

TITLE: Seismic Interpretation in 2D
AUTHOR: Sharda Samlal
SUPERVISORS: Mr. R. Clarke
Mr. Victor Young On

-----O-----

The main aim of this project is to interpret seismic data of an existing offshore gas field 60km off the North Coast of Trinidad. This is accomplished through a joint venture between the Department of Physics of the University of the West Indies and Petrotrin. The acquired 2D seismic reflection data is interpreted via an incorporation of seismic, stratigraphic and lithologic techniques in subsurface mapping. These techniques include direct detection of hydrocarbon presence by fault as well as horizon mapping surrounding active velocity wells.

The age of the sediments range from Pleistocene to Paleocene, while the basement is considered Cretaceous to Jurassic in age. The most important reservoir is the MII sand, of Pliocene age. By combining these procedures and creating the relevant depth maps for each horizon a reliable application of seismic interpretation to calculate reserves for an existing offshore gas field can be accomplished.