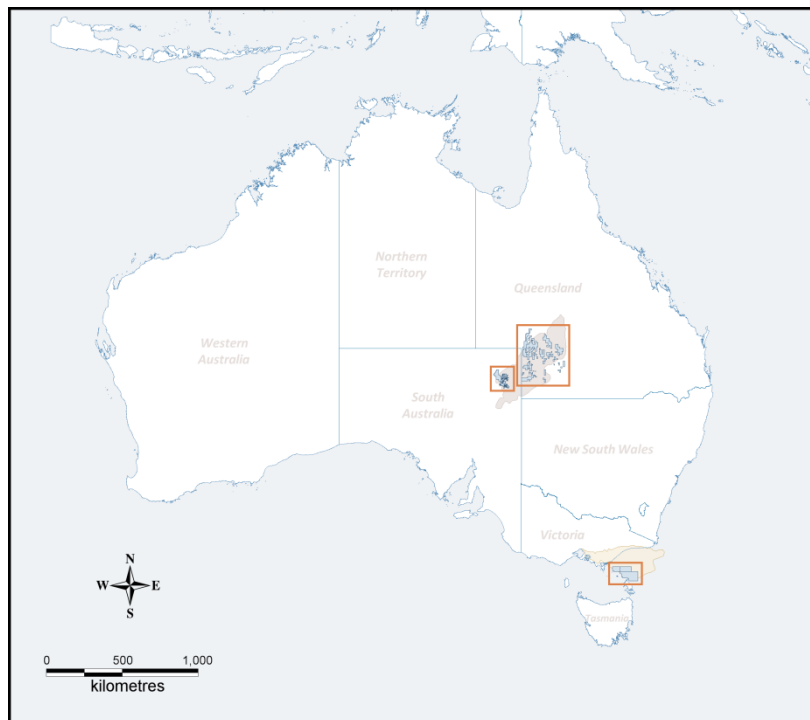


MBA Petroleum Consultants  
ACN: 85 139 445 319  
27 Douglas Street  
PO Box 2098  
MILTON QLD 4064  
Australia



# Partial Valuation of Drillsearch Limited Exploration Portfolio



**Prepared for: BDO Corporate Finance (QLD) Ltd**

**September 2010**

Document No.: R0100  
(Revision 1)

MBA Petroleum Consultants Pty Ltd  
ACN: 139 445 319  
27 Douglas Street  
PO Box 2098  
MILTON QLD 4064  
Australia  
Ph: +61 7 35054500  
Fax: +61 7 3505 4599  
Web: www.mbapetcon.com.au



15 October 2010

BDO Corporate Finance (QLD) Ltd  
Level 18  
300 Queen Street  
Brisbane, Qld, 4000  
Australia

ATTN: Steven Sorbello

Dear Steven,

**RE: Partial Valuation of Drillsearch Energy Limited's Exploration Hydrocarbon Exploration Portfolio (30 September 2010)**

## **1 INTRODUCTION**

In September 2010, BDO Corporate Finance (QLD) Limited (BDO) requested that MBA Petroleum Consultants Pty Ltd (MBA) prepare an Independent Expert's Report (IER) to assist in providing a valuation of the Drillsearch Energy Limited (DLS) hydrocarbon assets. The valuation has been split into three parts: MBA has valued DLS's exploration assets only; these being the acreage and its undiscovered prospectivity in Queensland and Victoria/Tasmania and unconventional resources in South Australia. The acreage lies mostly in the onshore Cooper/Eromanga Basin in Queensland and South Australia as well as three permits in the Gippsland Basin, two in Victorian waters and one in Tasmanian waters. DLS is a listed company on the Australian Stock Exchange (ASX).

This report provides a part valuation of the DLS oil and gas (hydrocarbon) exploration assets only, as listed in Table 1 (Figures 1 to 4).

## **2 SUMMARY**

DLS's Exploration Assets are listed in Table 1 and described below. MBA's fair and reasonable valuation of DLS's exploration acreage in Queensland and Victoria/Tasmania as well as unconventional exploration potential in South Australia is between **A\$10.9million** and **A\$31.4million** with the middle value being **A\$21.2million** as determined as at 1 September 2010. The valuation does not include any other assets or liabilities that DLS may or may not have. Valuation methodologies are outlined in Section 9.0.

**Table 1: DLS Estimated Exploration Acreage Valuation**

Permit	Basin	DLS Interest or Earning Interest (%)	Permit Surface Area (Km <sup>2</sup> )	Valuation Method	DLS Exploration Value (A\$mm)**	
					Low	High
<b>Queensland</b>						
ATP 539P	Cooper/Eromanga	50	2484	Farmin	0.521	1.303
ATP 549P (Cypress)	Cooper/Eromanga	40	539	Farmin	0.417	1.042
ATP 549P (West)	Cooper/Eromanga	25	1002	Farmin	0.260	0.651
ATPA 783P	Cooper/Eromanga	100	1621	Farmin	1.042	2.605
ATPA 917P*	Cooper/Eromanga	100	2171	Farmin	0.180	0.450
ATPA 920P*	Cooper/Eromanga	100	2847	Farmin	0.180	0.450
ATPA 924P*	Cooper/Eromanga	100	2305	EMV	1.272	3.179
ATPA 927P*	Cooper/Eromanga	100	1718	Farmin	0.180	0.450
ATPA 932P*	Cooper/Eromanga	100	1543	Farmin	0.180	0.450
AT PA 940P*	Cooper/Eromanga	100	2546	Farmin	2.778	6.944
ATPA 956P*	Cooper/Eromanga	100	754	Farmin	0.180	0.450
ATPA 959P*	Cooper/Eromanga	100	735	Farmin	0.180	0.450
<i>Subtotal Queensland Conventional</i>					<i>7.370</i>	<i>18.425</i>
<b>South Australia (Unconventional Hydrocarbon Potential Only)</b>						
PEL 91	Cooper/Eromanga	60	1972	Farmin	0.430	1.704
PEL 106A	Cooper/Eromanga	100	312	Farmin	0.339	1.344
PEL 106B***	Cooper/Eromanga	50	166	Farmin	0.101	0.400
PEL 107	Cooper/Eromanga	60	407	Farmin	0.266	1.055
PELA 513	Cooper/Eromanga	100	1498	Farmin	1.634	6.472
<i>Subtotal South Australia Unconventional</i>					<i>2.771</i>	<i>10.975</i>
<b>Victoria/Tasmania</b>						
VIC/P 63	Gippsland	100	1316	DLS Est. Budget	0.200	0.500
VIC/P 64	Gippsland	100	2039	DLS Est. Budget	0.400	1.000
T/46P	Gippsland	100	4942	DLS Est. Budget	0.200	0.500
<i>Subtotal Victoria/Tasmania</i>					<i>0.800</i>	<i>2.000</i>
<b>TOTAL</b>					<b>10.941</b>	<b>31.399</b>

\*DLS and Circumpacific Corporation (CER) both applied for the eight (8) 900 series blocks, all of which are still under application.

\*\* \$Amm = millions of Australian dollars.

\*\*\* 106B includes PRL 25 and PRLA 26.

DLS and CER entered into a Joint Evaluation Agreement (JEA) under which all of the permits were agreed to be jointly (50:50) owned by DLS and CER with DLS as the operator. These permits are ATP 917, 924, 927, 932, 940, 956, and 959 (900 Series).

At the time of writing, DLS holds 79.37% of CER, a Canadian TSX-listed consolidated subsidiary of DLS. On 26<sup>th</sup> August 2010, DLS announced a sale of its interest in CER to Western Petroleum Commodities Inc. ("WPC"), a wholly-owned subsidiary of CER. Following the completion of the arrangement, DLS has also agreed to purchase CER's joint venture interest in eight exploration tenements (900 series) in South West Queensland as described below.

On 27 August 2010 DLS announced entry into an Acquisition Agreement whereby DLS will acquire CER's 50% interest in the 900 series blocks for an aggregate consideration of CAD\$1.8 mm (A\$1.85 mm), which is due to settle later in the year.

Where DLS is discussed and in the text and valued it includes CER's interests in the 900 series permits.

The valuation in this report has relied mainly on an analysis of farmin deals and interest sales in surrounding permits including the sale of CER's 50% interest in the 900 series to DLS.

Usually, MBA restricts its valuation range to no more than 2.5 times low to high. However, the unconventional resources Shale Gas and coal seam gas (CSG) are a relatively new play type in Australia with a short history of rapid growth in value. This will not necessarily be repeated in the Cooper Basin, where conditions are different to current successful CSG plays. Therefore, the valuation of these assets, based on farmin deals, has a wide range of potential outcomes. The total DLS portfolio in this valuation has a range of 2.9 times low to high.

For permits that have not yet been granted, DLS has provided assurance that the native title process that is a necessary part of the acquiring of the permits is in progress to both the company's and the respective governing body's satisfaction in SA and QLD and that all permits are expected to be granted within 6 to 12 months.

**Fair Market Value:** Valmin, 2005, part of D43 and Section 11.0, (Definition 1). A number of valuation methods were investigated. MBA prefers to use farmin deals and asset sales to gauge value in exploration permits and departs from this method only on occasions where it believes that a better value can be determined by another method, or in the absence of relevant and recent farmings and sales.

### 3 COOPER/EROMANGA BASIN PETROLEUM SYSTEMS OVERVIEW

The Cooper Basin and overlying Eromanga Basin are large intracratonic sedimentary basins hosting numerous gas and oil fields. Petroleum exploration in south-western Queensland and north-eastern South Australia has focussed on the search for oil from the Jurassic-Cretaceous Eromanga Basin and gas from the Permian Cooper Basin.

Rich source rocks within the Permian sequence have sourced the majority of oil and gas fields within the basins, with some contribution from the Jurassic coals and shales. To date there have been numerous gas fields and a few small oil fields discovered in the Cooper Basin, whereas the Eromanga Basin sequence hosts numerous small oil fields and a few small gas fields.

Attention is now being focussed on coal seam gas (CSG), tight sandstone gas and shale gas and this has added a new dimension to exploration potential in the Basin. Early exploration strategies have focussed on thick Permian coal seams within the Patchawarra and Toolachee formations for coal seam gas, the Roseneath to Murteree Shale sequence as shale gas targets and the early Permian Patchawarra and Tirrawarra Formations for tight gas exploration.

Within the Nappamerri Trough, high maturity levels and thick wide spread shales of the Murteree and Roseneath offer targets for shale gas exploration. Currently neither of these unconventional targets have been allocated reserves within the Cooper Basin.

The target for Cooper Basin exploration is predominantly gas, wet-gas and oil within the Toolachee and Patchawarra Formations. These sequences consist of regionally tight sandstone reservoirs stratigraphically alongside mature organic-rich coal seams. The trend is that the more marginal areas tend to contain more liquids when compared to the central portion of the basin.

Within the Eromanga, the Triassic Nappamerri Group is a tight and predominantly shale prone sequence acting as a seal in the central basin, however there is evidence to suggest that oil may have migrated vertically from Permian source rocks into the Paning, Wimma and Tinchoo sandstone members.

The basal Jurassic Poolowanna Formation is a proven play which is often targeted, particularly where it is not deeply buried. The Hutton sandstone is an excellent reservoir fining up into the sealing Birkhead Formation, however few oil columns are more than 12 metres (40 feet), unless situated in areas where there has been a significant oil charge that has filled stacked oil pools. The lower and middle Birkhead Formation can also be oil bearing where the reservoir is in contact with the underlying Hutton Sandstone and is top sealed by the upper Birkhead Formation.

The late Jurassic to Early Cretaceous Westbourne and Mooga Formation members contain oil accumulations throughout the region. The quality of the reservoirs can be variable both laterally and vertically. The Namur and Murta Member accumulations are typically found along the southern and eastern margins of the Cooper Basin subcrop edge. These

sandstones can be of very good reservoir quality. However, local calcite cementation can cause dramatically reduced reservoir quality and deliverability.

