

ASX/Media Release  
27 October 2009

## DRILLSEARCH ANNOUNCES SUBSTANTIAL WESTERN COOPER BASIN GAS AND LIQUIDS PROJECT RESOURCE UPGRADE

- **Independent technical review confirms Gross Contingent Resources\* (2C) of 41 Bcf sales gas and 1.9 MMBbls condensate**
- **This review further confirms 21 prospects with Best Estimate Prospective Resource\* exploration potential of over 200 Bcf sales gas and 8 MMBbls condensate**
- **Upside exposure to Prospective Resource (High Estimate) exploration potential up to over 390 BCF sales gas and 14 MMBbls condensate**
- **The best 3 exploration prospects have potential to more than double the size of Western Cooper Gas and Liquids Project**
- **Contingent Resource (Gross) revenue potential of \$166 to \$650 million**

\* Defined at the end of this ASX release

Drillsearch Energy Limited (ASX: DLS) is pleased to announce substantial increases in the resource estimates for the Western Cooper Gas & Liquids Project ("WCGL Project"). The project is based on the company's gas and liquids discoveries in PEL 106. Drillsearch owns and operates 100% of the eastern portion (503 km<sup>2</sup>) of PEL 106 and the south west portion of PEL 106 is the Beach Farmin Block held by Beach (50%) and the company (50%).

"Our next steps will be to pursue a programme of extended production testing on a number of the existing discoveries in conjunction with working to secure commercial sales arrangements for the project," Managing Director, Mr Brad Lingo said.

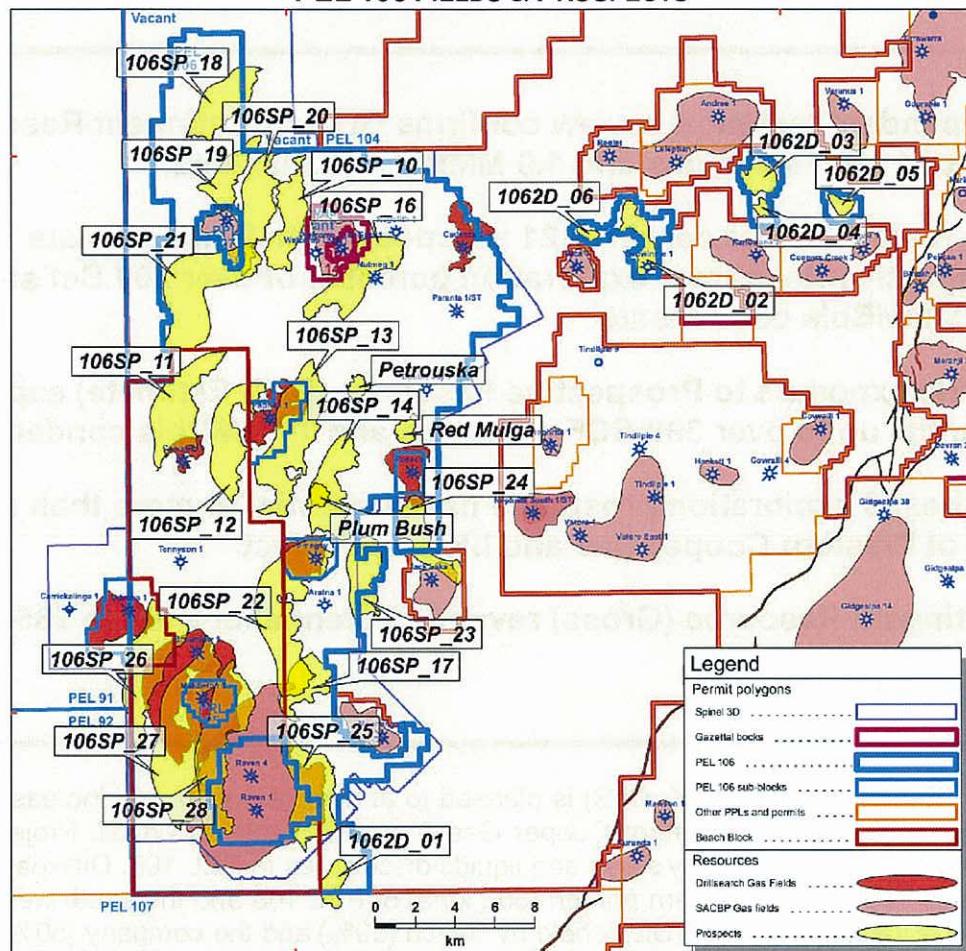
"Completion of this work has allowed the company to formulate a forward exploration plan to build upon the Contingent Resource base we have already established in PEL 106," he said.

These increases have been independently audit reviewed by Gaffney, Cline & Associates Pty. Limited ("GCA"), a leading independent international energy advisory group, and are in addition to the resource estimates reported on 30 June 2009. These Prospective Resources measure the potential increase in resources possible through further exploration drilling and represent a material potential scale for the WCGL Project.

The review completed by GCA follows on from the initial review by GCA which, for the WCGL Project, considered only Contingent Resources. Following the positive results from the initial review, Drillsearch completed a further assessment of the exploration potential within PEL 106 ("Prospective Resources"). With the completion of this work, Drillsearch commissioned GCA to conduct an audit review of the company's assessment of the

Prospective Resources and risking in the project. A copy of the full GCA report covering both the Contingent and Prospective Resources for the WCGL Project (PEL 106) is attached to this release. The GCA report has been prepared in accordance with the Society of Petroleum Engineers (SPE) Petroleum Resources Management System.

**WESTERN COOPER GAS & LIQUIDS PROJECT  
PEL 106 FIELDS & PROSPECTS**



"These are significant Prospective Resources and further support the plan to develop processing and transportation facilities for the WCGL Project. These are exciting results and imply that we are close to sanctioning the project," Mr Lingo said. The project plan is discussed in more detail below.

"The seismic interpretation indicates that there is a good probability that the Contingent Resources in PEL 106 will increase significantly through additional exploration drilling. The company's Prospective Resource assessment and the GCA audit review fully support this view." Mr. Lingo added.

"Given our success in PEL 106 to date, we consider this play fairway low risk and GCA agrees with this assessment," he said.

Table 1 summarises the estimated Contingent Resources for the WCGL Project (PEL 106) as estimated by Drillsearch. These resource estimates have been confirmed in the audit review conducted by GCA and are set below as shown in the GCA report.

**TABLE 1**  
**ESTIMATES OF CONTINGENT RESOURCES**  
**FOR WESTERN COOPER GAS & LIQUIDS PROJECT (PEL 106)**  
**AS AT 1<sup>ST</sup> OCTOBER**

<b>Gross (100%)</b>	<b>1C</b>	<b>2C</b>	<b>3C</b>
Sales Gas (Bcf)	20.2	41.3	78.3
Condensate (MMBbl)	0.9	1.9	3.7
LPG (Mtonnes)	53.1	106.8	199.6
<b>Total (MMBOE)</b>	<b>5.2</b>	<b>10.7</b>	<b>20.3</b>
<b>DLS Net Working Interest</b>			
Sales Gas (Bcf)	11.8	24.4	47.1
Condensate (MMBbl)	0.6	1.2	2.4
LPG (Mtonnes)	30.0	61.0	115.6
<b>Total (MMBOE)</b>	<b>3.1</b>	<b>6.4</b>	<b>12.3</b>

Table 2 summarises Drillsearch's estimated Prospective Resources for the best three prospects in PEL 106 as reviewed in the GCA report. A complete table of all the prospects in PEL 106 is contained in the GCA report.

