

PREFACE

Gujarat state is known for huge deposits of crude oil. The present studied area is a part of the Cambay basin which falls in the South Gujarat. The area comprises the Gandhar oilfield of Ankleshwar project. Physical and chemical properties of crude oil, oil well correlation, exploration and exploitation techniques and Environmental investigations constitute the major part of the work. The stratigraphic sequences in this area includes- Deccan Traps, Vagadkhol formation/Olpad formation, Cambay Shale Member, Ankleshwar formation, Dadhar formation, Tadkeshwar formation, Babaguru formation, Kand formation, Jhagadia formation, Broach formation, Jambusar formation and Gujarat Alluvium.

The complete work has been presented in eight chapters. The first two chapters include- Introduction, Geographical details, Geological set-up, Structural set-up and palaeoenvironment of the studied area. Chapter 3rd covers the aspects of physico-chemical properties including gas chromatographic analysis. Chapter 4th deals with oil well correlation. Chapter 5th includes exploration and exploitation of oilfield. The adverse effects due to exploration and exploitation of oilfield on the environment form the subject of the Chapter 6th. Chapter 7th is a comprehensive discussion of all the observations recorded from the previous experiments. A Summary of the complete work is given as Chapter 8th.

Representation of the text is supported with 17 tables and 83 figures.