CBM93-004

Well Proposal

October 2009

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1.0 EXECUTIVE SUMMARY

A regional coal bed methane (CBM) drilling programme incorporating five wells is planned to commence late 2009 in permits EP-93 and EP-107. The permits are operated by Central Petroleum Limited (CTP) on behalf of Petroleum Exploration Australia Limited (PXA) and Red Sky Energy (RSE).

CBM93-004, one of the five wells, is located in EP-93 directly updip about 9 km north of CBM93-001 drilled in 2008. The well will target the Permian Purni Formation coals which have been regionally mapped using limited seismic data coverage. The well is located on seismic line CB08-01 at VP 2778.

The five well drilling program will provide information to support the company's vision of realising a major coal resource in the northern Pedirka Basin with the aim of commercial exploitation.

CBM93-004 will provide critical information relating to total coal seam thickness, gas content, gas composition, permeability and potential productivity. It is planned to continuously core the Permian coal sequence and conduct open hole DST's over selected intervals. Dependant on results final productivity will be assessed through extended production tests after dewatering.

The top Permian Purni Coal in CBM93-004 is prognosed at 550mRT with a gross thickness of 420m. The prognosed TD is 1020mRT. The prognosed coal seam thickness (in seams >2m thick) at this location is 80-90m.

No potential shallow drilling hazards are identified from seismic data at this location.

2.0 INTRODUCTION

2.1 General Overview

A coal bed methane (CBM) drilling programme is scheduled to commence in permits EP-93 and EP-107 in late 2009. The permits are located in the Simpson Desert in Central Australia, the northeastern corner of each of these permits being approximately 320km and 200km southeast of Alice Springs, respectively. The permits encompass four superimposed sedimentary basins, namely the Palaeozoic Warburton Basin, the Permo–Carboniferous Pedirka Basin, the Triassic Simpson Basin, and the Jurassic–Cretaceous Eromanga Basin a geological cross section defining the Pedirka Basin is illustrated in Figure 1. Particular reference is made to the Permian Purni Coal Formation which thins in a northwest direction onto the Andado Shelf. It is this sequence, which is interpreted to be present in both permits and is the primary objective of the 2009/2010 CBM drilling campaign.

The Pedirka Basin covers an area of 73,000km^2 in the Northern Territory. To date ten exploration wells have been drilled in this area and about 3000 line km of seismic have been acquired. Not all the seismic data is available, having been lost through time. Recent studies of the basin (Alexander *et al* 1996, Ambrose *et al* 2002, Middleton *et al* 2007, and Ambrose et al, 2007) have reviewed the stratigraphy and basin history of the area and have updated the petroleum potential of this highly prospective basin.

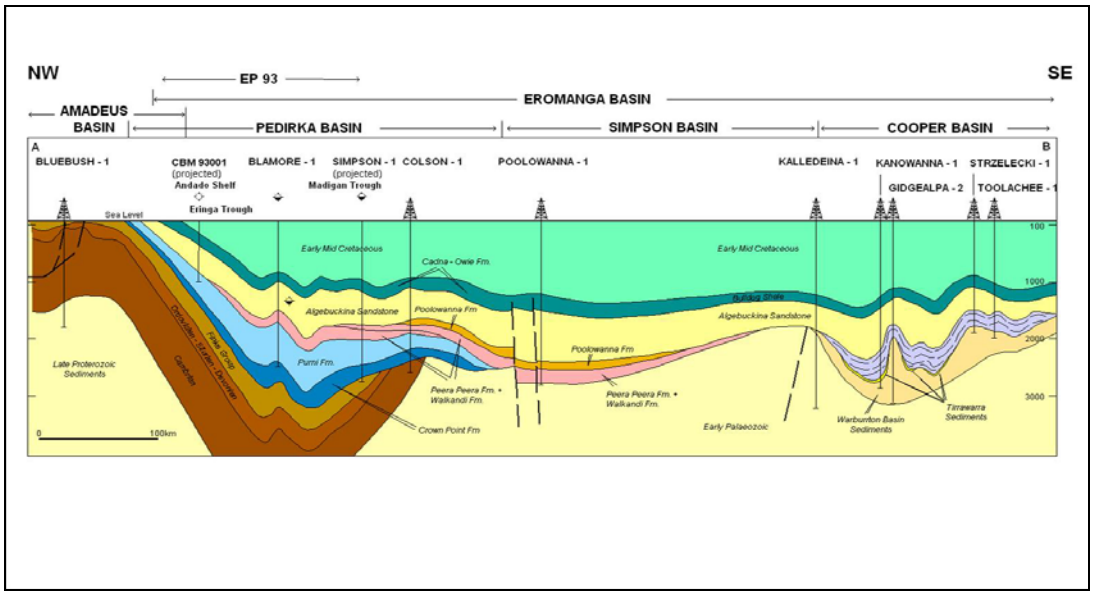

Figure 1 Pedirka Basin Geological Cross Section

One CBM well, CBM93-001 has been drilled in EP-93. There is no well control in EP-107. Additional stratigraphic control is present updip on the far northwestern margin of the basin where Early Permian glacials of the Crown Point Formation form a line of outcrops parallel to the Newlands Range Ridge. Blamore-1 and CBM93-001 drilled in 2008 in EP-93, intersected 132m and 138m of coal respectively in seams greater than 2m thick. A northwest-southeast trending seismic line tying these two wells, CB08-01, in EP-93 is illustrated in Figure 2. Calibration of these wells with existing seismic and regional distribution has formed the basis for the location of the 2009 CBM well locations.