**TABLE 2**  
**ESTIMATES OF PROSPECTIVE RESOURCES (BEST CASE) FOR**  
**WESTERN COOPER GAS & LIQUIDS PROJECT (PEL 106)**  
**AS AT 1<sup>ST</sup> OCTOBER**

<b>Prospect - Gross 100%</b>	<b>Sales Gas (Bcf)</b>	<b>Condensate (MMBbl)</b>	<b>LPG (Mtonnes)</b>	<b>GCoS* (%)</b>
106P-28	24.3	0.89	81.8	34
106P-27	23.8	0.87	80.1	34
106P-22	20.5	0.75	69.0	31
<b>Prospect - DLS Net WI%</b>				
106P-28	9.9	0.36	33.6	34
106P-27	11.9	0.43	40.1	34
106P-22	15.1	0.55	50.8	31

\* Defined at the end of this ASX Release

### Project Financial Potential

The Contingent Resources represent a significant revenue opportunity for the company. Table 3 sets out the revenue potential for the WCGL Project:

**TABLE 3**  
**WESTERN COOPER GAS & LIQUIDS POTENTIAL REVENUES**

<b>Contingent Resources &amp; Revenues</b>	<b>1C</b>	<b>2C</b>	<b>3C</b>
Gross BOE (MMBBLs)	5.2	10.7	20.3
Revenues - Gross (\$MM)	166	342	650
DLS Net BOE (MMBBLs)	2.8	5.8	11.2
Revenues - DLS Net (\$MM)	90	186	358

These revenue projections are based on an economic barrel of oil equivalent price of \$32/bbl ("EBOE reference price") assuming a current oil price of USD 75/bbl and an

AUD/USD exchange rate of AUD 0.85. Approximately 75% of these revenues come from liquids sales rather than gas. This price is based on interconnection with the regional gas gathering system in the Western Cooper Basin and is consistent with previous arrangements Drillsearch was able to secure for Smegsy Gas Field connection to the system and associated sales.

It is significant to note that these revenue estimates are based on actual resources that have been discovered and several of the discoveries (Middleton and Udacha) are held under petroleum retention licenses pending commitment to an overall field and project development plan.

If the WCGL Project proceeds with a standalone gas development the potential revenues for the project are expected to be significantly higher. This benefit of potentially higher revenues would be offset by higher field development costs for standalone gas processing and pipeline facilities. With the potential of developing a much larger resource base the development of a standalone development becomes an increasingly attractive alternative.

The endorsement of the Prospective Resources potential of the WCGL Project in the GCA report highlights the significant economic potential of the project. Based on the Best Estimate Prospective Resources for the best three prospects set out in Table 2, the project has additional unrisked revenue potential of \$512 million based on 16.0 MMBOE at the EBOE reference price.

### **Project Plan**

The GCA Report has provided the company with independent confirmation of the discovered gas and liquids resources and the additional low risk exploration potential within PEL 106. The review has assisted Drillsearch in formulating an exploration and development plan for the project. This plan can be broken down into three main components:

- **Extended Production Testing of Existing Discoveries** – The next stage of the development of the project will involve the extended production testing (EPT) of the Brownlow and Canunda gas discoveries in the Beach Farmout Block. Beach Petroleum as operator and Drillsearch have already approved this work. In parallel, Drillsearch is planning to complete and test the Paprika and Cadenza discoveries in the PEL 106 area held 100% by Drillsearch. It is anticipated that the EPT projects will be undertaken over the next quarter. Successful completion of the EPT projects will provide increased confidence in the full development of these fields and entering into gas and liquids sales arrangements.
- **Gas and Liquids Marketing** - Drillsearch holds the gas marketing rights for the WCGL Project for both the 100% Drillsearch owned PEL 106 area and for the Beach Farmin Block. Drillsearch has previously successfully negotiated gas sales to the SACBJV from the Smegsy Gas Field and connection to the joint venture pipeline system. Drillsearch has initiated preliminary discussions with the SACBJV seeking to secure similar arrangements. The company is endeavouring to secure these arrangements over the next several months but the timing of securing these arrangements is subject to reaching agreement with the joint venture. In the alternative Drillsearch continues to evaluate stand-alone options independent of the existing joint venture facilities.

- **Additional Exploration and Appraisal Drilling** – In parallel with the EPT testing programme and the gas marketing activities, the company is currently determining the exploration programme for PEL 106 through the end of the current financial year. Ideally, the company believes that at least 2 additional exploration wells should be drilled in PEL 106 over the next 6 months to establish additional Contingent Resources to underpin the WCGL Project. The completion of the PEL 106 Prospectiveity Review and endorsement of the Prospective Resources by GCA identified in the review has provided the company with the confidence to move forward with this programme and which prospects to focus on.

For further information please contact:



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Or visit the website [www.drillsearch.com.au](http://www.drillsearch.com.au)

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

#### **About Gaffney, Cline & Associates**

Gaffney, Cline & Associates (GCA) is an independent international energy advisory group of over 45 years' standing. A substantial part of GCA's work involves the technical evaluation of petroleum properties and the provision of independent valuation of assets for inclusion in company or stock exchange statutory documentation.

The GCA Report was prepared in accordance with the SPE-PRMS guidelines and, in preparing the report, GCA maintained strict independence in accordance with the Valmin Code issued by the Australasian Institute of Mining and Metallurgy.

#### **Competent Person Statement**

Information on the Reserves and Resources in this release is based on information compiled by Mr. Chris Carty, previously Chief Operating Officer and now consultant to Drillsearch, and Mr. Ken Grieves who have both given their consent as of the date of this release to the inclusion of this statement and the information in the form and the context in which they appear in this release. Mr. Carty's company is CCCT Enterprises Pty Limited. Mr. Grieves' company is In Depth Geophysics Pty Ltd.

#### **\*Defined terms**

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

“**GCoS**” stands for “**Geologic Chance of Success**” is defined as the estimated chance that a feature does (to be proved or otherwise by drilling and testing to the surface) contain hydrocarbons.

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



**Gaffney, Cline & Associates Pty Ltd**

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**MDF/chw/KK1500/1028/09**

**26<sup>th</sup> October, 2009**

The Directors  
**Drillsearch Energy Limited**  
Level 8, 6 Spring Street  
SYDNEY NSW 2000

Dear Sirs,

**INDEPENDENT TECHNICAL AUDIT REPORT  
ON THE CONTINGENT AND PROSPECTIVE RESOURCES  
FOR PEL106, ONSHORE AUSTRALIA  
AS OF 1<sup>st</sup> OCTOBER, 2009**

Drillsearch Energy Limited (Drillsearch or DLS) has requested GCA to update the status of Contingent Resources held in PEL106 and to review Drillsearch's estimates of Prospective Resources in the license.

## **INTRODUCTION**

Drillsearch has interests in tenements in Australia, Papua New Guinea and Canada, with its main area of interest being the Cooper-Eromanga Basin in South Australia and south western Queensland. Specifically Drillsearch has production from the Naccowlah (ATP259 and PLs) and Tintaburra (ATP299 and PLs) blocks, in Queensland. In South Australia it has oil production from the Kiana field in PPL212, ten gas discoveries in PEL106 and identified prospects in PEL91 and PEL107. Drillsearch is the operator for PEL106 (under the terms of a farm-in agreement Beach operates within the "Beach Farm-in Area"), Santos operates Naccowlah and Tintaburra blocks and Beach PPL212, PEL91 and PEL107.

Drillsearch requested GCA to carry out an independent review of information provided by Drillsearch concerning estimated volumes of Contingent and Prospective Resources in PEL106 and opine upon their reasonableness. In doing this GCA relied on information provided by DLS and did not conduct any independent interpretations of the data.

## **SUMMARY**

GCA has carried out an independent review of estimated volumes of Contingent and Prospective Resources in Drillsearch's Cooper-Eromanga Basin block PEL106. In doing so, GCA relied on the data provided to it by DLS. GCA did not conduct original data interpretation but carried out sufficient checks to ensure the reasonableness of the resource estimates.

The Contingent Resources were evaluated in May, 2009 and have not been updated since with the exception of changes to DLS's working interests. They are included here as reported in the June, 2009 Technical Expert Report prepared by GCA. The results of the audit review are presented for Contingent Resource Estimates in **Tables 1** and **2** on a Gross and Net to DLS's Working Interest basis respectively.

TABLE I

**ESTIMATES OF GROSS (100%) CONTINGENT RESOURCES  
FOR PEL106, ONSHORE AUSTRALIA  
AS OF 1<sup>st</sup> OCTOBER, 2009**

	1C	2C	3C
Sales Gas (Bscf)	20.2	41.3	78.3
Condensate (MMBbl)	0.9	1.9	3.7
LPG (kTonnes)	53.1	106.8	199.6
<b>Total in MMBOE</b>	<b>5.2</b>	<b>10.7</b>	<b>20.3</b>

TABLE 2

**ESTIMATES OF CONTINGENT RESOURCES  
NET TO DLS'S WORKING INTEREST  
FOR PEL106, ONSHORE AUSTRALIA  
AS OF 1<sup>st</sup> OCTOBER, 2009**

	1C	2C	3C
Sales Gas (Bscf)	11.8	24.4	47.1
Condensate (MMBbl)	0.6	1.2	2.4
LPG (kTonnes)	30.0	61.0	115.6
<b>Total in MMBOE</b>	<b>3.1</b>	<b>6.4</b>	<b>12.3</b>

Prospective Resource Estimates are shown by prospect in **Tables 3** and **4** respectively on a Gross and Net to DLS's Working Interest basis. In addition to the prospects listed below DLS has identified a number of leads. These leads are deemed to be immature and will require significant additional work to mature to drillable prospect stage. As such they are not included in this review.

