

3 March 2010

## **SUBSTANTIAL UPGRADE TO WESTERN COOPER UNCONVENTIONAL GAS PROJECT PROSPECTIVE RESOURCE POTENTIAL**

- **Drillsearch recently engaged independent technical experts to assess the Prospective Resource\* Potential of the Western Cooper Unconventional Gas Project**
- **The finding of this independent review materially increases the Gross Deep Coal Seam Prospective Resource potential to 9.9 to 19.9 TCF – an increase of over 360% from previous estimates**
- **The review is based on extensive data from over 450 conventional oil & gas well logs**
- **The Western Cooper Unconventional Gas Project is located close to extensive, existing gas pipeline infrastructure capable of accessing most of Eastern Australia's major gas markets**
- **These Unconventional Gas Resources can be appraised & developed as part of company's conventional Western Cooper Wet Gas Project**
- **Successful evaluation of these Unconventional Gas Prospective Resources presents a material growth and economic opportunity for the company**

\* Defined at the end of this ASX release

Drillsearch Energy Ltd (ASX: DLS) is pleased to announce a significant increase in the Prospective Resource Potential of the Western Cooper Unconventional Gas Project.

### **Significant Increase in Resource Potential – 360% over previous estimate**

The unconventional gas Prospective Resource potential of deep coal seams in the Western Cooper Unconventional Gas Project Area has increased by approximately 360%.

<b>Western Cooper Deep Coal Seam Gas Project Prospective Resources*</b>					
	Project Area (km <sup>2</sup> )	Net Coal Thickness (m)	Net Coal to Formation Ratio	Gas-in-Place (TCF)	Prospective Resource (TCF)
New Estimate	2805	Up to 63	Up to 14%	39.9	9.9 to 19.9
Nov 2009 Estimate	780	16 to >48	-	10.9	2.7 to 5.4
* Source: MBA Petroleum Consultants Western Cooper Basin Coal Seam Gas Gas-in-Place & Prospective Resource Estimate. Prospective Resource range based on 25-50% recovery factors. The Nov 2009 Prospective Resource estimate only determined resource potential for Patchawarra Formation coal seams and did not include PELA 513.					

Drillsearch has just completed the second phase of an independent technical review with MBA Petroleum Consultants Pty Ltd (MBA) of the Prospective unconventional gas resource potential of deep coal seams in the Permian and Triassic formations of the Western Cooper Basin. This independent technical review is an extension of the earlier work completed by MBA prior to the award of PELA 513. It should be noted that Prospective Resources are as yet undiscovered and, as such, carry significant risk. Gas content, gas composition (gas may not only be methane) and certain coal parameters are poorly known and require specialist coal seam gas (CSG) sampling and testing, which will be addressed by near future drilling.

On 27 November 2009, Drillsearch previously announced the results of the independent review of the deep coal seam gas potential of the project area. The previous announcement indicated that the unconventional gas Prospective Resource potential was between 2.7 to 5.4 TCF based on a gas-in-place of 10.9 TCF.

“Drillsearch is very encouraged by the results of the independent review for the overall unconventional resource prospectivity of the our permit areas in the Western Cooper,” Drillsearch Managing Director, Brad Lingo said

“Our own exploration drilling in this area has shown that there are multiple, thick coal seams and the well logs has indicated significant gas contents. Previously this has been considered a drilling problem rather than an opportunity worth exploring further.”

“The independent review confirmed that these coal seams are extensively distributed throughout our acreage from a detailed analysis of 450 wells in the area and our extensive seismic coverage – both 2D and 3D – of the area.

“In September 2008 Santos announced that it was evaluating 5 unconventional gas test concepts in the Cooper Basin and that they had completed a deep coal frac of these same coal seams at a depth of 9,000 feet and successfully produced gas from these deep coal seams to surface at the Moomba-77 well which is right on the edge of our project area.”

“We also know that unconventional gas has been successfully produced from similar deep coal seams in basins in the Rocky Mountain region of North America,” he said.

Mr Lingo said the independent review provided Drillsearch with a clear road map of where the company needed to focus its efforts to convert this Prospective Resource into Contingent Resources and Reserves.

He said Drillsearch was working closely with MBA Petroleum and AWT to formulate the forward work programme to begin the direct evaluation of this resource potential.

“In order to manage the cost of this programme, we are looking to integrate this evaluation into the appraisal and development of the conventional wet gas discoveries we have already made in the project area and as part of the exploration programme for the conventional 22 wet gas prospects already identified,” Mr Lingo said.

