



PINE LODGE 1 PROGNOSIS
G.L.E. : 50m a.m.s.l.
Primary Objective : Waarre Formation
Secondary Objective : Pebble Point Formation

FORMATION	LITHOLOGY	METRES (ss) / TWT (ms)	THICKNESS (Metres)	RESERVOIR	SEAL
HEYTESBURY GROUP	T T T T T	120/130	120		
NIRRANDA GROUP	T T T T T	190/210	70		
WANGERIP GROUP	DILWYN FORMATION		445		
	PEMBER MUDSTONE	635/594			
	Intra Pember Sand		305		
	PEBBLE POINT FORMATION	940/792 / 1010/850	740		
SHERBROOK GROUP	PAARATTE FORMATION (Undifferentiated)		680		
	BELFAST FORMATION	1690/1265	190		
	WAARRE FORMATION	1880/1340	50		
OTWAY GROUP	EUMERALLA FORMATION	1930/1377 / T.D. 1980m			

DEPTH IN METRES (SUB-SEA)
SEA LEVEL 0
1755
1945

(BASED ON BEACH PETROLEUM INTERPRETATION)

JUSTIFICATION

Pine Lodge No. 1 is designed to test as a primary objective basal Upper Cretaceous Waarre Formation sandstones. The secondary objective is the basal Tertiary Pebble Point Formation and the immediately underlying Paaratte Formation sandstones.

The structure is a tilted fault block bounded to the north by the Tartwaup fault and to the south by the Wanwin fault. Both faults trend south-eastwards and are normal listric faults. The structure is closed to the north on the low side of Tartwaup fault where the Waarre Formation is expected to be juxtaposed against the Eumeralla Formation of Otway Group. Pronounced rollover is evident along strike. Vertical seals for the primary and secondary objectives are provided by Belfast mudstone and Pember mudstone respectively. The thickness of these formations appear to be significantly greater than the throw of the faults which cut through and/or bound the structure.

The prospect is located on the northern side of the Portland Trough which is a potential hydrocarbon kitchen. Any hydrocarbons generated there would accumulate in the Upper Cretaceous reservoirs. Wilson No. 1, situated 6km northwest of the prospect, is particularly significant as oil from a marine source was recovered there from the Pebble Point. Also, very encouraging hydrocarbon shows were encountered in the area at the Pebble Point level in Fahley-1 and at the Waarre level in Najaba-1

DEPT. MIN. RES. & ENV.
PE902070

GAS AND FUEL EXPLORATION N.L.

PROSPECT NAME
PINE LODGE NO. 1

Total Depth: 2030m Ground Level Elevation : 50m a.m.s.l.
Classification: WILDCAT
Location: Latitude: Longitude:
Seismic Line: WGD85-350 Shotpoint No.: SP.233

Reservoir Target: Primary: Waarre Sandstone Depth: 1930m
Secondary: Pebble Point Depth: 990m

Area of closure: Primary: 5.1km Secondary: 7.6km
Vertical closure: Primary: 170m Secondary: 53m
Net Thickness: Primary: 12.5m Secondary: 40m
Porosity: Primary: 15% Secondary: 20%
Hydrocarbon Saturation: Primary: 70% Secondary: 70%
In place volumes: Primary: 33 x 10⁶ bbls. if Gas: 30 BCF
Secondary: 67 x 10⁶ bbls.
Recovery factor: Primary: 25% (oil), 70% (Gas)
Secondary: 25% (Gas)

Significant Nearby Wells:
WILSON-1 6km NW, FAHLEY-1 14km W,
FAHLEY-2 14km WNW, NAJABA-1A 14km NW.

Significant Nearby: MT. GAMBIER: 40km, PORTLAND: 54km.
Facilities/Market: HAMILTON: 92km.
Estimated cost: Dry hole: \$ 660,000
Discovery: \$

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