

A.A.P.G. PACIFIC SECTION ANNUAL MEETING, LOS ANGELES,
OCTOBER 30-31, 1952. ABSTRACTS

The A.A.P.G. Pacific Section met in annual joint convention with the S.E.P.M. Pacific Section and the S.E.G. Pacific Coast Section at the Statler Hotel, October 30-31, 1952. The registration was 894 persons; the total attendance was about 1,100. About 18 papers were on the A.A.P.G. and joint sessions; about 7 papers were presented by the S.E.P.M. The abstracts of these papers are in the appended list.

The A.A.P.G. convention committee was composed of the following members with designated responsibilities: general chairman, RUSSELL R. SIMONSON; arrangements, A. THEODORE LEE and JOHN W. HARDING, JR.; advertising, JOSEPH B. HUDSON, ADEN W. HUGHES, and EDGAR W. WELLBAUM; exhibits, A. MACLAY GARDNER and MILTON T. WHITAKER; program editor, LOUIS J. SIMON; program, FRANCIS D. BODE, HARRY V. CHURCH, ROBERT F. HERRON, JOHN E. KILKENNY, M. R. RECTOR, and IRVING T. SCHWADE; publicity-public relations, JOSEPH G. HATHEWAY; registration, THOMAS E. FOLSOM; projections, ROBERT SUMPFF; sound and facilities, LOYDE H. METZNER.

The Pacific Section executive committee whose term ended with the meeting was composed of: president, HOMER J. STEINY; past-president, FRANK B. CARTER; vice-president, HAROLD H. SULLWOLD, JR.; secretary-treasurer, RUFUS M. SMITH; San Joaquin Valley representative, M. J. HILL. Section officers elected for the new year are: president, RUSSELL R. SIMONSON, Ohio Oil Company; vice-president, RUFUS M. SMITH, Continental Oil Company; secretary, ROBERT G. MAYNARD, Sunray Oil Corporation; treasurer, THOMAS E. FOLSOM, Honolulu Oil Corporation.

A.A.P.G. ABSTRACTS

HOMER J. STEINY, President, Pacific Section, A.A.P.G., Tide Water Associated Oil Co., Los Angeles
Address of Welcome

JOHN P. BUWALDA, California Institute of Technology, Pasadena
Recent California Earthquakes—"Geology"

The July 21, 1952, Arvin (Tehachapi) earthquake, the strongest shock in Southern California since 1857, presumably resulted from movement on the northeast-southwest-trending White Wolf fault near the south end of the San Joaquin valley. The southwest half of the fault is beneath San Joaquin valley alluvium and gives little or no surface expression, but geophysical data indicate 10,000 feet or more vertical offset. The northeast half is in plutonic rocks with virtually no sediments and is affected by large-scale landsliding from the 5,000-foot Bear Mountain scarp. Judged from some other earthquakes the displacement on the fault at depth was probably between 10 and 20 feet but no continuous simple trace developed on the surface. Numerous ruptures, some several miles long, with diverse trends and directions of movement, cut the surface along the fault zone. Southern Pacific tracks crossing the zone were shortened 10-15 feet. Among peculiarities of the earthquake were: occurrence of the very strong shock on a fault showing little evidence of recent activity; trend of fault at right angles to San Andreas and most other active faults in California; relatively low intensity of the shock; epicenter of main shock very near southwestern end of epicenter series; asymmetry of isoseismals of apparent intensity; lack of simple trace; diversity in nature and directions of movement on surface ruptures; and the small displacements on ruptures compared with the shortening in railroad tracks.

One plausible tectonic explanation is that the fault slip occurred along a thick zone rather than on a single fault surface, that the fracture is a steep reverse fault or an overthrust dipping southeast, and that the faulting is extending or lengthening southwestward. Seismic and geodetic data will greatly aid in a final explanation.

HUGO BENIOFF, California Institute of Technology, Pasadena
Seismological Aspect of Arvin Earthquake

Instrumentally observed aspects of the Arvin earthquake are discussed, including the strain-release curve, magnitudes, and geologic distribution of the after-shock sequence; in addition, the observed evidence on the extent of faulting and the characteristics of the generating stress.

ARCHER H. WARNE, Richfield Oil Corp., Bakersfield

Evidence of Extensive Lateral Faulting in Bakersfield Area, Kern County, California
A series of faint surface lines observed on aerial photos in the vicinity of Bakersfield have long