“There is a lot of work that needs to be done to establish this Prospective Resource and as commercially viable reserve but to put these potential gas volumes into perspective, a typical single 5 mmtpa LNG train requires 5-6 TCF of gas supply over 15 years. Similar quantities would be required to run a large scale gas-to-liquids plant producing clean diesel. With the potential resources we are trying to prove up from these prospective resources, if these can be successfully established as a commercially viable resource and developed there is significant opportunity for a very big project” Lingo said.

**Western Cooper Unconventional Gas Project Area – Resources in the Right Place**

The project area covers Drillsearch’s permit holdings in PEL 106, 107, 91 and the newly awarded PELA 513 – North, South and Central Blocks. These permit holdings cover an extensive, contiguous area in the Western Cooper Basin covering a total of 4275 km2 (1,056,000 acres) with a core resource prospective project area of 2805 km2 (693,100 acres). Drillsearch operates 78% of the project area and holds 100% interest in 63% of the project area.

**Western Cooper Basin Unconventional Gas Project Area  
(PELs 91, 106, 107 & PELA 513 – formerly Block B)**

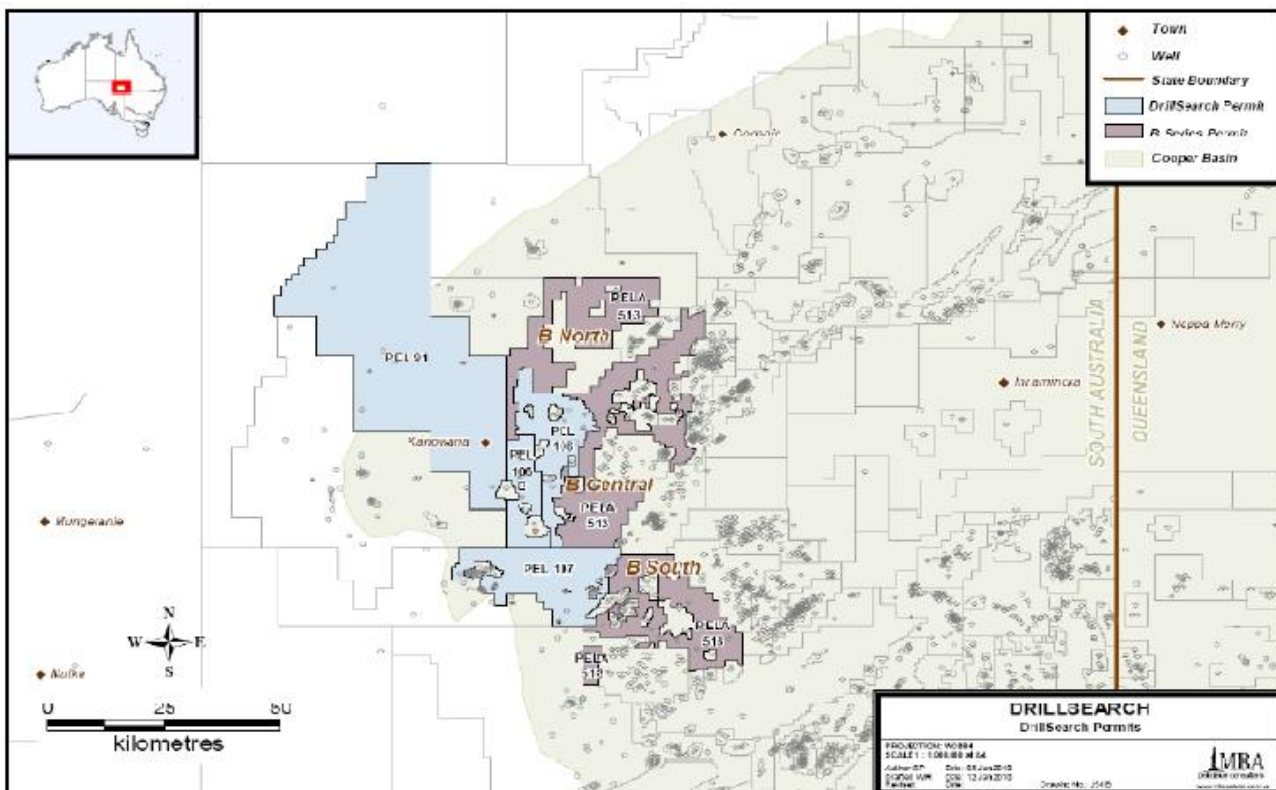


Figure 1: Location of Drillsearch Permits within the Cooper Basin (S.Australia)

The November 2009 report only analysed the Patchawarra Formation deep coal seams and did not include PELA 513 area which was under application as part of the South Australian Government 2009 Cooper Basin Bid Round although Drillsearch had commenced its study of this permit area as part of formulating its bid strategy.

