

TABLE OF CONTENTS

	<u>PAGE</u>
EXECUTIVE SUMMARY	1-1
TABLE OF CONTENTS	2-1
INTRODUCTION	3-1
OBJECTIVES AND BACKGROUND OF STUDY	3-1
SOURCES OF DATA AND LIMITATIONS	3-3
SOME COMMENTS ON METHODOLOGY	3-4
MANNER OF PRESENTATION	3-5
GEOLOGY	4-1
INTRODUCTION	4-1
GEOLOGIC HISTORY AND STRATIGRAPHY	4-6
Precambrian and Paleozoic	4-9
Precambrian to Cambrian	4-9
Ordovician to Permian	4-12
Mesozoic	4-14
Triassic	4-14
Early Jurassic	4-14
Late Jurassic	4-19
Cretaceous	4-29
Cenozoic	4-34
Paleocene to Middle Eocene	4-34
Late Eocene to Recent	4-41
REGIONAL TECTONICS AND STRUCTURAL ELEMENTS	4-45
HYDROCARBON FAVORABILITY	5-1
DEFINITION AND CONCEPTS.	5-1
General Approach	5-1
Identification of Source Rocks	5-2
Total Organic Carbon	5-3
Kerogen Types	5-7

TABLE OF CONTENTS

	<u>PAGE</u>
THERMAL MATURATION.	5-9
Lopatin's Method	5-10
SOURCE ROCK AVAILABILITY	5-12
Upper Jurassic.	5-12
Cretaceous	5-21
Tertiary	5-22
Summary Remarks on Source Rocks and Maturation.	5-23
RESERVOIR ROCKS	5-27
GEOLOGY AND HYDROCARBON POTENTIAL OF INDIVIDUAL BASINS	5-30
Introduction	5-30
North Yemen	5-30
Ma'rib/al Jawf Basin	5-30
Yemen Volcanic Basins	5-35
Tihama Basin	5-36
South Yemen	5-39
Shabwah Basin	5-39
Balhaf Basin	5-40
Hadramut – Jeza Region.	5-41
Rub al Khali Basin	5-42
Sayhut Basin	5-42
Aden-Abyan Region	5-44
SUMMARY OF HYDROCARBON FAVORABILITY	5-44
BIBLIOGRAPHY.	6-1