Appendix 5 910016 001

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 1 Date: 05-12-2003

Depth: 345m **Progress:**345m **Days from Spud:** 1

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	508mm at 15m

Comments:
Spud Wombat No.1 at 0030hrs on 5th December, 2003 with 17.5 inch hole.
0600hr Update: Drill ahead at 392m in Gippsland Limestone, no shows.

Interval (mRT)	Hydrocarbon Show Summary	Gas
15-119	No Shows	Nil
119-345	No Shows	C1 0-15 ppm

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589			
Latrobe Group	664			
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**

Surface-18	Massive Sand (100%). (HAUNTED HILLS GRAVELS) SAND: light orange, very fine to very coarse, dominantly coarse, subrounded to rounded, moderately to well sorted, no visual cement, no visual matrix, white to opaque quartz grains often with yellow orange iron oxide staining, trace brown and red cherty lithics, trace black lithics, unconsolidated, very good inferred porosity, no oil fluorescence.
18-81	Massive Sand (100%) with at base minor Claystone (trace) (JEMMY'S POINT FORMATION) SAND: light to medium grey, very fine to grit, dominantly coarse becoming finer with depth, subrounded to rounded, poorly to very poorly sorted, no visual cement, trace medium to dark grey argillaceous and silt matrix, clear to milky quartz grains, trace to common grey black brown and red lithics, trace to common green and brown mica flakes, trace to common black carbonaceous material, rare pyrite, unconsolidated, very good inferred porosity, no oil fluorescence. CLAYSTONE: medium to dark green grey, slightly silty, common black coaly detritus occasionally with associated pyrite, abundant fossil fragments in part, common coarse green and brown mica flakes, very soft, very dispersive, non fissile.
81-119	Massive Marl (100%) (TAMBO RIVER FORMATION) MARL: light to medium grey to medium green grey to occasionally medium brown grey, abundant fossil fragments including bryozoa, forams, shell fragments, echinoid spines and sponge spicules, trace glauconite often as fossil infill, trace coarse yellow orange rounded quartz grains, very soft, very dispersive, non fissile.
119-345	Massive Calcarenite (100%) (GIPPSLAND LIMESTONE) CALCARENITE: light grey to light yellow grey, fine grained, common to abundant fine fossil fragments, trace coarse echinoid spines, abundant bryozoa in part, slightly argillaceous, trace very fine to rarely coarse quartz sand grains in part, nil to common glauconite, trace medium grey cryptocrystalline chert in part, friable, poor visual porosity, no oil fluorescence.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 2 Date: 06-12-2003

Depth: 430m **Progress:**85m **Days from Spud:** 2

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	508mm at 15m

Comments:

Drill 17.5" hole to 430m. Run 13.375" casing.

Carbide at 412m = 253 units. Hole washout - in gauge.

0600hr Update: Run 13.375" casing to 302m, casing stuck at 302m. Prepare to cement casing at 302m.

Interval (mRT)	Hydrocarbon Show Summary	Gas
345-430	No Shows	0-5ppm C1

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589			
Latrobe Group	664			
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**

345-430	Massive Calcarenite (100%) (GIPPSLAND LIMESTONE) CALCARENITE: light grey, fine grained, abundant fine fossil fragments with common coarse bryozoa, slightly to moderately argillaceous and calcilutitic, trace glauconite, friable, very poor visual porosity, no oil fluorescence.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 3 Date: 07-12-2003

Depth: 430m **Progress:**0m **Days from Spud:** 3

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

Set 13.375" casing at 302m. Nipple up BOP's.

0600hr Update: Nipple up BOP's.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589			
Latrobe Group	664			
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 4 Date: 08-12-2003

Depth: 430m **Progress:**0m **Days from Spud:** 4

Rig:	HUNT Rig No.2	**GL(*AHD*):**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

0600hr Update: Drill ahead with 12.25" hole in Gippsland Limestone at 458m. No shows.

CALCARENITE: (430-458m) light grey, fine grained, moderately to very calcilutitic and calcisiltitic, moderately argillaceous, common fossil fragments including bryozoa and forams, trace glauconite, friable to moderately hard, very poor visual porosity, no oil fluorescence.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589			
Latrobe Group	664			
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 5 Date: 09-12-2003

Depth: 578m **Progress:** 148m **Days from Spud:** 5

Rig:	HUNT Rig No.2	**GL(*AHD*):**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:
0600hr Update: Drilling ahead at 665m. Top Lakes Entrance Formation marl at 589m. Back ground gas in Lakes Entrance Formation 0 to 1 unit.

Interval (mRT)	Hydrocarbon Show Summary	Gas
430-578	No show (Gippsland Limestone).	Nil

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664			
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**

430-510	Calcarenite (70%) grading in part to Marl (30%) (GIPPSLAND LIMESTONE) CALCARENITE: light grey to occasionally medium grey, very fine to fine grained, often very calcilutitic and calcisiltitic, slightly to occasionally very argillaceous grading in part to marl, common fossil fragments including bryozoa and forams, trace glauconite, firm to friable, very poor visual porosity, no oil fluorescence. MARL: medium grey, very calcareous, trace fossil fragments, soft, non fissile.
510-530	Calcarenite (90%) grading in part to Marl (10%) (GIPPSLAND LIMESTONE). CALCARENITE: light grey, occasionally medium grey, very fine , cryptocrystalline in part, very calcilutitic and calcisiltitic in part, slightly to occasionally very argillaceous - occasionally grades to marl, common fossil fragments including bryozoa and forams, trace glauconite, firm to moderately hard, very poor visual porosity, no oil fluorescence. MARL: light to medium grey, very calcareous, trace fossil fragments, trace glauconite, soft, non fissile.
530-578	Calcilutite (60%) grading to Calcarenite (10%) grading to Marl (30%). (GIPPSLAND LIMESTONE). CALCILUTITE: off white to light grey, rarely light brown grey, slightly to very argillaceous, calcisiltitic in part, slightly cryptocrystalline, trace fossil fragments, trace glauconite, firm, no visual porosity, no oil fluorescence. CALCARENITE: light to occasionally medium grey, rarely medium greenish grey, very fine , cryptocrystalline in part, very calcilutitic and calcisiltitic in part, slightly to occasionally very argillaceous, occasionally grades to marl, common fossil fragments including bryozoa and forams, trace glauconite, firm to moderately hard, very poor visual porosity, no oil fluorescence. MARL: light to medium grey, light to medium green grey, rarely light brownish grey, very calcareous, trace fossil fragments, trace glauconite, soft, non fissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 6 Date: 10-12-2003

Depth: 910m **Progress:**332m **Days from Spud:** 6

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:
0600hr Update: Drilling ahead in Latrobe Formation at 972m. Interbedded Sandstone (50%) Claystone (40%) and Coal (10%). Background gas 0.5 to 1 units (C1 100%). No shows, no oil fluorescence.

