

## DAILY GEOLOGICAL REPORT

DGR 16

<b>Date:</b>	13 August 2006	<b>Licence / State:</b>	P39 (V) / VIC
<b>Report Period:</b>	06:00 - 06:00 Hours	<b>Rig:</b>	Ensign 32
<b>Days from Spud:</b>	15	<b>GL:</b>	2.7m
<b>Current Hole Size:</b>	12.25"	<b>RT:</b>	8.6m
<b>Depth @ 0600 Hrs:</b>	1660m MDRT	<b>PTD:</b>	2281m MDRT (-1338mSS)
	-840m TVDSS	<b>Spud Date:</b>	04:30 hrs 29/07/06
<b>24 Hr Progress:</b>	14m		
<b>Current Operation:</b>	Running in hole with circulating BHA while waiting on Top Drive spare parts.		
<b>Nope Cost</b> (Drill)\$	(C&S)\$	<b>Cost To Date:</b>	
	(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	1602m	EMW= 16.7 ppg

Mud Data	Type:	Wt:	Visc:	WL:	PH:	KCl%:	Cl -:	PV/YP:	Rmf:
	KCL-PHPA	9.3	46	5.4	9.5	5.4	29000	11 / 17	0.17 @ 75°F

Bit Data	No.	Make	Type	Size	Hours	Meters	Condition
(@ 24:00)	1	Reed	TCI T11C	17.5"	0.45	20	0-0-NO-A-O-I-RR-BHA
	2RR1	Reed	TCI T11C	17.5"	2.95	200	1-1-NO-A-O-I-RR-TD
	3	Reed	TCI T11	12.25"	9.6	316	0-0-NO-x-0-I-x-BHA
	4	Hycalog	PDC RSX516S	12.25"	21.75	971	1-1-ER-A-X-1-NO-TD
	5	Hughes	TC HP11GJ	12.25"	-	-	Clean-out trip
	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	

Surveys	Type	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
	MWD	1596.1	71.07	117.39	827.25	1164.87	118.97
	MWD	1620.16	71.72	118.44	834.93	1187.67	118.95
	MWD	1647.79	69.84	118.53	844.03	1213.76	118.94

## OPERATIONS SUMMARY

**Previous 24 hrs Operations Summary:**

Drill ahead 8.5" directional hole from 1646m to 1659m. Trouble shoot overheating Top Drive hydraulic pump. Pull out of hole to casing shoe and repair seals on Top Drive hydraulic pump. Run in hole and attempt to drill ahead without success. Pull back into casing shoe and troubleshoot Top Drive. Run in hole to bottom and drill ahead from 1659m to 1660m. Top Drive hydraulic pump overheating again. Pull out of hole into casing shoe and wait while locating and mobilising a replacement pump. Pull out of hole to surface, remove MWD radioactive sources, download memory data and rack back Geopilot in derrick. Make up circulating BHA and run in hole to circulate while waiting on spare parts for Top Drive.

**Anticipated operations:**

Circulate while waiting on parts. Repair Top Drive, run in hole with Geopilot & MWD, drill 8.5" directional hole.

**Sensor Distances:**

Surveys 8.95m, Gamma Ray 11.42m, Resistivity 13.78m, Pressure 16.31m, Density 22.1m, Neutron Porosity 26.16m

#### FORMATION TOPS (Preliminary Field picks)

FORMATION	ACTUAL TOP		High/Low	High/Low	PROGNOSED 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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1640-1660m ROP:2.8-11.8 Ave: 4.0	<p>INTERBEDDED MARL AND CALCILUTITE</p> <p>MARL: (90%) Medium to dark grey, light to medium green grey, trace off white lithic fragments, trace fossil fragments, firm to moderately hard, subblocky.</p> <p>CALCILUTITE: (10%) Light grey, off white, argillaceous, trace light brown lithic fragments, rare fossil fragments, dominantly moderately hard, minor hard.</p>	Trace