

**DAILY GEOLOGICAL REPORT**DATE: 01 Jun 2010
REPORT NO.: 16
(associated DDR # 16)**WELL: CBM 93-002**

RIG	Wallis Rig D 39	RIG TYPE	Land
COMPLETION TYPE		TARGET	Test gas potential of Purni Formation
Depth at Midnight (MD)	664.2 m	SPUD DATE	22 May 2010
DAYS SINCE SPUD	10.67 (Days on well: 15.67)	LAST CASING	4.500 in @ 523.5 m MD
PRESENT DEPTH MD	694.0 m	BACKGROUND GAS	14.00 Unit @ 661.0 m
24 Hr Progress	126.00 m	MAX GAS	52.00 Unit @ 687.0 m
AVERAGE ROP	50,759.96 m/h	ECD	
Operations Status @ 0600hrs	Coring ahead.	ESTIMATED PORE PRESSURE	
PROGNOSSED TD	1,150.0m MD 1,150.0m TVD		

Well Details

Latitude:	25.00° 21.00" 16.10' South	UTM(N/S):	RT - MSL:	159.30 m RT MSL
Longitude:	135.00° 26.00" 5.30' East	UTM(E/W):	GL Elevation:	158.0 m

Operations Summary and General Remarks

OPERATION SUMMARY:	Cored from 538 to 664m. 45.6 m of coal in seams greater than 1 m in thickness have been cored to 678m. Approximatel 3.5 m of coal drilled above casing point takes the total for the Purni to 49.1m so far. Desorption gas recoveries have been poor - <300ml.
HYDROCARBON SHOWS:	No shows other than cuttings gas which will be updated once generator has been serviced
NEXT OPERATION:	Continue coring to TD with Injectivity tests as appropriate

Lithology Summary

Interval MDBRT (m) From To		Lithology	%	Description
561.43 - 562.25		Sandstone	100	Sandstone 561.43 - 562.25m Sandstone, light grey, medium - fine, fining up from medium, clay matrix, common carbonaceous laminae.
562.25 - 562.74		Coal	100	Coal 562.25 - 562.74m Coal, dull, grading to carbonaceous claystone in part
562.74 - 563.34		Siltstone	100	Siltstone & Fine Sandstone 562.74 - 563.34m Siltstone, mid to dark grey, sandy, interlaminated with fine - very fine sandstone, some cross lamination
563.34 - 565.66		Sandstone	100	Sandstone 563.34 - 565.66m Sandstone, light grey, medium - fine, some slump structures, possible cross lamination, with some bands with abundant carbonaceous laminae
565.66 - 568.56		Coal	100	Coal 565.66 - 568.56m Coal, dull, common striated bright fragments to 1 cm on bedding planes, in part pyritic, interbedded with carbonaceous claystone. Vertical fractures
568.56 - 569.44		Sandstone	100	Sandstone 568.56 - 569.44m Sandstone, fine, silty, carbonaceous in part, thin bedded, some slump structures
569.44 - 574.20		Coal	100	Coal 569.44 - 574.2m Coal, dull as above with discontinuous bright laminae
574.20 - 584.10		Sandstone	100	Sandstone 574.2 - 584.1m Sandstone. very coarse - coarse, rare carbonaceous laminae, probable slump structures near base. Includes better sorted medium grained sandstone between 581.4 and 582.9m. Clay matrix.
584.10 - 586.20		Sandstone	100	Sandstone 584.1 - 586.2m Sandstone, mid grey, very fine, silty. Grades up from carbonaceous claystone and mid - dark grey siltstone with bright coal bands
586.20 - 588.45		Sandstone	100	Sandstone