The Cadna-Owie Formation is the shallowest reservoir targeted in south west Queensland. The quality is generally poor with numerous oil recoveries from DST's throughout the Eromanga Basin.

## 4 DLS QUEENSLAND ACREAGE

### 4.1 ATP 539P Exploration

#### 4.1.1 ATP 539P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 2 was awarded ATP 539P in 2010.

**Table 2: DLS ATP 539P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
Enterprise	50%	50%
Total	100%	100%

- Newport Exploration Ltd holds a 2.5% ORRI.
- CVL and Naughton hold a 2% ORRI
- Tyers Petroleum Pty Ltd holds a 1% ORRI

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATP 539P are presented in Table 3 (four year term). The permit is in good standing.

**Table 3: DLS ATP 539P Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	31/01/2010	Drill 2 Exploration Wells 50km 2D Seismic Data G & G Studies	1,000,000
Two	31/01/2011		200,000
Three	31/01/2012		1,000,000
Four	31/01/2013		200,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

#### 4.1.2 ATP 539P Farm-in Deal

There are no recent farm-in deals in relation to this permit at the current time.

#### 4.1.3 ATP 539P Prospectivity

ATP 539P is located on the western edge of the DLS Queensland acreage. It lies beyond the northern edge of the Permian Cooper Basin. The Inland Oil Field within PL 98, is a Hutton and Namur Sandstone oil field first discovered in 1994 and lies directly to the East of the permit. Several other wells within the Permit have encountered oil shows throughout the Jurassic formations. There remain a number of leads with potential for discovery of oil in the Eromanga Basin sandstones within the permit.

##### 4.1.3.1 Curalle SE Lead

The Curalle SE lead has been identified as an anticlinal structure from limited seismic data downdip of the Curalle-1 and Planet Downs-1 petroleum exploration wells. Currently identified from two northwest-southeast seismic lines 9 kilometres apart, further 2D seismic is required to confirm structural closure and size of the lead. The lead could be analogous to

the Inland Oil Discovery where the field exists in front of the dominant structural high in the area. There is a proven charge through Curalle-1 where there is evidence for structural breaching of the structural trap through faulting.

#### **4.1.3.2 ATP 539P Exploration Acreage Estimated Value**

The valuation is based on farm-in deals in the surrounding acreage (Section 8). A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.521mm** to **A\$1.303mm**.

## 4.2 ATP 549P (Cypress (C)) Exploration

This forms part of ATP 549P along with ATP 549P (West).

### 4.2.1 ATP 549P C Interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 4 was awarded ATP 549P in 2009.

**Table 4: DLS ATP 549P (Cypress) Interests**

Company	Contributing Interest	Revenue Interest
DLS	40.00%	40.00%
Australian Gasfields Ltd (Operator)	55.00%	55.00%
Strike Oil Limited	5.00%	5.00%
Total	100.00%	100.00%

- Newport Exploration Ltd holds a 2.5% ORRI.
- CVL and Naughton hold a 2% ORRI

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATP 549P are presented in Table 5 (four year term). The permit is in good standing.

**Table 5: DLS ATP 549P (Cypress and West) Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	30/04/2010	Well Completion and production testing Seismic Reprocessing and AVO Studies Mapping and Assessment of CSG Potential Drill 1 well	2,100,000
Two	30/04/2011		
Three	30/04/2012		
Four	30/04/2013		

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.2.2 ATP 549P C Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

### 4.2.3 ATP 549P C Prospectivity

ATP 549P (Cypress) is in the central eastern part of the DLS Queensland acreage. The permit has potential in both the Permian Cooper Basin and the overlying Eromanga Basin sedimentary sequences. Several wells have been drilled previously in the permit, with oil fluorescence and gas shows both within the permit and the surrounding area. The Bunya and Thylungra Permian Gas Fields are just North and East (respectively) of the Permit.

Permian coals are present over this permit and potential may exist for Coal Seam Gas plays to be productive in these areas. This potential has not been assessed by DLS at this stage.

#### **4.2.3.1 ATP 549P C Leads**

The ATP 549P C Permit is dominated by a northwest to southeast trending anticlinal feature. Grandis-1 and Coonavalla-1 have been drilled on this trend (Coonavalla-1 to the South of the Permit), however further potential for leads exists given better seismic definition and the discovery of higher quality reservoir sandstones.

#### **4.2.4 ATP 549P C Exploration Acreage Estimated Value**

The valuation is based on farm-in deals in the surrounding acreage (Section 8). A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.417mm** to **A\$1.042mm**.

### 4.3 ATP 549P (West) Exploration

This forms part of ATP 549P along with ATP 549P (Cypress).

#### 4.3.1 ATP 549P W Interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 6 was awarded ATP 549P in 2009.

**Table 6: DLS ATP 549P (West) Interests**

Company	Contributing Interest	Revenue Interest
DLS	25.00%	25.00%
Icon Energy NL (Operator)	33.33%	33.33%
Enterprise Energy NL	41.67%	41.67%
Total	100.00%	100.00%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATP 549P (W) are presented in Table 7 (four year term). The permit is in good standing.

**Table 7: DLS ATP 549P (Cypress and West) Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	30/04/2010	Well Completion and production testing	2,100,000
Two	30/04/2011	Seismic Reprocessing and AVO Studies	
Three	30/04/2012	Mapping and Assessment of CSG Potential	
Four	30/04/2013	Drill 1 well	

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

#### 4.3.2 ATP 549P W Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

#### 4.3.3 ATP 549P W Prospectivity

ATP 549P (West) is on the Western edge of the DLS Queensland acreage to the South of ATP 539P. The Cooper Basin Sequence is present in the south portion of the permit, providing the potential for Permian sourced oil in structures to the north of the Permian edge. Several wells have been drilled in this area and have encountered oil shows however, several of these structural traps are believed to have been breached by Tertiary faulting in the area. Potential may still exist in structures not affected by faulting. Additional seismic coverage, including 3D seismic would aid in identifying further potential of this area.

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays to be productive in these areas. This potential has not been assessed by DLS at this stage.

#### **4.3.3.1 Wyerie SW Lead**

Wyerie-1 recovered oil from a DST over the Hutton Sandstone. The Wyerie SW lead is a southern extension of the Wyerie anticlinal trend and is located north of the Permian subcrop edge. The lead is poorly defined by seismic data and would require additional coverage to define the lead and how it is affected by faulting, as the Wyerie-1 structure is believed to be breached. The lead location is situated along the structural lineament within the interpreted migration pathway. An EMV of \$0.20mm (\$0.08mm DLS share) was calculated for this lead.

#### **4.3.4 ATP 549P W Exploration Acreage Estimated Value**

The valuation is based on farm-in deals in surrounding acreage (Section 8). A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.260mm** to **A\$0.651mm**.

## 4.4 ATPA 783P Exploration

### 4.4.1 ATPA 783P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 8 is under application for ATP 783P, pending Native Title.

**Table 8: DLS ATP 783PA Interests**

Company	Contributing Interest	Revenue Interest
DLS (operator)	100%	100%
Total	100%	100%

The commitments made by DLS to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 783P are presented in Table 9 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 9: DLS ATPA 783P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not Yet Granted	150 deep up holes, 550km reprocessing, Stratigraphic studies.	600,000
Two		60kms of 3D survey, 200kms of new 2D seismic survey	1,800,000
Three		Drill 1 well to 30m below basement	1,300,000
Four		Drill 1 well to 30m below basement	1,300,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.4.2 ATPA 783P Farm-in Deal

Santos QNT P/L is to earn 30% on completion of 3D seismic acquisition, with the option to earn an additional 30% by drilling two wells. The agreement is binding and as of August 2010, Santos is looking to transfer the farm-in agreement to another company.

As part of a farmin agreement, Santos has been managing the Native Title process and Drillsearch is now in the process of taking over management of that process.

### 4.4.3 ATPA 783P Prospectivity

ATP 783P is near the Eastern edge of the DLS Queensland permits and includes part of the Chandos Anticline. Overall, there remain a significant number of leads with potential for discovery of oil in the Permian formations within the permit. Several wells in the area have recovered Triassic and/or Permian oil from DST, including Chandos-1 and Earlstoun-1, both within ATP 783P.

Permian coals are present over this permit and potential may exist for Coal Seam Gas plays to be productive in these areas. This potential has not been assessed by DLS at this stage.

#### 4.4.3.1 Updip Chandos Leads

Leads have been identified on the Chandos anticline in the vicinity of the Chandos-1 location. The leads need further definition to identify structurally crestal locations and are

ideal candidates for 3D seismic coverage to define any potential accumulations which may be suitable as future drilling candidates.

#### **4.4.4 ATPA 783P Exploration Acreage Estimated Value**

The valuation is based on farm-in commitments in surrounding acreage (Section 8). The application permit had previously been farmed out to Santos, though, there is now some uncertainty surrounding that farmout. A fair and reasonable exploration value of the DLS share is assessed to be **A\$1.042mm to A\$2.605mm.**

## 4.5 ATPA 917P Exploration

### 4.5.1 ATPA 917P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 10 is the preferred bidder for application permit ATPA 917P, pending Native Title.

**Table 10: DLS ATPA 917P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 917P are presented in Table 11 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 11: DLS ATPA 917P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$mm)
One	Not yet Granted	1000km Repro, 500km 2D, 100km 3D, Studies	6,500,000
Two		3 wells to 2600m	6,000,000
Three		2 wells to 2600m	4,000,000
Four		Studies	100,000

Before the end of each permit year DLS can terminate the Permit.

### 4.5.2 ATPA 917P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.5.3 ATPA 917P Prospectivity

ATPA 917P is in the northeastern area of the DLS Queensland acreage. Several wells in and around the permit have oil and/or gas shows, and the closest field is the Bunya Gas Field to the south of the permit, which discovered gas within the Toolachee and Patchawarra Formations. The permit is located directly to the east of the Ullenbury Depression. Permian sediments end south of the Ingella-1 well in the central part of the permit, providing the potential for Permian sourced oil accumulations in the north of the permit.

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays in these areas. This potential has not been assessed by DLS at this stage.

#### **4.5.3.1 Ingella Northwest Lead**

Several leads exist on the anticlinal trend between the Ingella and Galway structures. Ingella Northwest is one such lead. The lead is located north of the Permian edge, with the potential to have trapped migrating hydrocarbons from the Permian section. Further seismic coverage is required to define structural closure and identify any faulting which may cause breaching of the structure.

#### **4.5.4 ATPA 917P Exploration Acreage Estimated Value**

The valuation is based on the sale of CER to DLS, and considering the fact that the permit is yet to be granted. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.180mm** to **A\$0.450mm**.

## 4.6 ATPA 920P Exploration

### 4.6.1 ATPA 920P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 12 is the preferred bidder for application permit ATPA 920P, pending Native Title.

**Table 12: DLS ATP 920P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 920P are presented in Table 13 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 13: DLS ATPA 920P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not yet Granted	1000km Repro, 500km 2D, 100km 3D, Studies	6,500,000
Two		1 well to 1600m, two wells to 2700m	6,000,000
Three		2 wells to 2700m	4,000,000
Four		Studies	100,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.6.2 ATPA 920P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.6.3 ATPA 920P Prospectivity

ATPA 920P is located in the northwestern area of the DLS acreage, adjacent to the ATP 548P (Inland Oil Field). Several wells have been drilled in the permit with Jurassic oil shows and oil recovered on DST from Cuddapan within the Cadna-owie Formation. The edge of the Cooper Basin sediments is within the south of the permit between Tanbar-1 and Tanbar North-1. The Permit lies between the Yamma Yamma, Ullenbury Depressions and the Windorah Trough and should be well located to receive charge from migrating hydrocarbons. There remain a significant number of leads within the permit, with the potential for discovery of oil.

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays in these areas. This potential has not been assessed by DLS at this stage.