It should be noted that the Prospective Resources quoted are those quantities of petroleum that are estimated on a given date, to be potentially recoverable from undiscovered accumulations. The key descriptor is "undiscovered", and this is what distinguishes Prospective from Contingent Resources. There is significantly higher risk with Prospective Resources relative to Contingent Resources in that they may not mature into revenue generating projects. Prospective Resource volumes are usually quoted with an associated Geological Chance of Success (GCoS); this is defined as the estimated chance that the feature does (to be proved or otherwise by drilling and testing to the surface) contain hydrocarbons. In effect, GCoS is the chance of a Prospective Resource maturing into a Contingent Resource.

Features that contain Prospective Resources are further subdivided into Prospects and Leads. Prospects are features that have been sufficiently well defined, on the basis of geological and geophysical data, to the point that they are considered drillable. Leads, on the other hand, are not sufficiently well defined to be drillable, and need further work and/or data. In general, Leads carry significantly more risk than Prospects. It must be appreciated that the risked volumes reported in terms of Prospective Resources are risk assessed only in the context of applying the stated GCoS. This dimension of risk assessment does not incorporate the considerations of economic uncertainty and commerciality.

The Prospective Resource estimates have been ranked in the following tables according to the Gross (100%) Best Estimate volumes. Given the current prospect risking the prospects on the lower half of the tables would probably not be economic to drill without reducing risk further.

TABLE 3

**ESTIMATES OF GROSS (100%) PROSPECTIVE RESOURCES  
FOR PEL106, ONSHORE AUSTRALIA  
AS OF 1<sup>st</sup> OCTOBER, 2009**

Prospect	DLS W/I%	Low Estimate			Best Estimate			High Estimate			GCoS %
		Sales Gas	Cond.	LPG	Sales Gas	Cond.	LPG	Sales Gas	Cond.	LPG	
		(Bcf)	(Mbb)	(Mtonnes)	(Bcf)	(Mbb)	(Mtonnes)	(Bcf)	(Mbb)	(Mtonnes)	
106SP_28	41.00	12.7	459.4	41.7	24.3	886.4	81.8	43.9	1612.6	150.9	34
106SP_27	50.00	12.5	449.7	40.8	23.8	867.7	80.1	43.0	1578.6	147.7	34
106SP_22	73.67	10.7	387.2	35.1	20.5	747.1	69.0	37.0	1359.2	127.2	31
106SP_21	94.60	8.7	313.9	28.5	16.6	605.7	55.9	30.0	1102.0	103.1	31
106SP_13	87.36	8.6	312.1	28.3	16.5	602.2	55.6	29.9	1095.6	102.5	31
106SP_26	43.35	7.0	254.4	23.1	13.4	490.8	45.3	24.3	893.0	83.6	31
106SP_11	50.0	6.9	247.1	22.4	13.1	477.2	44.1	23.7	868.0	81.3	31
106SP_25	68.06	6.1	220.5	20.0	11.7	425.5	39.3	21.1	774.2	72.5	31
106SP_16	92.18	5.5	198.0	18.0	10.5	382.1	35.3	18.9	695.2	65.1	31
106SP_12	54.12	4.8	171.8	15.6	9.1	331.6	30.6	16.4	603.3	56.5	31
106SP_18	83.64	4.5	161.3	14.6	8.5	311.2	28.7	15.4	566.2	53.0	28
106SP_20	97.88	4.8	156.6	14.2	8.3	302.2	27.9	15.0	549.9	51.5	31
106SP_10	100.00	3.9	141.2	12.9	7.5	273.2	25.4	13.6	496.8	46.8	31
106SP_23	66.38	3.7	133.3	12.1	7.0	257.2	23.8	12.8	468.0	43.8	28
106SP_24	64.86	3.4	122.3	11.1	6.5	235.9	21.8	11.7	429.2	40.2	31
106SP_14	100.00	3.4	121.8	11.1	6.4	235.0	21.7	11.7	427.5	40.0	31
106SP_17	97.31	2.7	96.6	8.8	5.1	186.3	17.2	9.2	338.9	31.7	31
106SP_19	87.38	2.6	93.0	8.4	4.9	179.4	16.6	8.9	326.4	30.6	31
Petroska	100.00	0.6	22.0	2.0	1.2	42.6	4.0	2.1	77.6	7.3	28
Plum Bush	100.00	0.5	18.5	1.7	1.0	35.7	3.3	1.8	65.1	6.1	55
Red Mulga	100.00	0.5	17.3	1.6	0.9	33.4	3.1	1.7	61.0	5.7	55

**Notes:**

1. Prospective Resources are those quantities of petroleum that are estimated, on a given date, to be potentially recoverable from undiscovered accumulations. The key descriptor here is undiscovered, and this is what distinguishes Prospective from Contingent Resources. There is a significantly higher risk, with Prospective relative to Contingent Resources that, they will not mature into revenue generating projects.
2. Prospective Resource volumes are usually quoted with an associated geological risk (GCoS): this is defined as the estimated chance that the feature does (to be proved or otherwise by drilling and testing to the surface) contain hydrocarbons.
3. It is inappropriate to report summed-up Prospective Resource volumes or to otherwise focus upon those of other than the 'Best Estimate'.
4. Sales Gas is estimated Sales Gas in billion standard cubic feet.
5. Cond. is estimated Condensate Resources in thousand barrels.
6. LPG is estimated Liquid Petroleum Gas in thousand tonnes.

TABLE 4

**ESTIMATES OF PROSPECTIVE RESOURCES NET TO DLS'S WORKING INTEREST  
FOR PEL106, ONSHORE AUSTRALIA  
AS OF 1<sup>st</sup> OCTOBER, 2009**

Prospect	DLS WI%	Low Estimate			Best Estimate			High Estimate			GCoS %
		Sales Gas	Cond.	LPG	Sales Gas	Cond.	LPG	Sales Gas	Cond.	LPG	
		(Bcf)	(Mbbi)	(Mton nes)	(Bcf)	(Mbbi)	(Mton nes)	(Bcf)	(Mbbi)	(Mton nes)	
106SP_28	41.00	5.2	188.3	17.1	9.9	363.4	33.6	18.0	661.2	61.9	34
106SP_27	50.00	6.2	224.8	20.4	11.9	433.8	40.1	21.5	789.3	73.8	34
106SP_22	73.67	7.9	285.2	25.9	15.1	550.4	50.8	27.3	1001.3	93.7	31
106SP_21	94.60	8.2	296.9	27.0	15.7	573.0	52.9	28.4	1042.5	97.6	31
106SP_13	87.36	7.5	272.7	24.7	14.4	526.1	48.6	26.1	957.1	89.6	31
106SP_26	43.35	3.1	110.3	10.0	5.8	212.8	19.6	10.5	387.1	36.2	31
106SP_11	50.00	3.4	123.5	11.2	6.5	238.6	22.0	11.8	433.9	40.6	31
106SP_25	68.06	4.2	150.1	13.6	7.9	289.6	26.7	14.4	526.9	49.3	31
106SP_16	92.18	5.1	182.5	16.6	9.6	352.2	32.5	17.5	640.9	60.0	31
106SP_12	54.12	2.6	93.0	8.4	4.9	179.5	16.6	8.9	326.5	30.6	31
106SP_18	83.64	3.7	134.9	12.2	7.1	260.3	24.0	12.9	473.6	44.3	28
106SP_20	97.88	4.7	153.3	13.9	8.1	295.8	27.3	14.7	538.2	50.4	31
106SP_10	100.00	3.9	141.2	12.9	7.5	273.2	25.4	13.6	496.8	46.8	31
106SP_23	66.38	2.4	88.5	8.0	4.7	170.7	15.8	8.5	310.6	29.1	28
106SP_24	64.86	2.2	79.3	7.2	4.2	153.0	14.1	7.6	278.4	26.0	31
106SP_14	100.00	3.4	121.8	11.1	6.4	235.0	21.7	11.7	427.5	40.0	31
106SP_17	97.31	2.6	94.0	8.5	5.0	181.3	16.7	9.0	329.8	30.9	31
106SP_19	87.38	2.3	81.3	7.4	4.3	156.8	14.5	7.8	285.2	26.7	31
Petrouska	100.00	0.6	22.0	2.0	1.2	42.6	4.0	2.1	77.6	7.3	28
Plum Bush	100.00	0.5	18.5	1.7	1.0	35.7	3.3	1.8	65.1	6.1	55
Red Mulga	100.00	0.5	17.3	1.6	0.9	33.4	3.1	1.7	61.0	5.7	55

