NOMINATION OF OFFICERS

4. PROGRAM OF AMERICAN GEOLOGICAL INSTITUTE

DAVID M. DELO, Executive Director, American Geological Institute, Washington, D. C.

World War II found the geological professions without a mechanism through which they could act in unity. The weakness of this situation, which inhibited proper use of geology and geologists to the maximum benefit in the country, was one of the major factors which led to planning for the American Geological Institute.

Numerous conferences between delegated representatives of eleven national scientific societies in geology and closely related fields, and the support of the National Research Council, resulted in establishment of Institute headquarters in the N.R.C. building in Washington, D. C., on June 1, 1949. Additional support has come from the A.A.P.G., the G.S.A., several local societies and about 100 individual geologists.

The Institute has devoted its attention primarily to organizing a program of professional service to the geological professions, designed to supplement the scientific activities of the eleven Member Organizations. It has established an informative monthly *News Letter*, and has issued a number of reports. Seven standing committees covering activities in such areas as public information, finance, education, geological information and personnel have been active and are implementing a continuing program.

Prior to the Korean war, the Institute was actively working with other organizations toward a national policy for the allocation and use of scientists and engineers in case another war should occur. The outbreak of hostilities found it with recommendations already in the hands of the Department of Defense and the National Security Resources Board. Since that time, it has vigorously represented the value of geological science and geologists to the Military Services, has contributed to the formation of national policies concerning scientific manpower, and has disseminated up-to-date information to the profession concerning developments, particularly in the manpower area.

Since the United States apparently faces a decade or more of partial mobilization, the Institute has adopted a National Defense Program, designed to serve both the best interests of the geological profession and the country. This is divided into four major lines of activity which are concerned with (a) Supply and Demand studies, (b) Selective Service, (c) Utilization of Geological Scientists, and (d) National Scientific Manpower policy. Prosecution of this program is calculated to help the geological professions to continue a high level of scientific work; to prevent the wastage of geologists which occurred during the last war; to assist the highest use of geological knowledge and techniques in the national defense; and throughout to serve the best interests of the profession and the nation.

In order to prosecute both the normal peacetime activities and the National Defense Program of the Institute, a pattern for cooperative action on a national scale is proposed.

5. SOME FORMATIONS EXPOSED IN THE CUYAMA GORGE, BRANCH MOUNTAIN QUADRANGLE, CALIFORNIA

THOMAS CLEMENTS, University of Southern California, Los Angeles

The Cuyama Gorge is that part of the valley of the Cuyama River cut through the San Rafael Mountains northeast of Santa Maria, California for a distance of more than 30 miles. The area extending 3 or 4 miles on either side of the gorge and approximately 17 miles along the river from the western boundary of Branch Mountain Quadrangle to the Thirty-Five Mile bridge has been mapped during the past three summers by the field geology classes of the University of Southern California.

Formations exposed in the area are: Franciscan, Knoxville, Chico, Sespe, Monterey, and Santa Margarita, although the last named is not found in the gorge proper. The Franciscan forms the core of a northwest-southeast anticlinal structure, with the Knoxville and Chico lapping up on both sides. Thick beds of the Sespe occur on the northeast flank, with only a small remnant on the southwest. Monterey is found only on the southwest flank, and patches of Santa Margarita occurring here and there on the higher ridges suggest that this formation formerly blanketed the whole area, thinning northwest.

The northeastern part of the area is complicated by the Nacimiento Fault, which has caused repetition of the Sespe and Chico.

6. CALDER FIELD, KERN COUNTY, CALIFORNIA

FRANK B. CARTER, General Petroleum Corporation, Los Angeles

The Calder field is located in Secs. 23 and 26, T. 29 S., R. 25 E., Kern County, in the south-central part of the San Joaquin Valley, approximately 12 miles west of Bakersfield. Discovery was made by the General Petroleum Corporation upon the completion of K.C.L.-Calder No. 38-23, on May 5, 1949.

Initial production was 280 barrels per day of 34.8° gravity oil cutting 0.8% through a 17/64-inch bean with 475 pounds pressure over packer and 404 M.c.f. of gas from the interval 8,815–8,835 feet.

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