



# DAILY GEOLOGICAL REPORT

**WELL:** Glenaire-01      **REPORT No.:** 10      **DAYS FROM SPUD:** 10      **DATE:** 18/09/06  
**PL:** PEP 160      **0000 hrs Depth:** 2125 m      **LAST DEPTH:** 1778 m      **PROGRESS:** 347 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 216mm hole to 2154m, wiper trip to shoe.  
**PREVIOUS 24 Hours Operations:** Drill ahead with 216mm hole to 2125m.  
**Comment:** Controlled drilling 1991-2076m. Reliability of pick for top of Laira – poor.

Formation Tops (Wellsite)	Wellsite (mRT)	Wellsite (mSS)	Prognosed (mRT)	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			3746	-3670	
T.D.			3945	-3869	

Interval (m) ROP (ave) min/m	Lithology Description	Gas/Background Breakdown C1/C2/C3/C4/C5
1853 – 1968 (35)	<p>SILTY CLAYSTONE, (80%) off white to medium green grey to medium brown grey, trace to common very fine altered feldspar grains, trace to common black carbonaceous flecks and detritus, trace medium brown cryptocrystalline dolomite, trace micromica, rare pyrite, firm, subfissile.</p> <p>SANDSTONE, (20%) off white to light green grey, very fine to fine, dominantly fine, subangular to subrounded, moderately sorted, moderate silica cement, weak to occasionally moderate calcareous cement, abundant off white argillaceous and silt matrix – matrix supported, abundant altered feldspar grains, common green grey brown red and black volcanogenic lithics, trace quartz grains, rare pyrite, trace black carbonaceous detritus, moderately hard, no visual porosity, no oil fluorescence.</p> <p>COAL, (trace) black to very dark brown grey, earthy to subvitreous, blocky to platy to subconchoidal fracture, very argillaceous in part, hard, brittle.</p>	35 – 1128 (85) (97:2:1:tr:tr)
<b>Fluorescence</b>	<p>Nil in the sandstone, but: The coal has no fluorescence but gives a weak dull yellow crush cut.</p>	
1968 – 2055 (20)	<p>SILTY CLAYSTONE, (80%) off white to medium grey to medium brown to medium green grey, often common to abundant very fine altered feldspar grains, trace to common black carbonaceous flecks and detritus, trace medium brown cryptocrystalline dolomite, common micromica, firm, subfissile.</p> <p>SANDSTONE, (20%) off white to light green grey, very fine to fine, dominantly very fine, subangular to subrounded, moderately sorted, moderate silica cement, weak calcareous cement, abundant off white argillaceous matrix – matrix supported, abundant altered feldspar grains, common green grey brown red and black volcanogenic lithics, trace quartz grains, rare pyrite, common black carbonaceous detritus, moderately hard, no visual porosity, no oil fluorescence.</p>	20 – 210 (100) (97:2:1:tr:tr)
<b>Fluorescence</b>	<p>Nil in the sandstone, but the detrital coal has no fluorescence but gives a weak dull yellow crush cut.</p>	



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2055 – 2154 (20)	<p>SILTY CLAYSTONE, (95%) medium to dark brown grey to medium grey to medium green grey, gradually becomes more brownish with depth, trace very fine altered feldspar grains in part, moderately carbonaceous in part, trace black carbonaceous flecks and fine detritus, common micromica, moderately hard, subfissile.</p> <p>SANDSTONE, (5%) off white to light brown grey, very fine to fine, subangular to subrounded, moderately sorted, moderate silica and calcareous cements, abundant off white argillaceous matrix – matrix supported, abundant altered feldspar grains, trace to common green grey brown red and black volcanogenic lithics, trace quartz grains, trace fine brown and clear mica flakes, trace to common black carbonaceous detritus, hard, no visual porosity, no oil fluorescence.</p>	25 – 124 (60) (97:2:1:tr:tr)
<b>Fluorescence</b>	Nil	
<b>Fluorescence</b>		
<b>Fluorescence</b>		
<b>Fluorescence</b>		
<b>Fluorescence</b>		
<b>Fluorescence</b>		