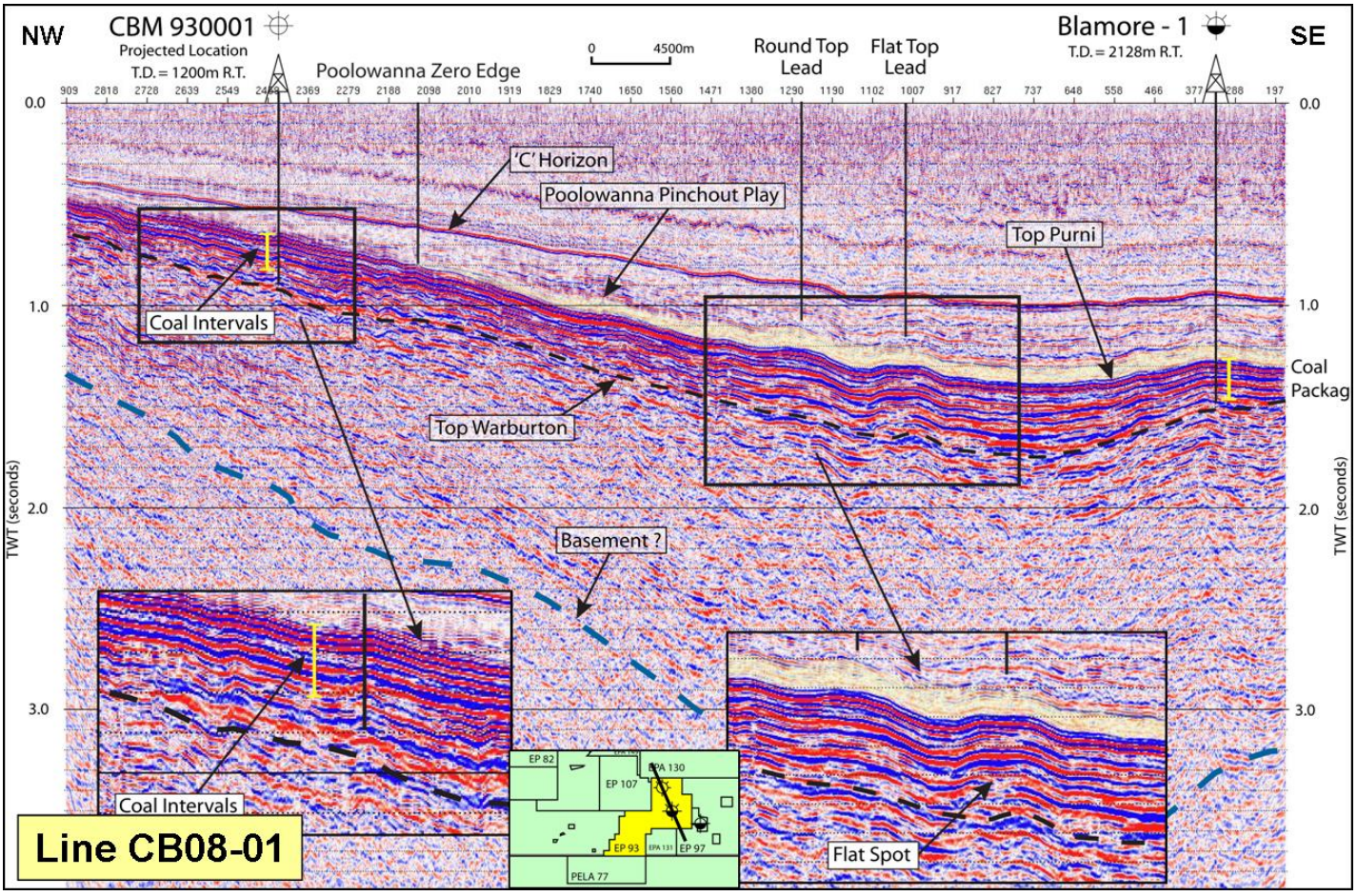

Figure 2 Seismic line CB08-01 tying CBM93-001 to Blamore-1

A log correlation tying the coal section between these two wells is illustrated in Figure **3**.

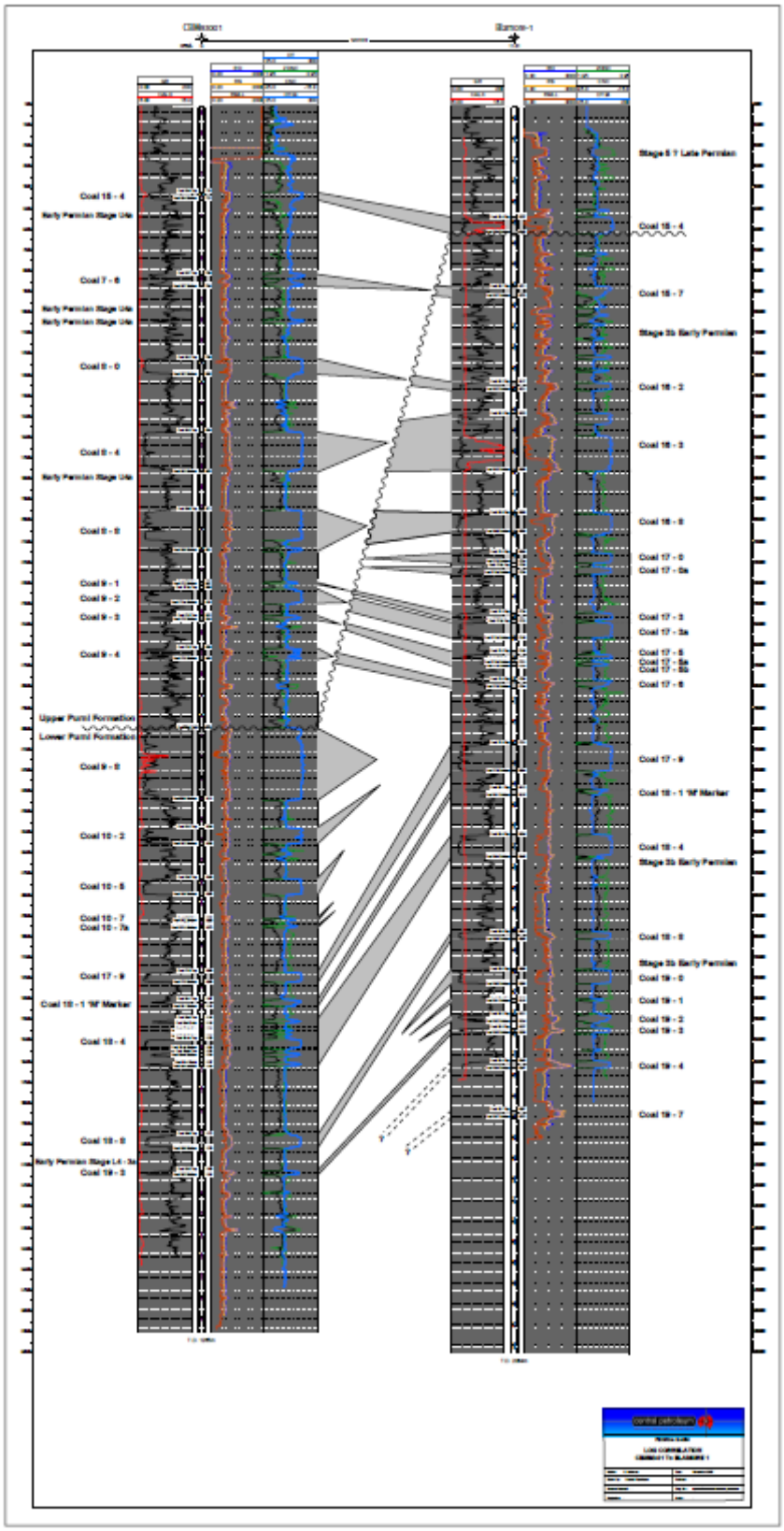

Figure 3 Log Correlation CBM93-001 to Blamore-1

The drilling programme proposed to assess the CBM potential will commence in late 2009 with the drilling of five wells. The three CBM wells to be drilled in EP-93 will satisfy the permit year four guaranteed drilling commitment for this permit (Figure 4). The two wells to be drilled in EP-107 will satisfy the permit year two guaranteed drilling commitment for this permit (Figure 5). The figures illustrate the five year commitment programmes. It is noted that seismic acquisition is also planned this year to fulfil the outstanding seismic commitments.

EP-93	Permit EP-93 117 blocks Permit Dates Year One 1st November 2004- 31st October 2005 Permit Date Year 1- 6 mth sus. to 1st May 2006, Year 2-12 mth sus. and ext. to 31st April 2008 12mth ext permit year 4 from 1st Nov 2008 to 31st Oct 2010 JV: Operator Central Petroleum Ltd (Merlin Energy Pty Ltd) CTP 80% PXA 20%				
Commitment Work Programme	011104-310406	010506-310407	011107-311008	011108-311010	011110-311011
	Year One	Year Two	Year Three	Year Four	Year Five
G+G Studies	$125K				
150km Seismic Acq.		$200K			
250 Km Seismic Acq			$1900K		
378km Seismic Acq. & 3 wells				$7736K	
G+G Studies					$100K

Figure 4 Work Programme EP-93

EP-107	Permit EP-107 92 blocks Permit Dates Year One 28th September 2007- 27th September 2008 JV: Operator Central Petroleum Ltd (Merlin Energy Pty Ltd) CTP 80% PXA 20%				
Commitment Work Programme	280907-270908	280908-270910	280910-270911	280911-270912	280912-270913
	Year One	Year Two	Year Three	Year Four	Year Five
G+G Studies	$100K				
36km Seismic Acq. & 2 Wells		$3308K			
G+G			$200K		
G+G				$100K	
G+G					$100K

Figure 5 Work Programme EP-107

2.2 Resource Exploration

With the discovery of thick coal seams in CBM93-001 and Blamore-1, Central Petroleum began the process of coal resource estimation. The objective of the 2009-2010 CSG wells is to assist with the overall coal resource determination and best monetization strategy of this newly discovered coal basin.

The process leading to Gas In Place (GIP) estimates that Central Petroleum intends to follow (Gales, 2009) is outlined below:

1. Perform Gas Desorption Measurements
2. Estimate Total Gas Content
3. Relate Gas Content to Coal Composition
4. Relate Coal Composition to Wireline Density Measurements
5. Determine In-situ Moisture Content
6. Estimate Thickness and Density from Log Data
7. Compute In-situ Gas Content
8. Compute Gas-in-Place Volume

The principle source of data for this process is full core cut throughout the coal section in the five specified wells. By locating the five CSG wells in varying locations in the Pedirka Basin, some estimation of the variability of the coal resource will be possible. From this initial phase of exploration, depending on results, Central Petroleum would move on to pilot projects around exploration wells that demonstrate the most promising resource. If this phase is successful Central Petroleum will move onto production of the resource.