#### **4.6.3.1 Updip Cuddapan Lead**

Cuddapan-1 recovered oil on DST from the Cadna-owie Formation and Elm-1 gas shows through the top Cadna-owie section. The Cuddapan structure has updip potential, identified as the Cuddapan Updip Lead. Further seismic is required to locate the crestal location and size of the lead, which is located south of the Inland Oil Field.

#### **4.6.4 ATPA 920P Exploration Acreage Estimated Value**

The valuation is based on the sale of CER to DLS, and considering the fact that the permit is yet to be granted. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.180mm to A\$0.450mm.**

## 4.7 ATPA 924P Exploration

### 4.7.1 ATPA 924P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 14 is the preferred bidder for ATPA 924P, and grant is pending Native Title.

**Table 14: DLS ATPA 924P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 924P are presented in Table 15 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months..

**Table 15: DLS ATPA 924P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not Yet Granted	1000km Repro, 500km 2D, 150km 3D, Studies	6,500,000
Two		3 wells to 2600m	6,000,000
Three		2 wells to 2600m	4,000,000
Four		Studies	100,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.7.2 ATPA 924P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.7.3 ATPA 924P Prospectivity

ATPA 924P is located in the central western area of the DLS Queensland acreage. The Permit has several wells with both oil and gas shows in the permit area. The sub-crop edge of the Permian sediments occurs through the permit area, giving the potential for Permian sourced oil north of this edge. The presence of Cook Oil Field, southwest of this permit, also provides evidence for the potential for Permian sourced oil fields within areas where the Permian section is present. There are several leads within this permit, with potential for accumulations of both Jurassic oil and Permian gas in the area.

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays in these areas. This potential has not been assessed by DLS at this stage.

#### 4.7.3.1 Marengo South West Lead (gas)

Marengo South-1 recovered 6 barrels of oily mud from the Adori Sandstone and flowed 15,000 cubic feet per day from the Permian section. Marengo is a Toolachee Formation gas Field. The Marengo South West lead is identified primarily as a Permian target, with Jurassic oil being a secondary target. Additional seismic coverage is required to further define the lead and determine a crestal location. An EMV of \$3.08mm was calculated for this lead.

#### 4.7.3.2 Gilpeppee Updip Lead

Gilpeppee Updip defines a lead updip of Gilpeppee-2, which recovered oil on DST and produced shows throughout much of the Jurassic section. The well had poor reservoir quality throughout this section. Further seismic acquisition is required over the lead to define a crestal location and investigate the impact of faulting near the lead. Permian gas potential may also be present in this structure. An EMV of \$1.94mm was calculated for this lead.

#### 4.7.3.3 Gilpeppee North Lead

The Gilpeppee North lead is a poorly defined structure north of Gilpeppee-2, close to the edge of the Permian sediments. Seismic resolution is poor for this lead and additional is required to define the lead.

#### 4.7.3.4 Tanbar West Lead

The Tanbar West lead is a structural closure which exists at the Jurassic Birkhead Formation level. Hydrocarbons are present throughout the region and there have been oil shows and some recoveries on DST. The lead is outside the Permian zero edge with prospectivity at the Birkhead Formation/Hutton Sandstone interval. Charge to the area remains an unknown factor. An EMV of \$1.272mm was calculated for this lead. Parameters applied in determining the EMV calculation included those in Table 16 for this lead (and similarly for other leads).

**Table 16: NPV and EMV calculation parameters**

Drilling Schedule		Economic
Year	Well	Assumptions
1	1	13% Chance of Success (COS) (Tanbar W) NPV Discounted at 12% State Royalties at 10% After Tax Exchange Rate at US0.85 : A\$1.00 Period of 20 Years Oil Price of US\$75/bbl escalated by 2.5% p.a. CPI of 2.5% Each Well = Average Reserves over 20 year Decline reflects average production profile.
2	2	
2	3	
2	4	
3	5	
3	6	
3	7	
4	8	
4	9	
3	10	

#### 4.7.3.5 Lead A

Lead A is a poorly defined structural closure at the Birkhead Formation level. Wells to the north have recorded oil shows and recoveries, leading to the Inland Oil Field further north.

This lead is thus expected to be along a migration pathway, reducing the charge risk. Further seismic coverage is required to mature the lead to a drillable status.

#### **4.7.4 ATPA 924P Exploration Acreage Estimated Value**

ATPA 924P contains at least five (5) oil and gas leads, several of which have positive expected monetary values. These are the result of recent desktop studies including new seismic interpretation which has had a significant effect on the value of the permit. The valuation is based around the calculated EMV's of these leads as the permit is considered to have good, identified prospectivity. A fair and reasonable exploration value of the DLS share is assessed to be **A\$1.272mm** to **A\$3.179mm**.

## 4.8 ATPA 927P Exploration

### 4.8.1 ATPA 927P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 17 is the preferred bidder for application permit ATPA 927P, pending Native Title.

**Table 17: DLS ATPA 927P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 927P are presented in Table 18 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 18: DLS ATPA 927P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not Yet granted	1000km Repro, 500km 2D, 100km 3D, Studies	5,800,000
Two		4 wells to 2200m	8,000,000
Three		3 wells to 2200m	6,000,000
Four		Studies	100,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.8.2 ATPA 927P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.8.3 ATPA 927P Prospectivity

ATPA 927P is in the central part of the DLS acreage, east of the Windorah Trough. No wells have been drilled within the permit however several Permian gas fields have been discovered in the area south, west and east of the permit. The Toby Oil Field is also between the southern and northern areas of the permit. Although the leads in the area are primarily Permian gas leads, oil potential also needs to be identified and addressed. Several leads have been identified within this permit area.

Permian coals are present over this permit and potential may exist for Coal Seam Gas plays in these areas. This potential has not been assessed by DLS at this stage.

#### 4.8.3.1 Boldrewood West Lead (gas)

The Boldrewood West Lead is located between the Boldrewood and Wareena structures. Although Boldrewood-1 did not encounter significant hydrocarbons, a DST over the basal

Toolachee Formation in Wareena-1 flowed gas to surface at 11 million cubic feet per day. The primary target for the lead would be the Permian section for gas, with Jurassic oil targets considered a secondary objective. The lead lacks structural control; further seismic coverage is required to further define the size and extent of the lead. An EMV of \$3.09mm was calculated for this lead.

#### **4.8.3.2 Alkina West Leads**

The Alkina West Leads are on the structural high between the Cooper and Ullenbury synclines and down-dip of the Cocos/Solitaire/Alkina trend. Alkina-1 recovered gas cut mud on DST over tight sandstone formations; however the middle Toolachee Formation sandstones displayed significant mud-gas peaks while drilled but were not been tested by DST. Cocos and Solitaire are both Permian gas fields further to the south. Seismic coverage is poor in the area and further data is required to adequately define these leads.

#### **4.8.4 ATPA 927P Exploration Acreage Estimated Value**

The valuation is based on the sale of CER to DLS, and considering the fact that the permit is yet to be granted. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.180mm to A\$0.450mm.**

## 4.9 ATPA 932P Exploration

### 4.9.1 ATPA 932P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 19 is the preferred bidder for application permit ATPA 932P, pending Native Title.

**Table 19: DLS ATPA 932P**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 932P are presented in Table 20 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 20: DLS ATPA 932P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not yet Granted	1000km Repro, 500km 2D, Studies	4,400,000
Two		150km 2D seismic, 150km 3D seismic, 1 well to 2600m	3,200,000
Three		1 well to 2600m	2,000,000
Four		2 wells to 1600m	4,000,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.9.2 ATPA 932P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.9.3 ATPA 932P Prospectivity

The permit is in the south western part of the DLS acreage with gas fields located to the south and east of the permit. The potential for further leads to be identified and assessed within the permit is high.

Permian coals are present over this permit and potential may exist for Coal Seam Gas plays in these areas. This potential has not been assessed by DLS at this stage.

### 4.9.4 ATPA 932P Exploration Acreage Estimated Value

The valuation is based on the sale of CER to DLS, and considering the fact that the permit is yet to be granted. A fair and reasonable exploration value of the DLS share is assessed to be from **A\$0.180mm to A\$0.450mm**.

## 4.10 ATPA 940P Exploration

### 4.10.1 ATPA 940P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 21 is the preferred bidder for application permit ATPA 940P, pending Native Title.

**Table 21: DLS ATPA 940P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 940P are presented in Table 22 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 22: DLS ATPA 940P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not yet Granted	1000km Repro, 500km 2D, 512km 3D, Studies	11,568,000
Two		4 wells to 2600m	8,000,000
Three		3 wells to 2600m	6,000,000
Four		3 wells to 2600m	6,000,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.10.2 ATPA 940P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.10.3 ATPA 940P Prospectivity

ATPA 940P is the southern permit in the DLS acreage and consists of both conventional oil and unconventional gas potential. The majority of the eastern section of ATPA 940P is considered to have conventional oil prospectivity, with Murta Member oil fields along the Jackson-Naccowlah-Challum Trend and throughout this region. Several leads have been identified within this part of the Permit.

The majority of the permit includes both Permian coals, which may be suitable for CSG production, and the potential for thermally mature shale gas exploitation. It is possible to consider nearly the entire area of the permit as an unconventional gas lead. These potential plays have not been fully assessed by DLS at this stage. Beach Energy Ltd is currently conducting a two-well shale gas program in South Australia within the Nappamerri Trough to the west of ATPA 940P. Shale gas is an unproven play in Australia, though it has been proven in North America and is currently receiving a good deal of attention and significant

drilling programs will be undertaken by the Beach-led JV in the coming months in the permit to the west.

#### **4.10.3.1 Lead C**

Lead C is a poorly defined structure south of the Callisto-1 well and east of the Wilson Oil Field. A structural high is present on the high side of a north-south trending fault, with some fault independent closure indicated. The lead is defined by one seismic line; additional seismic data would be required to mature this lead.

#### **4.10.4 ATPA 940P Exploration Acreage Estimated Value**

The valuation is based on unconventional farm-in deals in surrounding acreage rather than the CER sale to DLS as the unconventional plays are currently commanding a premium. The main farms considered are Adelaide Energy and Beach, and Icon and Beach as described in Section 8. A fair and reasonable exploration value of the DLS share is assessed to be **A\$2.778mm to A\$6.944mm.**

## 4.11 ATPA 956P Exploration

### 4.11.1 ATPA 956P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 23 is the preferred bidder for application permit ATPA 956P, pending Native Title.

**Table 23: DLS ATPA 956P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 956P are presented in Table 24 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 24: DLS ATPA 956P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not Yet Granted	1000km Repro, 500km 2D, 400km 3D, Studies	10,000,000
Two		3 wells to 2200m	6,000,000
Three		2 wells to 2200m	4,000,000
Four		1 well to 2200m	2,000,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.11.2 ATPA 956P Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.11.3 ATPA 956P Prospectivity

ATPA 956P is near the eastern part of the DLS acreage. Leads in the area address both Permian gas and Jurassic oil potential, with the Bodalla, Kenmore and Black Stump oil fields in the area. Several leads are present in the area.

Permian coals are present over this permit and potential may exist for Coal Seam Gas plays in these areas. This potential has not been assessed by DLS at this stage.

#### 4.11.3.1 Gum Hole Updip Lead

Gum Hole Updip Lead has been identified along the anticline between the Gum Hole-1 well, which encountered gas on DST, and the Warragon-1 oil discovery. Reservoir rock properties are considered poor. There is limited seismic coverage to demonstrate structural control; additional data would need to be acquired to mature this lead.

#### **4.11.4 ATPA 956P Exploration Acreage Estimated Value**

The valuation is based on the sale of CER to DLS, and considering the fact that the permit is yet to be granted. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.180mm** to **A\$0.450mm**.

## 4.12 ATPA 959P Exploration

### 4.12.1 ATPA 959P interests

Refer to Figure 2. A joint venture (JV) comprised of the companies listed in Table 25 is the preferred bidder for application permit ATPA 959P, pending Native Title.