Drillsearch's Western Cooper Unconventional Gas Project Area is well located for future development in close proximity to existing gas pipeline infrastructure.

The main area project area is located within 25-50 km of the Moomba Gas Plant and from this point can access the main gas pipeline network serving most of Eastern Australia.

The potential for the development of this large scale resource also provides a new source of energy and fuel that may be developed to serve the expanding South Australian Mining District with its growing energy demand to serve major mines such as Olympic Dam and Prominent Hill.

### **Resource Estimate based Extensive Geological Data**

The report is based on the analysis of 450 conventional oil and gas well logs to identify the presence and distribution of suitable Permian and Triassic coals throughout the project area. The report covered a detailed review of the Patchawarra, Epsilon, Daralingie, Toolachee and Poolowanna Formations.

The report identified the Permian Patchawarra Formation as the primary area of interest indicating that within the central area of the project with individual seam thicknesses of up to 10 metres and average net coal thicknesses of approximately 40 metres. In this area these coals are contained over a 350-400 metre interval with an average a net coal to formation ratio of approximately 10-11% and in some areas as high as 14%. This compares to a net coal ratio of 6% in the Bowen Basin late Permian coals. (See attached Patchawarra Formation Net Coal Map).

Through its conventional exploration activity in PELs 106,107 and 91 which includes extensive 2D and 3D seismic coverage and exploration well coverage, Drillsearch has confirmed the presence of thick extensive Permian coal seams which have demonstrated significant gas readings while drilling. This previous conventional exploration work has provided Drillsearch and MBA with a significant database to undertake the assessment of the unconventional resource potential of these thick coal seams.

### **New Technologies opens the way for Unconventional Gas development**

Over the last five years a new technology has been developed in North America to extract previously unrecoverable gas from unconventional reservoirs such as coal seams, shale and tight gas sands. Many of these unconventional reservoirs are the actual source rocks for traditional oil & gas discoveries. Traditionally, the rocks holding this gas have been thought to be too hard to produce. New technologies and production techniques have successfully combined several long-standing conventional production techniques combining horizontal drilling and hydraulic fracturing known as "fracking" to successfully extract gas from these unconventional reservoirs.

With the large scale CSG –to-LNG projects underway in Eastern Queensland, more and more of these new technologies are becoming readily available in Australia for the first time. There are major efforts currently underway in Onshore Western Australia and the Onshore Gippsland Basin in Victoria to use these technologies to unlock rich, gas saturated unconventional reservoirs. The deep Permian coals and shales are universally recognized as the primary source rocks for all the oil & gas generated in the Cooper Basin. Much of the oil & gas resources generated in these rocks remain trapped in the actual source rocks and in tight gas sands adjacent to the source rocks.

Drillsearch is seeking to systematically apply these proven technologies to the unconventional gas resources well recognized in the Cooper Basin.

## **What these Unconventional Gas Resources mean to Drillsearch**

The large Unconventional Gas Prospective Resource potential of the Cooper Basin underscores two key points.

“First, the Cooper Basin is far from being a mature oil & gas basin. Second, the Cooper Basin holds World-class large scale resource potential which if successfully proven up should be meaningful and material for even the largest international oil & gas companies,” Mr. Lingo said.

The potential of these Unconventional Gas Prospective Resources gives Drillsearch confidence in focusing investment targeting gas resources in the Cooper Basin. The potential of these unconventional gas resources also adds another dimension to Drillsearch’s investment in the Western Cooper Gas & Liquids Project.

## **How might Drillsearch commercialize Unconventional Gas in the Western Cooper ?**

The Unconventional Gas Prospective Resources Drillsearch is targeting in the in the Western Cooper have a potential natural advantage both technically and economically.