Interval (mRT)	Hydrocarbon Show Summary	Gas
578-589	No show (Gippsland Limestone).	Nil
589-694	No Show (Lakes Entrance Formation)	0-5 units 100% C1
694-743	Top Latrobe Formation has gas indications present suggesting migrated gas. Gas readings within the coaly and argillaceous intervals range between 5 to a maximum of 18 units of total gas (C1 99%, C2 1%, C3+ 0). Readings within the sandstone intervals range between 6 to a maximum of 12 units of total gas (C1 99%, C2 1%, C3+ 0). This would indicate gas has migrated into or through this interval since the maturation level of the sediments at this depth is insufficient for local generation. Gas readings would suggest this interval to be water saturated. Further evaluation will be available with electric logging.	5-19 units C1 99% C2 1% C3 0 C4 0
743-910	No Show (Latrobe Formation)	0.5-7 units C1 100%

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**
578-589	Calcilutite (70%) grading to Marl (30%). (GIPPSLAND LIMESTONE). CALCILUTITE: off white to light grey. rarely light brown grey. slightly to very argillaceous. calcisiltitic in part. slightly cryptocrystalline. trace fossil fragments. trace glauconite. firm. no visual porosity. no oil fluorescence. MARL: light to medium grey. light to medium green grey. rarely light brownish grey. very calcareous. trace fossil fragments. trace glauconite. soft. non fissile.
589-694	Massive Marl (100%) (LAKES ENTRANCE FORMATION) MARL: light to medium green grey. light to medium brown grey. rarely light to medium grey. very calcareous in part. common forams and other fossil fragments. rare medium brown cryptocrystalline dolomite. trace glauconite. firm. non fissile.
694-708	Coal (80%) with minor interbedded Marl (10%) and Sandstone (10%) (LATROBE FORMATION) COAL: black to dark brown. earthy texture. irregular fracture. moderately to very argillaceous. trace pyrite and marcasite. firm. no oil fluorescence or cut. SANDSTONE: light grey. very fine to very coarse. dominantly very coarse. subrounded to rounded. poorly sorted. moderate calcareous cement. abundant off white to green grey marly matrix. clear to opaque quartz grains. common pyrite. trace glauconite. friable. poor inferred porosity. no oil fluorescence. MARL: off white to light green grey to medium brown. very calcareous. common glauconite. common dolomite. trace pyrite and marcasite. firm. non fissile.
708-743	Sandstone (50%) interbedded with Coal (10%) grading to carbonaceous Claystone (40%) (LATROBE FORMATION). SANDSTONE: very light brown. very fine to grit. dominantly coarse. subrounded to rounded. moderately sorted. weak silica cement. trace medium brown argillaceous matrix. clear to milky white quartz grains occasionally with a yellow brown stain. common black coal detritus. friable. very good inferred porosity. no oil fluorescence. CLAYSTONE: medium to dark brown. very silty in part. slightly calcareous and dolomitic. very carbonaceous grading to argillaceous coal. soft. very dispersive. non fissile. COAL: black to dark brown. earthy texture. irregular fracture. moderately to very argillaceous grading to carbonaceous claystone. firm.
743-840	Sandstone (60%) interbedded and intermixed with Claystone (20%) (LATROBE FORMATION). SANDSTONE: light brown grey. very fine to grit. dominantly coarse. subangular to rounded. moderately sorted. weak silica cement. trace weak calcareous cement. common to abundant medium brown argillaceous and silt matrix. clear to milky white quartz grains. trace grey and red cherty lithics. trace black coal detritus. friable. good to very good inferred porosity. no oil fluorescence. CLAYSTONE: medium to dark brown. moderately to very silty. trace calcilutitic stringers and nodules. very carbonaceous. soft. very dispersive. non fissile.

840-910	Sandstone (60%) interbedded with Claystone (20%) and Coal (20%). (LATROBE FORMATION). SANDSTONE: light brown grey, very fine to grit, dominantly coarse, subangular to rounded, moderately sorted, weak silica cement, trace weak calcareous cement, trace brown argillaceous and silt matrix, clear to milky white quartz grains, trace grey green brown and red cherty lithics, trace black coal detritus, friable, very good inferred porosity, no oil fluorescence. CLAYSTONE: medium to dark brown, medium to dark grey, light green grey, very silty, slightly calcareous, very carbonaceous, trace micromica, firm, very dispersive, non to slightly subfissile. COAL: dark brown to black, often very argillaceous grading to carbonaceous claystone, earthy texture, blocky fracture where clean, soft to moderately hard, brittle.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 7 Date: 11-12-2003

Depth: 1065m **Progress:** 155m **Days from Spud:** 7

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

POOH at 1065m for new drill bit.

0600hr Update: Slip and cut drill line prior to RIH with new bit.

Interval (mRT)	Hydrocarbon Show Summary	Gas
910-1065	No Show (Latrobe Formation)	0-5 units C1 100%

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**

910-1065	Sandstone (50%) interbedded and intermixed with Claystone (40%) and Coal (10%). (LATROBE FORMATION). SANDSTONE: light brown grey, very fine to granular, dominantly coarse to very coarse, subangular to subrounded, poor to moderately sorted, weak silica cement, trace weak calcareous cement in part, trace to abundant brown argillaceous and silt matrix, clear to milky white quartz grains, trace grey green brown and red cherty lithics, trace to common black coal detritus, friable, good to very good inferred porosity, no oil fluorescence. CLAYSTONE: off white to dark brown, medium to dark brown grey, very silty, slightly calcareous, often very carbonaceous grading to argillaceous coal, trace micromica, firm, very dispersive, non to slightly subfissile. COAL: dark brown to black, often very argillaceous, earthy texture, blocky fracture where clean, soft where argillaceous, moderately hard and brittle where clean.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 8 Date: 12-12-2003

Depth: 1065m **Progress:**0m **Days from Spud:** 8

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:
0600hr Update: Repair mud pump. No new formation drilled.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 9 Date: 13-12-2003

Depth: 1185m **Progress:** 120m **Days from Spud:** 9

Rig:	HUNT Rig No.2	**GL(*AHD*):**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

0600hr Update: Drill ahead in Latrobe Formation at 1215m.

Minor gas show at 1188m: Interval above 1186m Sandstone. 1186-1188m lithology intermixed coal and brown/white claystone. Interval below 1188m sandstone. At 1187.5 to 1188.5m, gas readings rose from a background of 1 unit to a maximum of 7 units (100% C1) then rapidly dropped back to 1 unit. Show is believed to be of no economic significance due to the thinness of the interval (less than 1m), lack of possible capping (less than 2m), the low size of the gas reading (7 units), and the probability the gas is held within the coal rather than the sand.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1065-1185	No Show (Latrobe Formation)	TG 0.2-1.5u C1 100%

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1065-1185	Sandstone (70%) interbedded and intermixed with Claystone (30%). (LATROBE FORMATION). SANDSTONE: very light brown grey, very fine to pebble, dominantly coarse to very coarse, angular to subrounded, poor to moderate sorting, weak silica cement, trace weak calcareous cement in part, common to abundant off white argillaceous matrix - occasionally matrix supported, clear to opaque quartz grains, rare grey green brown and red cherty lithics, trace to common black coal detritus, friable, fair to very good inferred porosity, no oil fluorescence. CLAYSTONE: off white to light brown, rarely medium brown, kaolinitic?, slightly silty, slightly carbonaceous in part, trace black coal detritus, firm, very dispersive, non fissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 10 Date: 14-12-2003

Depth: 1289m **Progress:** 104m **Days from Spud:** 10

Rig:	HUNT Rig No.2	**GL(*AHD*):**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

0600hr Update:

Drill ahead at 1310m in Latrobe Formation in interbedded and intermixed Claystone and Sandstone. Maximum background gas at 1291m TG = 3.9 units, C1 95%, C2 5%, C3 trace, C4 0.