**Table 25: DLS ATPA 959P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	50%	50%
CER	50%	50%
Total	100%	100%

The commitments made by the JV to the governing authority Department of Employment, Education and Innovation (DEEDI) for ATPA 959P are presented in Table 26 (four year term). The permit is not yet granted. This is expected to occur within the next 6 months.

**Table 26: DLS ATPA 959P Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not Granted Yet	1000km Repro, 500km 2D, 400km 3D, Studies	10,000,000
Two		7 wells to 1600m	14,000,000
Three		2 wells to 1600m	4,000,000
Four		1 well to 1600m	2,000,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 4.12.2 ATPA 959P Farm-in Deal

There are no recent farm-in deals in relation to this permit at the current time.

DLS is acquiring CER and its 50% interest in the 900 series permits for a total consideration of CAN\$1.8mm (A\$1.85mm). This would notionally equate to A\$230,000 per 900 series permit.

### 4.12.3 ATPA 959P Prospectivity

ATPA 959P is in the southeastern part of the DLS acreage, located updip from the oil bearing trends from Tintaburra through to Aros and Endeavour to Talgeberry. These fields are located southeast of the Permian edge and thus in good locations to receive migrating hydrocarbons. Some of the area is poorly defined by seismic coverage and thus further leads may be present if this is improved.

#### 4.12.3.1 Thargomindah Lead

The Thargomindah Lead is located southwest of GSQ Thargomindah-1/1A, which cored the upper 5 metres of the Hooray Sandstone. Core analysis measured porosities of up to 25% (He) and oil saturations of 2.4%. Moderate to strong fluorescence was recorded from the top 20 metres of the formation. A DST produced water only on test. The lead is

approximately 10 kilometres southeast of the Aros-1 well which recovered oil from the Cadna-owie Formation on DST. Additional seismic is required to define the lead and other potential leads in the area.

#### **4.12.4 ATPA 959P Exploration Acreage Estimated Value**

The valuation is based on the sale of CER to DLS, and considering the fact that the permit is yet to be granted. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.180mm** to **A\$0.450mm**.

## 5 DLS SOUTH AUSTRALIAN ACREAGE

MBA has been requested to provide a valuation of only the unconventional CSG and shale gas resources in the South Australian permits. Another independent expert is valuing the conventional discovered oil and gas prospects.

### 5.1 PEL 91 Exploration

#### 5.1.1 PEL 91 interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 27 was awarded PEL 91 in 2008.

**Table 27: DLS PEL 91 Interests**

Company	Contributing Interest	Revenue Interest
DLS	60%	60%
Beach (Operator)	40%	40%
Total	100%	100%

- Edward Landers Dieri People/Ngayanna Dieri Karna Aboriginal Corporation holds a 1% ORRI.
- Newport Exploration Ltd holds a 2.5% ORRI.
- Gas Exploration Pty Ltd holds a 0.5% ORRI.

The commitments made by the JV to the Department of Primary Industries and Resources of South Australia (PIRSA) for PEL 91 are presented in Table 28 (five year term). The permit is in good standing.

**Table 28: DLS PEL 91 Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	04/06/2009*	G,G&A Studies**	75,000
Two	04/12/2010	100km 2D seismic & G,G&A Studies	550,000
Three	04/12/2011	G,G&A Studies	75,000
Four	04/12/2012	G,G&A Studies	75,000
Five	04/12/2013	1 Well & G,G&A Studies	1,600,000

\*6 month suspension/extension granted May 2010, new expiry date 04/12/13  
Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

\*\* Permit commitments are fulfilled for the full term.

#### 5.1.2 PEL 91 Farm-in Deal

There are no recent farm-in deals in relation to this permit at the current time.

#### 5.1.3 PEL 91 Prospectivity (CSG only reviewed)

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays to be productive. Patchawarra Formation coal thicknesses in excess of 48 metres are expected to be present in the south of the permit.

MBA is not valuing the DLS interest in the entire permit, only the CSG potential. DLS has made a considerable effort to characterize the coal seam gas play through desk top studies and has identified a number of prospects. A very large gas volume possibly exists. Future work plans include the taking of some core through coals when drilling conventional gas prospects in the 2010 drilling program and the drilling of the core holes to determine gas content and composition. Pilot wells are envisaged to determine the gas productivity. This expenditure on unconventional plays will amount to millions of dollars.

#### **5.1.4 PEL 91 Unconventional Exploration Acreage Estimated Value**

The valuation is based on the same farm parameters that have been applied to ATPA 940P. Because these plays were extensive, MBA has pro-rated the value on the basis of surface area. ATPA 940P covers an area of 2846 km<sup>2</sup> and includes unconventional plays in all of that area. One third of PEL 91 includes unconventional plays and so one third of 1972 km<sup>2</sup> (approximately 650 km<sup>2</sup>) has been used to determine the permit value. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.430mm** to **A\$1.704mm**.

## 5.2 PEL 106 Exploration (106A)

Part of PEL 106 was farmed out to Beach Energy Ltd, 106B 'the Beach farm-out block'. The remaining area is called 106A. The commitments to government pertain to entire area of PEL 106 (PEL 106A together with PEL 106B).

### 5.2.1 PEL 106A interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 29 was awarded PEL 106A in 2003. Renewal was granted in 2008.

**Table 29: DLS PEL 106A Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	100%	100%
Total	100%	100%

- Edward Landers Dieri People/Ngayanna Dieri Karna Aboriginal Corporation holds a 1% ORRI.
- Newport Exploration Ltd holds a 2.5% ORRI.
- Gas Exploration Pty Ltd holds a 0.5% ORRI.

The commitments made by the JV to the Department of Primary Industries and Resources of South Australia (PIRSA) for PEL 106 are presented in Table 30 and 32 (five year term). The permit is in good standing.

**Table 30: DLS PEL 106 (106A and 106B) Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	08/10/2009	G,G&A Studies**	75,000
Two	08/10/2010*	G,G&A Studies	75,000
Three	08/10/2011	G,G&A Studies	75,000
Four	08/10/2012	G,G&A Studies	75,000
Five	08/10/2013	1 Well & G,G&A Studies	2,700,000

\*Six month suspension/extension of Licence term and Year applied for Before the end of each permit year DLS can terminate the Permit.

\*\* Permit commitments are fulfilled for the full term.

### 5.2.2 PEL 106A Farm-in Deal

There are no farm-in deals in relation to the exploration portion of this permit at the current time.

### 5.2.3 PEL 106A Prospectivity (CSG only reviewed)

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays to be productive. Patchawarra Formation coal thicknesses in excess of 48 metres are expected to be present in the south of the permit.

MBA is not valuing the DLS interest in the entire permit, only the CSG potential. DLS has made a considerable effort to characterize the coal seam gas play through desk top studies and has identified a number of prospects. A very large gas volume possibly exists. Future

work plans include the taking of some core through coals when drilling conventional gas prospects in the 2010 drilling program and the drilling of the core holes to determine gas content and composition. Pilot wells are envisaged to determine the gas productivity. This expenditure on unconventional plays will amount to millions of dollars.

#### **5.2.3.1 Nutmeg CSG Prospect**

The Nutmeg Prospect is a Permian CSG play situated in the western edge of the Patchawarra Trough. Multiple coal seams totalling 50 metres have been identified from nearby wells. Mudlog gas peaks were high exceeding 1000 units indicating good gas content potential.

#### **5.2.3.2 Corvus CSG Prospect**

The Corvus Prospect is a Permian CSG play situated in the western edge of the Patchawarra Trough. Several seams are expected to range from 5 to 10 metres of net thickness. Net coal totals over the Permian interval total over 70 metres in some nearby petroleum wells. Mudlog gas peaks were high exceeding 1000 units indicating good gas content potential.

#### **5.2.3.3 Smegsy CSG Prospect**

The Smegsy Prospect is a Permian CSG play situated in the western edge of the Patchawarra Trough. Total net coal is expected to be over 60 metres with several seams expected to exceed 5 metres of net thickness. Mudlog gas peaks were good exceeding 500 units indicating good gas content potential.

#### **5.2.4 PEL 106A Unconventional Exploration Acreage Estimated Value**

The valuation is based on the same farmin parameters that have been applied to ATPA 940P. Because these plays were extensive, MBA has pro-rated the value on the basis of surface area. ATPA 940P covers an area of 2846 km<sup>2</sup> and includes unconventional plays in all of that area. All of PEL 106A includes unconventional plays and so the permit area of 312 km<sup>2</sup> has been used to determine the permit value. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.339mm to A\$1.344mm**.

### 5.3 PEL 106 Exploration (PEL 106B)

Part of PEL 106 was farmed out to Beach Energy Ltd, 106B 'the Beach farm-out block'. The remaining area is called 106A. The commitments to government pertain to entire area of PEL 106 (PEL 106A together with PEL 106B). **PRL 25** (Middleton) permit and **PRLA 26** (Udacha) permit are included within the 106B area.

#### 5.3.1 PEL 106B interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 31 was awarded PEL 106B in 2003. Renewal was granted in 2008. The block is commonly known as the 'Beach Farm-in Block'.

**Table 31: DLS PEL 106B Interests**

Company	Contributing Interest	Revenue Interest
DLS	50%	50%
Beach (Operator)	50%	50%
Total	100%	100%

- Edward Landers Dieri People/Ngayanna Dieri Karna Aboriginal Corporation holds a 1% ORRI.
- Newport Exploration Ltd holds a 2.5% ORRI.
- Gas Exploration Pty Ltd holds a 0.5% ORRI.

PEL 106B includes **PRL 25** permit and **PRLA 26** permit within the 106B area.

The commitments made by the JV to the Department of Primary Industries and Resources of South Australia (PIRSA) for PEL 106 are presented in Table 30 and 32 (five year term). The permit is in good standing.

**Table 32: DLS PEL 106 (106A and 106B) Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	08/10/2009	G,G&A Studies**	75,000
Two	08/10/2010*	G,G&A Studies	75,000
Three	08/10/2011	G,G&A Studies	75,000
Four	08/10/2012	G,G&A Studies	75,000
Five	08/10/2013	1 Well & G,G&A Studies	2,700,000

\*Six month suspension/extension of Licence term and Year applied for  
Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

\*\* Permit commitments are fulfilled for the full term.

#### 5.3.2 PEL 106B Farm-in Deal

There are no current farm-in deals in relation to the exploration portion of this permit at the current time.

### **5.3.3 PEL 106B Prospectivity (CSG only reviewed)**

Permian coals are present in areas in the south of the permit. Potential may exist for Coal Seam Gas plays to be productive. Patchawarra Formation coal thicknesses in excess of 48 metres are expected to be present in the south of the permit.

MBA is not valuing the DLS interest in the entire permit, only the CSG potential. DLS has made a considerable effort to characterize the coal seam gas play through desk top studies and has identified a number of prospects. A very large gas volume possibly exists. Future work plans include the taking of some core through coals when drilling conventional gas prospects in the 2010 drilling program and the drilling of the core holes to determine gas content and composition. Pilot wells are envisaged to determine the gas productivity. This expenditure on unconventional plays will amount to millions of dollars.

#### **5.3.3.1 Brownlow CSG Prospect**

The Brownlow Prospect is a Permian CSG play situated in the western edge of the Patchawarra Trough on a gently plunging anticline. Multiple coal seams totalling over 60 metres have been identified in the Brownlow and nearby wells. Mudlog gas peaks were high exceeding 1000 units.

### **5.3.4 PEL 106B Unconventional Exploration Acreage Estimated Value**

The valuation is based on the same farm parameters that have been applied to ATPA 940P. Because these plays were extensive, MBA has pro-rated the value on the basis of surface area. ATPA 940P covers an area of 2846 km<sup>2</sup> and includes unconventional plays in all of that area. Nearly all of PEL 106B includes unconventional plays and so the permit area of 166 km<sup>2</sup> has been used to determine the permit value. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.101mm** to **A\$0.400mm**.

## 5.4 PEL 107 Exploration

### 5.4.1 PEL 107 interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 33 was awarded PEL 107 in 2003. The permit was renewed in 2008.

