



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)		Lithology	%	Description
From	To			
				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 or 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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From	To			
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