CLAYSTONE: (80%) off white to light brown, occasionally medium to rarely dark brown, kaolinitic?, slightly silty, very finely to coarsely arenaceous in part, occasionally very carbonaceous, common black coal, trace pyrite, firm, very dispersive, non fissile.

SANDSTONE: (20%) very light grey to very light brown grey, very fine to granule, dominantly very coarse, angular to subrounded, poor to moderately sorted, weak silica cement, trace strong pyrite cement, common to abundant white argillaceous matrix - matrix supported in part, clear to opaque quartz grains, rare grey green lithics, trace black coal detritus, friable, poor to good inferred porosity, no oil fluorescence.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1185-1289	Latrobe Formation Minor gas show at 1188m: Interval above 1186m is Sandstone. 1186-1188m lithology is intermixed coal and brown/white claystone. Interval below 1188m is sandstone. At 1187.5 to 1188.5m, gas readings rose from a background of 1 unit to a maximum of 7 units (100% C1) then rapidly dropped back to 1 unit. Show is believed to be of no economic significance due to the thinness of the interval (less than 1m), lack of capping (less than 2m), the low size of the gas reading (7 units), and the probability the gas is held within the coal rather than the sand.	TG 0.5-7u C1 100%

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)

Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353			
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1185-1289	Sandstone (60%) interbedded and intermixed with Claystone (40%) and Coal (Trace). (LATROBE FORMATION). SANDSTONE: very light brown grey, very fine to granule, dominantly very coarse, angular to subrounded, poor to moderately sorted, weak silica cement, trace pyrite cement in part, common to abundant off white argillaceous matrix - matrix supported in part, clear to opaque quartz grains, rare grey green lithics, trace black coal detritus, friable, poor to very good inferred porosity, no oil fluorescence. CLAYSTONE: off white to light brown, minor medium to dark brown, kaolinitic?, slightly silty, occasionally very carbonaceous, common black coal in part, firm, very dispersive, non fissile. COAL: black to very dark brownish black, earthy to slightly subvitreous, blocky to slightly subconchoidal fracture, moderately argillaceous in part, hard and brittle.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 11 Date: 15-12-2003

Depth: 1359m **Progress:**70m **Days from Spud:** 11

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

0600hr Update: Drill ahead at 1382m.

Lithology SILTY CLAYSTONE: (100%) off white to medium grey, medium brown grey, slightly calcareous in part, trace black carbonaceous specks, trace very fine altered feldspar grains, trace micromica, soft, very dispersive, slightly subfissile.

Maximum background gas of 37 units at 1371m (C1 93%, C2 5%, C3 2%, C4 trace).

Gas readings increasing steadily with depth.

Maximum gas coming from white kaolinitic silty clay intervals within a predominantly medium grey silty claystone lithology.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1289-1327	No Show (Latrobe Formation)	TG 0.5-4u C1 94% C2 5% C3 1% C4 0
1327-1359	No Show (Golden Beach Formation) Background gas increasing steadily from 2 units to 11 units with depth.	TG 2-11u C1 95% C2 4% C3 1% C4 0

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)

Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1289-1327	Sandstone (40%) interbedded and intermixed with Claystone (60%). (LATROBE FORMATION). SANDSTONE: very light grey to very light brown grey, very fine to granule, dominantly very coarse, angular to subrounded, poor to moderately sorted, weak silica cement, trace strong pyrite cement, common to abundant white argillaceous matrix - matrix supported in part, clear to opaque quartz grains, rare grey green lithics, trace black coal detritus, friable, poor to good inferred porosity, no oil fluorescence. CLAYSTONE: off white to light brown, occasionally medium to rarely dark brown, kaolinitic?, slightly silty, very finely to coarsely arenaceous in part, occasionally very carbonaceous, common black coal, trace pyrite, firm, very dispersive, non fissile.
1327-1359	Massive Silty Claystone (100%) (GOLDEN BEACH FORMATION) SILTY CLAYSTONE: off white to medium grey, medium brown grey, occasionally medium green grey, trace black carbonaceous specks, trace very fine altered feldspar grains, trace micromica, soft, very dispersive, slightly subfissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 12 Date: 16-12-2003

Depth: 1385m **Progress:**26m **Days from Spud:** 12

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:

POOH at 1385m, coals caving severely, prepare hole for running 9.625" casing.

0600hr Update: Condition hole and mud prior to running 9.625" casing.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1359-1385	No show (Golden Beach Formation) Maximum gas coming from white kaolinitic silty clay intervals within a predominantly medium grey silty claystone lithology.	TG 5-37u C1 93% C2 5% C3 2% C4 trace

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**

1359-1385	Massive Silty Claystone (100%) (GOLDEN BEACH FORMATION) SILTY CLAYSTONE: off white to medium grey to medium brown grey, dominantly medium grey, slightly calcareous in part, trace black carbonaceous specks, trace very fine altered feldspar grains, trace micromica, soft, very dispersive, slightly subfissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 13 Date: 17-12-2003

Depth: 1385m **Progress:**0m **Days from Spud:** 13

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	340mm at 302m

Comments:
Condition hole, run 9.625" casing.
0600hr Update: Circulate casing prior to cementing.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 14 Date: 18-12-2003

Depth: 1385m **Progress:**0m **Days from Spud:** 14

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

Run 9.625" casing to 1366m.

0600hr Update: Pressure test BOP's.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608			
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 15 Date: 19-12-2003

Depth: 1449m **Progress:**64m **Days from Spud:** 15

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

Trip gas at 1385m = 160 units (C1 92%, C2 6%, C3 2%, C4 trace, C5 trace).

0600hr Update: Prepare for DST No.1

Interval (mRT)	Hydrocarbon Show Summary	Gas
1388-1390m	GAS SHOW: (Golden Beach Formation) 1388 to 1390m. gross pay 2 meters. From 1388-1390m the drill rate increased from a rate of 5 m/hr in the silty claystone above 1388m to 12 m/hr. then in the silty claystone below 1390m decreased back to 5 m/hr. The gas rose from a background of 60 units (still decreasing from the trip gas) to a maximum of 371 units. then decreased in the silty claystone below to a background of 50 units.. No oil fluorescence was present in the cuttings. The gas was in a tight very fine grained sandstone. Open hole testing at this stage was not considered viable due to the excessively tight nature of the sandstone and the lack of significant section This sandstone was: SANDSTONE: off white to light grey. fine to dominantly very fine. subangular to subrounded. moderately sorted. moderate silica and calcareous cements. abundant off white argillaceous matrix - matrix supported. quartzose with abundant partially altered feldspar and multicoloured lithic sand grains. trace fine black coaly grains. trace pyrite. moderately hard. no visual porosity. very poor inferred porosity. no oil fluorescence.	TG 371u C1 96% C2 3% C3 1% C4 trace C5 trace No fluor.
1390-1431	GAS SHOWS: (Golden Beach Formation) This interval consists predominantly of silty claystone with minor laminated and occasionally very finely interbedded tight sandstones. The sandstones within this interval appear to be gas saturated but are too tight and thin for significant gas recovery. The more pronounced sandier intervals are from 1402-1403m (TG 116u). 1410-1411m (TG 122u). 1414-1415m (TG 121u). 1416-1417m (TG 120u). 1420-1421m (TG 130u). Background gas from the silty claystone was from 50 to 75 units. No oil fluorescence was observed through this interval. (See "lithological desciptions" and "cuttings descriptions" for detailed lithology).	C1 95% C2 4% C3 1% C4 trace C5 trace No fluor.

