

General map of Arabia shown as well as moving pictures of typical desert scenes.

7. FRANK HORNKOT, consultant, Los Angeles: Interpretations of Core Analyses (abstract).

Permeability is a measure of the fluid passing ability of a porous material. Porosity is a measure of the void space in the sand that can be occupied by a fluid. Water saturation of a sand is the total amount of water in per cent present in the void space in the porous material. This includes the connate water, drilling fluid, and actual water present. The larger the diameter of the core sample, the more accurate the determination. Oil saturation is only of comparative value, because in deep samples of light gravity oils, only the residual oil is present, the other lost because of temperature and pressure conditions present. Permeability and porosity determinations for the entire oil sand area plus bottom-hole pressure from which a specific productivity index can be determined make it possible to predict fairly accurately the gross barrels per day per foot of sand.

8. J. Q. ANDERSON, Union Oil Company of California, Los Angeles: Comparative Columnar Sections of the Domengine-Arroyo Hondo Sandstone Intervals between Cantua Creek and Waltham Canyon, Coalinga District, California (abstract).

Presentation of a series of slides showing 13 hand-leveled surface columnar sections of the Domengine-Arroyo Hondo sandstone intervals measured at varying distances between Cantua Creek and Waltham Canyon. Correlation of all sections is based on the "black pebble bed" or Domengine Reef. Discussion involves demonstration of lateral variation and facies changes in lithology of both intervals. Deals briefly with Domengine-Kreyenhagen contact, fossil occurrences, and contact relations of the Arroyo Hondo sand with Arroyo Hondo shale and the Moreno shale.

9. HARRY B. ALLEN, student, University of California at Los Angeles: An Eocene Section at Point of Rocks, Kern County, California (abstract).

The sedimentary sequence and formational age of the Eocene rocks in northwestern Kern County have been the subjects of controversy. The results of recent field and paleontological work, conducted in an attempt to clarify this problem, are presented in this paper.

10. ROGER REVELLE, Scripps Institution of Oceanography: Problems of Sediment Transportation off the Coast of California (abstract).

Several kinds of evidence obtained in recent investigations suggest that water movements of sufficient strength to move sand grains over the bottom may exist at least occasionally at all depths in the open sea. Sediments are absent from topographic highs rising one or two hundred fathoms above the general level of the sea floor even at depths of two miles or more. Thin layers of well sorted fine sand intercalated with thicker layers of clayey muds are characteristic of inshore basins off Southern California at depths of over half a mile and at distance of thirty or more miles from land. Current velocities of nearly one-half knot were measured within two feet of the bottom at 1,100 fathoms in the Santa Cruz Basin south of Santa Cruz Island, 500 fathoms below the sill or threshold of the basin. Other similar measurements show that the strongest bottom currents shift irregularly in both speed and direction. They may be regarded as representing lateral turbulence or eddy motion in which eddies have vertical axes and are perhaps a few miles in