**Table 33: DLS PEL 107 Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	60%	60%
Beach	40%	40%
Total	100%	100%

PPL 212 (Kiana) lies within PEL107, DLS owns 60% of this PPL.

- Edward Landers Dieri People/Ngayanna Dieri Karna Aboriginal Corporation holds a 1% ORRI.
- Newport Exploration Ltd holds a 2.5% ORRI.
- Gas Exploration Pty Ltd holds a 0.5% ORRI.

The commitments made by the JV to the Department of Primary Industries and Resources of South Australia (PIRSA) for PEL 107 are presented in Table 34 (five year term). The permit is in good standing.

**Table 34: DLS PEL 107 Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
One	01/12/2009	G,G&A Studies	75,000
Two	01/06/2011*	G,G&A Studies	75,000
Three	01/06/2012	G,G&A Studies	75,000
Four	01/06/2013	1 Well & G,G&A Studies	1,600,000
Five	01/06/2014	G,G&A Studies	75,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

\*6 month suspension/extension granted, new expiry date 1/06/2014

Are all commitments met?

### 5.4.2 PEL 107 Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

### 5.4.3 PEL 107 Prospectivity (CSG only Reviewed)

Permian coals are present over the majority of the permit and potential may exist for Coal Seam Gas plays to be productive. Patchawarra Formation coal thicknesses in excess of 48m are expected to be present in parts of the permit.

MBA is not valuing the DLS interest in the entire permit, only the CSG potential. At this time DLS will only carry out minor projects in an attempt to reduce risk in the play. This includes the taking of some core through coals when drilling conventional gas prospects in the 2010 drilling program. We have considered to be a minimum of approximately A\$200,000 per well.

#### **5.4.3.1 Goolwa CSG Prospect**

The Goolwa Prospect is a Patchawarra Formation CSG play situated along the far south-western edge of the Patchawarra Trough. Nearby wells contain numerous individual seams of greater than 5 metres thickness. Gas contents are expected to be moderate to high with good gas peaks observed on the mudlog.

#### **5.4.3.2 Hollows CSG Prospect**

The Hollows Prospect is a Patchawarra Formation CSG play situated in the far south-western edge of the Patchawarra Trough. A single 25 metre coal seam was identified on wireline logs in the Hollows 1 petroleum well. Mudlog gas peaks were lower over this interval compared to deeper Cooper Basin examples.

#### **5.4.4 PEL 107 Unconventional Exploration Acreage Estimated Value**

The valuation is based on the same farmin parameters that have been applied to ATPA 940P. Because these plays were extensive, MBA has pro-rated the value on the basis of surface area. ATPA 940P covers an area of 2846 km<sup>2</sup> and includes unconventional plays in all of that area. Nearly all of PEL 107 includes unconventional plays and so the permit area of 407 km<sup>2</sup> has been used to determine the permit value. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.266mm** to **A\$1.055mm**.

## 5.5 PELA 513 Exploration

### 5.5.1 PELA 513 interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 35 was awarded PELA 513 in 2009 (subject to native title clearance).

**Table 35: DLS PELA 513 Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	100%	100%
Total	100%	100%

- Traditional Land Owners hold a 1% ORRI.

The commitments made by the JV to the Department of Primary Industries and Resources of South Australia (PIRSA) for PELA 513 are presented in Table 36 (five year term). The permit is in good standing.

**Table 36: DLS PELA 513 Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
One	Not yet Granted	1000km seismic & G&G	300,000
Two		3 wells, 200km <sup>2</sup> 3D seismic, 500km seismic reprocessing, G&G	11,750,000
Three		3 wells, 100km <sup>2</sup> 3D seismic, G&G	9,700,000
Four		5 wells, 100km <sup>2</sup> 3D seismic, G&G	18,500,000
Five		6 wells	15,000,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

### 5.5.2 PELA 513 Farm-in Deal

There are no farm-in deals in relation to this permit at the current time.

### 5.5.3 PELA 513 Prospectivity (CSG only Reviewed)

Permian coals are present over the permit and potential may exist for Coal Seam Gas plays to be productive. Patchawarra Formation coal thicknesses in excess of 48m are expected to be present in parts of the permit.

#### 5.5.3.1 Brolga CSG Prospect

The Brolga Prospect is a Toolachee to Patchawarra Formation CSG play situated along the northern flanks of the Patchawarra Trough. Structurally the prospect lies along the axis of a gently plunging anticline with net coal thickness totals 40 to 45 metres in nearby wells. Gas contents are expected to be adequate as DST's over coaly intervals yielded gas to surface with mud gas peaks in excess of 1000 units.

#### 5.5.3.2 Brolga South CSG Prospect

The Brolga South Prospect is a Toolachee to Patchawarra Formation CSG play situated along the northern flanks of the Patchawarra Trough. Structurally the prospect lies along the

axis of a gently plunging anticline with net coal thickness totals 30 to 35 metres in nearby wells. Gas contents are expected to be adequate as DST's over coaly intervals yielded gas to surface with high mud gas peaks.

#### **5.5.3.3 Caladan CSG Prospect**

The Caladan Prospect is a Toolachee to Patchawarra Formation CSG play situated along the western flank of the Nappamerri Trough. Structurally the prospect lies along a broad structural high with net coal thicknesses ranging from 5 to 35 metres in nearby wells. Gas contents are expected to be high with good gas peaks observed on the mud log while drilling.

#### **5.5.3.4 Dorodillo CSG Prospect**

The Dorodillo Prospect is a Toolachee to Patchawarra Formation CSG play situated within the western Nappamerri Trough. The prospect lies on a gentle structural high west of the Moomba gas field. Net coal thickness is expected to be on average up to 50 metres with numerous seams exceeding 10 metres continuous thickness. Gas contents are expected to be high with good gas peaks of over 1000 units observed on the mud log.

#### **5.5.3.5 Karina Southwest CSG Prospect**

The Karina Southwest Prospect is a Toolachee to Patchawarra Formation CSG play situated on the south-western edge of the Nappamerri Trough. The prospect lies along a gently plunging anticline with net coal thickness is expected to be up to 15 metres. Gas contents are expected to be good with gas peaks ranging from 300 to over 1000 units from offset well data.

#### **5.5.3.6 Snake Hole CSG Prospect**

The Snake Hole Prospect is a Toolachee to Patchawarra Formation CSG play situated on the northern edge of the Gidgealpa-Merrimelia-Innamincka Ridge. The primary target is the mid-Patchawarra Formation VC 50 coal with seam thicknesses of up to 25 metres. Gas contents are expected to be good with gas peaks over 1000 units from offset well data.

### **5.5.4 PELA 513 Unconventional Exploration Acreage Estimated Value**

The valuation is based on the same farmin parameters that have been applied to ATPA 940P. Because these plays were extensive, MBA has pro-rated the value on the basis of surface area. ATPA 940P covers an area of 2846 km<sup>2</sup> and includes unconventional plays in all of that area. Nearly all of PEL 513 includes unconventional plays and so the permit area of 1498 km<sup>2</sup> has been used to determine the permit value. A fair and reasonable exploration value of the DLS share is assessed to be **A\$1.634mm** to **A\$6.472mm**.

## 5.6 PRL25 (Middleton Block) Exploration

A retention licence has been granted over the Middleton oil discovery. While development of the conventional resources is being contemplated, the CSG remains a viable exploration target, though the area is small (4km<sup>2</sup>). It lies in **PEL106B** and has been included in that valuation.

### 5.6.1 PRL25 interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 37 was awarded PRL 25 in 2009.

**Table 37: DLS PRL25 (Middleton) Interests**

Company	Contributing Interest	Revenue Interest
Great Artesian Oil and Gas Limited (DLS)	50%	50%
Beach (Operator)	50%	50%
Total	100%	100%

Within the boundary for PEL 106B.

- Edward Landers Dieri People/Ngayanna Dieri Karna Aboriginal Corporation holds a 1% ORRI.
- Newport Exploration Ltd holds a 2.5% ORRI.
- Gas Exploration Pty Ltd holds a 0.5% ORRI.

## 5.7 PRLA 26 (Udacha Block) Exploration

A retention licence has been applied for over the Udacha oil discovery. While development of the conventional resources is being contemplated, the CSG remains a viable exploration target, though the area is small (14km<sup>2</sup>). It lies in **PEL106B** and has been included in that valuation, even though the interests vary. The area of the permit is small, so the different DLS interest (75% compared to 50% in 106B)) has been ignored.

### 5.7.1 PRLA 26 interests

Refer to Figure 3. A joint venture (JV) comprised of the companies listed in Table 38 was awarded PRLA 26 in 2010.

**Table 38: DLS PRLA 26 (Udacha) Interests**

Company	Contributing Interest	Revenue Interest
DLS	75%	75%
Rawson Resources	10%	10%
Beach (Operator)	15%	15%
Total	100%	100%

Farm out area excised from PEL 91/PEL 106.

- Edward Landers Dieri People/Ngayanna Dieri Karna Aboriginal Corporation holds a 1% ORRI.
- Newport Exploration Ltd holds a 2.5% ORRI.
- Gas Exploration Pty Ltd holds a 0.5% ORRI.

## 6 GIPPSLAND BASIN GEOLOGY OVERVIEW

Most of the Gippsland Basin lies offshore in coastal Victorian waters. The basin is one of Australia's most prolific and mature petroleum provinces, but oil production has waned since the 1980s.

Water depths for the offshore part of the basin range from less than 200 metres, to over 3000 metres. The basin overlies Palaeozoic metasediments and consists of a central depocentre with up to 10 km of section. Initial rifting in the Early Cretaceous resulted in a complex system of graben and half graben, forming part of the southern rift system between Australia and Antarctica. Volcanogenic and non-marine sediments up to 3000 metres thick were deposited during this phase.

Renewed extension during the Turonian-Campanian established the central deep as the main depocentre. The Lower Latrobe Group alluvial and fluvio-lacustrine facies were deposited during this phase. Post rift subsidence was accompanied by alternating marine and non-marine fluvio-deltaic/alluvial deposition in the Late Cretaceous-Palaeogene (Upper Latrobe Group). Major canyon cutting and subsequent canyon fill deposition occurred in the Eocene. Cool water marine carbonate sedimentation commenced in the Early Oligocene (Seaspray Group) and progradation of the carbonate shelf continues today. Middle Miocene compression formed a series of NE to ENE trending anticlines that host many of the basins large oil and gas accumulations.

Hydrocarbons are dominantly sourced from the non-marine Late Cretaceous to Eocene, Upper Latrobe Group, with marine source rocks also present. The upper Latrobe Group sandstones act as good quality reservoirs while the Seaspray Group forms a regional seal.

The first commercial discovery was made in the basin in 1964, with the drilling of Barracouta-1. The Kingfish Oil Field lies to the north of the DLS permits and at about an original volume of 1.5 billion barrels of oil, is the largest oil field in Australia.

The DLS acreage consists of three permits on the southern flank of the basin. The permits aim to target structural and stratigraphic traps of the Latrobe Group as it on-laps the basement and pinches-out towards the basin margin.

## 7 DLS VICTORIAN AND TASMANIAN ACREAGE

### 7.1 VIC/P 63 Exploration

#### 7.1.1 VIC/P 63 interests

Refer to Figure 4. A joint venture (JV) comprised of the companies listed in Table 39 was awarded VIC/P 63 in 2007.

**Table 39: DLS VIC/P 63 Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	100%	100%
Total	100%	100%

- Cooney, Phil 1% ORR

The commitments made by DLS to the governing authority Victoria Department of Primary Industries for VIC/P 63 are presented in Table 40. The permit is in good standing.

**Table 40: DLS VIC/P 63 Permit Commitments**

Permit Year	End Date	Work Program Commitment	Indicative Cost (A\$)
Four	28/09/11	Geotechnical studies.	250,000
Five	28/09/12	Geotechnical studies.	500,000
Six	28/09/13	One well and Geotechnical studies	10,250,000

Before the end of each permit year the Joint Venture (JV) can terminate the Permit.

