

distributions based on geological interpretation and intuition are reservoir area, thickness, gas saturation, porosity, and gas expansion.

The resulting field size - probability distribution (see Table 2.2) indicate a 90 percent chance of the Pelican Field containing greater than 1.18 TCF, a 70 percent chance of greater than 1.73 TCF, and a 50 percent chance of greater than 2.15 TCF and so on.

2.7 Problems and Recommendations

Problems associated with the present study are:

- 1) poor quality logs result in unreliable estimate of reservoir parameters,
- 2) insufficient fluid recoveries from the reservoir result in unreliable values for gas composition and formation water resistivities,
- 3) insufficient seismic coverage prevents closure of the reservoir to the southeast, and
- 4) the quality of seismic data available is too low for detailed mapping of this complex reservoir.
- 5) Faulting and facies changes combine to prevent reliable sand correlations.

Problems associated with producing the field are:

- 1) the highly faulted nature of the reservoir may reduce sand continuity,