



## HIGHLIGHTS - DECEMBER QUARTER 2009

- Two additional phases of drilling were completed on the Murphy project, which is prospective for high grade basement unconformity-style and sandstone-style uranium mineralisation
- Phase 2 drilling on regional targets in the western part of the Murphy project returned anomalous uranium at the unconformity between Westmoreland Sandstone and underlying reduced Murphy Metamorphics.
- Drilling has confirmed extensive areas of untested unconformity with underlying basement metamorphics and confirmed modelled depths to the unconformity
- A ground magnetic program was completed over the planned area of Phase 3 drilling at the UC19 target where a wide zone of anomalous uranium and copper in hematite alteration was intersected in phase one drilling
- Phase 3 drilling commenced at the UC19 target in late November, focusing on stepouts from the wide zone of anomalous uranium and copper in hematite alteration which was intersected in previous drillhole MURD002.
  - Hole MURD015 is a 290 metre stepout to the east which was designed to test the position of the altered mafic intrusive in a zone of demagnetisation at a shallower target depth to that intersected in hole MURD002
  - Hole MURD016 is a 270 metre stepout to the south which was designed to test a zone of demagnetized, altered and copper-anomalous mafic intrusive which was originally intersected at 52 metres in a shallow RAB scout hole.
- The UC19 target consists of a five kilometre long zone of anomalous uranium and copper from shallow air core scout drilling
- Generative activities continued during the quarter, with a number of projects reaching advanced negotiation stage.

Bondi Mining Ltd (ASX: BOM) is pleased to provide an update on its activities during the December Quarter. Bondi has made significant progress on its uranium projects and is currently assessing the results of its 2009 exploration program at the Murphy project in collaboration with JOGMEC. In addition, the company is continuing to pursue other advanced uranium opportunities.



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ASX: BOM

# MURPHY PROJECT UPDATE

## MURPHY PROJECT

*(Bondi 100%)*

The **Murphy Project**, Northern Territory, is the southern extension of the Alligator Rivers Uranium field and has identical geological ingredients to the district that hosts 750 million lbs of high grade uranium mineralisation further to the north.

### Phase 1 Drilling

The first phase of the 2009 program was designed to test a number of drill targets which were defined on the basis of a combination of magnetics, Radon track etch anomalism, soil geochemical anomalies, and in some cases anomalous uranium and clay alteration in aircore scout drilling.

Whilst the main results of phase one drilling have been previously reported, additional assaying of the wide altered interval in hole MURD002 at the UC19 target returned separate intervals of 57 metres at 0.10% Cu and up to 106 ppm U3O8 and 51 metres at 0.11% Cu and up to 107 ppm U3O8.

### Phase 2 Drilling

The phase two program was aimed at testing for the presence of reduced basement metasediments of the Murphy Metamorphics under the Westmoreland Sandstone, as well as testing for the presence of Siegal Volcanics and mafic intrusives. The presence of reduced basement rocks is a very important component of the model for formation of high grade unconformity-related uranium deposits (for example, Ranger and Jabiluka).

Drillholes MURD011 and MURD012 were drilled in areas where the aeromagnetic data suggested the presence of layered metamorphic rocks in the basement. Both holes intersected basement metasediments, with a wide sequence of dark, reduced metasediments in MURD012. A drilling sample of Westmoreland Sandstone within 1 metre of the unconformity returned 44.3ppm U3O8, along with elevated lead, zinc, arsenic, nickel and phosphorous. Background values of uranium in the Westmoreland Sandstone are typically less than 1.5 ppm U3O8, so the presence of uranium at over 30 times background near

the unconformity with underlying reduced metasediments is extremely significant.

Drillhole MURD013 was sited to test the contact between Westmoreland Sandstone and an interpreted large mafic intrusive body in close proximity to a major northwest-trending structure. The contact between Westmoreland Sandstone and the mafic intrusive was very weakly anomalous in uranium, and zones of hematitic alteration and weakly anomalous copper similar to those seen in MURD002 were also seen in hole MURD013 within the mafic intrusive.

Drillhole MURD014 was drilled to attempt to intersect the Siegal Volcanics, but the hole encountered problems and was terminated within Antrim Plateau Basalts at a depth of 323 metres.