#### 7.1.2 VIC/P 63 Farm-in Deal

DLS is seeking to sell or farm out the permit and VIC/P64 and T/46P.

#### 7.1.3 VIC/P 63 Prospectivity

VIC/P63 is in the south-eastern Gippsland Basin. Two wells Groper-1 and -2 have been drilled in the permit previously, both intersected water saturated section in the expected pay zone. No structural closures are currently mapped within this permit.

#### 7.1.4 VIC/P 63 Exploration Acreage Estimated Value

The valuation is based on the likely cost of DLS to farmout or sell its interest. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.200mm** to **A\$0.500mm**.

## 7.2 VIC/P 64 Exploration

### 7.2.1 VIC/P 64 interests

Refer to Figure 4. A joint venture (JV) comprised of the companies listed in Table 41 was awarded VIC/P 64 in 2010.

**Table 41: DLS VIC/P 64 Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	100%	100%
Total	100%	100%

• Cooney, Phil 1% ORR

The commitments made by DLS to the governing authority Victoria Department of Primary Industries for VIC/P 64 are presented in Table 42. The permit is in good standing.

**Table 42: DLS VIC/P 64 Permit Commitments**

Permit Year	Commencing	Work Program Commitment	Indicative Cost (A\$)
Four	28/09/11	Geotechnical studies.	250,000
Five	28/09/12	Geotechnical studies.	500,000
Six	28/09/13	One well and Geotechnical studies	10,250,000

Before the end of each permit year DLS can terminate the Permit.

### 7.2.2 VIC/P 64 Farm-in Deal

DLS is seeking to sell or farm out the permit and VIC/P64 and Tas/46.

### 7.2.3 VIC/P 64 Prospectivity

VIC/P64 is located in the southern central portion of the Gippsland Basin. There has been one well, Mullet-1, drilled near the edge of VIC/P64 and T/46P, which did not encounter any hydrocarbons. Mudskipper-1, just north of VIC/P64 encountered a very sandy section however no indications of hydrocarbons were intersected. Only small dip closures are mapped within the permit at the Top Latrobe level.

#### 7.2.3.1 Lead 1

Lead 1 is an Early Eocene (Upper Latrobe Group) fault/dip closure and considered the best lead in DLS Gippsland Basin acreage. No wells in the area have found hydrocarbons in the equivalent Latrobe Group sections; most have no shows, making migration the prime risk for this lead.

### 7.2.4 VIC/P 63 Exploration Acreage Estimated Value

The valuation is based on the likely cost of DLS to farmout or sell its interest.. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.400mm** to **A\$1.000mm**.

### 7.3 T/46P Exploration

#### 7.3.1 T/46P Interests

Refer to Figure 4. A joint venture (JV) comprised of the companies listed in Table 43 was awarded T/46P in 2007.

**Table 44: DLS T/46P Interests**

Company	Contributing Interest	Revenue Interest
DLS (Operator)	100%	100%
Total	100%	100%

- Cooney, Phil 1% ORR

The commitments made by the JV to the governing authority Mineral Resources Tasmania for T/46P are presented in Table 45. The permit is in good standing.

**Table 45: DLS T/46P Permit Commitments**

Permit Year	Permit Year Ends	Work Program Commitment	Indicative Cost (A\$)
One	05/09/2008	Geotechnical studies, 500km 2D seismic reprocessing.	150,000
Two	05/09/2009	Geotechnical studies, 250k 2D seismic acquisition.	450,000
Three	05/09/2010	Geotechnical studies, 250k 2D seismic acquisition.	450,000
Four	05/09/2011	Geotechnical studies	250,000
Five	05/09/2012	Geotechnical studies	500,000
Six	05/09/2013	One well and Geotechnical studies	10,250,000

Before the end of each permit year DLS can terminate the Permit.

#### 7.3.2 T/46P Farm-in Deal

DLS is seeking to sell or farm out the permit and VIC/P64 and Tas/46.

#### 7.3.3 T/46P Prospectivity

The southern T/46P contains the wells Sailfish-1, Bluebone-1 and Mullet-1. Some larger closures are mapped within this permit; however the charge risk in this area is very high.

#### 7.3.4 T/46P Exploration Acreage Estimated Value

The valuation is based on the likely cost of DLS to farmout or sell its interest.. A fair and reasonable exploration value of the DLS share is assessed to be **A\$0.200mm** to **A\$0.500mm**. Recent Relevant Sales and Farm-in Deals

## **8 RECENT RELEVANT SALE AND FARMIN DEALS**

The farmin deals described here are relevant because they lie in the same exploration areas (respectively) as the DLS permits, have similar prospectivity in most cases and are relatively recent. They provide an excellent basis for valuation. The premium values paid on farmin deals closely resemble sale of interest deals. MBA carried out an analysis of leads and prospects. For a number of these a calculation of expected monetary value (EMV) was undertaken. These often produce a wide and relatively uncertain value (as the leads and prospects are undiscovered) and are mainly used by MBA to assist with quantifying the prospectivity of a permit. In the case of ATPA924P it has been decided to use the EMV from one of the leads to set a low-side value for the permit as the prospectivity is regarded as being superior to other 900 series permits (at this stage of technical analysis).

### **8.1 Cooper/Eromanga Basin**

#### **8.1.1 September 2010**

Drillsearch has executed a definitive purchase agreement with Bandanna to acquire all of the interests held by Bandanna's subsidiary Traditional Energy in the Udacha Wet Gas Discovery in PEL 91 and PEL 106B and the Paprika, Smegsy and Rossco Wet Gas Discoveries in PEL 106A. The consideration for the assets is \$1,300,000 payable in Drillsearch stock. These transaction relates to discovered assets.

A 12.5 % interest has been purchased in all the discoveries except Smegsie where a 25% interest has been purchased.

#### **8.1.2 August 2010**

##### **Drillsearch acquires Circumpacific**

On 27 August 2010 DLS and CER announced entry into an acquisition agreement whereby DLS will acquire CER's 50% interest in the 900 series blocks for an aggregate consideration of CAD\$1.8 mm (A\$1.85 mm), which is due to settle later in the year.

The value is calculated to be about \$36,000/1% for all 8 blocks, and about \$4,500/1% for each permit.

#### **8.1.3 20 January 2010**

##### **Drillsearch acquired Magellan Petroleum's Western Cooper Basin interests**

Drillsearch acquired Magellan Petroleum's Western Cooper Basin interests in the Kiana Oil Field, the Udacha Wet Gas discovery and PEL 107. The consideration paid by the Company for the acquisition of these interests was \$550,000

Drillsearch was already holding working interests in each of the permits. The table below discloses the pre and post transaction working interests of each of the permits:

Permit	DLS pre working interest	Magellan Interest Acquired	DLS post working interest
PPL212 Kiana	30%	30%	60%
PRLA 26	32.5%	30%	62.5%
Udacha			
PEL107	40%	20%	60%

#### 8.1.4 June 2010

##### **Victoria Petroleum for 49.9% of PEL 182 from AuDAX Energy Ltd**

Cash consideration of A\$1.1 million and AuDAX's share of future plugging and liability for Emily-1 and Vanessa-1 wells, estimated at \$200,000.

The value is calculated to be about \$26,000/1%.

#### 8.1.5 April 2010

##### **Mosaic Oil for 40% (and Operatorship) of ATP 1056 from Discovery Geo Corporation**

Mosaic to fund 50% of 600km<sup>2</sup> 3D seismic and 50% of drilling of 10 exploration wells. The total consideration for the farm-in is approximately A\$16 million, consisting of an upfront payment of A\$2.7 million, issue of 45 million MOS shares (under voluntary escrow and about \$6.75mm in value), plus a capped payment of the carrying of a portion of the Farmors capital costs and production bonus of A\$6.25 million, which is contingent on future oil sales.

The Farm-in Premium value is calculated to be about \$80,000/1%.

#### 8.1.6 April 2010

##### **Bounty Oil & Gas for 2% of Naccowlah Permit from Drillsearch Energy**

This comprised of \$950,000 cash and \$200,000 in Bounty shares. The total Consideration is \$1.15mm. This includes producing oil assets, so is not equivalent to the exploration deals.

The Farm-in Premium value is calculated to be about \$575,000/1%.

#### 8.1.7 October 2009

##### **Beach Petroleum for 25% of ATP 855P from Icon Energy**

This farm-in targets the potential deep shale gas deposits in ATP 855P. Beach can earn up to a 40% interest for an up to \$8.5m commitment. Beach Petroleum will also subscribe to \$3.5m placement in Icon securities.

The first part 25% interest earned by contributing 80% of the cost of seismic reprocessing and the acquisition of an additional 300km of 2D seismic.

The Farm-in Premium value is calculated to be about \$110,000/1%.

Beach has the option to earn a further 15% by contributing to Icon's participating interest share of the drilling costs up to \$7 million.

### **8.1.8 May 2009**

#### **Beach Petroleum for 90% of PEL 218 from Adelaide Energy**

Beach Petroleum Ltd has acquired 90% interest over the Permian section to basement and 70% from top-Permian to surface. Adelaide Energy's interest in PEL 218 is 10% from surface to basement and Beach will carry ADE for the first \$2.5M of expenditure in this section.

The Farm-in Premium value is calculated to be about \$28,000/1%.

### **8.2 Gippsland Basin**

#### **8.2.1 January 2008**

##### **Apache Energy Ltd for 80% of Vic/P42 from Bass Straight Oil Company Ltd**

Apache Energy Ltd proposes to drill Speke South-1 as its Vic/P42 farm-in obligation well. Bass Straight Oil Company will retain a 20% interest in the well and the permit

The Farm-in Premium value is calculated to be about \$50,000/1%.

## 9 VALUATION METHODS

The principles conveyed in the Valmin Code, Revised Edition April 2005 (Valmin, 2005), and in the ASIC Regulatory Guide 111 and 112 have been applied by MBA. Reserve and Resource concepts follow the definitions as laid down by the Society of Petroleum Engineers (SPE) Inc. (SPE, 2007).

There are several methods that can be used to estimate the fair market value of exploration and production assets. These include and are not limited to the methods described below, which are:

Production and reserve information leading to cash flow analysis – present value (NPV); Production estimates and cash flow analysis (NPV) based on current prospects (undrilled) and incorporating expected chances of success (COS) – expected monetary value (EMV); Recent farm-in costs (value of work to be undertaken) and premiums or promotes (amounts above the cost of the work) paid in the permit or similar nearby permits; and Estimated cost of committed work programs (deal between permit holder and the governing authority).

### 9.1 NPV

For an oil or gas field a value can be determined from the proven (1P), proven plus probable (2P) and proven plus probable plus possible (3P) reserve. Calculation of the net present value (NPV) can be made on the best-estimate reserve. Various combinations of reserve categories may be made to obtain the best estimate, such as:

2P by itself; OR

1P plus 50% of the 2P; OR

$(0.9 \times \text{proved } (P1 \text{ or } 1P) + 0.5 \times \text{probable } (P2) + 0.1 \times \text{possible } (P3))$ ; OR

others.

The NPV is equivalent to the value of the project and possibly the permit. An NPV calculation based on only the 1P reserve can constitute a low-side value.

### 9.2 EMV

It is possible to value an exploration permit by firstly selecting the prospect (not a lead) most likely to be drilled in the near future. By calculating the net present value (NPV) on the mean potential reserve case, and the chance of success (COS) for discovery on an economic reserve, the expected monetary value (EMV) can be determined. The mean reserve is often estimated as  $0.3 \times P90 + 0.4 \times P50 + 0.3 \times P10$  (Swanson's Mean), or more accurately calculated using a Monte-Carlo simulator.

- EMV is calculated as:

$(NPV \times COS) - [\text{exploration cost (eg: dry well)} \times (1 - COS)]$

The EMV is equivalent to the value of the prospect and may be used to value the permit.