2.3 CBM93-004 Geographical Location

The CBM93-004 exploration well is located in Central Australia in the Pedirka Basin approximately 310km southeast of Alice Springs. The well is situated in permit EP-93 on seismic line CB08-01 at VP 2778. Easting is 585855mE and northing 7249212mN (Figure 6). The area is linked with existing tracks and seismic lines. Each of the wells is located in accessible locations and each has the necessary access approvals. The map illustrates the locations for the three CBM wells in EP-93 and two in EP-107.

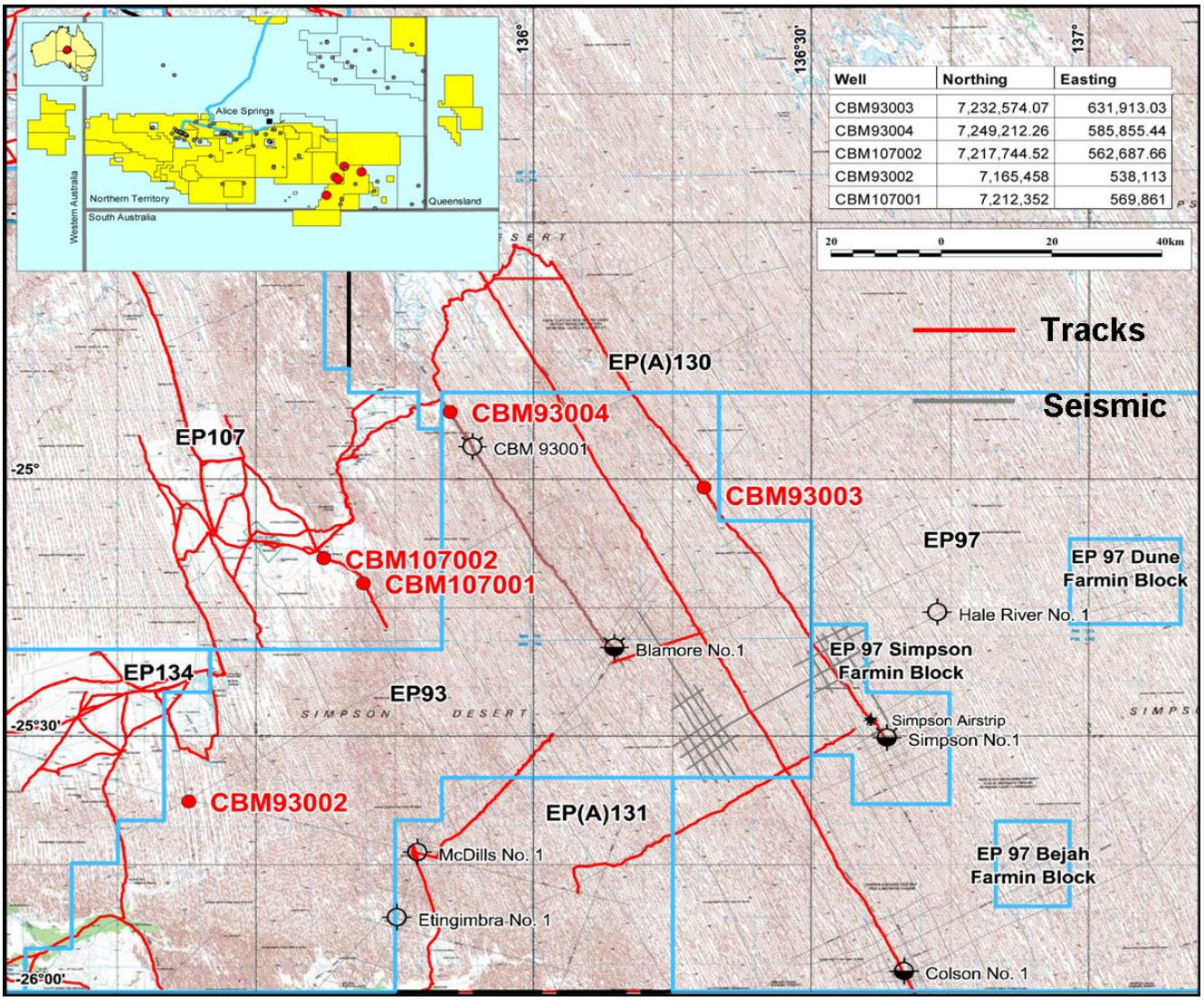

Figure 6 CBM93-004 Well Location

The well data summary for CBM93-004 is detailed in Table 1.

WELL DATA SUMMARY CBM93-004		
WELL NAME	CBM93-004	
BASIN	Pedirka Basin	
PERMIT	EP-93	
CLASSIFICATION	Exploration Coal Bed Methane	
OPERATOR	Central Petroleum Limited	
PROPOSED LOCATION	GDA94 Zone 53	
Northing	Y=7249212.0N	
Easting	X=585855.0E	
Latitude	(-)24.8697S	24 52 10.92S
Longitude	135.8499E	135 50 59.64E
Seismic Reference	VP 2778	Line CB08-01
Primary Objective	Purni Coal Formation 550m TVDRT	
Total Depth	1020m TVDRT	
GROUND ELEV. (AMSL)	185m	
DRILL FLOOR ELEV.(AMSL)	1m	
DRILLING RIG	Wallis Rig D 39	
DRILLING CONTRACTOR	Wallis Drilling	
ESTIMATED DURATION	27 days	

Table 1 Well Data Summary CBM93-004

3.0 REGIONAL CBM DRILLING PROGRAMME

3.1 Objectives

CBM93-004 is part of a five well CBM programme in EP-93 and EP-107 to target the Top Permian Coals within the Permian Purni Formation. It is a preliminary programme which will precipitate a comprehensive review of regional prospectivity and possibly a CBM drilling campaign in the near future. The wells have been located based on their proximity to seismic control, the interpreted presence and distribution of coal, their regional distribution and their position with respect to the existence of accessible tracks. It is noted that some of the proposed locations do not have seismic control. The wells are spread over distances of approximately 100 km and trend in a northeast southwest orientation along the northeastern flank of the Pedirka Basin on the margin of the Eringa Trough and on to the edges of the Andado Shelf. It is anticipated information on the coal properties will allow mapping of regional trends and allow prediction of the following:

The presence and thickness of coal seams for extent and volumes.
The gas content and its origin (biogenic or thermogenic gas).
Vitrinite reflectance and pyrolysis for coal rank.
Isotherm analysis to determine coal gas saturations (adjusted for reservoir conditions).
Coal permeability and porosity for an understanding of flow capacity and potential productivity.
Maceral and ash content to for isotherm calibration and to understand general suitability for GTL Feedstock.
Indications of depositional environment of the coals and the stress regime in the environs of the wellbore for regional basin analysis.

A coring and logging programme is planned for all the wells and will include full coring of the coal sequence. The logging programme will include a “quad combo” run, CMI (image log) and a final TD checkshot survey. A full analysis of cored section is planned. Testing equipment will be on standby to run DST’s if required.

3.2 Technical Justification CBM93-004

CBM93-004 will test the coal potential updip of CBM93-001 drilled in 2008. The well has been located with seismic control. The nearest well control is located 9 km to the south where 138 m of coal was intersected in CBM93-001. The well will be cored from the Top Purni Coal at 550mRT to TD prognosed at 1020mRT. Coal rank, gas content and permeability information derived from analysis of logging and coring results will contribute to the regional understanding of the CBM potential.

CBM93-004 is the most northerly located well of this program. It will test coals deposited updip from those intersected in CBM93-001. Due to the lack of frequency of major fault trends, and relatively layer parallel geometries of the identified reflective sequences interpreted on the seismic data, the basin is interpreted to have formed passively due to subsidence. As this well is located updip it is interpreted to test an area where there may be an increase in biogenic gas content as a result of water influx. CBM93-004 is critical to understand the depositional environment and the coal rank of the basin and its regional variation, and has been located to provide these data and a robust seismic to well tie for basin wide mapping and resource estimation.

It is possible that during production testing the permeability can increase up to 100 times due to coal matrix shrinkage.

