

DAILY GEOLOGICAL REPORT

DGR 19

Date:	16 August 2006	Licence / State:	P39 (V) / VIC
Report Period:	06:00 - 06:00 Hours	Rig:	Ensign 32
Days from Spud:	18	GL:	2.7m
Current Hole Size:	8.5"	RT:	8.6m
Depth @ 0600 Hrs:	1881m MDRT	PTD:	2281m MDRT (-1338mSS)
	-957m TVDSS	Spud Date:	04:30 hrs 29/07/06
24 Hr Progress:	201m		
Current Operation:	Drilling ahead 8.5" directional hole in the basal Gippsland Limestone at 6 m/hr		
Nope Cost (Drill)\$	(C&S)\$	Cost To Date:	
	(P&A)\$		

Casing Data	Hole Size	Depth	Casing Size	Wt:	Type	Shoe Depth	LOT
(Conductor)		100m	20"			60m	
	17.5"	320m	13.375"	54.5	J55 BTC	317m	EMW= 20.0 ppg
	12.25"	1606m	9.625"	47.0	N80 BTC	1598m *	EMW= 16.7 ppg

* 9.625m Casing Shoe revised to 1598m based on MWD

Mud Data	Type:	Wt:	Visc:	WL:	PH:	KCl%:	Cl -:	PV/YP:	Rmf:
	KCL-PHPA	10.0	52	5.8	9.0	5.5	30000	13 / 24	

Bit Data	No.	Make	Type	Size	Hours	Meters	Condition	
(@ 24:00)	6	Hycalog	TC	HP21G	8.5"	-	Drill out trip #1	
	7	Reed	PDC	RSX272	8.5"	-	Drill out trip #2	
	8	Hycalog	PDC	RSX616M	8.5"	3.2	41	2-3-CT-A-X-I-BT-RIG
	9	Hycalog	PDC	RSX616M	8.5"	3.2	20	0-0-NO- -X-I-NO-PR
	9RR	Hycalog	PDC	RSX616M	8.5"	10.1	167	-

Surveys	Type	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
	MWD	1793.14	55.54	117.44	909.28	1343.18	118.88
	MWD	1822.11	51.89	116.24	926.43	1366.51	118.84
	MWD	1851.05	47.98	115.64	945.05	1388.63	118.80

OPERATIONS SUMMARY

Previous 24 hrs Operations Summary:

Run in hole with 8.5" directional BHA with Geopilot & MWD to casing shoe. Precautionary wash and ream to bottom at 1680m. Drill ahead 8.5" directional hole from 1680m to 1865m at average 20 m/hr, dropping angle as per directional plan. Drill ahead from 1865m to 1881m observing lower ROP of 4 to 6 m/hr and increase in pressure from 2700 psi to 2850 psi. Pumped several sweeps with no effect in pressure or ROP.

Anticipated operations:

Wiper trip to casing shoe. Drill ahead 8.5" directional hole, dropping angle to 10°.

Sensor Distances:

Surveys 8.96m, Gamma Ray 11.43m, Resistivity 13.79m, Pressure 16.32m, Density 22.46m, Porosity 26.55m

FORMATION TOPS (Preliminary Field picks)

FORMATION	ACTUAL TOP		High/Low	High/Low	PROGNOSSED TOP	
	(MDmRT)	(TVDmSS)	To Prognosis	To East Reeve-1	(MDmRT)	(TVDmSS)
Jemmy's Point	5.9	2.7	-	-	6	3
Tambo River (Coquina)	143.0	-134.4	30.6m High	30.8m High	180	-165
Gippsland Limestone	235.0	-225.9	5.9m Low	0.2m High	230	-220
Lakes Entrance Formation					1876 **	-960 **
Latrobe Coarse Clastics					2098	-1155
Latrobe N. asperus (Coal)					2163	-1220
Total Depth					2281	-1338