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Interval MDBRT (m) From To		Lithology	%	Description
				586.2 - 588.45m Sandstone, light grey, very fine, and siltstone, dark grey, carbonaceous and clayey, abundant woody plant fragments. Vaguely upward fining.
588.45 - 600.40		Coal	100	Coal 588.45 - 600.4m Coal, dull with discontinuous bright laminae as above, grading to carbonaceous claystone at top.
600.40 - 601.30		Siltstone	100	Siltstone 600.4 - 601.3m Siltstone, mid - dark grey, and minor sandstone, light grey, fine - very fine, thinly and irregularly bedded, fining up to claystone, carbonaceous claystone and coal.
601.30 - 614.20		Sandstone	100	Sandstone 601.3 - 614.2m Sandstone, light grey, coarse, white clay matrix, quartzose, uniformly bedded apart from rare claystone of coal bands, particularly around 608m. One metre of slightly carbonaceous fine - very fine sandstone with occasional claystone laminae below 605m
614.20 - 615.60		Siltstone	100	Siltstone 614.2 - 615.6m Siltstone, dark grey, 70% and sandstone, (30%), light grey, fine - very fine, irregular and indefinite bedding
615.60 - 617.93		Sandstone	100	Sandstone 615.6 - 617.93m Sandstone, light grey, medium, thin bedded and cross bedded with minor claystone bands and laminae in upper part, more uniform and silty downwards.
617.93 - 618.60		Sandstone	100	Sandstone 617.93 - 618.6m Sandstone, light - mid grey, very fine, interlaminated and interbedded in thin beds with dark grey claystone. Scattered plant fragments
618.60 - 624.33		Sandstone	100	Sandstone 618.6 - 624.33m Sandstone, light grey, very coarse to granular fining up to coarse. Fairly uniform throughout.
624.33 - 629.44		Sandstone	100	Sandstone 624.33 - 629.44m Sandstone, light grey, medium and medium - fine, fairly uniform overall with scattered large plant fragments. Occasional zones with carbonaceous or claystone laminae or thin beds, particularly in lower 2m.
629.44 - 630.60		Sandstone	100	Sandstone 629.44 - 630.6m Sandstone, mostly very coarse, 15 cm dark grey siltstone band near top
630.60 - 634.00		Sandstone	100	Sandstone 630.6 - 634.0m Sandstone, light grey, fining upward vaguely from very coarse to coarse - medium. Mostly uniform with a few claystone or carbonaceous laminae
634.00 - 634.52		Coal	100	Coal 634.0 - 634.52m Coal, bright, vitrinitic
634.52 - 636.30		Sandstone grading up to siltstone	100	Sandstone grading up to siltstone 634.52 - 636.3m Two upward fining units, grading from medium - fine or fine sandstone through laminated sandstone and siltstone to siltstone and claystone, dark grey, at top.
636.30 - 638.12		Sandstone grading upwards to siltstone	100	Sandstone grading upwards to siltstone 636.3 - 638.12m Series of thin sequences, fining or coarsening upwards, mostly consisting of fine to very fine sandstone and dark grey siltstone, minor claystone, sometimes carbonaceous. Irregular beds
638.12 - 646.20		Coal	100	Coal 638.12 - 646.2m Coal, includes bright intervals, occasional oblique fractures healed with pyrite
646.20 - 650.24		Sandstone	100	Sandstone 646.2 - 650.24m Sandstone, medium and uniform at base, grading to fine - very fine, silty, and thin bedded or laminated claystone bands in upper part
650.24 - 652.05		Sandstone	100	Sandstone 650.24 - 652.05m Similar to above, but upper part about equal sandstone and dark grey siltstone in thin beds to 1cm



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652.05 - 654.41		Sandstone	100	Sandstone 652.05 - 654.41m Sandstone, light grey, grading up from very coarse to coarse, fairly uniform. Basal 40cm coarse - medium.
654.41 - 655.66		Coal	100	Coal 654.41 - 655.66m Coal, moderately bright and laminated, moderate vertical fractures
655.66 - 657.20		Claystone	100	Claystone 655.66 - 657.2m Claystone, in part carbonaceous, very dark grey, grading to siltstone in part, occasional coal bands
657.20 - 659.62		Coal	100	Coal 657.2 - 659.62m Coal, mostly bright but probably not all vitrinite
659.62 - 661.42		Interbedded Sandstone & Siltstone	100	Interbedded Sandstone & Siltstone 659.62 - 661.42m Sandstone, light -mid grey, and siltstone, dark grey, thinly bedded and laminated, with scattered carbonaceous laminae
661.42 - 662.95		Sandstone	100	Sandstone 661.42 - 662.95m Sandstone, coarse - medium, quartzose, uniform
		Interbedded Sandstone & Siltstone	100	662.95 - 670.72m Thin bedded sequence as at 659.62m, but overall more regularly bedded. Occasional medium - fine sandstone beds to 30 cm.