4.0 GEOLOGY

4.1 Structural Elements

The structural elements for the Pedirka Basin are illustrated in Figure 7. The axis of the narrow depocentre of the Eringa Trough is interpreted to run northeast-southwest through EP-93. The Andado Shelf is located to the west of the Eringa Trough and runs from permit EPA-130 south through EP-107 and EP-105 to PELA-77. The Madigan Trough is located in the northeastern corner of EP-93 and is flanked to the north by the Arunta Platform. The northern Poolawanna Trough defines the eastern extent of the Pedirka Basin. The majority of this area is covered by permits either operated or under application by Central Petroleum Limited. The CBM potential is currently interpreted to extend along the western flank of the Eringa Trough and on to the Andado Shelf where coal has been deposited and now sits at depths suitable for CBM production, given other requisite coal characteristics are present.

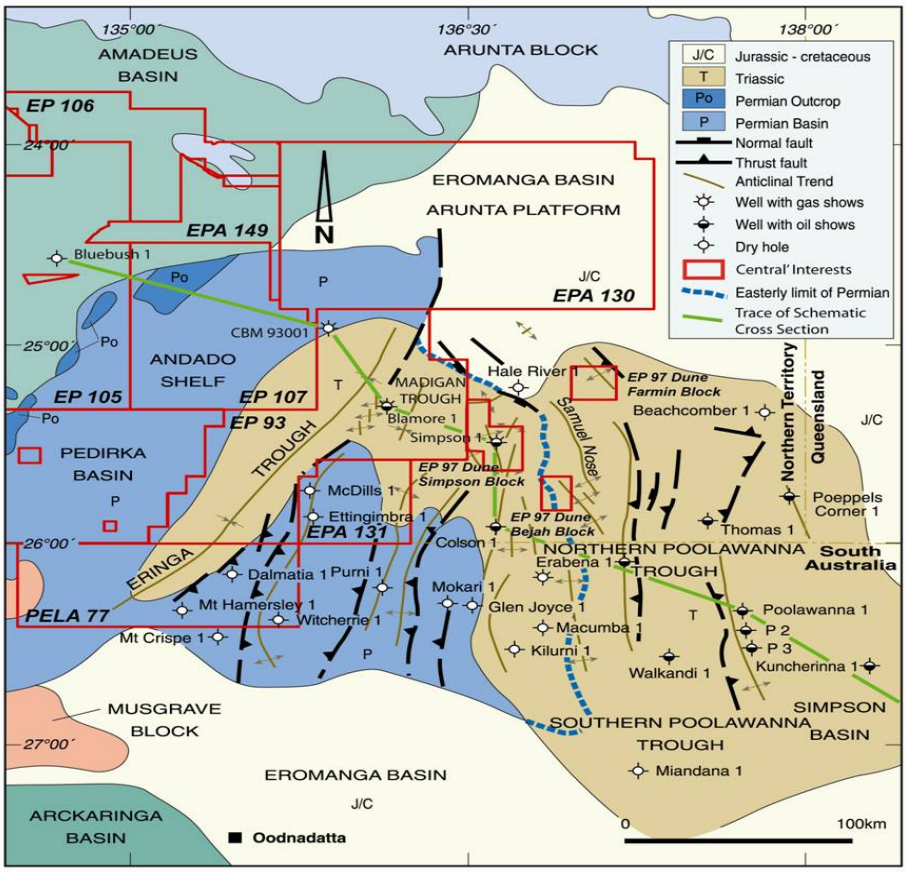

Figure 7 Structural Elements Pedirka Basin

At this early stage of basin appraisal for CBM, little is yet known about the stress fields present as a result of the tectonic elements illustrated in Figure 7. Geodynamic studies based on core and wireline logs will assist in correlating stress measurements from CBM93-004 with the mapped regional structures. This is critical for locating “sweet-spots” in the basin where enhanced permeability greatly increases flow rates and ultimate recovery of CBM.

4.2 Stratigraphy

The stratigraphy of the Pedirka Basin is illustrated in Figure 8. It encompasses four superimposed sedimentary basins, namely the Palaeozoic Warburton Basin, the Permo–Carboniferous Pedirka Basin, the Triassic Simpson Basin, and the Jurassic–Cretaceous Eromanga Basin.

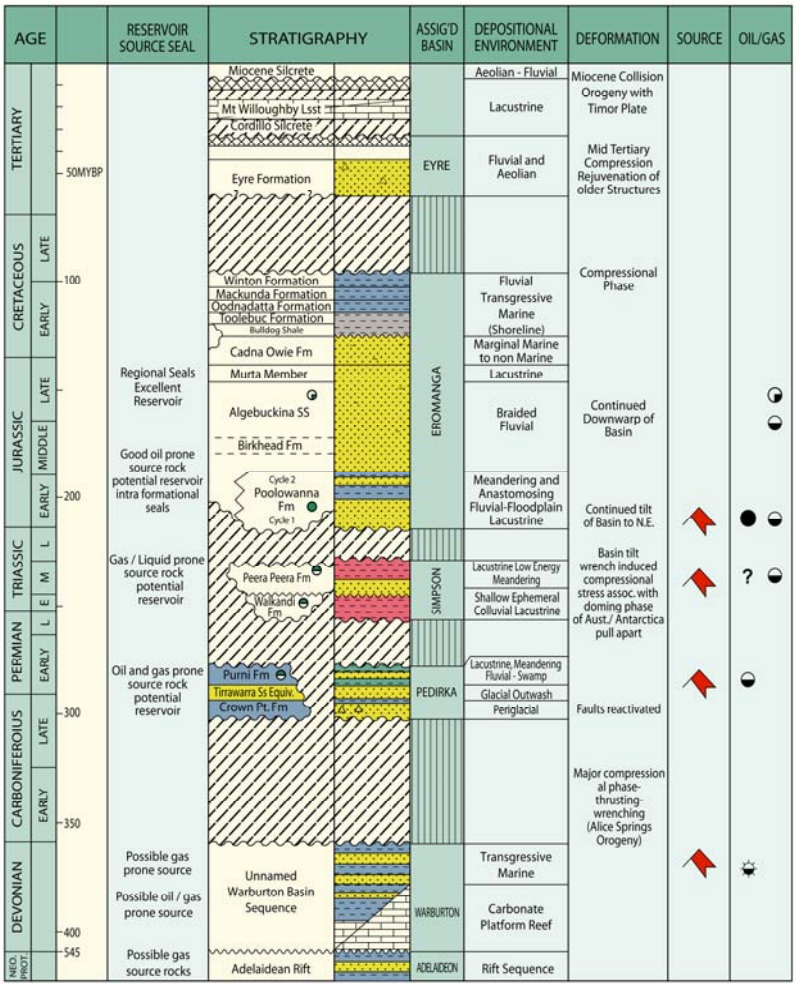

Figure 8 Stratigraphic Section Pedirka Basin

Pre-Permian

The earliest sediments in the area are a succession of Neoproterozoic to Late Devonian intracratonic sediments of the Warburton Basin. These strata occur extensively in the subsurface and onlap Mesoproterozoic gneiss, amphibolite and granite of the Musgrave Province; they are discussed in more detail by Questa (1990).

Permian Sedimentation (Pedirka Basin)

The Pedirka Basin and its associated depocentres, the Eringa and Madigan troughs and the Jurassic/Cretaceous Poolowanna Trough all lie east of the well. The Permo–Carboniferous record is dominated by widespread glaciation and basal diamictites (Crown Point Formation). This sequence is overlain by intracratonic sediments of the Early Permian Purni Formation (Youngs, 1975) which are equivalent to the Patchawarra Formation of the Cooper Basin. However, this interpretation recognises regional development of glacial outwash sandstones at the top of the Crown Point Formation which are believed to be equivalent to the Tirrawarra Sandstone of the Cooper Basin.

