5. Connate Water in Oil Sands, by Howard C. Pyle.

Methods used for determining the fluid contents of sands will be described. Results of tests on cores from a Los Angeles Basin well indicate that approximately thirty-eight per cent of the pore space of oil sands which produce clean oil and gas is occupied by connate water. Probable reasons for the occurrence of this water are discussed.

6. Geological Causes of Poor Reflection Records, by Frank Rieber.

Clear-cut reflection records are obtained only with sharply defined, conformable bedding, of considerable lateral extent, uncomplicated by steep folding or faulting. Deviations from these conditions will give rise to waves returning from the earth from a number of directions at approximately the same time. Such multi-directional arrivals produce unsatisfactory reflection records on the usual visual seismograph record. A method is presented for overcoming these difficulties by analyzing the received vibrations and separating them into their component wave trains.

7. Progress of Geologic Branch of the California State Division of Mines, by Olaf P. Jenkins.

The Geologic Branch has issued eight publications this last biennium. It has five manuscripts on hand, and ten practically completed field investigations (most of which are contributions). A new bibliography for the five-year period, 1931–1935, is nearly ready for the printer. A revision of Bulletin 91. "Minerals of California," is in the making. A struggle has been made to issue a preliminary outline of the state geologic map this year. The plan is to publish altogether four state maps (scale 1:500,000): (1) Topography and first preliminary geologic map; (2) mineral deposits and second preliminary geologic map; (3) oil and gas fields, fossil localities, and third preliminary geologic map; and (4) Final colored geologic map. Each will be issued in six sheets, 27×42 inches.

7a. Migration of Oil Along Fault Zones, by Bruce L. Clark.

8. The Sycamore Canyon Formation, by Max L. Krueger.

The name "Sycamore Canyon formation" is suggested for a 3,800-foot interval of alternating conglomerates, sands, silts, and shales in the Whittier Hills. This interval has previously been described with the Fernando (Pliocene); its micro-fauna insures an Upper Miocene age for this interval. It is overlain by the Repetto formation (Lower Pliocene) and it is unconformably superjacent to the upper Puente member of the Puente formation, also of Upper Miocene age.

8a. Geology of the Outfall Sewer Tunnel, Palos Verde Hills, by J. R. Schultz.

A geologic section of the strata penetrated by the outfall sewer is discussed.

9. Relation of the Type Santa Margarita to the Type Monterey, California, by J. Edmund Eaton.

10. The Stratigraphy of the Tesla Quadrangle near Tracy, California, by Arthur S. Huey.

The gas discoveries at Tracy, McDonald Island, and Rio Vista have strengthened interest in the stratigraphy and structure of middle California. The Tesla Quadrangle lies west of Tracy in the Diablo Range. The post-Franciscan stratigraphy will be described with emphasis given to the Cretaceous and Eocene.

11. Eocene Paleogeography in Southern California, by Ralph D. Reed.

Recent stratigraphic studies have permitted the making of some new guesses about land and sea distribution and the changes that occurred from time to time between the end of the Cretaceous and the beginning of the Oligocene. The chief conclusions are: (1) that some large areas in the Coast Ranges were notably folded near the end of the Cretaceous; (2) that the tectonic provinces that existed throughout the Tertiary were defined by the post-Cretaceous folding; and (3) that upper Middle Eocene was the time of maximum transgression in the folded areas during the Lower Tertiary.

12. Geological Prospecting in New Guinea, by W. E. Heater.

13. "Art is Long and Time is Fleeting," by Harry R. Johnson.