Landsat imagery in a wide sand-covered East-West valley.

Hole DEXAC069 is south of the main drainage, 200m west of a possible newly identified north-flowing tributary drainage, again showing as a dark "stain" on Landsat imagery (low reflectance). This "new" drainage becomes a target for closer-spaced follow-up drilling.

The Company is keeping open the possibility of hard rock potential.

### **Kurrajong Project**

The assay results from initial reconnaissance drilling at the Kurrajong reported a maximum uranium value of 40ppm (4m composite sample) within a 1.6km long zone of calcrete with thickness ranging from 5m to 9m. This anomalous result is supported over the strike length with further results greater than 20ppm U in adjacent holes.

This zone is open to the north and south and presents a possible target for follow-up with further drilling.

### **Bellview Project – Gold potential in new greenstone sequence identified-by drilling**

The Bellview project is located in granitic basement immediately west of the Agnew-Lawlers Greenstone Belt, home to several major gold and nickel mineral deposits. The drilling was targeting calcrete hosted uranium in buried paleochannels.

The drilling did not intersect anomalous uranium values but two holes on lines separated by 2000m on the east side of the Project intersected a series of amphibolites, hornblende, tremolite gneisses with quartz+carbonate veining. The regional aeromagnetic images show a series of thin

north-south concave-west linears, which may represent westward continuation of the greenstones (albeit at an increased metamorphic grade). The presence of quartz+carbonate veining is encouraging.

A more detailed evaluation of the granite-greenstone (gneiss) contact appears to be warranted at Bellview, with possible follow-up drilling (there is no outcrop) to test for slivers of greenstone/gneiss in a setting similar to the Ghost Crab gold deposit, south of Kalgoorlie.

### **Other Projects**

Uranium results from the drilling at the Barrambie and Maitland projects were not considered to be anomalous and these projects will be considered for relinquishment.

### **Drilling Statistics, Permitting and Exploration Methodology**

Following necessary permits, consents and clearances a total of 347 holes were drilled for 6364 meters. Drilling was vertical aircore holes to a nominal depth of recognisable basement (mostly granite) or 20m, and overall averaged 18.3m depth. Drill spacing was at 400m along lines nominally 1600m apart covering the targeted anomalies.

Drill cuttings were collected at one-meter intervals and composited to 4-meter samples for analysis at a credited Perth geochemical laboratory for U, As and V.

A condition of the drilling permits is that the drill site and access tracks are rehabilitated afterwards. Accordingly all holes were rehabilitated for later inspection by the Western Australian Department of Mines and Petroleum ("DMP").

During 2009, delays in obtaining drill permit approvals were experienced whilst the DMP developed rigorous, new safety and rehabilitation standards specifically for uranium exploration. This required a complete redrafting of the Company's previously-approved Radiation Management Plan, and various other new requirements.

The Company trusts that these sorts of delays are not likely to re-occur in the near future now that the new DMP systems are in place.

### **Exploration Model**

Desert Energy Limited is targeting Yeelirrie-style calcrete-hosted uranium mineralisation in old, buried drainage systems developed over the northeastern Yilgarn Craton in the Tertiary era. Desert Energy has a current portfolio of 23 calcrete uranium projects in this uranium-rich region.

Previous work by Desert Energy has demonstrated that its wide spaced reconnaissance drill holes would intersect (even peripherally) a significant calcrete-hosted uranium deposit of the type it is seeking.

Yeelirrie is also located in this region and is the world's largest calcrete-hosted uranium deposit. BHP-Billiton has announced recently its intension to progress this deposit towards development within two years (as reported in the West Australian newspaper in May 2009).

The Yeelirrie region, where many of the Company's tenements are located, may also be host to hard rock uranium deposits and the Company is mindful of this in its exploration programs.

## **HARD-ROCK URANIUM PROJECTS, WESTERN AUSTRALIA**

### **Chesterfield Project**

The Chesterfield project consists of two exploration licence applications, E51/1181 and E51/1201, located in granitic terrane 80km northwest of Meekatharra, Western Australia.

Following a field inspection in November no work is planned and the tenement applications will now be considered for relinquishment.

### **CORPORATE ACTIVITY**

The Desert Energy Annual General Meeting was held in the Company offices on 30 November 2009. All motions were passed unanimously by vote.

As of 31<sup>st</sup> December 2009, Desert Energy had \$2.1m in cash.