The Western Cooper Unconventional Gas Project largely covers the same area as Drillsearch’s Western Cooper Wet Gas Project. This project has already made 10 gas and condensate discoveries out of 12 exploration wells in PEL 106. Drillsearch previously announced on 26 October the Contingent and Prospective Resource Estimates for its Western Cooper Gas & Liquids Project announcing conventional 2C Contingent Resources of approximately 40 BCF and 2 mmbbls condensate and additional conventional gross Prospective Resource potential of up to 200 BCF sales gas and 7.9 mmbbls condensate (Best). These resource estimates were independently audit reviewed by Gaffney, Cline & Associates Pty Ltd.

The exploration drilling for the conventional oil & gas accumulations comprising the Western Cooper Gas & Liquids Project is what led to Drillsearch’s recognition that there was likely to be substantial unconventional gas potential associated with the gassy coals and shales adjacent to the conventional sandstone reservoirs. The fact that the Unconventional Resources are in the same geologic formations as the conventional wet gas discoveries provides Drillsearch with two advantages.

1. Drillsearch can progress the next stage of exploring, appraising and evaluating the unconventional resource potential on a low, incremental cost basis as part of the conventional wet gas development.
2. If Drillsearch is able to establish that gas can be successfully produced from these deep coal seams and shales, once the conventional Wet Gas Project commences operation, Drillsearch can use the same wells, pipelines and other gas processing and pipeline infrastructure to gradually bring the unconventional gas resources to market.

“This then lowers the overall entry cost for the unconventional gas resources while at the same time the unconventional improves the economics of the conventional gas development because it can offer both long-term resource potential and can support a very large scale development,” Mr. Lingo said.

## Forward Exploration & Appraisal Programme

The MBA Report has identified key information that is as yet unknown in the Western Cooper Unconventional Gas Project area that is required to demonstrate the potential commercial viability of at least part of these Prospective Resources.

This additional information includes gas content, gas composition and permeability of these deep coal seams and as such currently carries significant exploration risk. The MBA Report also outlines a forward program for Drillsearch to acquire this information to further refine and hopefully develop these Prospective Resources into Contingent Resources and commercial reserves.

The forward work programme work recommendations from MBA Petroleum focus on the company conducting a core hole programme followed by a pilot project.

**Core Hole Programme** - The core hole recommended by MBA Petroleum is programme is designed to:

- Obtain gas content measurements (desorption)
- Determine gas saturation (isotherm analysis)
- Drill Stem Testing to determine coal seam permeability
- Gas Compositional Analysis (CH<sub>4</sub>, CO<sub>2</sub> etc)
- Target identified Patchawarra P90 areas and locate well near existing well with known thick Patchawarra Coals

**Pilot Programme** – The pilot programme recommended by MBA Petroleum is designed to:

- Obtain production profiles to determine gas and water flow rates
- Test completion methods to determine well spacing, radial drilling, fracture stimulation requirements and well completion design

For further information please contact:



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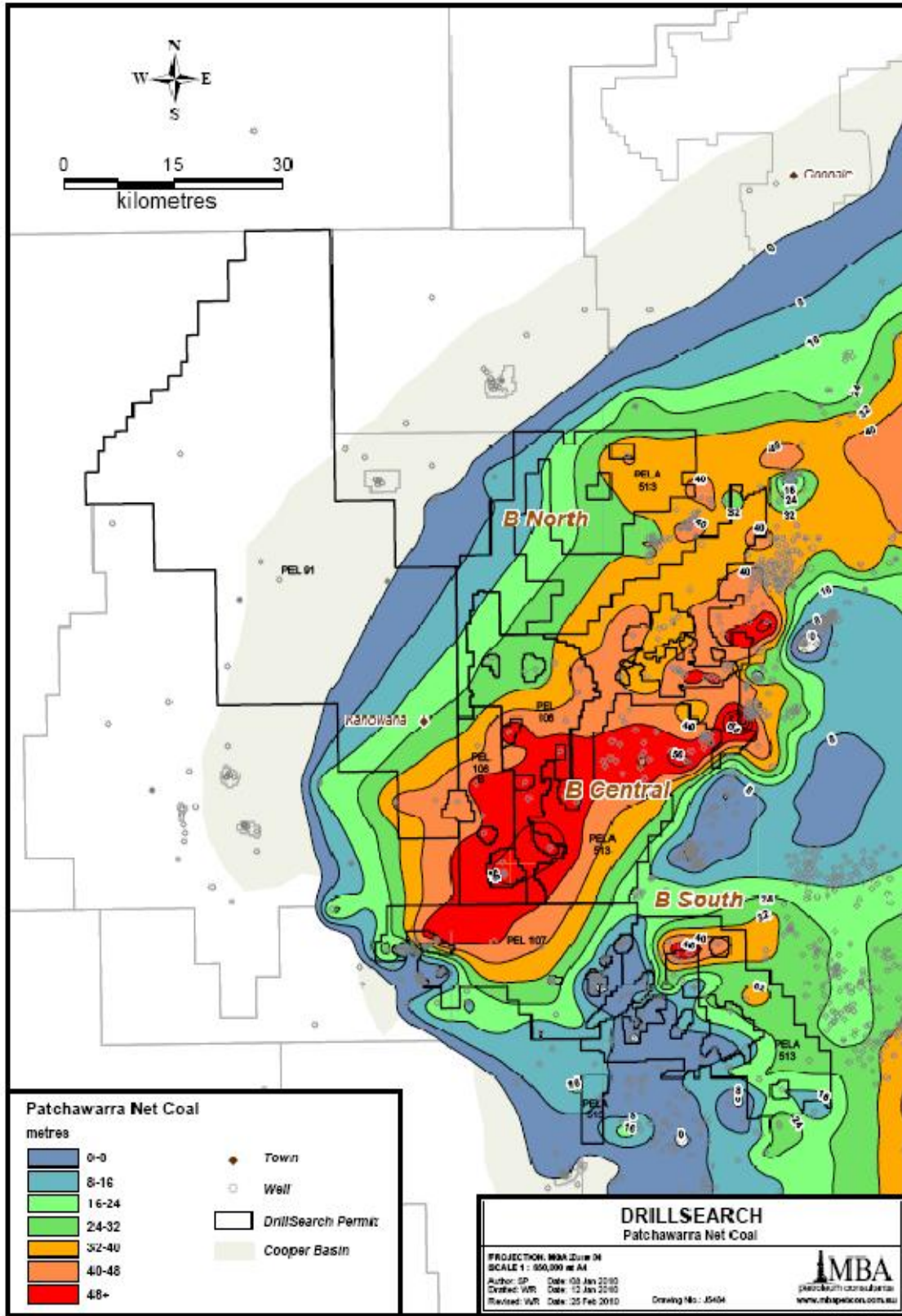
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## Western Cooper Basin Unconventional Gas Project Patchawarra Formation Net Coal Map



**\*Defined terms**

“**Contingent Resources**” is defined as those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are a class of discovered recoverable resources.

“**Conventional Gas**” is a natural gas occurring in a normal porous and permeable reservoir rock, either in the gaseous phase or dissolved in crude oil, and which technically can be produced by normal production practices.

“**Nonconventional Gas**” is a natural gas found in unusual underground situations such as very impermeable reservoirs, hydrates, and coal deposits.

“**Petroleum-in-Place**” is the total quantity of petroleum that is estimated to exist originally in naturally occurring reservoirs. Oil-in-place, gas-in-place, bitumen-in-place, are defined in the same manner.

“**Prospective Resources**” is defined as those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.

“**Reserves**” are those quantities of hydrocarbons which are anticipated to be commercially recovered from known accumulations from a given date forward.

“**Unconventional Resources**” are hydrocarbon from unconventional and more difficult to produce resources such as (hydrocarbon): shale gas, shale oil, heavy and viscous oil, hydrates, tight gas, etc.

**Competent Person Statement**

Information on the Prospective Resources in this release is based on an independent evaluation conducted by Mr. Doug Barrenger of MBA Petroleum Consultants. Mr. Barrenger has given his consent as of the date of this release to the inclusion of this statement and the information in the form and the context in which they appear in this release.

**About MBA Petroleum Consultants** – MBA Petroleum Consultants (MBA) is an independent international energy advisory group of over 15-years’ standing. A substantial part of MBA’s work involves the technical evaluation of petroleum properties and the provision of independent valuation of assets for inclusion in company or stock exchange statutory documentation.

**About Drillsearch Energy Limited (ASX: DLS)**, which listed on ASX in 1987, explores and develops conventional oil and gas projects. Drillsearch has a strategic spread of petroleum exploration and production acreage in Australia’s most prolific onshore oil and gas province, the Cooper/ Eromanga Basins in South Australia and Queensland. The company’s focus is on ‘brownfields’ exploration where geological risk is reduced and there is access to existing infrastructure, ensuring that any discoveries can be brought into production. The company also has offshore exploration interests in the Gippsland Basins as well as interests in PNG and Canada.