**Notes:**

- Prospective Resources are those quantities of petroleum that are estimated, on a given date, to be potentially recoverable from undiscovered accumulations. The key descriptor here is undiscovered, and this is what distinguishes Prospective from Contingent Resources. There is a significantly higher risk, with Prospective relative to Contingent Resources that, they will not mature into revenue generating projects.
- Prospective Resource volumes are usually quoted with an associated geological risk (GCoS): this is defined as the estimated chance that the feature does (to be proved or otherwise by drilling and testing to the surface) contain hydrocarbons.
- It is inappropriate to report summed-up Prospective Resource volumes or to otherwise focus upon those of other than the 'Best Estimate'.
- Sales Gas is estimated Sales Gas in billion standard cubic feet.
- Cond. is estimated Condensate Resources in thousand barrels.
- LPG is estimated Liquid Petroleum Gas in thousand tonnes.

## METHODOLOGY

Drillsearch provided the following reports and information regarding resource estimates:

PEL106	Estimate of Contingent Resources by In Depth Geophysics and Drillsearch
PEL106	Prospective Resources Review September 2009 by In Depth Geophysics and Drillsearch

GCA was provided with the seismic interpretation project in the form of a Kingdom Suite software based project. GCA reviewed the interpretations and found them reasonable. DLS also provided GCA with reviews of pressure data and Material Balance studies on various discoveries. These were reviewed as the basis for fluid contacts applied to prospects and found to be reasonable.

Drillsearch also provided extensive technical data supporting the resource estimates. GCA reviewed the data and found the resource estimation methodology to be reasonable.

In reviewing the data GCA has not performed a detailed audit of the rock and fluid properties used by DLS in the calculation of its resource estimates. However, GCA has reviewed sufficient information and carried out sufficient checks to opine on the reasonableness of the range in reservoir properties applied by Drillsearch in its resource estimates which were based on the above reports. However in calculating its volumes DLS has applied the same gas expansion factor (GEF) for the Low, Best and High Estimates. Varying the GEF by a factor of plus or minus 2.5 percent would be more reasonable in this case. If this were done the result would be a lower Low and a higher High Estimate

## THE ASSET

The PEL106 license is located in the Cooper-Eromanga Basin (**Figure 1**) which extends across the north eastern section of South Australia and the south western section of Queensland. It is considered to be a mature oil and gas province. First discoveries were made in the mid 1960s and the basin has been in continuous production since 1969.

## THE COOPER-EROMANGA BASIN

The Cooper Basin is a Late Carboniferous to Middle Triassic, intracratonic, non marine basin covering over 60,000 square kilometres. Sediment thickness is up to 2,500 metres. Traps are provided by faulted anticlines, downside fault closures and channels draped over structural noses.

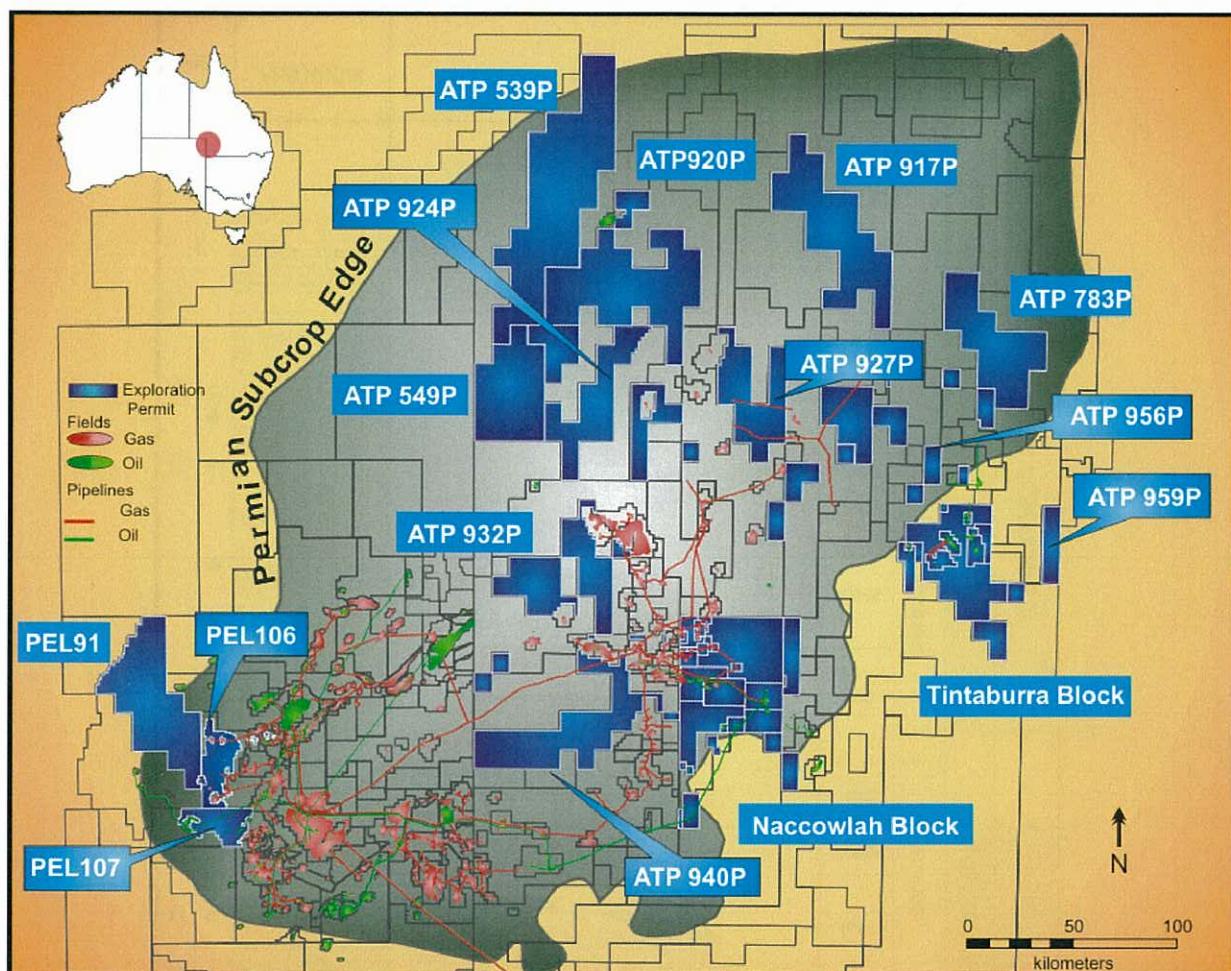
The Cooper Basin is unconformably overlain by the Eromanga Basin which is a Jurassic to Late Cretaceous intra-crataonic basin comprised predominantly of fluvial and lacustrine sediments grading into marine in places. Sediment thickness is up to 2,600 metres.

Historically traps identified in the Cooper Eromanga Basin were four way dip closed anticlines, however recent discoveries in PEL106 are predominantly three way dip closed southeast plunging noses with a stratigraphic component.

A stratigraphic table is attached as **Figure 2**.