The results of the phase two drilling will be used to plan for further programs in the Murphy West region in 2010. The presence of reduced metasediments in the basement provides encouragement that it may be possible to refine targets using electromagnetic methods.

### Phase 3 Drilling and ground magnetics

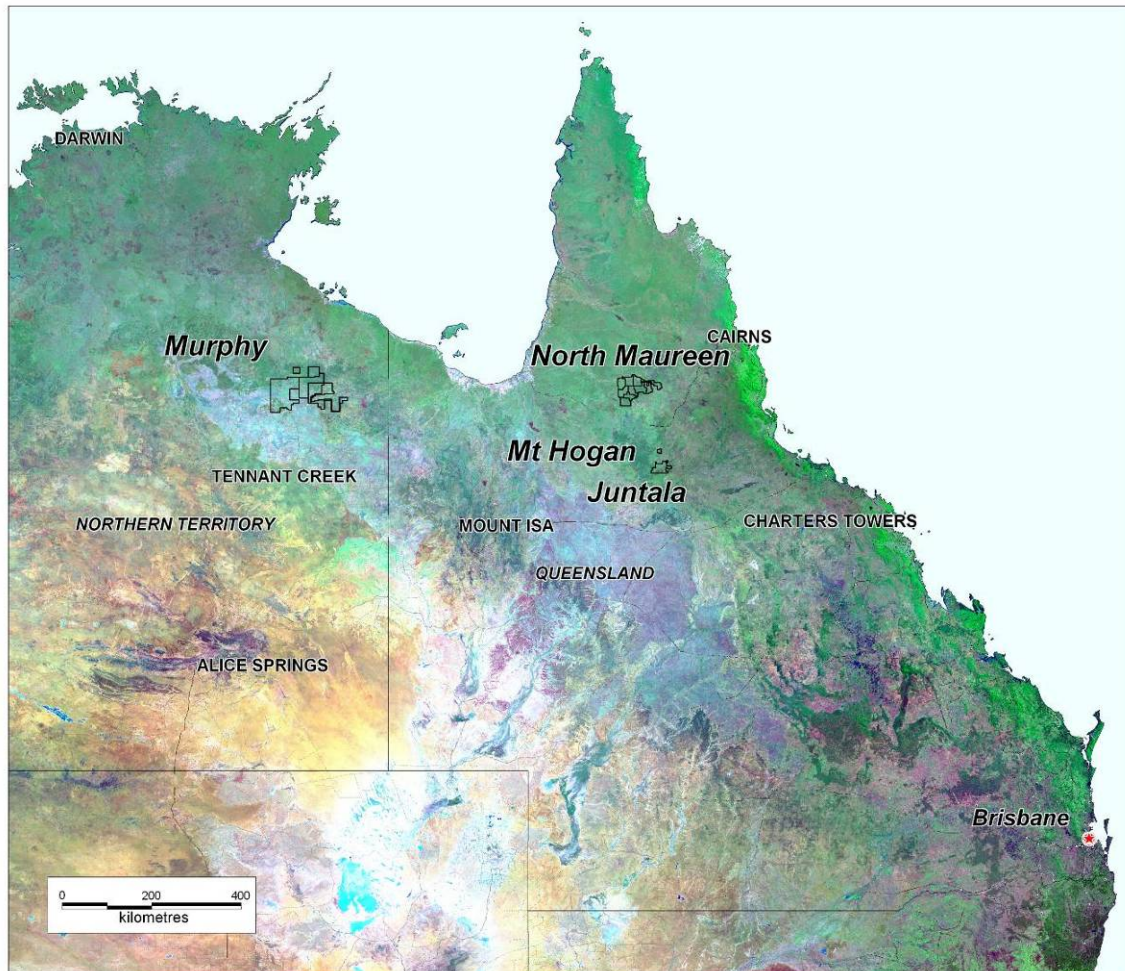
The aim of the phase 3 program was to test for a possible higher grade core to the system at UC19 which may be at shallower depths. The first drilling program returned highly encouraging wide zones of hematite-chlorite alteration with associated zones of anomalous uranium and copper in drill hole MURD002.

During the quarter, phase three drilling was completed at the UC19 target, focusing on stepouts from the wide zone of anomalous uranium and copper in hematite alteration which was intersected in previous drillhole MURD002. The commencement of drilling followed completion of a 225 line kilometre detailed ground magnetic survey designed to provide additional constraints on the geometry of potentially altered and mineralised mafic intrusive bodies.