Permo-Carboniferous Crown Point Formation / Tirrawarra Sandstone Equivalent

The basal Permian unit, the Crown Point Formation, is a dominantly glacial succession, comprising extensive diamictite, glacial-fluvial outwash sandstones, ripple laminated sandstone and siltstone, together with thick shale and varved successions. Coarse sandstone, conglomerate and diamictite are common around palaeo-highs, whereas basinal areas focused shale and varve sedimentation. The succession is thickest in the Eringa Trough where 700 m of clean sandstone and siltstone was encountered in Mount Hammersley-1; these are believed to represent glacio-lacustrine deposits. The topmost unit is a glacial outwash sandstone equivalent to the Tirrawarra Sandstone of the Cooper Basin. The sandstones are most porous at the base and are commonly feldspathic with lithics. The thickest known development of this sandstone is 200 m in Mt Hammersley-1 in South Australia where the sequence comprises glacial outwash sandstone, displaying both fining-upward and coarsening-upward GR log motifs.

The nearest well control relevant to this location comes from Blamore-1 (40 km to the south) and 93-001 (42 km to the west-northwest) where the Purni Formation

isopach was 564 m and 593 m + respectively; net coal coal thicknesses (> 2 m thick) were 132 m and 138 m. The underlying Tirrawarra Sandstone was 30 m + thick in Blamore-1 but was not penetrated in CBM93-001.

Early Permian Purni Formation

The Purni Formation, which is the prime target in CBM93-004, conformably overlies the Crown Point Formation, being a depositional continuum following the termination of glaciation in Sakmarian time. A glacial outwash sandstone intervening between these two units correlates with the Tirrawarra Sandstone. (Youngs 1975) subdivided the Purni Formation at Mokari-1 and Purni-1 into three members with a total maximum thickness of 350 m in Mokari-1 and 286 m in Mount Hammersley-1. The lowest member comprises thinly interbedded sandstone and siltstone, with minor carbonaceous shale and conglomerate. This facies resulted from a predominantly low-energy, meandering-fluvial depositional system. The sandstones are commonly pyritic which differentiates them from feldspathic sandstones of the Tirrawarra Sandstone. The upper part of the Purni Formation consists of paludal/floodplain deposits, comprising very fine to fine-grained carbonaceous sandstone and interbedded siltstone, shale and coal. The coals and shales contain up to 10% exinite and are expected to be rich in vitrinite and inertinite thus providing excellent source rocks for oil and gas.

At the proposed well location, the interpreted Purni Fm isopach is approximately 420m. The seismic signature, and drilling results in basinal areas to the northeast (Blamore-1 and CBM93-001), both suggest the coal beds at this location could have a net thickness of between 80 - 90m (Figure 13).

Early Jurassic Poolowanna Formation

In the Eromanga Basin, the Early Jurassic Poolowanna Formation is an important target for hydrocarbons. To the east in the Poolowanna Trough and beyond, this unit can be subdivided into two vertically stacked upward-fining cycles, each being 50 to 100m in thickness. This sequence, which relates to distal sea-level change may be present in the Eringa Trough but pinches out down-dip of the well location as verified by its absence in CBM93-001. Care should be exercised in differentiating any Poolowanna coals (not predicted but could possibly be present) from those expected in the top Purni Formation.

Jurassic Algebuckina Sandstone / Cretaceous Marine Shales

The Poolowanna Formation is disconformably/unconformably overlain by thick continental sandstones of the Algebuckina Sandstone. This thick fluvial package is in turn sometimes overlain by thin Murta Member shales in turn succeeded by marginal-marine Cadna-Owie Formation, comprising fine-grained sandstone, siltstone, and claystone, with minor limestone. Geochemistry of oil stains recorded at the top Algebuckina Sandstone indicates a marine source rock – the most likely candidate is the Murta Member shales which appear to have acted as both source and seal.

The onset of full marine conditions during the Early Cretaceous is represented by the Bulldog Shale/Toolebuc/Oodnadatta succession. In the Late Cretaceous, non-marine conditions prevailed and the Winton Formation was deposited in a fluvial-floodplain environment denoted by interbedded sandstones, siltstones and coals. It was during Winton Formation sediment loading that most hydrocarbon generation is believed to have occurred in the Eringa Trough to the east. Indeed the Andado Shelf is a target for migrated hydrocarbons formed in the Eringa Trough as well as for coal-bed-methane. Care should be exercised when penetrating key reservoir couplets at the levels of the Algebuckina Sandstone, possibly the Poolowanna Formation and intra Purni Fm sandstones as these are all potential oil targets.

Geochemistry

Geochemistry of potential Permian source rocks (shales and coals) are shown in Figure 9. The coals have excellent potential for hydrocarbon generation with up to 10% liptinites suggesting good potential for oil as well as gas. Overall the Pedirka coals are very similar to the Early Permian Patchawarra coals from the southern Cooper Basin. Detailed descriptions of the coal sequences penetrated in Blamore-1 and CBM93-001 wells occur in the respective Well Completion Reports (Harrison, 2009 a and b).

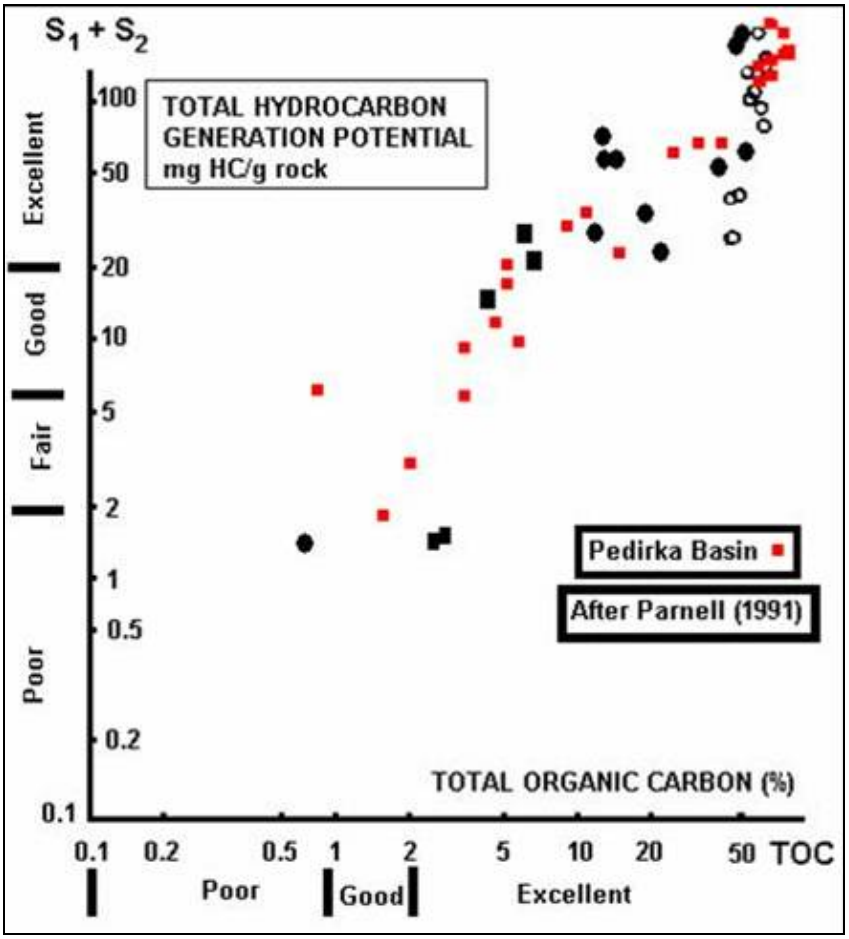

Figure 9 Geochemistry of Permian Coals

5.0 GEOPHYSICS

5.1 Time Mapping

Mapping of the Top Purni Coal horizon was completed using all available 2D seismic data and Kingdom Interactive Interpretation Software. Mapping was finalized using Petrosys. Seismic data control utilized in the interpretation is illustrated on the Top Purni TWT Map (Figure 10). It is noted that more seismic has been acquired in this area in the past and that an effort is being made to located this data in hard copy format for future scanning and remapping. A high level of confidence is assigned to the mapping of the Top Permian Coals as seismic data quality is good. The map shows the horizon to be gently dipping in a southeasterly direction and illustrates the area over which the coal is interpreted to be present. The TWT varies from about 200ms in the west to 1500ms in the east and is punctuated by a northeast-southwest trending high in the southeastern section of EP-93. Seismic and well control indicates the Purni coal is not present on this high.