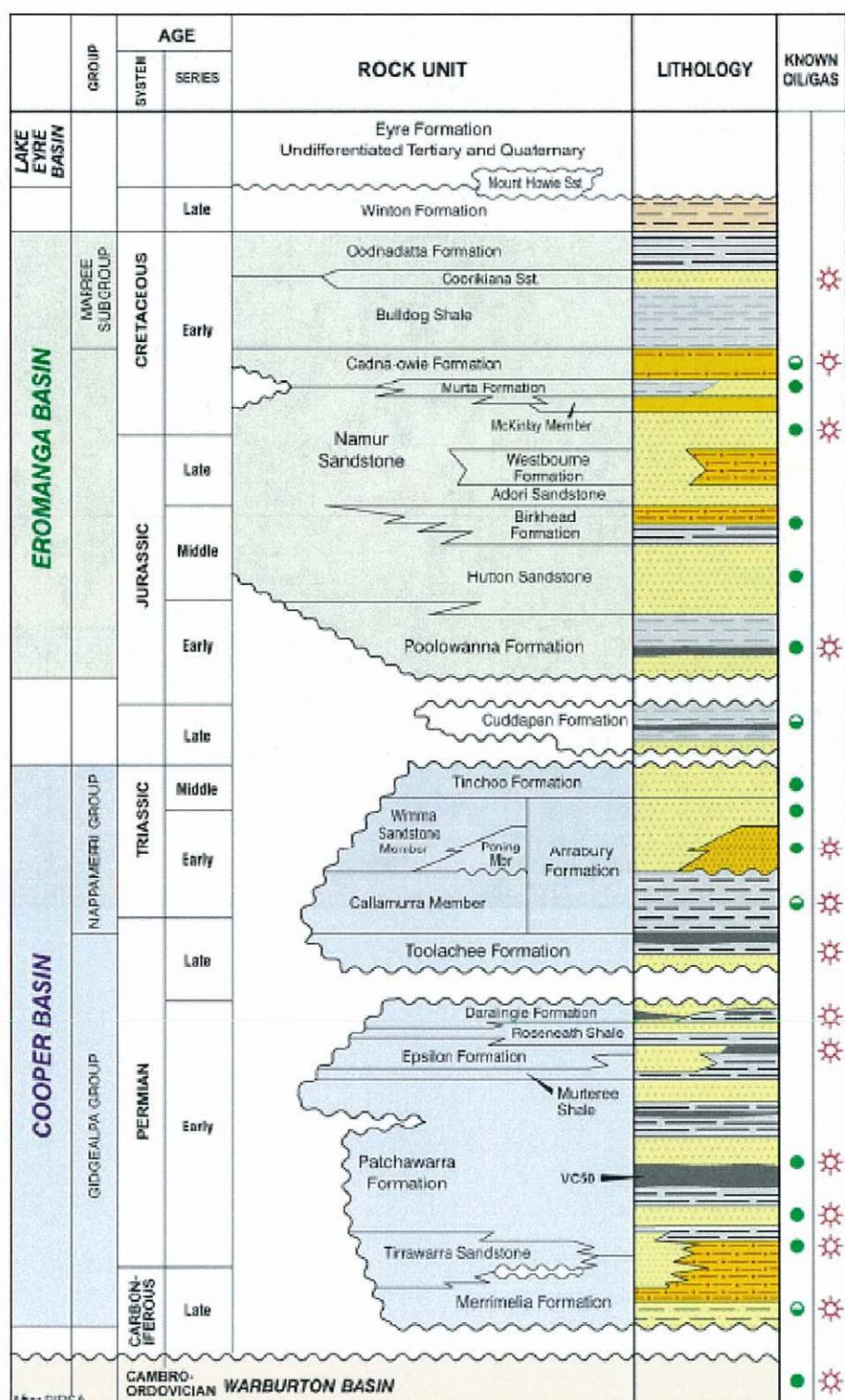
FIGURE I

DRILLSEARCH  
COOPER-EROMANGA BASIN  
AREAS OF INTEREST



## FIGURE 2

### COOPER-EROMANGA BASIN STRATIGRAPHIC COLUMN



## PEL106

PEL106 is located in South Australia in the Cooper-Eromanga Basin and covers an area of 503 square kilometres (**Figure 3**). Drillsearch operates and has varying interests across the block as a result of several farm-in agreements. However, under the terms of a farm-in agreement Beach operates within the "Beach Farm-in Area" of PEL106. PEL106 contains the Middleton Retention License (PRL25). Several production licenses have been carved out of the block by the previous operator prior to its award to Drillsearch.

Ten gas discoveries have been made in the remainder of PEL106; eight of these have been cased and suspended. Two of the wells have had extended production tests (EPTs). Included are Middleton in PRL25 and Udacha, which straddles the boundary with PEL91.

Gas is found in combination structural/stratigraphic traps where channel sands drape over structural noses. The traps are interpreted to be SW to NE trending channels draped over NW to SE trending noses.

Gross (100%) 2C Contingent Resources for the eight gas discoveries that were cased and suspended comprise 41.3 BCF of sales gas, 1.925 MMBbl of condensate and  $106.8 \times 10^3$  tonnes of LPG. These discoveries will remain as Contingent Resources until a development plan is prepared and a development commitment made. A detailed discussion of the Contingent Resources can be found in "Independent Technical Expert's Report on Drillsearch Energy Limited's Oil and Gas Assets" dated 30<sup>th</sup> June, 2009, which was prepared by GCA. Summaries of the Contingent Resources for PEL106 on a Gross and for DLS's Net Working Interest basis are provided in **Tables 1** and **2** above.

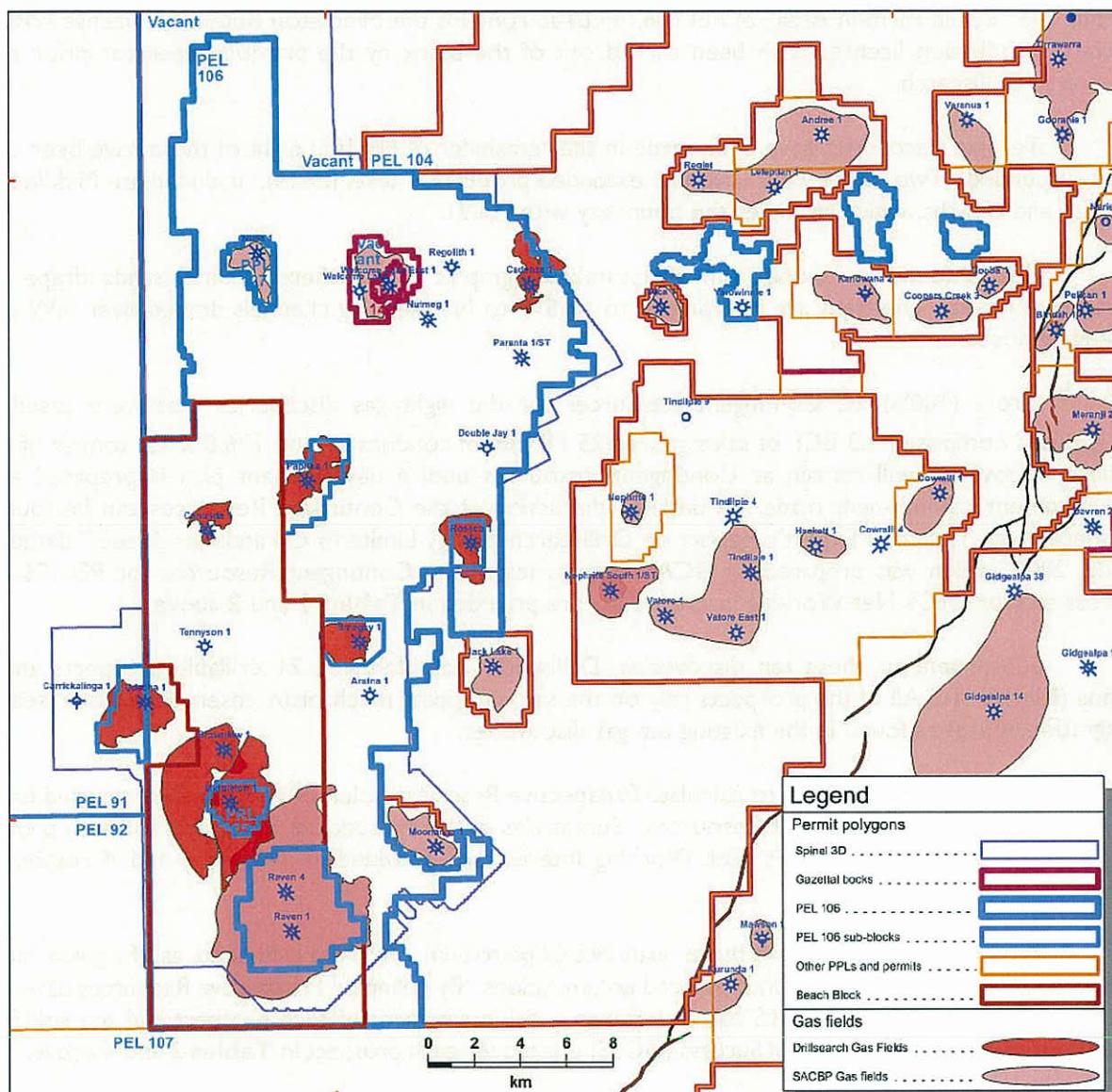
Subsequent to these ten discoveries, Drillsearch has identified 21 drillable prospects and six leads (**Figure 4**). All of the prospects rely on the same trapping mechanism, reservoir, source, seal and migration routes as found in the existing ten gas discoveries.