Robert Taylor  
Executive Director

Garry O'Hara  
Executive Director

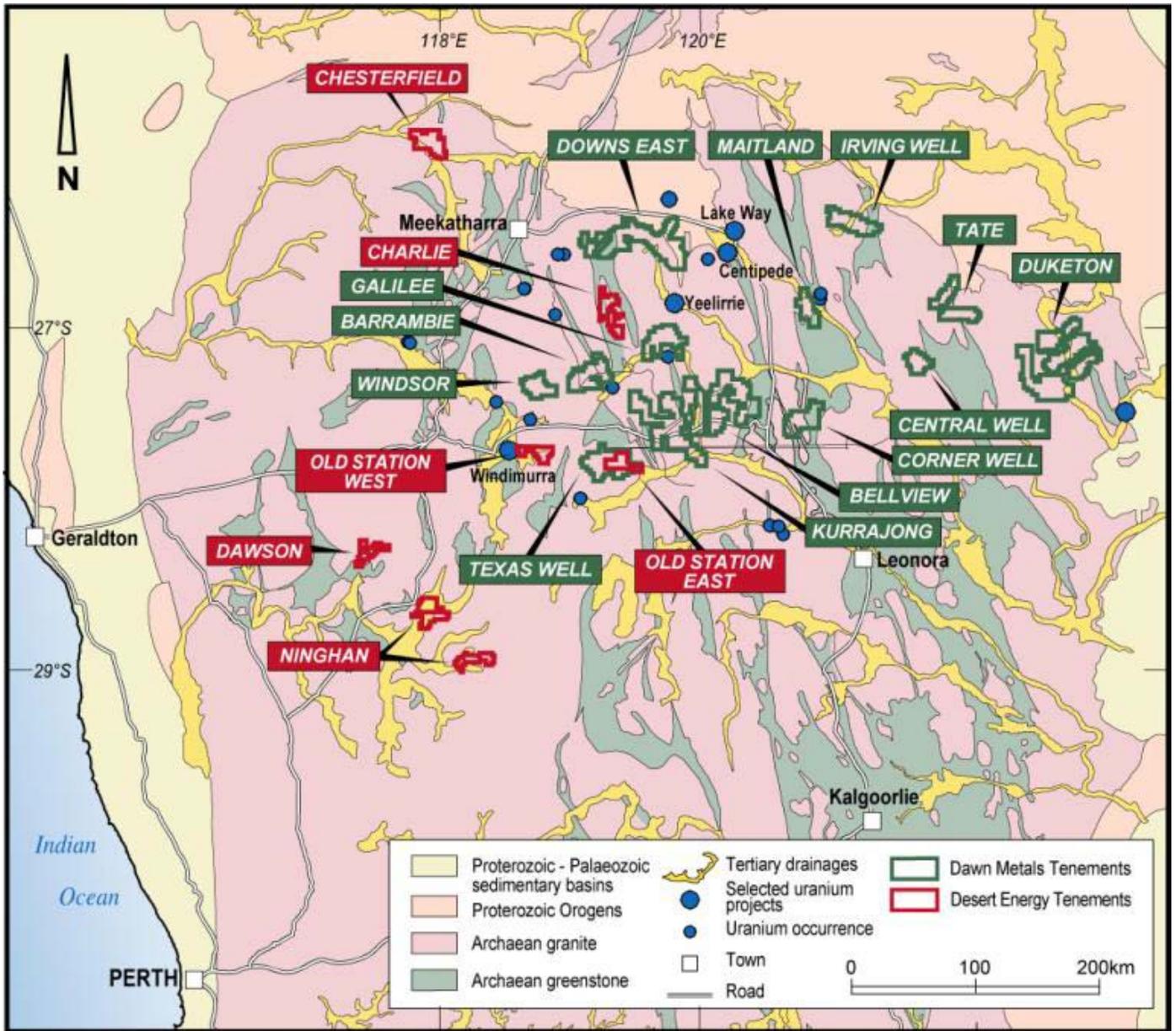
The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is presented by Dr Robert S Taylor, a Member of The Institute of Materials, Minerals and Mining and Mr. Garry P O'Hara, a corporate member of the Australasian Institute of Mining and Metallurgy, from data and information prepared and provided by Mr Kelvin Fox who is a member of the Australasian Institute of Mining and Metallurgy who consults to Desert Energy Limited through his geological consulting company Fox Contracting WA Pty Ltd.

Robert Taylor and Garry O'Hara are both executive directors of Desert Energy Limited and consult to the Company through their respective consulting companies Able Kids Pty Ltd and Anketell Pty Ltd.

Kelvin Fox, Dr Taylor and Mr O'Hara have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking 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'. Kelvin Fox consents to the inclusion in the report of the matters based on his data and information in the form and context in which it appears. Dr Robert Taylor and Garry O'Hara consent to the inclusion of information they have provided in the preparation of this report.

*The Company's website is recommended reading for interested market watchers, brokers and investors. The website contains information on the Company's projects including maps, a list of the Company's announcements to ASX, information on Native Title (including the tenement grant process and heritage surveys) including in the Desert Energy Prospectus, the legislative environments under which the Company operates, Corporate Governance, a section on risks, many of which are common to exploration companies, and other useful information. A list of the Company's announcements is also obtainable from the Australian Securities Exchange website at [www.asx.com.au](http://www.asx.com.au)*

*If you would like copies of announcements emailed to you, contact Ken Banks.*



**Desert Energy Ltd**  
**Calcrete Uranium Projects on the Yilgarn Block**