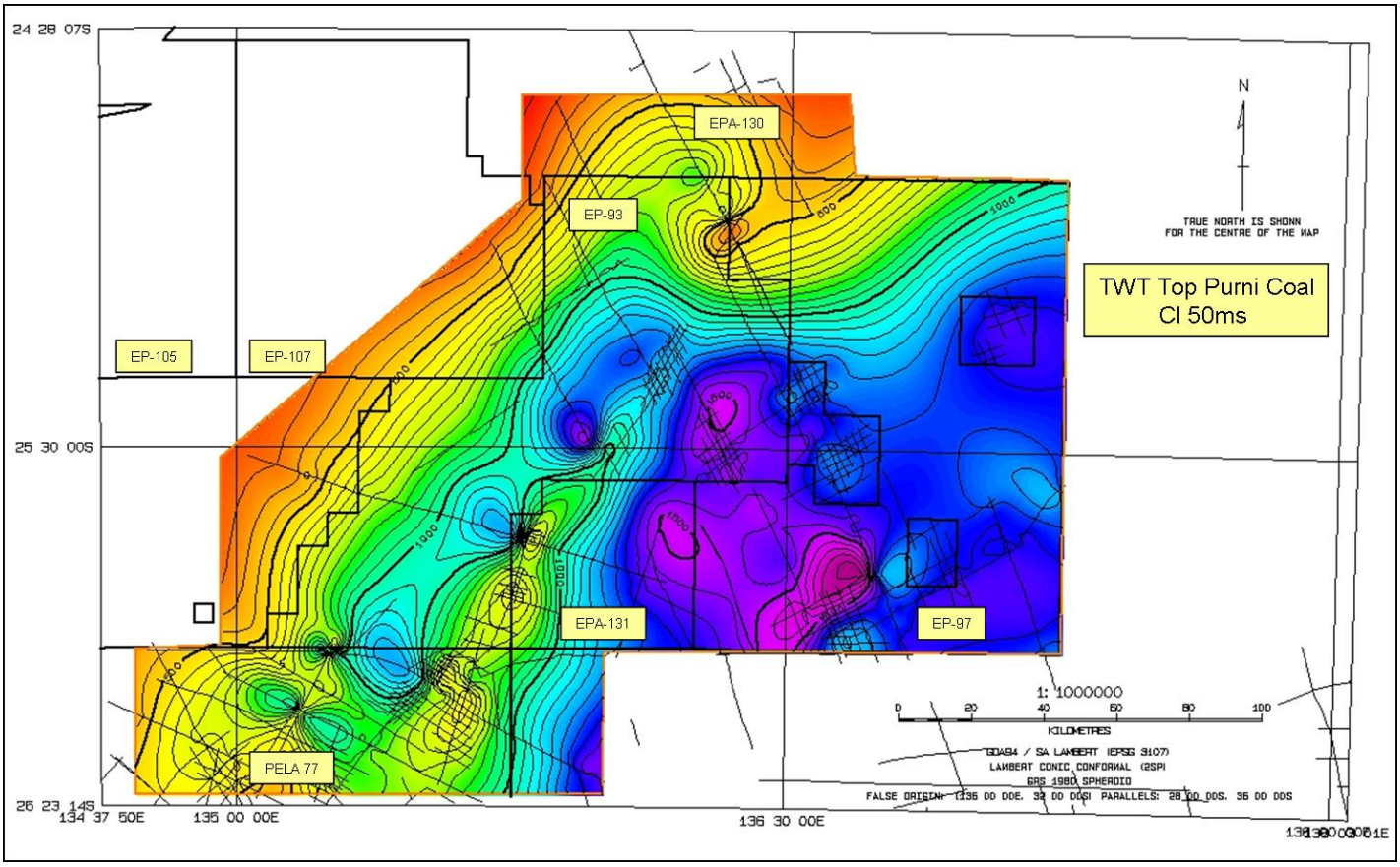

Figure 10 Top Purni Coal TWT map

5.2 Predicted Section CBM93-004

Based on a depth conversion using a single average velocity of approximately 1800m/sec and assuming the cut of depth limit of 1000m for CBM potential it is calculated that in the shaded area of EP-93 illustrated in Figure 11 alone there is in excess of 3500sqkm of coal in the optimum depth range of 200m to 1000m. This area does not include the southern section of EP-93 or permits to the north, west and south including EPA-130, EP-107, EP-105 and PELA-77. A total area has not been determined due to lack of direct seismic control. Additional seismic control will be obtained in a seismic acquisition programme planned for early 2010.

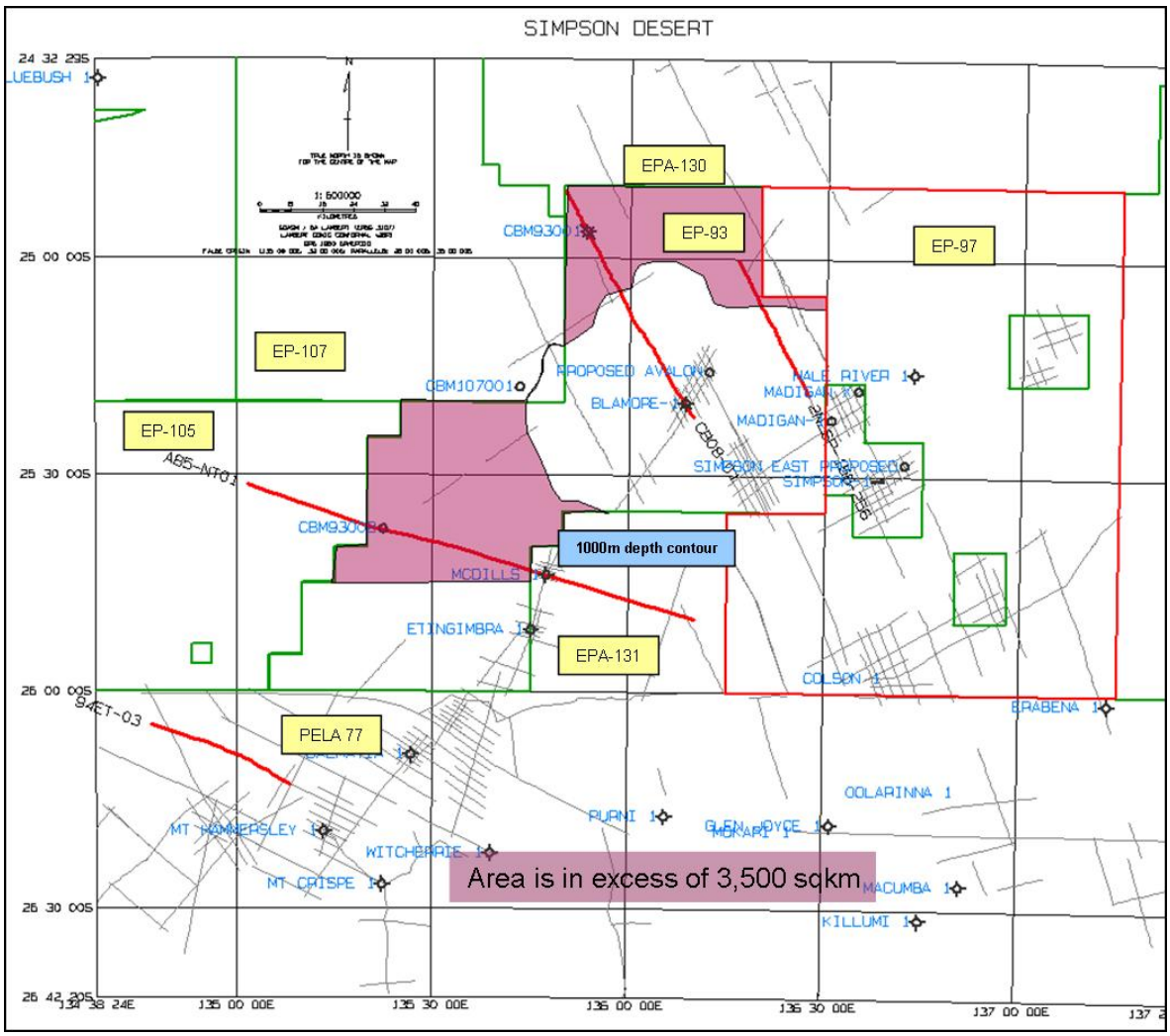

Figure 11 Interpreted area of CBM potential in northern section of EP-93

CBM93-004 is located on seismic CB08-01 at VP 2778 (Figure 12).

