

Production is from sands in the uppermost part of the Stevens sand zone of upper Miocene age. Three productive wells and two dry holes have been drilled since discovery.

Accumulation is believed to be due principally to stratigraphic trap conditions formed by the lensing-out of individual sand members.

The cumulative production of the Calder field, to August 1, 1950, is 78,895 barrels.

7. REPORT OF SUB-COMMITTEE ON THE CENOZOIC OF THE GEOLOGIC NAMES AND CORRELATIONS COMMITTEE OF THE A.A.P.G.

ROBERT T. WHITE, State Exploration Company, Los Angeles

8. MONTALVO OIL FIELD, VENTURA COUNTY

LEO H. MOIR, JR., Wilshire Oil Company, Santa Paula

The Montalvo oil field, discovered in 1947 by the Standard Oil Company of California, is located at the mouth of the Santa Clara River on the Oxnard Plain, Ventura County, California.

The accumulation of oil is due to a pinch-out of lower Pliocene (Repetto) sands on the north flank of a faulted, easterly plunging anticline. The producing sands are known as the McGrath zone, which is highly lenticular and in places is divided into two parts by an intermediate shale. The proved acreage is currently limited to this McGrath zone and covers about 375 acres.

In the vicinity of the Montalvo oil field, two distinct Miocene sedimentary provinces meet. The northern province, in which the field is located, contains a Miocene section, the whole of which is as yet unexplored. The southern province, which is separated from the northern by a large fault, contains a Miocene section similar to that of the Oakridge uplift and in one place has been completely penetrated by a test well. That well proves that the lower Miocene and Sespe formations contain reservoirs of value.

THURSDAY NOON, LUNCHEON

EMBASSY ROOM

*Presiding:* J. R. PEMBERTON, President, Pacific Section, Consultant, Los Angeles

INTRODUCTION OF NATIONAL OFFICERS

DISCUSSION OF ASSOCIATION AFFAIRS

C. L. MOODY, President of A.A.P.G., Ohio Oil Company, Shreveport, Louisiana

THURSDAY AFTERNOON

THEATER

*Presiding:* MILTON W. LEWIS, Consultant, Los Angeles

FRANK S. PARKER, Signal Oil and Gas Company, Los Angeles

9. PROGRESS IN GEOLOGY AND GEOPHYSICS

PAUL WEAVER, Past-President of A.A.P.G. and of S.E.G., Gulf Oil Corporation, Houston, Texas

Geophysical surveys in the past have been successful in the location of anticlines and faults, large either in relief or in area, and in a general way known oil provinces in the United States have been covered by this kind of survey, and particularly using the reflection seismograph. But the finding of these large structures might be considered "high grading." A substantial part of recent discoveries by the reflection seismograph has been different because on structures of low relief or of small area.

The discussion emphasizes that this kind of an exploration program requires that reflection shooting to be successful must be refined and improved, particularly in the contouring and geological interpretation.

10. OPPORTUNITIES FOR PETROLEUM DEVELOPMENT IN ARIZONA

EDWIN D. MCKEE, University of Arizona, Tucson

Arizona may be divided into two principal parts on the basis of geological features. Most of the northern half, except in the extreme west, belongs to the Plateau province and is characterized by dominantly horizontal strata deformed by uplifts, downwarps, and high-angle faults. The remainder of the state belongs to the Basin-and-Range province, and is composed of linear ranges, mostly oriented with northwest-southeast trends, and separated by wide, deep valleys filled largely with Tertiary and later alluvium. Overthrusts and many compressional features are represented in the mountain structures.

To date no significant petroleum discoveries have been made in Arizona. The Basin-and-Range portion, furthermore, offers encouragement for prospecting in few places. Its valleys, except possibly in the extreme southwestern part of the region, appear to be filled with continental sediments; deep water wells have exposed nothing to justify optimism. In contrast, certain features of the Plateau province favor more exploration in that area.

Rocks similar in type and age to those forming parts of the plateau of northern Arizona have produced petroleum in adjoining areas of southern Utah and northwestern New Mexico. Studies of