

CONTENTS

	<u>Page</u>
Preface	
Introduction	i
PART IV	
Origin of program	1
Secondary recovery	2
Engineering studies of secondary-recovery fields	2
Mid-Continent (Bartlesville, Okla.)	2
Texas (Dallas and Wichita Falls)	4
California (San Francisco)	4
Appalachian region (Franklin, Pa.)	4
Physicochemical studies of interfacial forces in relation to oil production	5
Engineering research on secondary-recovery problems	6
Petroleum Field Office, Franklin, Pa. (Bradford, Pa.)	6
Shooting oil and gas wells with explosives	6
Selective plugging of air-gas-injection wells	7
Studies of earth temperatures and reservoir oil samples	8
Pore-pattern studies	8
Flowing of oil wells on gas-injection projects	9
Cable-tool coring with improved drilling fluids	10
Petroleum Experiment Station, Bartlesville, Okla.	10
Locating abandoned wells	10
Study of water-conditioning plants	10
Effects of dissolved gases on corrosion of metal by water	11
Tracer in waters used for subsurface injection	11
Petroleum Field Office, San Francisco, Calif.	11
Effect of heat on oil recovery	11
Techniques and laboratory analyses for secondary-recovery research	12
Core-and water-analysis laboratories	12
Development of special tools	12
Electric logging	12
Petroleum chemistry and refining	13
Separation and identification of sulfur compounds in petroleum	14
Characteristics of distillates from high-sulfur crude oils	15
Thermal stability of sulfur compounds in distillates and crude oils	15
Thermal-decomposition studies of pure sulfur compounds	16

ILLUSTRATIONS

<u>Fig.</u>		Follows <u>page</u>
1.	Production history of Lynde, Walter, & Darby water-flooding project ..	2
2.	Oil production by years and average monthly price paid for 1 barrel of crude oil, Weber pool, Washington County, Okla.	2
3.	Apparatus used to study means of selectively plugging the more permeable zones of oil-bearing sandstones exposed in gas-injection wells	6
4.	Impregnating sandstone with plastic containing dye and preparing thin sections after plastic hardens	6
5.	Architect's sketch of entrance to radiochemical laboratory under construction	10
6.	Group sulfur analyses of naphthas from vacuum distillations	14