1431-1449	GAS SHOWS: (Strzelecki formation) This interval consists of lithic sandstones interbedded with and grading to green Claystone. The sandstones within this interval appear to be gas saturated but tight. The background gas levels ranged between 50 and 60 units of total gas with gas peaks at: 1433-1434m (TG 128 units) and 1440 to 1441m (TG 97 units). No oil fluorescence was observed through this interval. (See "lithological desciptions" and "cuttings descriptions" for detailed lithology).	C1 95% C2 4% C3 1% C4 trace C5 trace

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	1431	-1416	177 High
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1385-1431	Silty Claystone (90%) laminated with and occasionally interbedded with Sandstone (10%). (GOLDEN BEACH FORMATION) SANDSTONE: off white to light brownish grey, fine to dominantly very fine, subangular to subrounded, moderately sorted, moderate silica and calcareous cements, abundant off white argillaceous matrix - matrix supported, quartzose with abundant partially altered feldspar and multicoloured lithic sand grains, trace fine black coaly grains, tracee pyrite, moderately hard, no visual porosity, very poor inferred porosity, no oil fluorescence. SILTY CLAYSTONE: medium to dark grey, occasionally off white to medium brown grey, occasionally very finely arenaceous grading to silty sandstone, slightly calcareous in part, trace black carbonaceous specks, trace very fine altered feldspar grains, trace medium brown cryptocrystalline dolomite in part, trace pyrite, trace micromica, firm, very dispersive, slightly subfissile.
1431-1449	Sandstone (50%) grading to and interbedded with Claystone (50%) (STRZELECKI FORMATION) SANDSTONE: medium green, red brown in part, coarse to very coarse, subangular to subrounded, moderately sorted, moderate to strong silica and calcite cements, abundant medium green and occasionally red argillaceous matrix, composed of green white and red lithic grains, common crystalline calcite in part (calcite veining?), moderately hard to hard, no visual porosity, no oil fluorescence. CLAYSTONE: light to medium green to medium green grey, occasionally light brown to dark red brown, slightly silty, trace dispersed coarse green and red lithic and altered feldspar grains in part, moderately hard, non fissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 16 Date: 20-12-2003

Depth: 1449m **Progress:**0m **Days from Spud:** 16

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

DST#1 Packer failed to set, POOH.

0600hr Update: Prepare for DST No.1A (Rerun of DST#1)

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	1431	-1416	177 High
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 17 Date: 21-12-2003

Depth: 1449m **Progress:**0m **Days from Spud:** 17

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

Run DST No.1A (open hole bottom test) 1366 to 1449m. IF 15 mins, ISI 60 mins, FF 120 mins, FSI 120 mins. GTS at estimated flow rate of 25 CFD, (C1 94%, C2 4%, C3 1%, C4 1%), recovered 6 bbls of rathole mud (no condensate or mud filtrate).

0600hr Update: Ream to bottom prior to drilling ahead.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	1431	-1416	177 High
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**
	No new formation drilled.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 18 Date: 22-12-2003

Depth: 1537m **Progress:**88m **Days from Spud:** 18

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

Trip gas at 1449m after DST#1A TG = 4500 units.

Possible tectonic stresses appear to be present and to be associated with and above a probable fault zone at 1471m causing hole instability across this region.

Section from 1431 to 1471m previously identified as Strzelecki Formation may or may not be Strzelecki Formation, and will require palynology to accurately identify its age and further study to fully ascertain whether this rock described as sandstone is in fact sedimentary or is volcanic or intrusive. The section below 1471m indentified as Golden Beach may or may not be Golden Beach Formation and will also require palynology to accurately identify its age.

0600hr Update:

Drill ahead at 1592m., still in gas shows.

GAS SHOWS: From 1543 to 1583 meters (Golden Beach Formation)

This section consists of sandstone with minor finely interbedded and laminated claystone. The sandstone appears to be gas saturated throughout, with very poor to mainly poor inferred porosity. No better porosity intervals appear to be present. Gross gas pay 40 meters, estimated net gas pay 25 meters. Significant gas production rates may be possible from this sand - further analysis and/or testing is recommended. Total gas readings through this interval ranged between 50 units in the more clay rich intervals to a maximum of 399 units in the sandier units (average 200 units).

SANDSTONE: light green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix - matrix supported in part, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, friable, very poor visual porosity, very poor to poor inferred porosity, no oil fluorescence.

CLAYSTONE: off white to light grey to light green to light brown, moderately silty in part, often very finely arenaceous grading in part to arenaceous sandstone, firm, non fissile.

Interval (mRT)	Hydrocarbon Show Summary	Gas

1449-1471	GAS SHOW (Strzelecki Formation) This interval consists of interbedded and intermixed sandstone and claystone. This interval appears to be a fault alteration zone. The section from 1449 to 1469m appears to contain a high level of post depositional mineral regrowth which in general has depleted most of the depositional porosity - however what limited porosity remains appears to be gas saturated. From 1469 to 1471m there appears to be a more recent faulting event causing a greneral crushing of the internal rock structure without re-crystalization. This has led to retention or re-formation of some porosity within what is a more clayey unit resulting in a gas show of 391 units of total gas, with no oil fluorecence. Due to the argillaceous nature of the sediment containing the gas, production potential from this interval is considered to be low. For detailed lithology see "cuttings descriptions" and "lithological descriptions".	C1 97% C2 2.5% C3 0.5% C4 0 C5 0
1471-1510	GAS SHOW (Golden Beach Formation) This section consists of interbedded and intermixed sandstone and claystone. The sandstones through this interval appear to be gas saturated but too tight for significant accumulation. The most significant gas readings were: 1476-1477m TG 88 units, 1487-1488m TG 59 units. 1504-1506m 334 units.	C1 97.7% C2 2% C3 0.3% C4 trace C5 0
1510-1527	GAS SHOWS (Golden Beach Formation) This section consists of sandstone with minor finely interbedded claystone. The sandstone appears to be gas saturated, with inferred porosity ranging from very poor to fair. Gross gas pay 16 meters, estimated net gas pay 10 meters. Significant gas production rates may be possible from some intervals within this sand - further analysis and/or testing is recommended. Total gas readings through this interval ranged between 160 and 885 units with the better porosity intervals between 1511-1512m, 1517-1518m, and 1520-1522m.. For detailed lithology see "cuttings descriptions" and "lithological descriptions".	C1 97.6% C2 2% C3 0.4% C4 trace C5 0
1527-1543	GAS SHOWS (Golden Beach Formation) This section consists of claystone with minor laminated sandstone. The Sandstone is gas saturated but due to their thinness (laminae only) and lack of porosity are considered to be of no producable significance. Through this interval gas reading ranged between 26 and 50 units of total gas with no significant peaks	C1 97.5% C2 2% C3 0.5% C4 0-trace C5 0

