



DAILY GEOLOGICAL REPORT

DATE: 27 Dec 2009
 REPORT NO.: 24
 (associated DDR # 24)

WELL: CBM93-004

RIG	Wallis Rig D 39	RIG TYPE	Land
COMPLETION TYPE	Single Gas Producer	TARGET	Test gas potential of Puni Coal Measures
Depth at Midnight (MD)	855.0 m	SPUD DATE	04 Dec 2009
DAYS SINCE SPUD	23.39 (Days on well: 26.00)	LAST CASING	4.500 in @ 501.0 m MD
PRESENT DEPTH MD	867.0 m	BACKGROUND GAS	2.00 Unit @ 750.0 m
24 Hr Progress (Geology)	63.0 m	MAX GAS	16.00 Unit @ 806.0 m
AVERAGE ROP	5.30 m/h	MUD WEIGHT	1.04 sg (WBM)
Operations Status @ 0600hrs	Coring ahead	ECD	
PROGNOSSED TD	1,350.0m MD 1,350.0m TVD	ESTIMATED PORE PRESSURE	

Well Details

Latitude:	24.00° 52.00' 10.92" South	UTM(N/S):	RT - MSL:	186.00 m DF MSL
Longitude:	135.00° 50.00' 59.64" East	UTM(E/W):	GL Elevation:	185.0 m

Operations Summary and General Remarks

OPERATION SUMMARY:	<p>Cored ahead from 793 to 855m</p> <p>Interbedded sandstone and coal. Sandstones grade up through siltstone and claystone to coal, in part fractured, and with slightly more bright bands and laminae than higher in sequence. Sandstone medium, clay matrix very well developed, biotite more in evidence than higher up. Coals between 818.13 - 824.5m (6.37m), 836.2 - 841.63m (5.43m), & 845.32 - 846.43m (1.14m). This last coal has so far produced over 600ml gas during desorption. Total coal today 12.94m. Total for Purni approx 134m.</p> <p>Max TG 16 units at 806m, 7 units or less below 814m. Max C1 18ppm at 835m, trace C2. Desorption gas generally around 400ml, slightly better than average.</p>
NEXT OPERATION:	Core ahead to DST 4 point

Casing Run

OD	LOT/FIT	Csg Shoe (MD/TVD)	Remarks
7"	sg / sg	245.51 m / 245.51 m	
4 1/2"	sg / sg	501.00 m / 501.00 m	4 1/2" 114mm 10.8ppf Range 1 Ozcom Vam

Lithology Summary

Interval MDBRT (m) From To	Lithology	%	Description
793.00 - 855.00	Interbedded coal and sandstone	100	Sandstone Inbterbedded coal and sandstone, generally greeding up to siltstone and claystone. See core description for more detail

Gas Readings

Depth (m)	Total Gas (ppm)	BGG (ppm)	C1 (ppm)	C2 (ppm)	C3 (ppm)	iC4 (ppm)	nC4 (ppm)	iC5 (ppm)	nC5 (ppm)
833.50 - 836.00			0 - 14	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0

Comment- All gas readings unreliable

Prognosis and Preliminary Correlation

Top	Actual Depth (186.00 m DF MSL)			Prognosis MD	H/L	Pick Criteria	Remarks
	MD	TVD	MDSS				
Namba Formation	1.00	1.00	-185.00		N/A		
Eyre Formation	28.00	28.00	-158.00		N/A		
Winton Formation	35.00	35.00	-151.00		N/A	Change to grey claystone	Top placed halfway through 10m sample interval
MacKunda Fm	95.00	95.00	-91.00		N/A	Presence of glauconite fragments in claystone	Top placed halfway through 10m sample interval



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Top	Actual Depth (186.00 m DF MSL)			Prognosis	H/L	Pick Criteria	Remarks
	MD	TVD	MDSS	MD			
Oodnadatta Formation	276.00	276.00	90.00		N/A	First appearance of Inoceramus fragments	
Bulldog Shale	357.00	357.00	171.00		N/A	Non calcareous	
Cadna-owie Fm	406.00	406.00	220.00	435.00	29.0 H	Coarse loose sandstone	
Algebuckina Sandstone	424.00	424.00	238.00		N/A	Coarse friable sandstone	
Purni Formation	498.00	498.00	312.00	550.00	52.0 H	Claystone below m-c sandstone	

Core			
Core #:	64	Start Depth (MD):	792.0 m
Formation:	Purni Formation	End Depth (MD):	798.0 m
Contractor:	Wallis Drilling	Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	792.0 - 792.08m; Coal, 90%, dull with common bright bands and laminae, pyritic, grading to carbonaceous claystone, 10%, black. Continues from overlying core. Both slightly vertically fractured. 792.08 - 793.35m; Siltstone, 60%, light grey, hard, and coal, 40%, as above, with minor carb claystone 793.35 - 796m; Sandstone, light grey, medium grading up to fine and interbedded with siltstone, light grey, through carb claystone to overlying coal		

Core			
Core #:	65	Start Depth (MD):	798.0 m
Formation:	Purni Formation	End Depth (MD):	804.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	798.0 - 804.0m; Sandstone, light grey, coarse - medium, some fine, quartzose, clay matrix, biotite, interbedded with siltstone and claystone with common leaves - Glossopteris, Gangamopteris. Thick beds but fairly uniform.		