Gas Readings

Depth (m)	Total Gas (ppm)	BGG (ppm)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
590.00 - 604.00	1,500.000	300.00	2 - 74	0 - 16	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
Comment- While drilling coal									
638.00 - 646.00	1,800.000	500.00	3 - 81	0 - 14	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
Comment- While drilling coal									

Prognosis and Preliminary Correlation

Top	Actual Depth (159.30 m RT MSL)			Prognosis	H/L	Pick Criteria	Remarks
	MD	TVD	TVDSS	MD			
Eyre Formation	4.00	4.00	-155.30	4.00	N/A		
Winton Formation	20.00	20.00	-139.30	60.00	40.0 H	Top grey claystones	Top may be unweathered Eyre Fmn
MacKunda Fm	198.00	198.00	38.70		N/A	First glauconitic sandstones, slightly calcareous	Top boundary clear, but could contain equivalents of Oodnadatta and Bulldog Formations
Cadna-owie Fm	291.00	291.00	131.70	484.00	193.0 H	Top first quartz sandstone	Very thin, indistinguishable from Algebuckina while drilling. Better defined on wireline logs
Algebuckina Sandstone	314.00	314.00	154.70	490.00	176.0 H	Second fast drilling break - no change in cuttings	May include Poolowanna Formation and/or other early Mesozoic units
Purni Formation	512.00	512.00	352.70	700.00	188.0 H	Reverse drilling break above 5.5m coal	

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Core #:	10	Start Depth (MD):	568.2 m
Formation:		End Depth (MD):	574.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.1 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithological section		

Core

Core #:	11	Start Depth (MD):	574.2 m
Formation:		End Depth (MD):	580.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

Core

Core #:	12	Start Depth (MD):	580.2 m
Formation:		End Depth (MD):	586.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	5.5 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithological section		

Core

Core #:	13	Start Depth (MD):	586.2 m
Formation:		End Depth (MD):	592.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithological section		

Core

Core #:	14	Start Depth (MD):	592.2 m
Formation:		End Depth (MD):	598.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

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Core #:	15	Start Depth (MD):	598.2 m
Formation:		End Depth (MD):	604.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.1 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

Core

Core #:	16	Start Depth (MD):	604.2 m
Formation:		End Depth (MD):	610.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	5.9 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

Core

Core #:	17	Start Depth (MD):	610.2 m
Formation:		End Depth (MD):	616.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

Core

Core #:	18	Start Depth (MD):	616.2 m
Formation:		End Depth (MD):	622.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

Core

Core #:	19	Start Depth (MD):	622.2 m
Formation:		End Depth (MD):	628.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	5.7 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

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Core #:	20	Start Depth (MD):	628.2 m
Formation:		End Depth (MD):	634.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

Core

Core #:	21	Start Depth (MD):	634.2 m
Formation:		End Depth (MD):	640.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

Core

Core #:	22	Start Depth (MD):	640.2 m
Formation:		End Depth (MD):	646.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

Core

Core #:	23	Start Depth (MD):	646.2 m
Formation:		End Depth (MD):	652.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

Core

Core #:	24	Start Depth (MD):	652.2 m
Formation:		End Depth (MD):	658.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	See lithology section		

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Core #:	25	Start Depth (MD):	658.2 m
Formation:		End Depth (MD):	664.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

Core

Core #:	8	Start Depth (MD):	556.2 m
Formation:	Purni Formation	End Depth (MD):	562.2 m
Contractor:	Wallis Drilling	Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:	Others	Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See Lithology section

Core

Core #:	9	Start Depth (MD):	562.2 m
Formation:		End Depth (MD):	568.2 m
Contractor:		Core Diameter:	mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: See lithology section

Well Geologist

Graham McClung