Formation Tops:	**Prognosed (mRT)**	**Actual* (mRT)**	**Actual* (mSS)**	**Difference* (High/Low)**
Haunted Hills Gravels	Surface	Surface	Surface	0
Emmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	1431	-1416	177 High
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**

1449-1469	Sandstone (70%) interbedded with and grading to Claystone (30%). (STRZELECKI FORMATION) SANDSTONE: medium green to green grey to red, very fine to very coarse, dominantly coarse, angular to subrounded, poorly sorted, strong chlorite cement, abundant green (chlorite?) and red argillaceous matrix - welded texture, composed of red green and occasionally off white volcanogenic lithics with abundant crystal regrowth, trace vein calcite, hard, no visible porosity, no oil fluorescence. (Possibly fault altered?) CLAYSTONE: medium bright green, brick red, chloritic?, abundant dispersed very fine to very coarse volcanogenic lithic sand grains in part - welded texture with common mineral regrowth, hard, non fissile.
1469-1471	Sandstone (70%) interbedded with and grading to Claystone (30%). (STRZELECKI FORMATION) SANDSTONE: medium green to green grey to occasionally red, very fine to very coarse, dominantly coarse, angular to subrounded, poorly sorted, weak chlorite cement, abundant green (chlorite?) argillaceous matrix - confused texture, composed of red green and occasionally off white volcanogenic lithics, trace vein calcite, friable, no visible porosity, very poor inferred porosity, no oil fluorescence. (Possibly fault crushed?) CLAYSTONE: medium bright green, occasionally brick red, chloritic?, abundant intermixed very fine to very coarse volcanogenic lithic sand grains in part - no internal structure, soft, non fissile.
1471-1510	Sandstone (60%) interbedded with and grading to Claystone (40%). (GOLDEN BEACH FORMATION) SANDSTONE: medium green, occasionally red, very fine to very coarse, dominantly coarse, angular to subrounded, poorly sorted, moderate chlorite cement, abundant green (chlorite?) matrix, composed of red green and off white volcanogenic lithics fused together with a chloritic? matrix, common vein calcite, moderately hard, no visible porosity, very poor inferred porosity, no oil fluorescence, in part interbedded with: SANDSTONE: light grey to medium green, rarely brick red, very fine to very coarse, dominantly fine, angular to subrounded, poorly sorted, moderate silica cement, abundant off white to light green argillaceous and silt matrix, composed of off white atered feldspar and green to red to black volcanogenic lithics, common vein calcite, friable to moderately hard, no visual porosity, very poor inferred porosity, no oil fluorescence.. CLAYSTONE: medium green to medium green grey, occasionally brick red, very chloritic?, abundant very fine to very coarse volcanogenic lithic sand grains in part, moderately hard, non fissile, grading to and interbedded in part with: CLAYSTONE: off white to light grey to light green to medium green to brick red, occasionally very silty and finely arenaceous, common vein calcite, firm to moderately hard, non fissile.
1510-1527	Sandstone (80%) finely interbedded with and grading to Claystone (20%). (GOLDEN BEACH FORMATION) SANDSTONE: light grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, common white argillaceous matrix, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, friable, poor visual porosity, fair inferred porosity, no oil fluorescence. CLAYSTONE: off white to light grey to light green to light brown, moderately silty in part, abundant very fine altered feldspar and volcanogenic lithics in part, firm, non fissile.

1527-1543	Claystone (95%) with minor laminated Sandstone (5%). (GOLDEN BEACH FORMATION) CLAYSTONE: off white to light grey to light green to light brown, moderately silty in part, rarely very finely arenaceous with altered feldspar grains, firm, non fissile. SANDSTONE: light grey, very fine to fine, dominantly very fine, subangular to subrounded, moderately sorted, moderate silica cement, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, moderately hard, no visual porosity, very poor inferred porosity, no oil fluorescence.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 19 Date: 23-12-2003

Depth: 1710m **Progress:**173m **Days from Spud:** 19

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

A gas/water contact has been interpreted to be present in a claystone unit around 1608m. The GWC appears to be transitional.

Wiper trip gas at 1609m was 103 units of total gas.

0600hr Update:

Drill ahead at 1731m. Section below 1710m consists predominantly of Golden Beach Formation claystone with minor laminated and finely interbedded very tight sandstones. Gas readings have gradually reduced with depth from 30 units total gas back to 9-24 units. No sandstone of reservoir quality has been encountered through this section.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1543-1583	GAS SHOW: (Golden Beach Formation) This section consists of sandstone with minor finely interbedded and laminated claystone. The sandstone appears to be gas saturated throughout, with very poor to mainly poor inferred porosity. No better porosity intervals appear to be present. Gross gas pay 40 meters, estimated net gas pay 25 meters. Significant gas production rates may be possible from this sand - further analysis and/or testing is recommended. Total gas readings through this interval ranged between 50 units in the more clay rich intervals to a maximum of 399 units in the sandier units (average 200 units). For detailed lithology see "cuttings descriptions" and lothological descriptions".	C1 96.5% C2 2.7% C3 0.7% C4 0.1% C5 0
1583-1608	GAS SHOW: (Golden Beach Formation) This section consists of sandstone with minor finely interbedded and laminated claystone. The sandstone appears to be gas saturated through this interval , with very poor to mainly poor inferred porosity. A gas/water contact has been interpreted to be within a claystone interval around 1608m. Gross gas pay 25 meters, estimated net gas pay 17 meters. Significant gas production rates may be possible from this sand - further analysis and/or testing is recommended. Total gas readings through this interval ranged between 50 units in the more clay rich intervals to a maximum of 428 units in the sandier units (average 240 units). No oil fluorescence was observed in cuttings. For detailed lithology see "cuttings descriptions" and lothological descriptions".	C1 96.8% C2 2.6% C3 0.6% C4 0 C5 0