# MURPHY PROJECT UPDATE

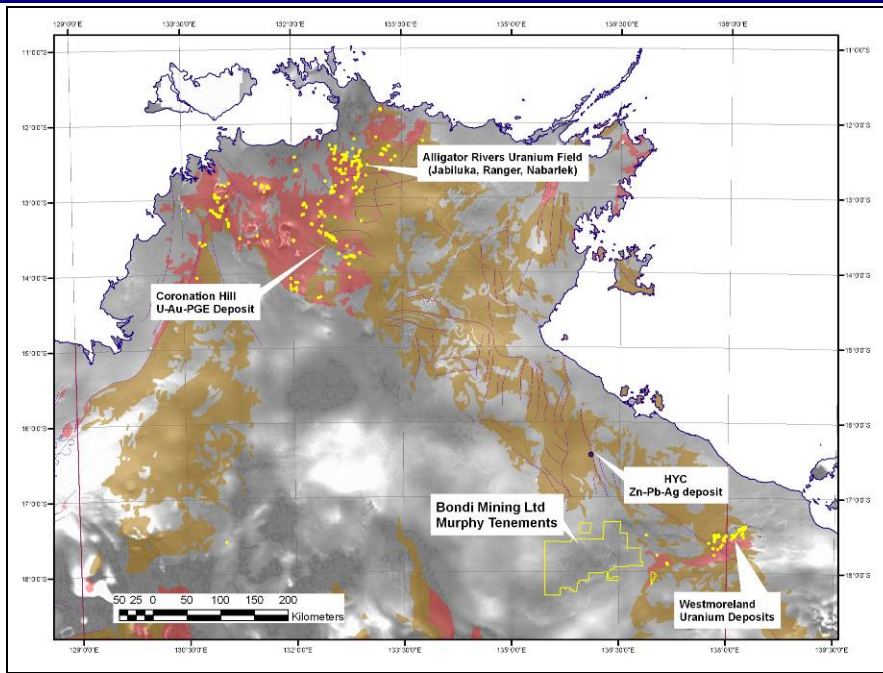
The Murphy Uranium project is the subject of a Joint Exploration Agreement between Bondi and Japan Oil, Gas and Metals National Corporation (JOGMEC) wherein JOGMEC can earn a 51% undivided interest in the project by funding AUD \$3 million in exploration over four years. As previously announced, a \$1.25 million 2009

exploration program of airborne geophysics, drilling and soil sampling to be funded by JOGMEC is currently under way, with assistance from NT government grants. Bondi is the operator of the exploration program.

