

pared by the subcommittee on the Cenozoic of the A.A.P.G. geologic names and correlations committee. ALLISON J. SOLARI, of the Standard Oil Company of California at San Francisco, led the discussion. S.E.P.M. president Israelsky reports that 130 were able to eat; others coming late tried but ate elsewhere. President M. C. ISRAELSKY was succeeded by LOUIS J. SIMON, and secretary-treasurer HARRY TURVER was replaced by DOUGLAS CRAWFORD.

## ABSTRACTS

## THURSDAY MORNING

## AMBASSADOR HOTEL THEATER

*Presiding:* ARTHUR S. HUEY, Hancock Oil Company of California, Long Beach  
IRVING T. SCHWADE, Richfield Oil Corporation, Bakersfield

## 1. ADDRESS OF WELCOME

J. R. PEMBERTON, President of Pacific Section, Consultant, Los Angeles

## 2. GEOLOGY OF KAMISHAK BAY AREA, COOK INLET, ALASKA

JOHN C. HAZZARD, JOSEPH J. BRYAN, and EUGENE BORAX, Union Oil Company of California, Los Angeles

RICHARD SHOEMAKER, The Ohio Oil Company, Bakersfield

Kamishak Bay lies at the southwestern extremity of Cook Inlet, at approximately 59° North Latitude and 154° West Longitude. It is about 125 miles northeast of the Kanatak district on the Alaska Peninsula, and 50 miles southwest of Iniskin Peninsula on Cook Inlet. In both regions deep wells were drilled about 1938 in search of oil. Approximately 2,000 square miles bordering Kamishak Bay were investigated in reconnaissance fashion in the summer of 1948 by a combined Union Oil Company of California and Ohio Oil Company field party.

Geologically the Kamishak Bay area lies within a broad belt of Mesozoic sediments which, for at least 450 miles, forms the southeastern margin of the Alaska Peninsula. A northeast-trending thrust system, termed the Bruin Bay thrust in the Kamishak area, separates this belt from the igneous and metamorphic complex which underlies the northwestern portion of the Peninsula.

The sedimentary section at Kamishak includes units of Upper Jurassic and Cretaceous age. Approximately 15,000 feet of beds are presumed to lie between the lowest exposed Jurassic unit and the top of the Upper Triassic. At the base of the surface section is a siltstone about 300 feet in thickness, referred on faunal basis to the Chinitsna formation. This is overlain by the Naknek formation which is divided into a lower unit 5,000 feet thick and an upper unit 6,500 feet thick. The lower member comprises pebble-to-cobble conglomerate, sandstone, and tillite; the upper member is medium-grained to pebbly fossiliferous sandstone characterized by many features indicative of shallow-water deposition. Overlying the Jurassic with apparent conformity, are at least 2,200 feet of fossiliferous sandstone of Lower Cretaceous to Upper Cretaceous age.

The major structural feature of the Kamishak area, other than the Bruin Bay thrust, is the Kamishak anticline, a broad, northeast-trending fold approximately 60 miles in length. The northwestern flank, cut off by the thrust, is only 4 to 5 miles in width. The southeastern flank is 15-20 miles wide, though along the south shore of Kamishak Bay the regional dip is interrupted by a shallow syncline. Minor cross-faults are present in the axial part of the fold and some major strike-faults are recognized.

The structurally high part of the anticline, as well as the Bruin Bay thrust, is intruded by a quartz-diorite stock of post-Cretaceous age. A wide contact metamorphic aureole is present within the Jurassic sediments.

## 3. RECENT DEVELOPMENT IN TEJON RANCH AREA

H. K. ARMSTRONG, Consultant, Altadena, California

JOSEPH LeCONTE, Richfield Oil Corporation, Bakersfield

Continued exploration of the Springs fault trend has resulted in the discovery of several oil accumulations. While development is still incomplete, the major structural and sedimentary conditions are discernible.

The structure in the Santa Margarita is a northwestward dipping homocline with local nosing against the Springs fault. Production is from the Santa Margarita against the fault and overlain by basal Chanac clays, or from sands of middle Miocene age within, or lying unconformably below, the "Valv" shale.

The oil ranges from 27° to 35° gravity and is produced from depths ranging from 400 to 1,750 feet.

The feature of this area is the high gravity of the oil produced from relatively shallow depths.