1608-1659	NO SHOW: (Golden Beach Formation) This section consists of interbedded and laminated claystone and sandstone. The sandstones within this unit appear to be water wet with some residual gas associated with mainly the upper tighter portions of the sandier units. Background gas through this interval ranged between 10 to 40 units with maximum readings of 99 units at 1618m and 80 units at 1642 units. Background readings in general reduced with depth. No oil fluorescence was observed in the cuttings.	C1 95% C2 4% C3 1% C4 trace C5 0
1659-1661	GAS SHOW: (Golden Beach Formation) This section consists of interbedded claystone and sandstone. Underlying a claystone cap (base at 1659m) and in the top of a sandstone unit the gas rose from a background of 10 units to a peak of 138 units total gas. then dropped back to a base of 30 units through the remainder of the sandstone. Best interpretation would suggest the probabilty of a gas pay section of 2 meters with a gas/water contact at 1661m. The sandstone has poor inferred porosity. Some gas may be recoverable on test but probability for significant flow is considered to be low. For detailed lithology see "cuttings descriptions" and lothological descriptions".	C1 96% C2 3% C3 1% C4 trace C5 0
1661-1686	NO SHOW: (Golden Beach Formation) This section consists of interbedded and laminated claystone and sandstone. Total gas readings through this interval ranged between 10 and 60 units, with a maximum gas reading at 1673m of 91 units. This interval appears to be water saturated with the only possible exception from 1672 to 1673m where a possible 1 meter column of tight gas saturation may be present. No oil fluorescence was observed in this interval.	C1 96% C2 3% C3 1% C4 trace C5 0
1686-1692	GAS SHOW: (Golden Beach Formation) This section consists of interbedded claystone and sandstone. Underlying a claystone cap (base at 1686m) and in the top of a sandstone unit the gas rose from a background of 60 units to a peak of 163 units total gas. with a range from 113 to 163 units through this sandstone interval. Best interpretation would suggest the probabilty of a gross gas pay section of 6 meters with a net pay of 5 meters with a gas/water contact at 1692m. The sandstone has poor inferred porosity. being matrix choked. Some gas may be recoverable on test but probability for significant flow is considered to be low. For detailed lithology see "cuttings descriptions" and lothological descriptions".	C1 97% C2 2.5% C3 0.5% C4 trace C5 0
1692-1710	NO SHOW: (Golden Beach Formation) This section consists of interbedded and laminated claystone and sandstone. The sandstones within this unit appear to be water wet with minor residual gas. Background gas through this interval ranged between 20 to 60 units decreasing with depth. No significant peaks were observed. No oil fluorescence was seen in the cuttings.	C1 97% C2 2.5% C3 0.5% C4 trace C5 0

Formation Tops:	**Prognosed (mRT)**	**Actual* (mRT)**	**Actual* (mSS)**	**Difference* (High/Low)**

Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	1431	-1416	177 High
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1543-1583	Sandstone (80%) finely interbedded with and grading to Claystone (20%). (GOLDEN BEACH FORMATION) SANDSTONE: light green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, friable, very poor to poor visual porosity, poor inferred porosity, no oil fluorescence. CLAYSTONE: off white to light grey to light green to light brown, moderately silty in part, rarely very finely arenaceous with altered feldspar grains, firm, non fissile.
1583-1623	Sandstone (60%) finely interbedded with and grading to Claystone (40%). (GOLDEN BEACH FORMATION) SANDSTONE: light grey to light green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, friable, very poor visual porosity, poor inferred porosity, no oil fluorescence. CLAYSTONE: off white to light grey to light green grey to light brown, moderately silty in part, often very finely arenaceous grading in part to arenaceous sandstone, firm, non fissile.
1623-1710	Sandstone (20%) finely interbedded with and grading to Claystone (80%). (GOLDEN BEACH FORMATION) SANDSTONE: light grey to light green grey, very fine to rarely medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, abundant white argillaceous matrix, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, friable, nil to very poor visual porosity, very poor to poor inferred porosity, no oil fluorescence. CLAYSTONE: light green grey to light brown grey to light grey, very silty in part, rarely very finely arenaceous with altered feldspar and volcanogenic lithic sand grains, trace black carbonaceous specks, trace micromica, firm, non fissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 20 Date: 24-12-2003

Depth: 1775m **Progress:**65m **Days from Spud:** 20

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

Total Depth of 1775 meters reached at 1400 hrs on 24th December, 2003.

0600hr Update:

Run Schlumberger electric logs: Run#1 PEX-HALS-Sonic (T.D.-Shoe 1366m), GR to surface.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1710-1775 T.D.	NO SHOW: (Golden Beach Formation) This section consists of interbedded and laminated claystone and sandstone. The sandstones within this unit appear to be water wet with inferred porosities ranging from very poor to occasionally fair. Background gas through this interval ranged from 10 units in the more argillaceous sections to a maximum of 42 units in the more arenaceous parts. Background gas levels in general reduced gradually with depth. No oil fluorescence was observed in the cuttings	C1 97% C2 2% C3 1% C4 0-trace

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/c	n/c	n/c
T.D.	1800	1775	-1760	15 High

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1710-1775 T.D.	Sandstone (70%) interbedded and laminated with Claystone (80%). (GOLDEN BEACH FORMATION) SANDSTONE: light grey to light green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately sorted, weak silica cement, trace weak calcareous cement, abundant white argillaceous matrix - matrix supported, quartzose with abundant altered feldspar and grey green red and black volcanogenic lithics, trace brown mica flakes, friable, poor visual porosity, poor to fair inferred porosity, no oil fluorescence. CLAYSTONE: light to medium grey to light green grey to light brown grey, very silty in part, rarely very finely arenaceous with altered feldspar and volcanogenic lithic sand grains, trace black carbonaceous specks, trace micromica, firm, non fissile.

LAKES PETROLEUM N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 21 Date: 25-12-2003

Depth: 1775m **Progress:**0m **Days from Spud:** 21

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	244mm at 1366m

Comments:

Run Schlumberger electric logs: Run#1 PEX-HALS-Sonic (T.D.-Shoe 1366m), GR to surface.

Run#2 Dipmeter

Run 7" liner.

0600hr Update: Run 7" liner.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/c	n/c	n/c
T.D.	1800	1775	-1760	15 High

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**
	No new formation drilled.

LAKES OIL N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 22 Date: 13-01-2004

Depth: 1796m **Progress:**29m **Days from Spud:** 41

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:

An 8m total depth discrepancy in the pipe tally was found during strapout and confirmed from electric logging. Total depth of well has been adjusted to be 8m shallower. Depth error appears to be from 1449m to 1775m original depths. Total depth of 1775m has been revised to 1767m.

Wombat No.1 was suspended on 26-12-03 to allow time for data appraisal and materials aquisition. After data appraisal a decision was made to recommence drilling prior to cased hole testing of the previously encountered gas shows.

Drilling of 6" hole recommenced on 13th January, 2004.

Lithology from 1767-1791m described as Claystone may be either a partially weathered intrusive sill, fault altered Strzelecki Formation or a strongly cemented and geothermally altered portion of normal Strzelecki Formation? Petrographic analysis will be required for positive identification.

At 1790m connection gas 2030units.

0600hr Update:

Circulate at 1812m prior to POOH for washout, increase mud weight to control connection gases..