Core			
Core #:	66	Start Depth (MD):	804.0 m
Formation:	Purni Formation	End Depth (MD):	810.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	804.0 - 810.0m; Sandstone as above - light grey, coarse - medium, some fine, quartzose, clay matrix, biotite, interbedded with siltstone and claystone with common leaves - Glossopteris, Gangamopteris. Thick beds but fairly uniform.		

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Core #:	67	Start Depth (MD):	810.0 m
Formation:	Purni Formation	End Depth (MD):	816.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: 810.0 - 815.1m; Sandstone, as above, light grey, coarse - medium, some fine, quartzose, clay matrix, biotite, interbedded with siltstone and claystone with common leaves - Glossopteris, Gangamopteris. Thick beds but fairly uniform.
815.1 - 815.9m; Siltstone grading to fine sandstone, light grey, well sorted, laminated with claystone in part
815.9 - 816.0m; Sandstone, silty, light grey and light brown grey. Grades up from underlying unit

Core

Core #:	68	Start Depth (MD):	816.0 m
Formation:	Purni Formation	End Depth (MD):	822.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: 816.0 - 818.13m; Sandstone, light grey, medium - fine, vaguely and irregularly fining up to silty sandstone, fine, mid grey and mid brown grey. Sharp base.
818.13 - 822.0m; Coal, dull, moderate bright bands and laminae, bright "wood chips" on bedding planes as above, slightly fractured

Core

Core #:	69	Start Depth (MD):	822.0 m
Formation:		End Depth (MD):	823.5 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	1.5 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: 822.0 - 823.5m; Coal as above - dull, moderate bright bands and laminae, bright "wood chips" on bedding planes

Core

Core #:	70	Start Depth (MD):	823.5 m
Formation:		End Depth (MD):	828.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	4.5 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: 823.5 - 824.5m; Coal as above - dull, moderate bright bands and laminae, bright "wood chips" on bedding planes.
824.5 - 828.0; Interbedded siltstone, 70%, light grey, sandstone, 20%, light grey, medium, both occasionally interlaminated with claystone, 10%, dark grey.

**DAILY GEOLOGICAL REPORT**DATE: 27 Dec 2009
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Core #:	71	Start Depth (MD):	828.0 m
Formation:	Purni Formation	End Depth (MD):	834.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	828.0 - 834.0m; Sandstone, 50%, fine, light grey, interbedded and interlaminated with siltstone, light grey, 50%		

Core

Core #:	72	Start Depth (MD):	834.0 m
Formation:	Purni Formation	End Depth (MD):	838.8 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	4.8 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	834.0 - 834.1m; Sandstone, 50%, fine, light grey, interbedded and interlaminated with siltstone, light grey, 50% 834.1 - 836.2m; Siltstone, dark grey 836.2 - 838.8m; Coal, dull, moderately common bright bands and laminae, slightly fractured		

Core

Core #:	73	Start Depth (MD):	838.8 m
Formation:	Purni Formation	End Depth (MD):	843.1 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	4.3 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	838.8 - 841.63m; Coal, as above, dull, moderately common bright bands and laminae, slightly fractured 841.63 - 843.1m; Siltstone, 60%, light grey, interbedded and interlaminated with sandstone, 30%, light grey, medium, and claystone, dark grey. Vaguely upward fining		

Core

Core #:	74	Start Depth (MD):	843.1 m
Formation:	Purni Formation	End Depth (MD):	846.9 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	3.7 m
Encapsulation Type:			
Shipping:			
Comments:			
Core Description:	843.1 - 845.3m; Siltstone, 60%, light grey, interbedded and interlaminated with sandstone, 30%, light grey, medium, and claystone, dark grey. Vaguely upward fining 845.3 - 846.6m; Coal, dull, moderately common bright bands, sequence mixed up during core retrieval. Includes 20cm lost core. 846.6 - 846.9 Sandstone, light grey, medium		



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Core

Core #:	75	Start Depth (MD):	846.9 m
Formation:	Purni Formation	End Depth (MD):	849.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	2.1 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: 846.9 - 849.0m; Sandstone, light grey, medium

Core

Core #:	76	Start Depth (MD):	849.0 m
Formation:	Purni Formation	End Depth (MD):	855.0 m
Contractor:		Core Diameter:	61 mm
Equipment:		Barrel Length:	6.0 m
Sleeve Type:		Amount Recovered:	6.0 m
Encapsulation Type:			

Shipping:

Comments:

Core Description: 849.0 - 855.0m; Sandstone, light grey, medium

Well Geologist

Graham McClung