

Structural closure of less than 100 feet is also present on the base of the Tertiary, and although the beds below the Tertiary are thought to be porous Upper Cretaceous sandstone, no good seal is expected.

Regional correlations between Whelk and Prawn are difficult because of intervening faults and volcanic intrusions. However, seismic reflection characteristics and regional considerations provide evidence for the presence of Cretaceous clastics equivalent to the Flaxmans-Waarre Formations. (An alternative interpretation that these sands might be Lower Cretaceous Pretty Hill Formation equivalent was considered, but seismic interpretation shows no evidence of a major unconformity in the area).

Correlation between Whelk and Clam No.1 75 miles to the south is not possible because of a large shallow basement block which separates the two areas.

The Flaxmans-Waarre Formations are expected to be approximately 900 feet thick and to provide sandstone reservoirs. Good porosity and permeability were obtained in these formations in the Prawn No.1 Well to the north where they were 2350 feet thick. The equivalent section was much thinner (72 feet) in Clam No.1 and mainly sandy siltstone. However, it is expected that good reservoir characteristics will persist from the north to the Whelk area. Seal will be provided by a unit which is thought to be the Belfast Mudstone on the evidence that the Belfast Mudstone occurs to the north and south of the area.

The prognosis for Whelk No.1 is as follows :-

<u>Depth (feet)</u>	<u>Formation</u>
0-330	Water.
-500	Pleistocene-Recent.
-1300	Heytesbury Gp. equivalent.
-2270	Browns Creek - Wangerrip Gp. undiff.
-3500	Curdies - Paaratte undiff.
-3750	Belfast Fm.
-4650	Flaxmans-Waarre undiff.
-5000	Basement.
(Depths from Mean Sea Level - add 93 feet for Drill Depth)	