1796 to 1812m, connection gases of 1000 to 2000 units of total gas, no significant sand development with porosity.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1767-1791	GAS SHOW: (Strzelecki Formation). This section appears to be gas saturated. Gas readings ranged from 30 units of total gas to 230 units, with a maximum gas reading of 2030 units at 1790m from connection gas. The gas from 1767 to 1791m was present in very thin "sandier" lenses and microfracturing within the rock unit. No identifiable sandstone units or porosity intervals were present hence production potential is assessed to be very low.	C1 96% C2 3% C3 1% C4 trace C5 trace
1791-1796	GAS SHOW: (Strzelecki Formation). This section appears to be gas saturated with gas readings ranging from 20 to 65 units of total gas. However no significant sand development is present, with the gas coming from thin sandier laminae within a massive claystone unit. Production potential from this interval is considered to be very low due to the lack of sand development.	C1 96% C2 3% C3 trace C4 0 C5 0

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description	
Interval (m)	**Description**
1767-1791	Massive Claystone (100%) - Possible altered intrusive? (Intra STRZELECKI FORMATION) CLAYSTONE: (possible altered weathered intrusive?) medium to dark green. off white to light brown grey. occasionally brick red. occasionally black. coarsely crystalline in part. moderately calcareous. common calcite veins. hard. non fissile.
1791-1796	Massive Claystone (100%). (STRZELECKI FORMATION) CLAYSTONE: light to medium grey. minor light brown grey. slightly silty. occasionally very finely arenaceous with altered feldspar grains. trace black to brown carbonaceous specks. trace micromica. moderately hard. slightly subfissile.

LAKES OIL N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 23 Date: 14-01-2004

Depth: 1832.4m **Progress:**36.4m **Days from Spud:** 42

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:

POOH at 1832.4m for Core No.1.

0600hr Update: Cut Core No.1 1832.4 to 1834.8m (2.4m), coring ceased at 1834.8m due to no penetration. Prepare to POOH with Core No.1.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1796-1827	GAS SHOW: (Strzelecki Formation). This section consists predominantly on claystone with minor very finely interbedded and laminated tight sandstone. The total gas readings ranged between 30 units a maximum of 76 units. Due to the thin and tight nature of the sandstones gas production potential is assessed as being very poor, however, all the minor sand laminae and thin interbeds do appear to be gas saturated.	C1 98% C2 2% C3 Trace C4 0 C5 0
1827-1832.4	RESIDUAL GAS SHOW: (Strzelecki Formation) This section consists of a massive sandstone unit, generally with poor to occasionally fair inferred porosity. No oil fluorescence was observed within this interval. The maximum gas reading within this unit was 78 units at the top of the interval, dropping back to 15 units at the base of the interval. Best assessment would imply water saturation with minor solution gas. Visual porosity would suggest this unit would have sufficient porosity/permeability for fluid recovery on test.	C1 98% C2 2% C3 Trace C4 0 C5 0

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)

Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1796-1827	Claystone (90%) with minor very finely interbedded and laminated tight Sandstone (10%). (STRZELECKI FORMATION) CLAYSTONE: light grey to light green grey, light brown grey, slightly silty, occasionally very fine sandstone laminae with abundant altered feldspar grains - no visual porosity, trace black to brown carbonaceous specks, trace micromica, moderately hard, slightly subfissile. SANDSTONE: light green grey, very fine to occasionally medium, dominantly fine, subangular to subrounded, moderately sorted, strong silica cement, weak calcareous cement, common to abundant white argillaceous matrix, abundant altered feldspar and green grey black and red volcanogenic lithics, trace to common quartz grains, trace coarse brown mica flakes, very hard, no visual porosity, very poor inferred porosity, no oil fluorescence.
1827-1832.4	Massive Sandstone (100%) with very strongly calcareously cemented band from 1830 to 1832m. (STRZELECKI FORMATION). SANDSTONE: (from 1827 to 1830m and 1832.0 to 1832.4m) medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately to well sorted, moderate silica and calcareous cements, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and green grey black and red volcanogenic lithics, trace coarse brown mica flakes, friable to moderately hard, poor visual porosity, poor to fair inferred porosity, no oil fluorescence. SANDSTONE: (from 1830 to 1832m) light to medium green grey, very fine to medium, dominantly fine, subangular to subrounded, moderately to well sorted, very strong calcareous cement, common to abundant white argillaceous matrix, quartzose with abundant altered feldspar and green grey black and red volcanogenic lithics, trace coarse brown mica flakes, hard, very poor visual porosity, very poor inferred porosity, no oil fluorescence.

LAKES OIL N.L.

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WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 24 Date: 15-01-2004

Depth: 1834.8m **Progress:**2.4m **Days from Spud:** 43

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:

Cut Core No.1 1832.4 to 1834.8m (2.4m), coring ceased at 1834.8m due to no penetration - core barrel jammed. POOH Core No.1. Recovered 2.17m (90%). Prepare for DST No.2 (1757.0 - 1834.8m).

0600hr Update: Prepare to open DST No.2.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1832.4-1832.8	See Core report No.1	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1832.4-1834.8	See Core No.1 Report.

LAKES OIL N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 25 Date: 16-01-2004

Depth: 1834.8m **Progress:**0m **Days from Spud:** 44

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:

Run DST No.2 1757.0 - 1834.8m, IF 15 mins, ISI 60 mins, FF 150 mins, FSI 300 mins. Initial flow 0.25 MMCFD (130 PSI through 0.25 inch surface choke with calculated gas gravity of 0.5) decreasing to RTSM in flinal flow. (C1 96%, C2 3%, C3 1%, C4 Trace, C5 0). Recovered 7.6 bbls (303m) rathole mud. Initial evaluation of the pressure charts suggest final flow may be invalid due to possible tool plugging. The pressure charts will require further analysis for definitive verification.

0600hr Update: Cut Core No.2, core ahead at 1835m.

Interval (mRT)	Hydrocarbon Show Summary	Gas
	No new formation drilled.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Lemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description

	No new formation drilled.

LAKES OIL N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 26 Date: 17-01-2004

Depth: 1845.2m **Progress:** 10.4m **Days from Spud:** 45

Rig:	HUNT Rig No.2	**GL(*AHD*):**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:

Cut Core No.2, 1834.8 to 1845.2m, Cut 10.4m, Recovered 9.8m (94%).

0600hr Update: Drill ahead at 1785m, background gas 11 units.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1834.8-1845.2	See core report No.2.	TG 1-7u

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)
Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1834.8-1845.2	See Core Report No.2

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(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 27 Date: 18-01-2004

Depth: 1971m **Progress:**125.8m **Days from Spud:** 46

Rig:	HUNT Rig No.2	**GL*(AHD)*:**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:
0600hr Update: Reached T.D. 1990m at 0550 hrs, 19-01-2004. Circulate hole clean before logging.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1845.2-1948	RESIDUAL GAS SHOWS (STRZELECKI FORMATION). This interval consists of Sandstone with thin interbedded and laminated Claystone. In general the sandstones appear to be fine grained and tight. However some thin bands within the sandstone appear to have slightly better porosity, with visual porosity estimated up to poor. The back ground gas is fairly consistant at around 20 units of total gas, with peaks at 1847m of 97 units, and at 1861 of 294 units. Note that these high peaks correspond to what appears to be slightly better porosity, but also lay immediately below tight argillaceous intervals. A gas peak of 850 units occurred at 1908m, with the gas coming from what appears to be a major limestone lined fracture. Best interpretation is for this interval to be primarily water saturated in the larger sand sections, but with minor intermittant sections of gas saturation under and within permeability barriers. Potential for economic gas recovery from these sands is deemed to be low.	C1 96.8% C2 2.5% C3 0.6% C4 0.1% C5 0
1948-1959	GAS SHOW: (STRZELECKI FORMATION). This interval consists of a massive Sandstone overlain by approximately 20 meters of claystone with minor laminated tight sandstones. The gas rose from a background of 15 units in the cap to a maximum of 580 units within the sandstone. The gas readings were consistant with drill rate through this interval indicating gas saturation was continuous to the base at 1959m where the lithology changed to a claystone. Visual porosity through this interval appears to be poor. With a gross and net gas column of 11 meters, sufficient gas column exists for possible significant flow and reservoir volume, with the limiting factor being permeability. This interval should be carefully evaluated after logging to see if testing is warranted.	C1 95.8% C2 2.0% C3 1.0% C4 0.2% C5 0
1959-1971	NO SHOW: (STRZELECKI FORMATION) Massive claystone unit, no reservoir.	