The methodology used to calculate Prospective Resource volumes was the same as used for the earlier calculation of Contingent Resources. Summaries of the Prospective Resources for each prospect on a Gross basis and for DLS's Net Working Interest are provided in **Tables 3** and **4** respectively above.

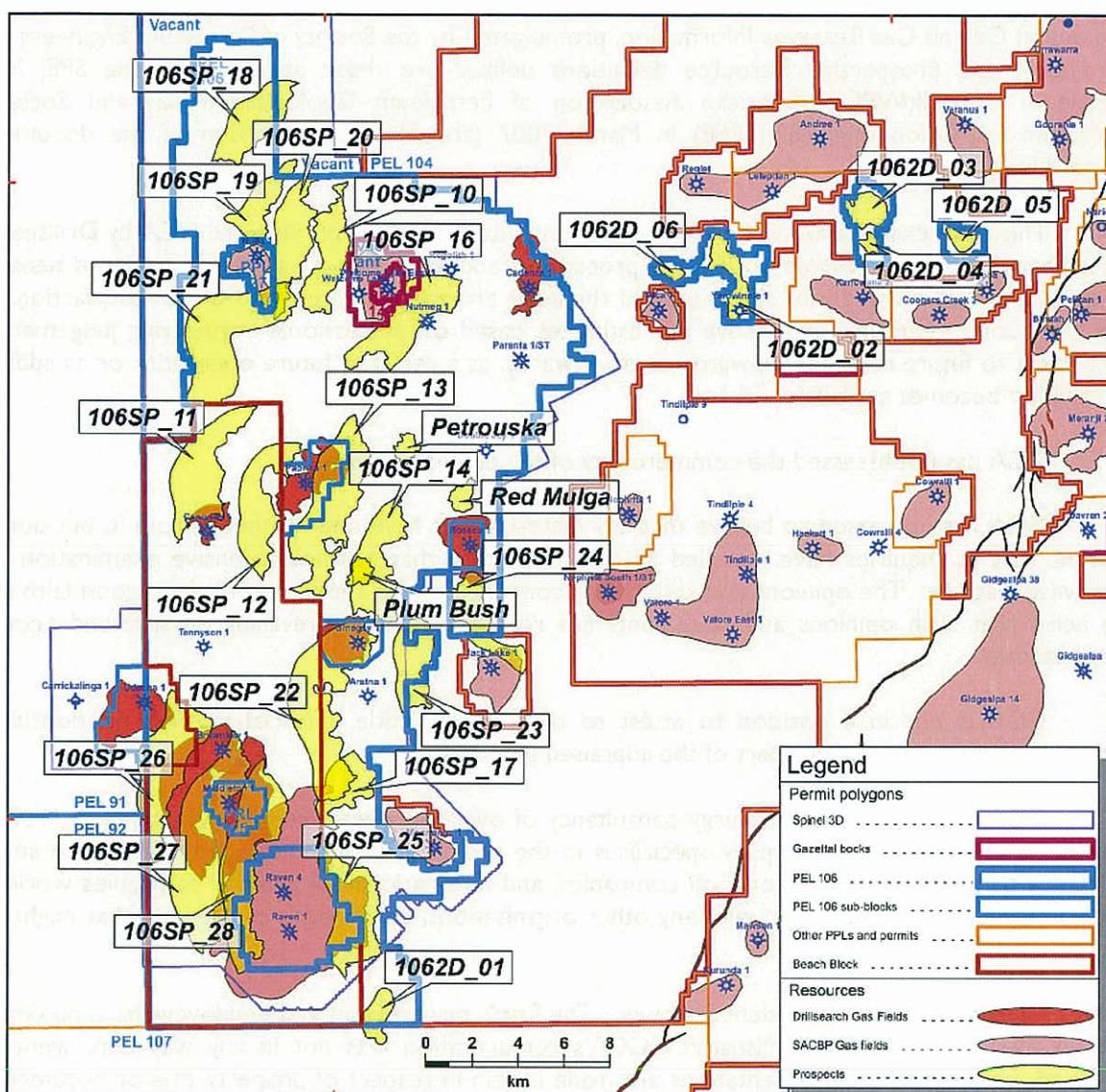
Prospective Resources are those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations. By definition Prospective Resources have a risk factor associated with them. DLS has undertaken a risk assessment of each prospect and the risk factor known as the Geologic Chance of Success (GCoS) is listed for each prospect in **Tables 3** and **4** above.

When considering GCoS four factors have been taken into account: migration of hydrocarbons, reservoir quality, the presence of a trap and the presence of an effective seal. Based on the discoveries in the area it is considered that the risk of migration, reservoir quality and trap are low and that the greatest risk lies in the existence of a trap.

FIGURE 3

PEL 106  
FIELD LOCATIONS

**FIGURE 4**  
**PEL 106**  
**PROSPECT LOCATION MAP**



**STATEMENT OF QUALIFICATION AND BASIS OF OPINION**

It is GCA's opinion that the estimates of Contingent and Prospective Resources listed in this report are reasonable and have been prepared in accordance with generally accepted petroleum engineering principles provided for in the document entitled Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information, promulgated by the Society of Petroleum Engineers (SPE). Contingent and Prospective Resource definitions utilized are those approved by the SPE, World Petroleum Council(WPC), American Association of Petroleum Geologists(AAPG) and Society of Petroleum Evaluation Engineers(SPEE) in March 2007 (an abbreviated version of the document is included in **Appendix I**).

This audit examination was based on data and interpretations provided to GCA by Drillsearch in September, 2009, and included such tests, procedures and adjustments as were considered necessary. All questions that arose during the course of the audit process were resolved to our satisfaction. The reported Contingent and Prospective are estimates based on professional engineering judgement and are subject to future revisions, upwards or downwards, as a result of future operations or as additional information becomes available.

GCA has not assessed the commerciality of the estimated resources.

GCA has no reason to believe that any material facts have been withheld from it, but does not warrant that its inquiries have revealed all of the matters that a more extensive examination might otherwise disclose. The opinions and statements contained in this report are made in good faith and in the belief that such opinions and statements are representative of prevailing physical and economic circumstances.

GCA is not in a position to attest to the property title, financial interest relationships or encumbrances thereon for any part of the appraised properties.

GCA is an independent energy consultancy of over forty years standing (founded in 1962) that operates worldwide. The company specialises in the provision of technical, commercial and strategic assistance to governments, national oil companies, and international oil and gas companies worldwide. The company has no connection with any other organisations, contractors or agencies that might affect the impartiality of advice offered.

GCA served as independent reviewer. The firm's management and employees have no direct or indirect interest holding in Drillsearch. GCA's remuneration was not in any way contingent upon reported estimates. No representations are made herein in respect of property title or encumbrances thereon. This report has been prepared for Drillsearch and should not be used for purposes other than those for which it is intended.

Yours sincerely,  
**GAFFNEY, CLINE & ASSOCIATES**



David S. Ahye  
Regional Manager, Asia Pacific

**APPENDIX I**

**PETROLEUM RESOURCES MANAGEMENT SYSTEM**

**Society of Petroleum Engineers, World Petroleum Council, American Association of Petroleum Geologists and Society of Petroleum Evaluation Engineers**

**Petroleum Resources Management System**

**Definitions and Guidelines (1)**

**March 2007**

**Preamble**

Petroleum resources are the estimated quantities of hydrocarbons naturally occurring on or within the Earth's crust. Resource assessments estimate total quantities in known and yet-to-be-discovered accumulations; resources evaluations are focused on those quantities that can potentially be recovered and marketed by commercial projects. A petroleum resources management system provides a consistent approach to estimating petroleum quantities, evaluating development projects, and presenting results within a comprehensive classification framework.