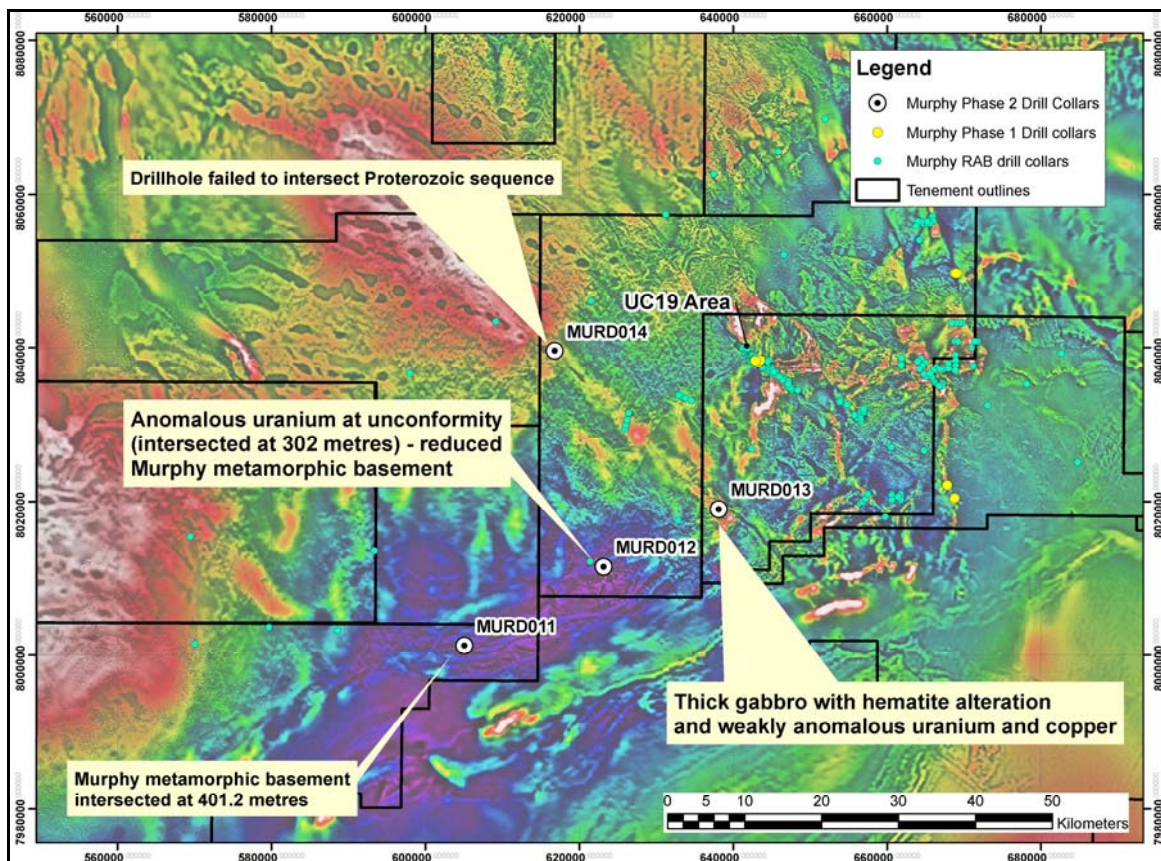


**Figure 1.** *Regional location of Bondi Mining's uranium projects*

# MURPHY PROJECT UPDATE



**Figure 2.** Regional location of Murphy project, overlain on regional magnetics, Kombolgie basin sediments (brown), basement (red), and uranium deposits (yellow)



**Figure 3.** Map of the Murphy area showing the location of wide spaced phase two drillholes along with all previous drilling

# PROJECT GENERATION & OUTLOOK

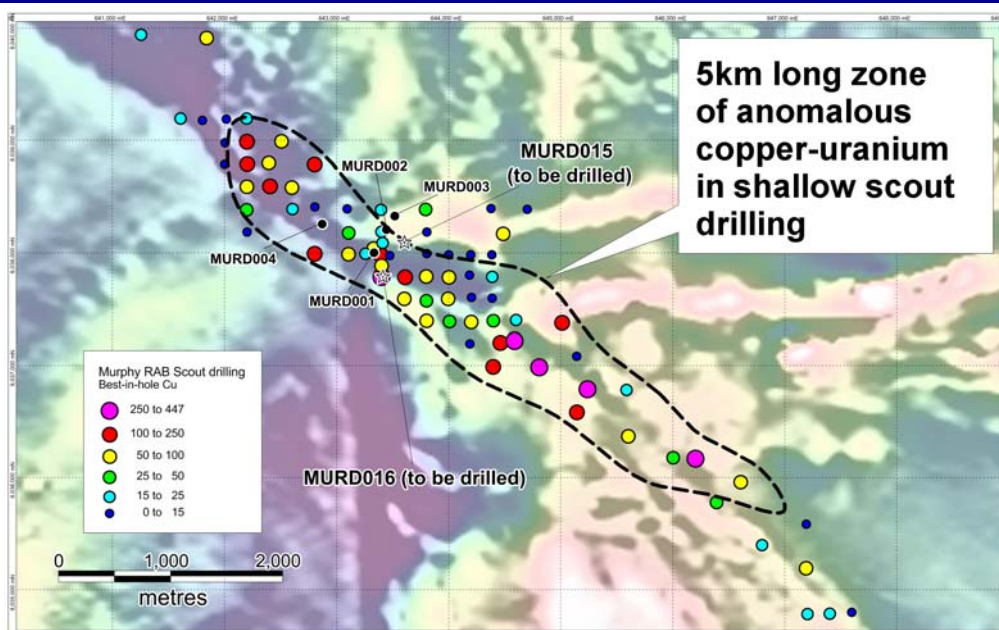


Figure 4. Map of the UC19 area showing existing drilling, best-in-hole Cu values from shallow RAB scout drilling, and planned phase three drillholes

## PROJECT GENERATION

Bondi's highest current priority is to acquire a high quality resource-stage uranium project, and the company is making good progress toward this objective. To this end, a number of opportunities were reviewed during the quarter and the company is in continuing discussions regarding the highest priority targets. During the December quarter the company also continued a regional geological and prospectivity framework study in South Australia and the Northern Territory focusing on the identification of new areas with strong potential for hosting high grade unconformity-style uranium mineralisation. A number of targets resulting from this study are currently at negotiation stage.

