DAILY GEOLOGICAL REPORT

WELL: Glenaire-1ST1	**REPORT No.:**	44	**DAYS FROM SPUD:**	44	**DATE:**	22/10/06
PL: PEP 160	**0000 hrs Depth:**	3612 m	**LAST DEPTH:**	3572 m	**PROGRESS:**	40 m
LOCATION: Otway Basin	**Rig:** Ensign 32		**RT elevation:**	76.1 m	**PTD:**	3945 m
Northing: 5 840 813 m N	**Easting:** 499 810 m E		**Ground Level**	70.0m		
NEARBY WELLS:	Tullich-1, Mceachern-1, Haselgrove South-1, Heathfield-1					

0600 OPS: Drill ahead with 152mm hole at 3619m.

PREVIOUS 24 Hours Operations: Drill ahead with 152mm hole to 3612m.

Comment: Oil Show: 3593-3603m – the oil is contained within the kaolinitic sandstone with very limited visual porosity – as the sandstone becomes cleaner with depth the kaolin is replaced with silica cement thus reducing effective porosity and hence fluorescence. Best assessment would suggest this interval is too tight for significant pore fluid recovery.

Formation Tops **(Wellsite)**	Wellsite (mRT)	Wellsite (mSS)	Prognosed Depths (mRT)	Prognosed Depths (mSS)	Prognosis Diff H/L	
Gambier Limestone	6.1	70	6	70	0	
Dilwyn Formation	29	47	82	-6	53H	
Pember Formation	320	-244	347	-271	27H	
Pebble Point Formation	380	-304	421	-345	41H	
Sherbrook Group	448	-372	487	-411	39H	
Eumeralla Formation	609	-533	656	-580	47H	
Windermere/Katnook Ss	Not Present	n/p	2034	-1958	Not Present	
Laira Formation	1968	-1892	2059	-1983	91H	
Pretty Hill Formation	3508	-1822	3746	-3670	238H	
T.D.			3945	-3869		

Interval (m) ROP (ave) min/m	**Lithology Description**	**Gas/Background Breakdown C1/C2/C3/C4/C5**
3576 – 3593 (1.7)	SILTY CLAYSTONE, (90%) medium grey to black, medium brown grey in part, moderately carbonaceous, trace black carbonaceous flecks and detritus, common micromica, hard to very hard, subfissile. SANDSTONE, (10%) off white, very fine to medium, dominantly fine, angular to subrounded, poorly sorted, strong silica and moderate calcareous cements, common white argillaceous matrix, quartzose, common altered feldspars, trace green grey black and brown lithics, trace fine black coaly detritus, very hard, no visual porosity, no oil fluorescence.	35 – 98 (75) (77:7:6:9:7)
Fluorescence	The sandstone has dull yellow orange mineral fluorescence, no oil fluorescence or cut.	

3593 – 3603 (4.0)	KAOLINITIC SANDSTONE, (100%) off white, moderately calcareous, abundant very fine to fine quartz sand grains dispersed through a white kaolin clay matrix, common black coaly laminates – sand percentage and grain size increases with depth, trace grey banded cryptocrystalline chert in part – possible fracture infill?, moderately hard, very poor intergranular porosity - grades with depth to: SANDSTONE, off white, very fine to medium, dominantly fine, angular to subrounded, moderately sorted, strong silica and moderate calcareous cements, common to abundant white argillaceous matrix, quartzose, abundant altered feldspar grains, trace green, orange and grey lithics, trace black coaly detritus, trace grey banded cryptocrystalline chert – possible fracture infill?, very hard, no visual porosity.	30 – 78 (55) (72:6:5:8:9)
Fluorescence	FLUORESCENCE, (3593-3603m) the kaolinitic sandstone has 50% decreasing to trace with depth, dull patchy medium yellow oil fluorescence giving a very weak dull pale yellow crush cut at the top.	

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3603 – 3618 (1.3)	SILTY CLAYSTONE, (90%) medium grey to black to medium brown, moderately carbonaceous, trace black carbonaceous flecks and detritus, common micromica, hard, subfissile. SANDSTONE, (10%) off white, very fine to fine, dominantly very fine, angular to subrounded, moderately sorted, very strong silica and moderate calcareous cements, common white argillaceous matrix, quartzose, common to abundant altered feldspar grains, trace green, orange and grey lithics, trace black coaly detritus, very hard, no visual porosity.	8 – 39 (21) (84:6:4:3:3)
Fluorescence	The sandstone has dull yellow orange mineral fluorescence, no oil fluorescence or cut.	

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