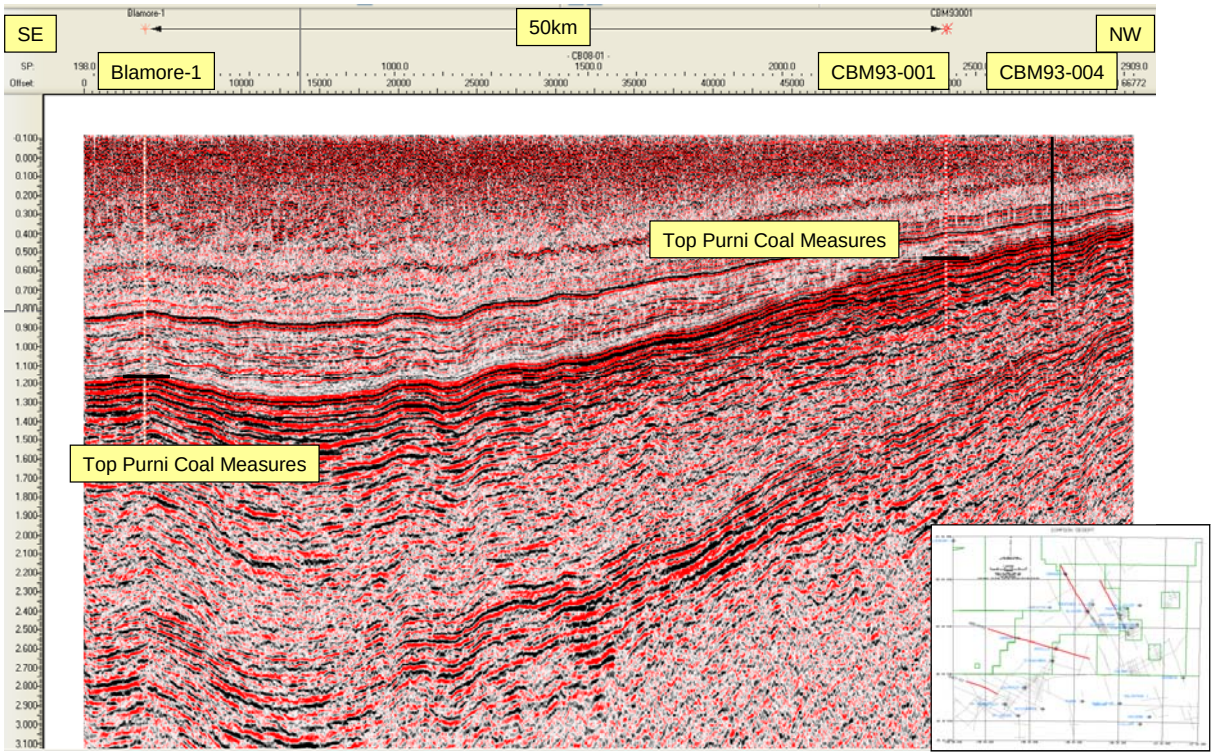

Figure 12 Seismic line CB08-01

This regional line extends NW through the axis of the plunging Eringa Trough and on to the flanks of the Andado Shelf. It defines a clear package of high amplitude seismic reflectors which have been correlated from CBM93-001 and Blamore-1 (Figure 2 and Figure 12) interpreted to be defining the top of the Purni Coal horizon.

5.3 Depth Mapping

The critical stratigraphic markers are prognosed for CBM93-004 in Table 2

Predicted Section CBM93-004 RT 4.1m GL 185m ASL	Depth m TVDSS	Depth m MD	Thickness m
Eyre Formation			
Winton Formation			
Oodnadatta Formation			
Bulldog Shale			
Cadna-Owie Formation	250	435	
Algebuckina Sandstone			
Poolowanna Formation			
Purni Formation	365	550	420
Tirrawarra Sandstone (near top)			
Crown Point Formation			
Warburton Basin			
TOTAL DEPTH	835	1020	

Table 2 Predicted Section CBM93-004

5.4 Permian Coal Thickness

The gross Permian thickness is estimated to be 420 m at the CBM93-004 location and based on the coal isopach versus formation isopach cross-plot a 80-90 m net of coal is prognosed (Figure 13).

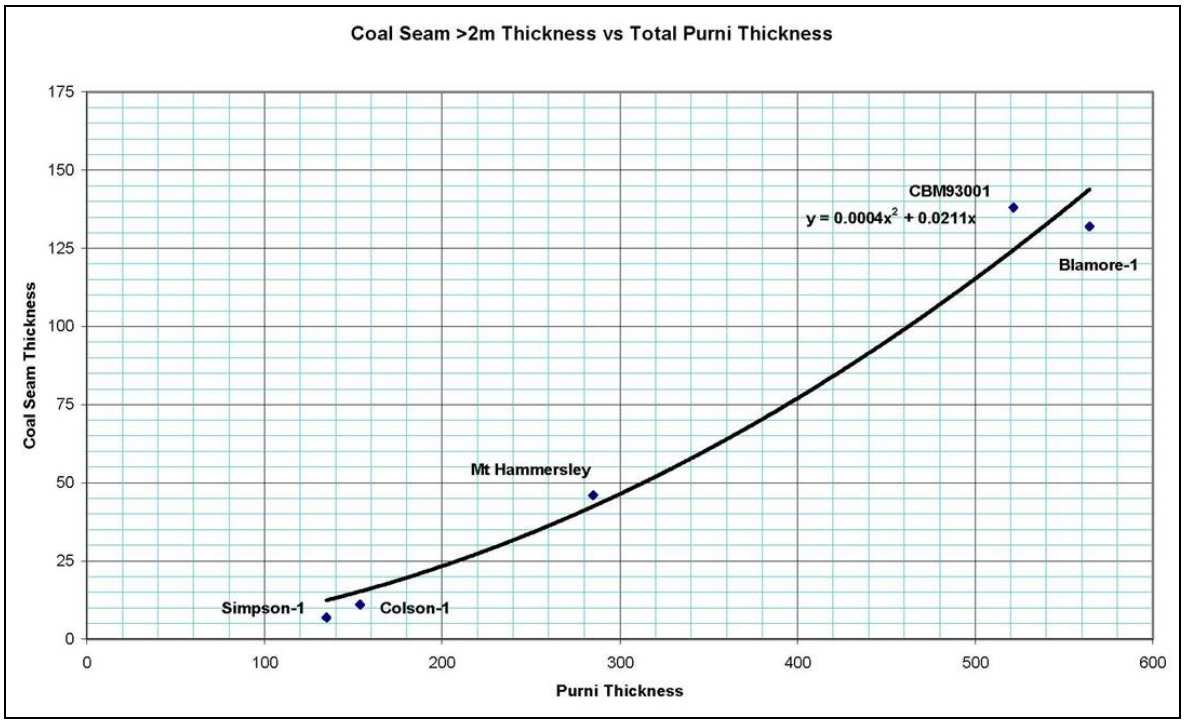

Figure 13 Purni Formation Thickness vs Coal Seam Thickness

6.0 FORMATION EVALUATION CBM93-004

The following details the rationale for proposed evaluation programme:

6.1 Coring and Testing

Drill breaks at the top Cadna-Owie prognosed at 435m TVDRT and the top Algebuckina Sandstone, will be circulated (after 3-4m of penetration) and checked for fluorescence and gas shows. Similarly the Permian sandstones, including the Tirrawarra Sandstone, will be carefully monitored for hydrocarbon shows. Although a conventional hydrocarbon trap is not mapped at the well location any significant hydrocarbon shows will be assessed and a decision could be made to flow test the reservoir in the open hole. Given the regional structural trends the presence of such a closure is considered unlikely. Any oil shows encountered in the Purni Formation will also be assessed and may include open hole DST's.

It is proposed that coring will commence with a 6m retrievable core barrel once the first Permian coal has been intersected. The Purni Formation will be continuously cored from this point to the base of the coal sequence. The depth to base coal will be best determined by comparing with the CBM93-001 coal section, wireline logs and mudlog. This data will be available at the wellsite. When coal core is recovered it will be measured and sealed in canisters in water heated baths for the Q1 desorption field testing process. Weatherford personnel will be conducting these tests. Sandstone and siltstone lithologies will be appropriately labelled and stored in the core boxes.