### 9.3 Farm-in/Work Program

A reliable value of an exploration permit may be estimated based on farm-in/farm-out or purchase transactions within the permit or in adjacent permits with comparable geological

prospectivity and operating constraints. This is achieved by comparing the acreage with similar acreage and the farm-in/farm-out deals that have been consummated, or are in progress in various permits. Also, the immediate, committed expenditure and/or the estimated cost of committed forward work programs on the permits provide additional information. These last two methods are described in more detail below.

#### **9.4 Full Value and Premium within Farm-in Deals**

The farm-inee (purchaser) agrees to fund a significant exploration program, which is often agreed to be a particular dollar value or, sometimes, capped at a particular dollar value. This work usually takes the form of either drilling and/or seismic, in return for the farmor (seller) transferring a significant equity to the farm-inee. Where the farm-inee pays the normal exploration costs of the work being done for the interest being acquired and then also covers some or all of the costs of the farmor, this extra cost is called a premium (or promote).

A value for the permit can be considered based on:

- 1) the total cost of the farm-in, that is the agreed cost of exploration plus the premium; or, more conservatively,
- 2) based on just the cost of the premium.

Both methods are valid. In estimating the worth of a permit using the farm-in method, MBA usually calculates the premium and sets that as the middle value with a range being determined as a 20-25% increase for the high value and a 20-25% decrease for a low value. The full cost of the farm-in is not often used.

#### **9.5 Committed Work Programs**

In cases where a permit has a committed work program, one that cannot usually be varied, a third method can be considered where the value of the permit is the cost required to retain it and explore for hydrocarbons. This is similar to the total cost of a farm-in. The government can be considered to have farmed out the permit, so this is treated in a similar way to method (1), above.

## **10 STATEMENTS**

### **10.1 Limitations**

MBA has primarily relied on data supplied by DLS and on several independent reports commissioned by DLS and/or Operators of permits that DLS holds interests in. Other data has included geological studies by MBA on behalf of DLS and interpreted technical studies and technical reports. These were compiled and written by various industry and government bodies as well as consultants. The material was reviewed for its quality, accuracy and validity and was considered to be acceptable.

In addition, Farm-in Agreements and other pertinent material pertaining to the permits were provided by DLS, either in full or in part. It is believed that the information received is reliable and there is no reason to believe that any material facts have been withheld. However, the level of review of the information provided to us does not amount to an audit, verification or due diligence, save to the extent necessary to satisfy ourselves that it is reasonable for us to rely on that information and no warranty can be given that this review has analysed all of the matters which a more extensive examination might reveal. MBA has not been required to check the status of DLS's interests in the permits and status of ORR interests.

No warranty can be given that this review has analysed all of the matters, which an extensive examination might reveal.

This report or any reference thereto, may not be included in any other document or distributed for any other purpose without the prior written consent of MBA to the purpose of such distribution and to the form and context in which the report or reference appears.

The opinions and statements in this report are made in good faith and in the belief that such opinions and statements are not misleading.

### **10.2 Declaration**

#### **10.2.1 Independence**

This report is our genuine opinion and the product of our professional judgment. MBA Petroleum Consultants has not had and, at the date of this report, does not have any relationship with DLS or its subsidiary companies that could be regarded as capable of affecting MBA's ability to provide an unbiased opinion in relation to this report. In particular (i) the author of this report is not an officer or related party of (ii) neither the author of this report, or any director or senior employee of MBA involved in preparing the report has a substantial interest in or is a substantial creditor of or has any material financial interest in the transaction and (iii) MBA has not participated in any strategic planning work for DLS.

MBA is engaged in exploration studies for DLS on numerous permits.

#### **10.2.2 Fees and other benefits**

A fee of \$250,000 will be received for the preparation of this report. Payment of the fee is not contingent on any matter. We have obtained an indemnity from DLS in respect of claims made by a third party against us as a result of (i) reliance by us on information provided by DLS which was incomplete, inaccurate, out of date or otherwise erroneous; (ii) failure by

DLS to provide us with material information; and (iii) other claims related to or arising out of our provision of the report (except as a result of our negligence). This indemnity is a contractual arrangement between MBA and DLS does not affect or limit MBA's liability to third parties in connection with this report. MBA will receive no other benefit for the preparation of the report. The author of this report has no pecuniary or other interest which could be regarded as capable of affecting his ability to provide an unbiased opinion in relation to this report.

### **10.2.3 Changes in facts or circumstances**

Advance copies of this report were provided to the Directors of DLS and minor changes were made as a consequence. There have been no material changes made to the report. We confirm that there has been no material change of circumstances or available information that we are aware of since this report was compiled and we are not aware of any significant matters arising from our evaluation that are not covered by this report which might be of a material nature.

### **10.2.4 Currency of Report**

This report has been prepared based on information available up to and including 30 September 2010. It has been prepared in accordance with the VALMIN Code applicable to the valuation of Mineral and Petroleum Assets and Securities.

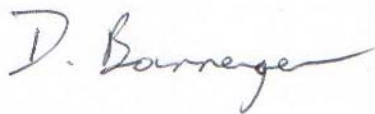
### **10.2.5 Consent for use**

MBA has given and not withdrawn its written consent to the inclusion of this report in the Independent Expert's Reports ('Report') in relation to a potential merger with Drillsearch Energy Ltd ('DLS') in a scrip transaction to be implemented by way of a Scheme of Arrangement ('the Proposed Transaction') in the form and context in which this report appears.

## 10.3 Qualifications of the Authors

### 10.3.1 Doug Barrenger

Doug Barrenger received a BSc degree (geology) from the Australian National University and a Graduate Diploma in Computing Science from the Queensland University of Technology. He has more than 30 years of experience in the petroleum industry and has undertaken all facets of geological work, from wellsite and operations geology to prospect evaluation, risk analysis, reserve assessment, basin analysis, portfolio valuation and project management for both operated permits and new-venture roles and for development and exploration projects. He has worked on all Australian petroleum basins, including coal seam gas, and has overseas experience in SE Asia and Italy as an employee and as a consultant and has written numerous Independent Expert Reports and acreage Valuations. Doug is a founding partner of MBA Petroleum Consultants, a member of the Petroleum Exploration Society of Australia and a twenty-year, Active Member of the American Association of Petroleum Geologists (number 330431).



Doug Barrenger  
Principal Geologist

## 11 DEFINITIONS

### Definition 1

**Fair Market Value** (Valmin, 2005, D43) of a Mineral or Petroleum Asset or Security is the amount of money (or cash equivalent of some other consideration) determined by the Expert in accordance with the provisions of the VALMIN Code for which the Mineral or Petroleum Asset or Security should change hands on the Valuation Date in an open and unrestricted market between a willing buyer and a willing seller in an “arms length” transaction, prudently and without compulsion.

Value is usually comprised of two components, 1) the underlying or ‘Technical Value’ of the Mineral or Petroleum Asset or Security and 2) a Premium or discount relating to market strategic or other considerations.

Value should be selected as the most likely figure from within a range after taking account of Risk and the possible variation in ore grade, metallurgical recovery, capital and operating costs, commodity prices, exchange rates and the like.

## 12 ABBREVIATIONS

BCFG	Billion Cubic Feet of Gas
BO	Barrels of oil.
BOPD	Barrels of oil per day
COSg	Geological Chance of Success
COSe	Economic Chance of Success
EMV	Expected monetary value
ft OR ‘	Foot / feet
JV	Joint Venture
Lead	Potential hydrocarbon trap that requires further work to determine if it might become a prospect.
m	Metre
ma	million ago (years)
mm	million
mmCFD	million cubic feet a day
mmBO	million barrels of oil
NPV	Net Present Value
OOIP	Original oil in place
Prospect exploration	Potential hydrocarbon trap that is ready to drill -
<i>P1</i> or 1P	Proven category of a hydrocarbon volume
<i>P2</i>	Probable category of a hydrocarbon volume
2P	Proven plus Probable
<i>P3</i>	Possible category of a hydrocarbon volume
3P	Proven plus Probable plus Possible
P90	90% of the potential hydrocarbon volume is greater than this volume on a probabilistic distribution.
P50	50% of the potential hydrocarbon volume is greater than this volume on a probabilistic distribution.
P10	10% of the potential hydrocarbon volume is greater than this volume on a probabilistic distribution.
Swanson’s Mean	Approximation of the mean of a lognormal probability distribution, usually calculated as $0.3 \times P10 + 0.4 \times P50 + 0.3 \times P10$ .
US\$	United States dollars
A\$	Australian dollars
£	English pounds
CAD\$	Canadian Dollars