** Revised Prognosis

HYDROCARBON SHOW SUMMARY

INTERVAL	LITHOLOGY & HYDROCARBON FLUORESCENCE	GAS

GAS	MD (m)	Peak	Background	Chromatograph
Trip Gas	-	-	-	-
Connection Gas	-	-	-	-

INTERVAL ROP (min/ft)	LITHOLOGY	GAS (Peak / BG) Composition
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1680-1713m ROP:3.4-7.0 Ave: 4.0	<p>INTERBEDDED MARL, CALCAREOUS CLAYSTONE AND MINOR CALCILUTITE</p> <p>MARL: (70-90%) Light to medium grey, occasional medium green grey, slightly arenaceous in part, minor off white lithic fragments, trace fossil fragments, firm to moderately hard, subblocky.</p> <p>CALCAREOUS CLAYSTONE: (20-40%) Light to medium grey, occasional dark grey, argillaceous, trace fossil fragments, soft to dominantly firm, minor moderately hard, subblocky.</p> <p>CALCILUTITE: (10%) Light grey, occasional medium grey, slightly arenaceous in part, soft to moderately hard, occasional hard, subblocky.</p>	No gas
1713-1772m ROP:3.3-5.0 Ave:3.8	<p>INTERBEDDED MARL, CALCAREOUS CLAYSTONE AND MINOR CALCILUTITE</p> <p>MARL: (60-70%) Light grey, medium grey, light to medium green grey, slightly arenaceous, silty, trace glauconite, trace fossil fragments, soft to moderately hard, subblocky.</p> <p>CALCAREOUS CLAYSTONE: (20-30%) Medium to dark grey, argillaceous, arenaceous in part, trace lithic fragments, trace glauconite, firm to occasional moderately hard, subblocky.</p> <p>CALCILUTITE: (0-10%) Light to occasional medium grey, slightly arenaceous, trace fossil fragments, from to moderately hard, subblocky.</p> <p>Note: Samples contaminated with BARACARB mud additive (sized CaCO₃)</p>	Nil to trace C1

INTERVAL ROP (min/ft)	LITHOLOGY	GAS (Peak / BG) Composition
1772-1834m ROP:3.2-4.0 Ave:3.8	<p>INTERBEDDED CALCAREOUS CLAYSTONE AND MARL</p> <p>CALCAREOUS CLAYSTONE: (30-70%) Medium to dark grey, pale brown grey, trace disseminated, pyrite, firm to moderately hard, subblocky to occasional subfissile.</p> <p>MARL: (30-70%) Light to medium grey, dominantly argillaceous grading to Calcareous Claystone in part, minor arenaceous, trace lithic fragments, trace glauconite, trace fossil fragments, firm to moderately hard, subblocky.</p>	Trace C1
1834-1865m ROP:3.5-5.6 Ave: 4.0	<p>INTERBEDDED CALCAREOUS CLAYSTONE AND MARL</p> <p>CALCAREOUS CLAYSTONE: (60-70%) Medium to dark grey, trace disseminated, pyrite, firm to moderately hard, subblocky to occasional subfissile.</p> <p>MARL: (30-40%) Pale brown grey, light to dominantly medium grey, dominantly argillaceous grading to Calcareous Claystone in part, minor arenaceous, trace lithic fragments, trace pyrite, trace fossil fragments, firm to moderately hard, subblocky.</p>	Trace C1
1865-1880m ROP:3.8-11.3 Ave:7.5	<p>INTERBEDDED CALCAREOUS CLAYSTONE AND MARL</p> <p>CALCAREOUS CLAYSTONE: (60-70%) Medium brown grey, light grey to medium grey, trace off white lithic fragments, trace nod and disseminated pyrite, firm to soft in part, subblocky to subfissile in part.</p> <p>MARL: (30-40%) Pale brown grey, medium grey, argillaceous, rare pyrite, minor dark grey off white lithic fragments, firm to soft in part, subblocky to subfissile in part.</p>	Trace C1