International efforts to standardize the definition of petroleum resources and how they are estimated began in the 1930s. Early guidance focused on Proved Reserves. Building on work initiated by the Society of Petroleum Evaluation Engineers (SPEE), SPE published definitions for all Reserves categories in 1987. In the same year, the World Petroleum Council (WPC, then known as the World Petroleum Congress), working independently, published Reserves definitions that were strikingly similar. In 1997, the two organizations jointly released a single set of definitions for Reserves that could be used worldwide. In 2000, the American Association of Petroleum Geologists (AAPG), SPE and WPC jointly developed a classification system for all petroleum resources. This was followed by additional supporting documents: supplemental application evaluation guidelines (2001) and a glossary of terms utilized in Resources definitions (2005). SPE also published standards for estimating and auditing reserves information (revised 2007).

These definitions and the related classification system are now in common use internationally within the petroleum industry. They provide a measure of comparability and reduce the subjective nature of resources estimation. However, the technologies employed in petroleum exploration, development, production and processing continue to evolve and improve. The SPE Oil and Gas Reserves Committee works closely with other organizations to maintain the definitions and issues periodic revisions to keep current with evolving technologies and changing commercial opportunities.

The SPE PRMS document consolidates, builds on, and replaces guidance previously contained in the 1997 Petroleum Reserves Definitions, the 2000 Petroleum Resources Classification and Definitions publications, and the 2001 "Guidelines for the Evaluation of Petroleum Reserves and Resources"; the latter document remains a valuable source of more detailed background information.

These definitions and guidelines are designed to provide a common reference for the international petroleum industry, including national reporting and regulatory disclosure agencies, and to support petroleum project and portfolio management requirements. They are intended to improve clarity in global communications regarding petroleum resources. It is expected that SPE PRMS will be supplemented with industry education programs and application guides addressing their implementation in a wide spectrum of technical and/or commercial settings.

It is understood that these definitions and guidelines allow flexibility for users and agencies to tailor application for their particular needs; however, any modifications to the guidance contained herein should be clearly identified. The definitions and guidelines contained in this document must not be construed as modifying the interpretation or application of any existing regulatory reporting requirements.

The full text of the SPE PRMS Definitions and Guidelines can be viewed at:  
[www.spe.org/specma/binary/files/6859916Petroleum\\_Resources\\_Management\\_System\\_2007.pdf](http://www.spe.org/specma/binary/files/6859916Petroleum_Resources_Management_System_2007.pdf)

<sup>1</sup> These Definitions and Guidelines are extracted from the Society of Petroleum Engineers / World Petroleum Council / American Association of Petroleum Geologists / Society of Petroleum Evaluation Engineers (SPE/WPC/AAPG/SPEE) Petroleum Resources Management System document ("SPE PRMS"), approved in March 2007.

**RESERVES**

***Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions.***

Reserves must satisfy four criteria: they must be discovered, recoverable, commercial, and remaining based on the development project(s) applied. Reserves are further subdivided in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their development and production status. To be included in the Reserves class, a project must be sufficiently defined to establish its commercial viability. There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of firm intention to proceed with development within a reasonable time frame. A reasonable time frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While 5 years is recommended as a benchmark, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons, or to meet contractual or strategic objectives. In all cases, the justification for classification as Reserves should be clearly documented. To be included in the Reserves class, there must be a high confidence in the commercial producibility of the reservoir as supported by actual production or formation tests. In certain cases, Reserves may be assigned on the basis of well logs and/or core analysis that indicate that the subject reservoir is hydrocarbon-bearing and is analogous to reservoirs in the same area that are producing or have demonstrated the ability to produce on formation tests.

**On Production**

***The development project is currently producing and selling petroleum to market.***

The key criterion is that the project is receiving income from sales, rather than the approved development project necessarily being complete. This is the point at which the project "chance of commerciality" can be said to be 100%. The project "decision gate" is the decision to initiate commercial production from the project.

**Approved for Development**

***A discovered accumulation where project activities are ongoing to justify commercial development in the foreseeable future.***

At this point, it must be certain that the development project is going ahead. The project must not be subject to any contingencies such as outstanding regulatory approvals or sales contracts. Forecast capital expenditures should be included in the reporting entity's current or following year's approved budget. The project "decision gate" is the decision to start investing capital in the construction of production facilities and/or drilling development wells.

**Justified for Development**

***Implementation of the development project is justified on the basis of reasonable forecast commercial conditions at the time of reporting, and there are reasonable expectations that all necessary approvals/contracts will be obtained.***

In order to move to this level of project maturity, and hence have reserves associated with it, the development project must be commercially viable at the time of reporting, based on the reporting entity's assumptions of future prices, costs, etc. ("forecast case") and the specific circumstances of the project. Evidence of a firm intention to proceed with development within a reasonable time frame will be sufficient to demonstrate commerciality. There should be a development plan in sufficient detail to support the assessment of commerciality and a reasonable expectation that any regulatory approvals or sales contracts required prior to project implementation will be forthcoming. Other than such approvals/contracts, there should be no known contingencies that could preclude the development from proceeding within a reasonable timeframe (see Reserves class). The project "decision gate" is the decision by the reporting entity and its partners, if any, that the project has reached a level of technical and commercial maturity sufficient to justify proceeding with development at that point in time.

### Proved Reserves

Proved Reserves are those quantities of petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations.

If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. If probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered will equal or exceed the estimate. The area of the reservoir considered as Proved includes:

- (1) the area delineated by drilling and defined by fluid contacts, if any, and
- (2) adjacent undrilled portions of the reservoir that can reasonably be judged as continuous with it and commercially productive on the basis of available geoscience and engineering data.

In the absence of data on fluid contacts, Proved quantities in a reservoir are limited by the lowest known hydrocarbon (LKH) as seen in a well penetration unless otherwise indicated by definitive geoscience, engineering, or performance data. Such definitive information may include pressure gradient analysis and seismic indicators. Seismic data alone may not be sufficient to define fluid contacts for Proved reserves (see "2001 Supplemental Guidelines," Chapter 8). Reserves in undeveloped locations may be classified as Proved provided that the locations are in undrilled areas of the reservoir that can be judged with reasonable certainty to be commercially productive. Interpretations of available geoscience and engineering data indicate with reasonable certainty that the objective formation is laterally continuous with drilled Proved locations. For Proved Reserves, the recovery efficiency applied to these reservoirs should be defined based on a range of possibilities supported by analogs and sound engineering judgment considering the characteristics of the Proved area and the applied development program.

### Probable Reserves

Probable Reserves are those additional Reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than Proved Reserves but more certain to be recovered than Possible Reserves.

It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated Proved plus Probable Reserves (2P). In this context, when probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the 2P estimate. Probable Reserves may be assigned to areas of a reservoir adjacent to Proved where data control or interpretations of available data are less certain. The interpreted reservoir continuity may not meet the reasonable certainty criteria. Probable estimates also include incremental recoveries associated with project recovery efficiencies beyond that assumed for Proved.

### Possible Reserves

Possible Reserves are those additional reserves which analysis of geoscience and engineering data indicate are less likely to be recoverable than Probable Reserves.

The total quantities ultimately recovered from the project have a low probability to exceed the sum of Proved plus Probable plus Possible (3P), which is equivalent to the high estimate scenario. When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the 3P estimate. Possible Reserves may be assigned to areas of a reservoir adjacent to Probable where data control and interpretations of available data are progressively less certain. Frequently, this may be in areas where geoscience and engineering data are unable to clearly define the area and vertical reservoir limits of commercial production from the reservoir by a defined project. Possible estimates also include incremental quantities associated with project recovery efficiencies beyond that assumed for Probable.

### Probable and Possible Reserves

(See above for separate criteria for Probable Reserves and Possible Reserves.)