# Figures

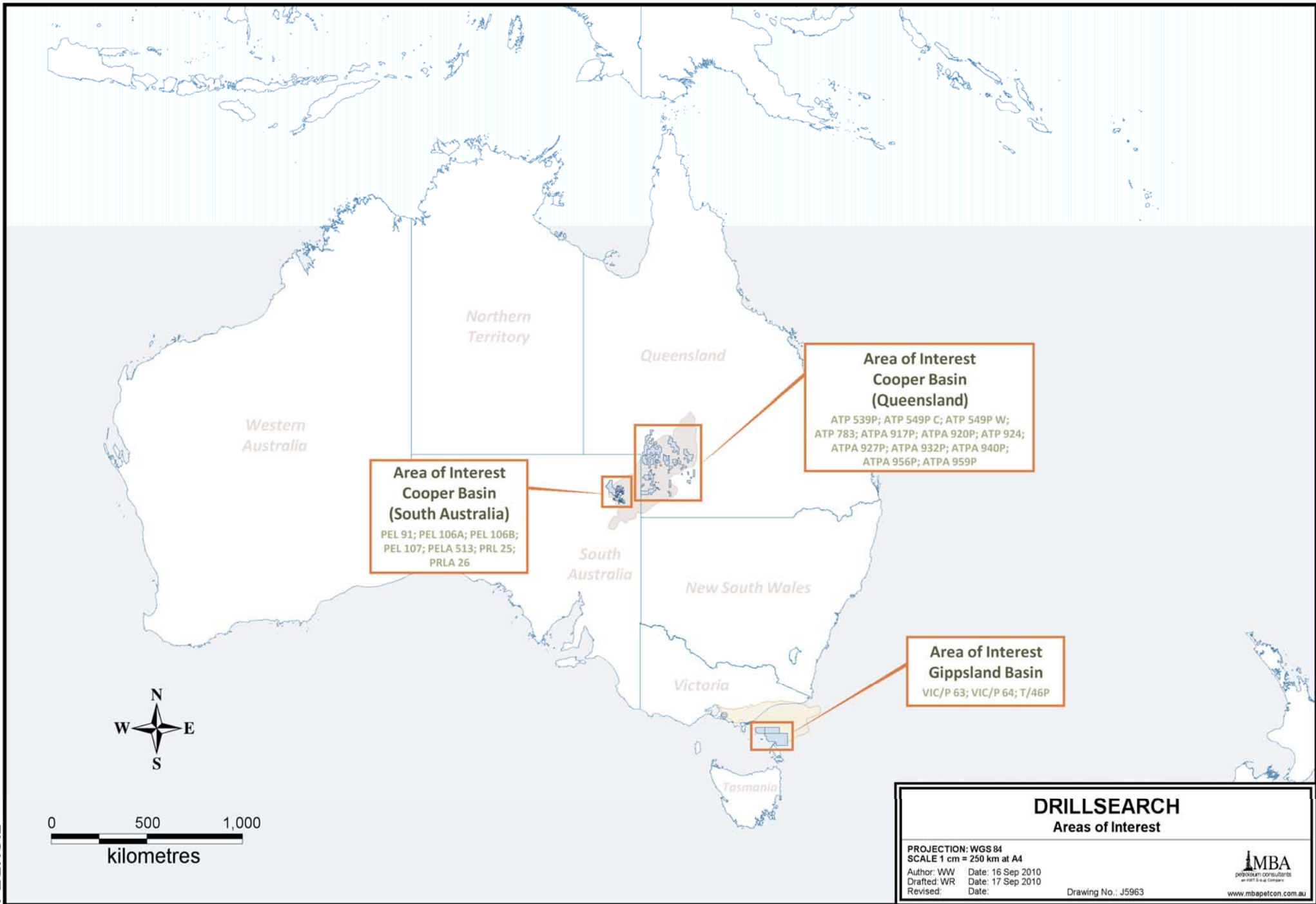


FIGURE 1

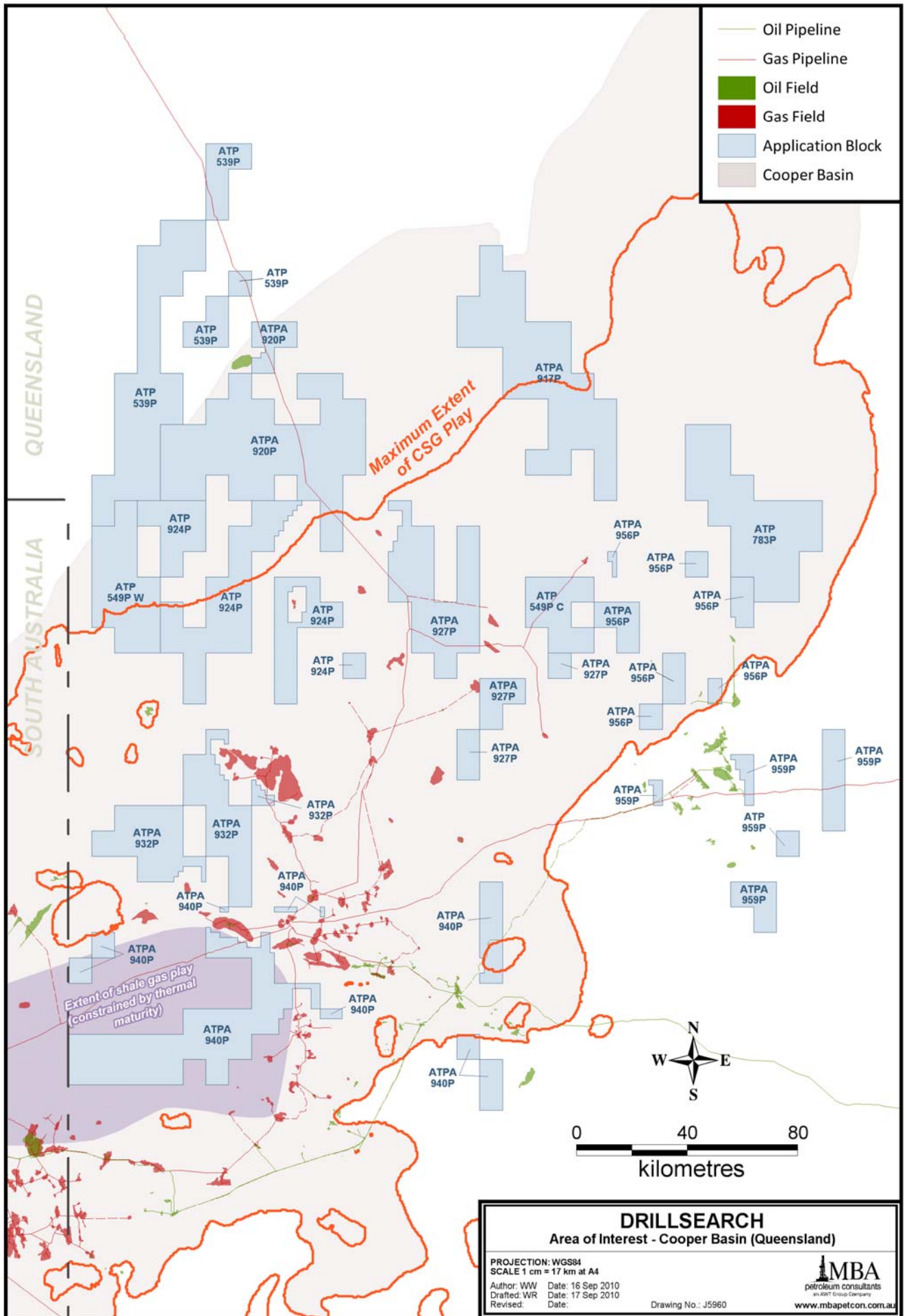


FIGURE 2

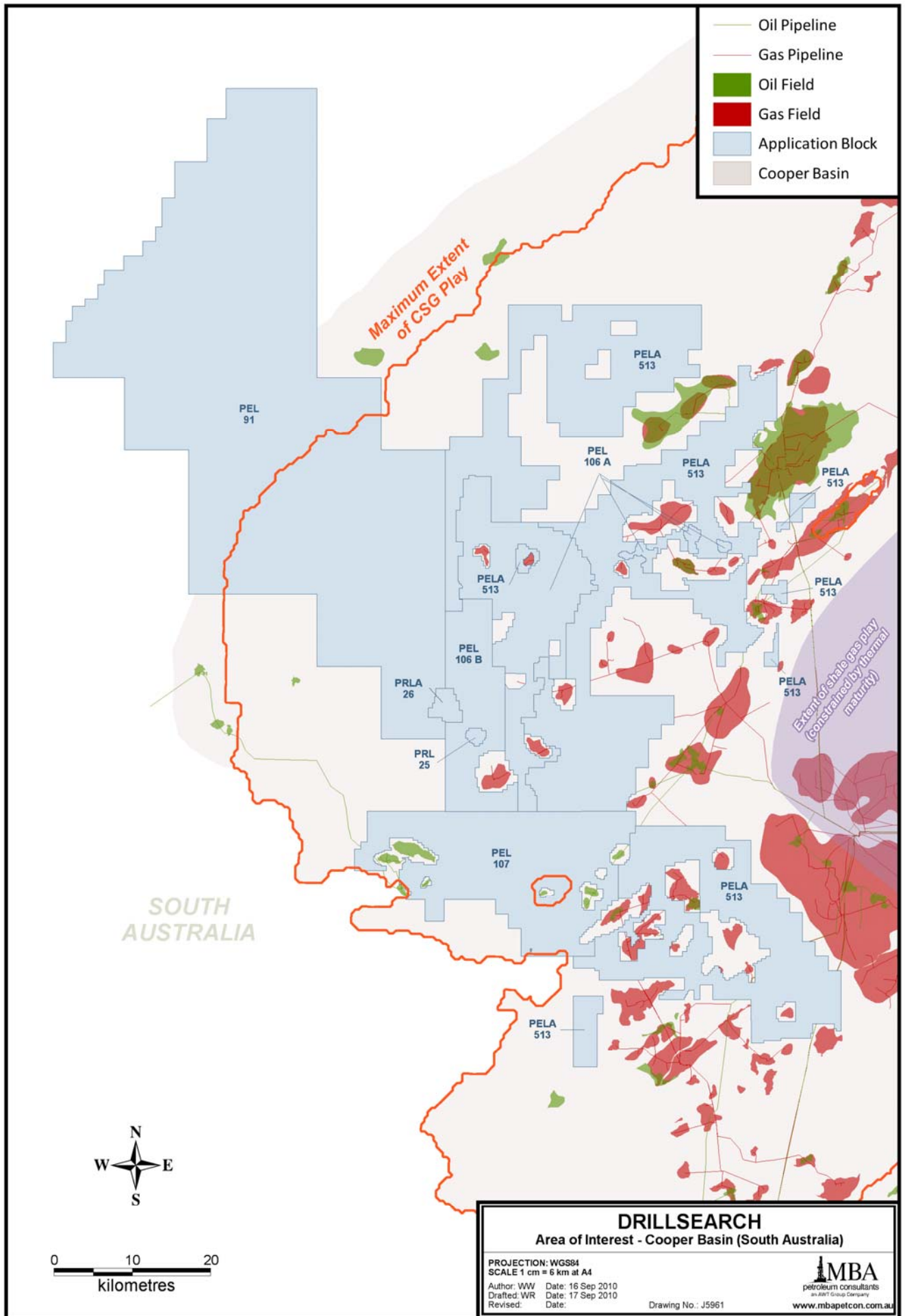


FIGURE 3

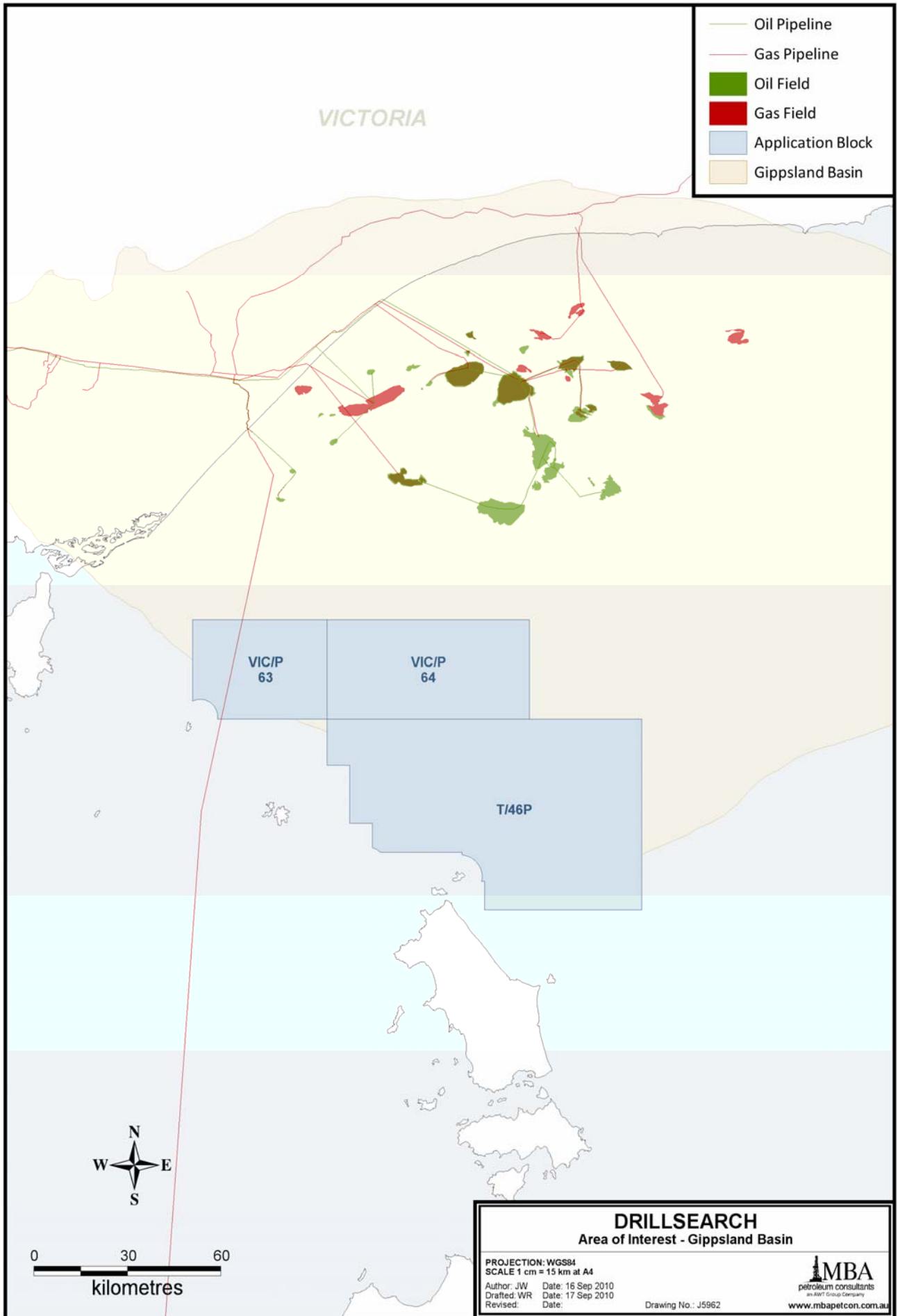


FIGURE 4