Santos — GALLOWAY - 1

DAILY GEOLOGICAL REPORT

DGR 21

Date:	18 August 2006	**Licence / State:**	P39 (V) / VIC
Report Period:	06:00 - 06:00 Hours	**Rig:**	Ensign 32
Days from Spud:	20	**GL:**	2.7m
Current Hole Size:	8.5"	**RT:**	8.6m
Depth @ 0600 Hrs:	2038m MDRT	**PTD:**	2281m MDRT (-1338mSS)
	-1085m TVDSS	**Spud Date:**	04:30 hrs 29/07/06
24 Hr Progress:	157m		

Current Operation: Drilling 8.5" directional hole in the Lakes Entrance Formation at 9 m/hr

Nope Cost (Drill)$ (C&S)$ (P&A)$ **Cost To Date:**

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 log**

Mud Data	Type:	Wt:	Visc:	WL:	PH:	KCl%:	Cl -:	PV/YP:	Rmf:
	KCL-PHPA	10.5	52	5.8	9.0	6.5	39000	25 / 32	0.12 @ 75°F

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"	3.0	13	0-1-RG-G-X-I-NO-BHA
	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"	14.87	201	0-0-BU- - X-I-NO-PR
	10	Hycalog	Rock	TC11P	8.5"	11.1	105	Drilling

Surveys	Type	MD (m)	Inclination	Azimuth (T)	TVD (m)	Offset (m)	Direction (T)
	MWD	1937.90	37.77	114.06	1008.58	1447.51	118.62
	MWD	1966.87	33.71	114.22	1032.08	1464.38	118.57
	MWD	1995.76	30.21	114.36	1056.59	1479.63	118.53

OPERATIONS SUMMARY

Previous 24 hrs Operations Summary:
Repair leaking mud-saver valve in Top Drive. Run in hole from casing shoe, wash down last stand to bottom. Pump 20bbls Baracarb sweep and circulate hole clean (observe excessive cuttings unloading at shakers). Drill ahead from 1881m to 2038m, pumping Baracarb sweeps and working pipe every connection to facilitate cuttings removal.

Anticipated operations:
Drill ahead 8.5" directional hole, dropping angle by Top Latrobe. Expect to intersect Top Latrobe at 2113m at approx 15° inclination based on current trajectory.

Sensor Distances:
Surveys 9.18m, Gamma Ray 11.65m, Resistivity 14.01m, Pressure 16.54m, Density 22.91m, Porosity 26.97m

FORMATION TOPS (Preliminary Field picks)						
FORMATION	ACTUAL TOP		High / Low to	High / Low to	PROGNOSED TOP	
	(MDmRT)	(TVDmSS)	Prognosis	East Reeve-1	(MDmRT)	(TVDmSS)
Jemmy's Point	5.9	2.7	-	-	6	3
Tambo River (Coquina)	143	-134.4	30.6m High	30.8m High	180	-165
Gippsland Limestone	235	-225.9	5.9m Low	0.2m High	230	-220
Lakes Entrance Formation	1880	-956.4	3.6m High	27.1m High	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
	LAKES ENTRANCE FORMATION 1880m (-956.4mSS)	
1880-1890m ROP:3.6-9.4 Ave: 6.0	INTERBEDDED CALCAREOUS CLAYSTONE, MARL AND SILTSTONE CALCAREOUS CLAYSTONE: (40%) 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. MARL: (30%) Pale brown grey, argillaceous, minor off white lithic fragments, firm to soft in part, subblocky to subfissile in part. CALCAREOUS SILTSTONE: (30%) Light to medium grey, occasional dark grey, trace dark grey lithic fragments, firm to moderately hard, argillaceous in part, subblocky to subfissile.	Nil to Trace C1
1890-1910m ROP:3.5-6.0 Ave: 6.0	CALCAREOUS SILTSTONE INTERBEDDED WITH CLAYSTONE CALCAREOUS SILTSTONE: (60-80%) Light to medium grey, occasional dark grey, trace dark grey lithic fragments, firm to moderately hard, argillaceous in part, subblocky to subfissile. CALCAREOUS CLAYSTONE: (20-40%) 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.	Nil to trace C1
1910-1949m ROP:3.6-8.3 Ave:6.0	INTERBEDDED CALCAREOUS CLAYSTONE AND SILTSTONE CALCAREOUS CLAYSTONE: (20-50%) Light to medium grey, minor dark grey, grading to Siltstone in part, trace lithic fragments, trace forams, trace fossil fragments, trace pyrite, soft to moderately hard, subblocky. CALCAREOUS SILTSTONE: (50-80%) Medium brown, medium brown grey, occasional dark grey, trace glauconite, trace lithic fragments, trace pyrite, firm to moderately hard, minor hard, subfissile.	Nil to Trace C1

INTERVAL ROP (min/ft)	LITHOLOGY	GAS (Peak / BG) Composition
1949-1974m ROP:3.0-6.1 Ave: 4.0	INTERBEDDED CALCAREOUS CLAYSTONE AND SILTSTONE CALCAREOUS CLAYSTONE: (50-90%) Light to medium grey, grading to Siltstone in part, trace lithic fragments, trace forams, trace bryozoa fossil fragments, rare nodular pyrite, soft to firm, occasional moderately hard, subblocky. CALCAREOUS SILTSTONE: (10-50%) Medium brown, medium brown grey, occasional dark grey, trace glauconite, trace lithic fragments, trace pyrite, firm to moderately hard, minor hard, subfissile.	Nil to trace C1
1974-1990m ROP:3.8-9.7 Ave:6.0	MASSIVE CALCAREOUS CLAYSTONE INTERBEDDED WITH MINOR SILTSTONE CALCAREOUS CLAYSTONE: (90-100%) Dominantly light to occasional medium grey, trace lithic fragments, trace forams, trace bryozoa fossil fragments, rare nodular pyrite, soft to firm, occasional moderately hard, subblocky. CALCAREOUS SILTSTONE: (0-10%) Medium grey, medium brown grey, occasional dark grey, trace glauconite, trace lithic fragments, trace pyrite, firm to moderately hard, minor hard, subfissile.	Nil to trace C1
1990-2020m ROP: 3.5-8.5 Ave: 5.0	CALCAREOUS CLAYSTONE INTERBEDDED WITH TRACE SILTSTONE CALCAREOUS CLAYSTONE: (90-100%) Dominantly light to occasional medium grey, trace lithic fragments, trace forams, trace bryozoa fossil fragments, rare nodular pyrite, rare carbonaceous specks, soft to firm, occasional moderately hard, subblocky. CALCAREOUS SILTSTONE: (0-10%) Medium grey, medium brown grey, occasional dark grey, trace glauconite, trace lithic fragments, trace pyrite, firm to moderately hard, minor hard, subfissile.	Trace to 2 units 100% C1