The 2P and 3P estimates may be based on reasonable alternative technical and commercial interpretations within the reservoir and/or subject project that are clearly documented, including comparisons to results in successful similar projects. In conventional accumulations, Probable and/or Possible Reserves may be assigned where geoscience and engineering data identify directly adjacent portions of a reservoir within the same accumulation that may be separated from Proved areas by minor faulting or other geological discontinuities and have not been penetrated by a wellbore but are interpreted to be in communication with the known (Proved) reservoir. Probable or Possible Reserves may be assigned to areas that are

structurally higher than the Proved area. Possible (and in some cases, Probable) Reserves may be assigned to areas that are structurally lower than the adjacent Proved or 2P area. Caution should be exercised in assigning Reserves to adjacent reservoirs isolated by major, potentially sealing, faults until this reservoir is penetrated and evaluated as commercially productive. Justification for assigning Reserves in such cases should be clearly documented. Reserves should not be assigned to areas that are clearly separated from a known accumulation by non-productive reservoir (i.e., absence of reservoir, structurally low reservoir, or negative test results); such areas may contain Prospective Resources. In conventional accumulations, where drilling has defined a highest known oil (HKO) elevation and there exists the potential for an associated gas cap, Proved oil Reserves should only be assigned in the structurally higher portions of the reservoir if there is reasonable certainty that such portions are initially above bubble point pressure based on documented engineering analyses. Reservoir portions that do not meet this certainty may be assigned as Probable and Possible oil and/or gas based on reservoir fluid properties and pressure gradient interpretations.

### Developed Reserves

Developed Reserves are expected quantities to be recovered from existing wells and facilities.

Reserves are considered developed only after the necessary equipment has been installed, or when the costs to do so are relatively minor compared to the cost of a well. Where required facilities become unavailable, it may be necessary to reclassify Developed Reserves as Undeveloped. Developed Reserves may be further sub-classified as Producing or Non-Producing.

#### Developed Producing Reserves

Developed Producing Reserves are expected to be recovered from completion intervals that are open and producing at the time of the estimate.

Improved recovery reserves are considered producing only after the improved recovery project is in operation.

#### Developed Non-Producing Reserves

Developed Non-Producing Reserves include shut-in and behind-pipe Reserves

Shut-in Reserves are expected to be recovered from:

- (1) completion intervals which are open at the time of the estimate but which have not yet started producing,
- (2) wells which were shut-in for market conditions or pipeline connections, or
- (3) wells not capable of production for mechanical reasons.

Behind-pipe Reserves are expected to be recovered from zones in existing wells which will require additional completion work or future re-completion prior to start of production. In all cases, production can be initiated or restored with relatively low expenditure compared to the cost of drilling a new well.

### Undeveloped Reserves

Undeveloped Reserves are quantities expected to be recovered through future investments:

- (1) from new wells on undrilled acreage in known accumulations,
- (2) from deepening existing wells to a different (but known) reservoir,
- (3) from infill wells that will increase recovery, or
- (4) where a relatively large expenditure (e.g. when compared to the cost of drilling a new well) is required to
  - (a) recomplete an existing well or
  - (b) install production or transportation facilities for primary or improved recovery projects.

**CONTINGENT RESOURCES**

***Those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable due to one or more contingencies.***

Contingent Resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

**Development Pending**

*A discovered accumulation where project activities are ongoing to justify commercial development in the foreseeable future.*

The project is seen to have reasonable potential for eventual commercial development, to the extent that further data acquisition (e.g. drilling, seismic data) and/or evaluations are currently ongoing with a view to confirming that the project is commercially viable and providing the basis for selection of an appropriate development plan. The critical contingencies have been identified and are reasonably expected to be resolved within a reasonable time frame. Note that disappointing appraisal/evaluation results could lead to a re-classification of the project to "On Hold" or "Not Viable" status. The project "decision gate" is the decision to undertake further data acquisition and/or studies designed to move the project to a level of technical and commercial maturity at which a decision can be made to proceed with development and production.

**Development Unclarified or on Hold**

*A discovered accumulation where project activities are on hold and/or where justification as a commercial development may be subject to significant delay.*

The project is seen to have potential for eventual commercial development, but further appraisal/evaluation activities are on hold pending the removal of significant contingencies external to the project, or substantial further appraisal/evaluation activities are required to clarify the potential for eventual commercial development. Development may be subject to a significant time delay. Note that a change in circumstances, such that there is no longer a reasonable expectation that a critical contingency can be removed in the foreseeable future, for example, could lead to a reclassification of the project to "Not Viable" status. The project "decision gate" is the decision to either proceed with additional evaluation designed to clarify the potential for eventual commercial development or to temporarily suspend or delay further activities pending resolution of external contingencies.

**Development Not Viable**

*A discovered accumulation for which there are no current plans to develop or to acquire additional data at the time due to limited production potential.*

The project is not seen to have potential for eventual commercial development at the time of reporting, but the theoretically recoverable quantities are recorded so that the potential opportunity will be recognized in the event of a major change in technology or commercial conditions. The project "decision gate" is the decision not to undertake any further data acquisition or studies on the project for the foreseeable future.

**PROSPECTIVE RESOURCES**

***Those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.***

Potential accumulations are evaluated according to their chance of discovery and, assuming a discovery, the estimated quantities that would be recoverable under defined development projects. It is recognized that the development programs will be of significantly less detail and depend more heavily on analog developments in the earlier phases of exploration.

**Prospect**

***A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.***

Project activities are focused on assessing the chance of discovery and, assuming discovery, the range of potential recoverable quantities under a commercial development program.

**Lead**

***A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be classified as a prospect.***

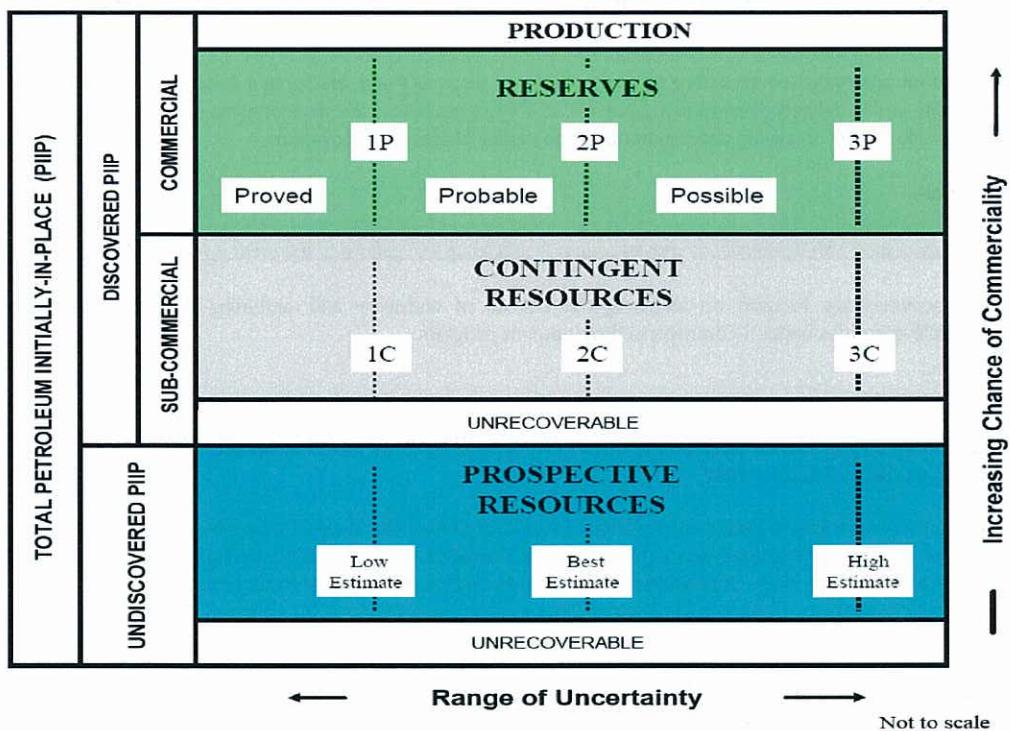
Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to confirm whether or not the lead can be matured into a prospect. Such evaluation includes the assessment of the chance of discovery and, assuming discovery, the range of potential recovery under feasible development scenarios.

**Play**

***A project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects.***

Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to define specific leads or prospects for more detailed analysis of their chance of discovery and, assuming discovery, the range of potential recovery under hypothetical development scenarios.

## RESOURCES CLASSIFICATION



## PROJECT MATURITY