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)

Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800			

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1845.2-1948	Sandstone (50%) interbedded and laminated with Claystone (50%). (STRZELECKI FORMATION). SANDSTONE: light to medium greenish grey, very fine to occasionally medium, dominantly fine, angular to subrounded, moderately to well sorted, moderate silica and weak calcareous cements, abundant white argillaceous matrix, abundant altered feldspar and green grey black and red volcanogenic lithics, common quartz grains, trace coarse brown mica flakes, trace calcite infilled fractures, moderately hard, nil to poor visual porosity, very poor to poor inferred porosity, no oil fluorescence. CLAYSTONE: light grey to dominantly medium grey, medium brown grey in part, slightly silty, occasional very fine sandstone laminae with abundant altered feldspar grains - no visual porosity, trace black to brown carbonaceous specks, trace micromica, moderately hard, non to slightly subfissile.
1948-1959	Massive Sandstone (100%) (STRZELECKI FORMATION) SANDSTONE: medium greenish grey, very fine to medium, dominantly fine to medium, angular to subrounded, moderately to well sorted, moderate silica and strong calcareous cements, common white argillaceous matrix, abundant altered feldspar and green grey black and red volcanogenic lithics, common quartz grains, trace coarse brown and clear mica flakes, common calcite vein infill, moderately hard, very poor visual porosity, poor inferred porosity, no oil fluorescence, 5% bright white pinpoint mineral fluorescence, no cut.
1959-1971	Sandstone (20%) interbedded and laminated with Claystone (80%). (STRZELECKI FORMATION). SANDSTONE: light to medium greenish grey, very fine to fine, angular to subrounded, moderately to well sorted, moderate silica and weak calcareous cements, abundant white argillaceous matrix, abundant altered feldspar and green grey black and red volcanogenic lithics, common quartz grains, trace coarse brown mica flakes, trace calcite vein infill, moderately hard, no visual porosity, very poor inferred porosity, no oil fluorescence. CLAYSTONE: light to medium grey to medium brown grey, slightly to moderately silty, occasionally very finely arenaceous with abundant altered feldspar grains, trace black to brown carbonaceous specks, trace micromica, trace vein calcite, moderately hard, non to slightly subfissile.

LAKES OIL N.L.

(A.C.N. 004247214)

WOMBAT No.1 PEP 157

DAILY GEOLOGICAL REPORT No. 28 Date: 19-01-2004

Depth: 1990m **Progress:** 19m **Days from Spud:** 47

Rig:	HUNT Rig No.2	**GL(*AHD*):**	11.0m
Drilling Rep:	Peter Dwyer	**RT:** *(datum)*	14.65m
Geologist:	David Horner	**Last Casing:**	178mm at 1757m

Comments:

Reached T.D. of 1990m at 0550 hrs 19th January, 2004. Condition hole, POOH for Electric Logs.

Run No.1 DLS-MRS-CSS-GR-SP-Cal (1987 - 1757m), Run No.2 PDS-CNS-GR-Cal (1987 - 1757m).

Wiper trip prior to running 4.5" liner.

0600hr Update: POOH after wiper trip prior to running 4.5" casing.

Interval (mRT)	Hydrocarbon Show Summary	Gas
1971-1978	NO SHOW: (STRZELECKI FORMATION) Massive claystone unit, minor very tight sandstone, no reservoir.	
1978-1990 T.D.	GAS SHOW: (STRZELECKI FORMATION) This interval consists of a a massive sandstone unit. The gas rose to a maximum of 200 units at 1979m, then slowly declined through the remainder of the unit. Inferred porosity at the top is assessed to be poor, and decreases to very poor with depth, probably causing the gas readings decrease rather than a gas/water transition. The sandstone has considerable quantities of kaolin matrix and calcareous cementation. Due to the apparent tightness of this sandstone potential for significant flow is assessed as low.	C1 96.4% C2 3.0% C3 0.6% C4 0 C5 0

Formation Tops:	Prognosed (mRT)	Actual* (mRT)	Actual* (mSS)	Difference* (High/Low)

Haunted Hills Gravels	Surface	Surface	Surface	0
Jemmy's Point Formation	16	18	-3	2 Low
Tambo River Formation	80	81	-66	1 Low
Gippsland Limestone	118	119	-104	1 Low
Lakes Entrance Formation	589	589	-574	0
Latrobe Group	664	694	-679	30 Low
Golden Beach Formation	1353	1327	-1312	26 High
Strzelecki Group	1608	n/p	n/p	n/p
T.D.	1800	1990	-1975	190 Low

**Provisional, based on mudlog*

Lithological and Fluorescence Description

Interval (m)	Description
1971-1978	Sandstone (20%) interbedded and laminated with Claystone (80%). (STRZELECKI FORMATION). SANDSTONE: light to medium greenish grey, very fine to fine, dominantly very fine, angular to subrounded, moderately to well sorted, moderate silica and calcareous cements, abundant white argillaceous matrix - matrix supported, abundant altered feldspar and green grey black and red volcanogenic lithics, trace quartz grains, trace coarse brown mica flakes, trace calcite vein infill, moderately hard, no visual porosity, very poor inferred porosity, no oil fluorescence. CLAYSTONE: off white to light to medium grey to medium brown grey, slightly to moderately silty, often very finely arenaceous with abundant altered feldspar grains, trace black to brown carbonaceous specks, trace micromica, trace vein calcite, moderately hard, non to slightly subfissile.
1978-1990 T.D.	Sandstone (90%) interbedded and laminated with Claystone (10%). (STRZELECKI FORMATION). SANDSTONE: light to medium greenish grey, very fine to medium, dominantly fine to medium, angular to subrounded, moderately to well sorted, moderate silica and strong calcareous cements, abundant white argillaceous matrix, abundant altered feldspar and green grey black and red volcanogenic lithics, common quartz grains, trace coarse brown mica flakes, trace calcite vein infill, moderately hard, very poor visual porosity, poor inferred porosity, no oil fluorescence, 5% bright white pinpoint mineral fluorescence, no cut. CLAYSTONE: off white to light grey, occasionally medium grey to medium brown grey, slightly to moderately silty, often very finely arenaceous with abundant altered feldspar grains, trace black to brown carbonaceous specks, trace micromica, trace vein calcite, moderately hard, non to slightly subfissile.