## OUTLOOK MARCH QTR 2010

During the March Quarter, the company intends to reassess all the 2009 results from Murphy and to formulate a plan for additional exploration in collaboration with its JV Partners from JOGMEC. Much of the overall target footprint at UC19 remains untested, and the wide zone of hematite alteration and anomalous copper and uranium remains open to the northwest and southeast. On the broader scale of the 10,000 square kilometre Murphy project, there are a number of high priority targets which have received very little attention to date, and the company is looking forward to progressing them with the help of the knowledge gained during the 2009 program.

In addition, Bondi is continuing to pursue advanced resource-stage uranium opportunities and has reviewed and made offers on a number of projects. This activity will continue in 2010, and the company is confident it will be successful in acquiring a high quality resource-stage Uranium asset. At the same time, geological framework studies and target identification are continuing with a current dominant focus on the Northern Territory. A number of projects are at negotiation stage, and the company is confident that it will be able to acquire additional NT projects in early 2010.

### DISCLAIMER

The exploration data and results contained in this report are based on information reviewed by Dr Rick Valenta, a fellow of the Australian Institute of Mining and Metallurgy. He is Managing Director of the Company and has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Dr Valenta has consented to the inclusion in this release of the matters based on his information in the form and context in which it appears.

# BONDI MINING LIMITED

# QUARTERLY REPORT

Dec Quarter 2009

28 January 2010

## CORPORATE INFORMATION



Bondi Mining Ltd is a Brisbane-based exploration company with a focus on high-grade cycle-proof uranium targets with world class size potential. Bondi's Australian uranium portfolio is currently focused on the Murphy project in the Northern Territory, and the company is currently undertaking a generative program focussed on additional high quality uranium plays in South Australia and the Northern Territory. The company also retains a significant land holding in the gold-prospective Georgetown region of Queensland.

### DIRECTORS

Simon O'Loughlin (Chairman)  
Dr Richard Valenta (Managing Director)  
Creagh O'Connor  
Simon Taylor

### COMPANY SECRETARY

Pierre Van Der Merwe

### REGISTERED OFFICE

Level 2, 32 Park Road  
MILTON QLD 4064

### PRINCIPAL PLACE OF BUSINESS

Level 2, 32 Park Road  
MILTON QLD 4064

### SHARE REGISTRY

Computershare Investor Services Pty Ltd  
Level 5, 115 Grenfell Street  
ADELAIDE SA 5000

### ISSUED CAPITAL

As at 21 January 2010 Bondi Mining Limited had the following shares on issue:

- 88,662,807 ordinary shares
- 3 million (unlisted) 25¢ options expiring 18/12/2010
- 500,000 (unlisted) 30¢ options expiring 11/11/2011
- 500,000 (unlisted) 35¢ options expiring 11/11/2011
- 500,000 (unlisted) 40¢ options expiring 11/11/2011
- 108,000 (unlisted) 30¢ options expiring 26/11/2012
- 116,000 (unlisted) 30¢ options expiring 26/11/2012
- 50,000 (unlisted) 15¢ options expiring 22/09/2013

### CASH as at 31 Dec 2009 \$A2.8 million

### AUSTRALIAN STOCK EXCHANGE

ASX CODE: BOM

### INTERNET ADDRESS

All Company announcements, reports and presentations are posted on our website [www.bondimining.com.au](http://www.bondimining.com.au)

If you would like to receive news releases by email please register your details on our website by going to the "Contact" tab and entering your details. Alternatively send an email to [info@bondimining.com.au](mailto:info@bondimining.com.au) with your request.

All queries can also be directed to Dr Rick Valenta (Managing Director) on +61 7 3369 4000 or [info@bondimining.com.au](mailto:info@bondimining.com.au)

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