Q1 desorption testing in the field is subject to the following criteria:
Between 35-45% of the entire coal sequence will be canistered for desorption analysis (in the field and lab) and other analyses; it is the well site geologists responsibility to nominate these intervals. One metre canisters will be used as these will include less diversity of coal type and increase the veracity of gas content/ density crossplots. A Q1 desorption analysis will be completed in the field The canisters will then be forwarded to Weatherford Laboratories in Brisbane where all samples will be subjected to rapid gas desorption analysis. It has been recommended not to carry out any long term desorption analysis. The adsorption isotherm analysis will be undertaken on 5%-10% of the samples.

During the Q1 testing in the field the canistered core will undergo desorption displacement measurement every 10 minutes for the first 100 minutes. The process usually takes up to 3-4 hours but may take up to 24 hrs. The canisters will be stored

in a water bath maintained at the reservoir temperature. Later Q2 rapid desorption and Q3 desorption will be undertaken in the laboratory.

NB The frequency of coal canistering is usually dependent on the variance of coal lithology and the incidence of interbedded claystone/siltstone. The more uniform the coal lithology, the lower the sampling rate. Considering the sparcity of well data and the rank wildcat nature of the programme a comprehensive sampling routine is proposed. All coals greater or equal to 1m should be cannistered and subject to Q1 desorption testing. Laboratory analysis will include mainly desorption (Q2, Q3), but several long desorption tests will be undertaken. At least six adsorption isotherm tests will be undertaken.

The coring programme will be conducted using accurate time recordings with fast core removal and canister placement. Cooperation between mud loggers and core personnel is necessary to allow quick description and photographs of the core whilst suitable cores are being selected for canister placement.

The open hole testing program will follow guidelines as discussed in the drilling program. The well site geologist, together with the drilling engineer will be responsible for selecting test intervals. The Q1 desorption curve, if available, may be used to gauge possible test intervals in conjunction with assessment of coal quality; bright coals with fracture/cleat developments are to be favoured as they are likely to have higher gas content.

Note: Cuttings will be assessed periodically for gas content using a conventional mixer. This is a wildcat CBM exploration well and if the Poolowanna coal is penetrated, consideration should be given to coring ahead with a 9 m barrel. Interpretation of data suggests this outcome will be unlikely.

Cuttings will be collected to provide a set of samples representative of the stratigraphic sequence encountered in the well. All samples will be washed and dried with a minimum of 100 gm dry weight placed in suitable plastic bags. For the section from the surface conductor shoe to Top Cadna-Owie Formation samples should be collected at 10m intervals. For the interval from Top Cadna-Owie Formation to TD it is proposed samples be collected at 3m intervals.
Cuttings will be split into 2 separate plastic containers to be forwarded to:
Central Petroleum's warehouse in Alice Springs.
Address: Central Petroleum Warehouse; Lot 4402, Santa Teresa Rd., Airport, Alice Springs, (0870). (This is the old quarantine station at the airport).

Northern Territory Government Core Library – address to be confirmed. Department of Primary Industry, Fisheries and Mines. 16 Power St. Alice Springs, NT 0870

6.2 Wireline Logging

The logging suite proposed for CBM93-004 is illustrated in Table 3

HOLE SIZE	LOG	COMMENTS
3.7 inch hole Suite 1	**Run 1 1020mMD –550mMD** Gamma Ray Density (incl) PE and Caliper Dual Neutron Monopole borehole compensated sonic Resistivity - Dual Laterolog, MSFL Spontaneous Potential	Tool configuration is a "quad combo" with the Gamma tool, Density tool, Resistivity tool, Neutron and Sonic tools all run together
3.7 inch hole Suite 1	**Run 2 550mMD – 0mMD** Gamma Ray Monopole borehole compensated sonic	Record Gamma Ray – Sonic through casing
3.7 inch hole Suite 1	**Run 3 1020mMD – 550mMD** Borehole Imaging Tool (CMI) GR/Caliper	Only Gamma Ray and CMI tool run in on Run 3
3.7 inch hole Suite 2	**Run 1 1020mMD – 0mMD** Checkshot Survey final TD to surface.	Checkshot at MSL (datum) and every 50m. Extra checkshots at key formation tops

Table 3 Proposed Logging Suite CBM93-004

The logging suite to be run has the following applications:

1) Resistivity: Geology - lithology, log-core correlation, sandstone porosity and saturation.
2) Gamma Ray: well log correlation, lithology and clay content.

3) Neutron Porosity: porosity corrected for pyrite and kerogen.
4) PEF: Direct hydrocarbon indicator.
5) Density: Indicative values of gas content (after core-log calibration)
6) CMI: stress field orientation, fracture aperture and spacing, cleat and fracture orientation, coal homogeneity. Textural driven cluster facies model. Note that Weatherford will integrate core photos with these plots as a free service.

6.3 Analytical Program

A proposed analytical program is summarised below:

1)	Petrology	6/well
2)	Gas chemical analysis	5/well
3)	Gas analysis –desorption Q1 and Q2	20/well
4)	Water Analysis	5/well
5)	Adsorption Isotherms	2/well
6)	Photography	5/well

7) Lithotype logging, preparation of coal logs, core photography
8) Cleat and fracture description- semi detailed
9) Preparation and analysis for true RD, ash, moisture, volatiles and fixed carbon.
10) Maceral analysis and vitrinite reflectance
11) Reconciliation of Wireline log depths and core depths
12) Gas Isotope Studies

7.0 DOCUMENT DISTRIBUTION

Data Distribution				
Before Drilling				
	CTP Exploration	**CTP Operations**	**Minerals and Energy**	**JV Partners**
	Digital (D)	Digital (D)	Digital (D)	Digital (D)
Well Proposal	1D	1D	1D	1D
Drilling Proposal	1D	1D	1D	1D
While Drilling				
Wireline Logs	1D	1D	1D	1D
Master Mud Log	1D	1D	1D	1D
Pressure Evaluation	1D	1D	1D	1D
Mud Logging Data	1D	1D	1D	1D
All geological operations forms	1D			
Cuttings	1 set Wet and dry		1 set Wet and dry	
Cores Report	1C			1C
Cores			¼ slab of each core	
Formation Fluid Report	1D			1D
Fluid Anal. Report	1D	1D		1D
Log Quality Control	1D			1D
Daily Geological Report	1D	1D	1D	1D
Daily Drilling Report	1D	1D	1D	1D
After Drilling				
Well Completion Report	1D	1D	1D	1D
Final Drilling Report	1D	1D	1D	1D
Mud logging Report	1D	1D		1D
Wire line logs Final	1D	1D	1D	1D
Well Testing Report	1D	1D	1D	1D
PVT Analysis Rept.	1D	1D	1D	1D
Quantitative Log Analysis	1D			1D
Master Mud Log	1D	1D	1D	1D
Mud Log Data	1D	1D	1D	1D
Gas Desorption Reports	1D		1D	1D

Note

Wireline logs will be distributed ASAP after acquisition

Mud logging data will be distributed with Daily Drilling Reports

8.0 CONTACT NUMBERS

The following is a list of personnel telephone and mobile numbers.

Personnel	Position	Company	Office tel.	Mobile Phone
John Heugh	Managing Director	Central Petroleum	64362601	0427107690
Stewart Bayford	Exploration Manager	Central Petroleum	64362605	0418946031
Tim Green	Drilling Manager	Central Petroleum	64362606	0458219675
Greg Ambrose	Geology Manager	Central Petroleum	64362604	0448822136
Tim Brower	Drilling Supervisor	Central Petroleum	64362613	0429202875
Doug White	Alice Springs Manager	Central Petroleum	**	0429948584
Alan Cameron	Operations Manager	Wallis Drilling	0893741114	0407746571
Jerry Whitfield	Director	Minerals and Energy	0889995293	0407851252
Alan Holland	Assistant Director	Minerals and Energy	0889995357	0438810155

Note

**Satelite phone 00118816 4149 9008

**Car Phone 0424216 040

9.0 REFERENCES

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