which will be phased the Armed Services Petroleum Purchasing Agency and other miscellaneous service elements. Greater efficiency in Armed Services petroleum supply is the objective.

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Factors Relating to Fault Seals in Some California Oil Fields

The fault-seal problem is of particular importance in California because of the many significant regional and local fault systems affecting more than half of the known oil pools.

Fault seals are not only barriers to the migration of oil and gas in fault-trap fields, but are also important as secondary traps on anticlinal closures. The sealing effect of faults has complicated the field development, reservoir studies, pressure maintenance, and secondary-recovery programs, particularly in multi-block, multi-zone fields. Several factors which influence the effectiveness of fault seals include (1) lithologic type of sedimentation, (2) type of faulting, (3) depth of burial during faulting, (4) magnitude of fault displacement, (5) secondary cementation in fault zone, (6) differential fluid pressure across faults, and (7) time of faulting versus accumulation.

The lithologic type of the sediments appears to be one of the most important factors responsible for the formation of fault seals. The type of faulting and depth of burial during fault slippage are also significant. Other factors such as cementation are locally important. Post-accumulation faulting has affected the separation and readjustment of some pools; others have been partly depleted by leakage. Pressure barriers resulting from fault seals have caused abnormal reservoir pressures in some fields.

Major fault systems in the state can be related to local field patterns. This analogy has aided in the exploration of new fault-block accumulations within a proved field area as well as exploration for new fields.

INTRODUCTION TO GEOLOGY

RECORDED TALK AND FILM STRIP[1]

E. GAIL CARPENTER[2]
Wichita, Kansas

A little more than a year ago, the chairman of the Committee on Applications of Geology, of the American Association of Petroleum Geologists, requested that the Kansas Geological Society undertake the production of a recorded talk and film strip, for the purpose of awakening an interest in Geology at the High School student and parent levels. This project was referred to the Committee on Applications of Geology of the Kansas Geological Society.

This project is now completed. It consists of a recorded talk and a film strip in color. The talk is "beamed" at High School students and their parents. It is also suitable for P. T. A. groups, Civic clubs, Church groups, and others. Travel has been used as the common denominator between the High School student and parent levels. Geology and the Geologist are introduced. Illustrations are given to show a few of the many ways in which Geology can enrich the experiences of the traveler. It is also pointed out that Geology has made itself indispensable to Industry; and some of the industrial uses of Geology are shown, with emphasis on the Petroleum Industry. The training of a geologist is depicted, making use of pictures provided by schools which made slides available.

The film strip has 84 frames, on a 35-mm. strip. The talk is recorded on both sides of a 16-inch platter, 33 rpm, standard groove. The strip has audible signals for advancing the frames. It comes with a sheet of instructions and a copy of the script. The equipment required for showing is a projector which will take film strips and a record player which will play 16-inch records at 33 rpm, or a combination record player and projector. This equipment is to be found in almost every modern High School. It is also available on a rental basis in most communities.

[1] Manuscript received, January 14, 1957.

[2] Chairman, Committee on Applications of Geology.