

ROCKY MOUNTAIN SECTION ANNUAL MEETING, SALT LAKE CITY,
FEBRUARY 28-29, 1952

ABSTRACTS

1. VERNE E. FARMER, JR., Carter Oil Company, Vernal, Utah
Review of Exploratory Drilling in the Uinta Basin, Utah

The current era of exploratory drilling in the Uinta Basin began in 1946 with the Carter Oil Company's No. 1 Edna Davis. During the next three years four additional wildcat failures preceded the first discovery at Roosevelt in June, 1949.

This initial discovery created widespread interest in the area; however the abnormally high operational costs and a very complex geological picture precluded any great acceleration of drilling operations. 1950 saw the commencement of only four new wildcat tests.

In 1951 seven wildcat Tertiary tests were completed, including discoveries at Red Wash and Duchesne, for a success rate of nearly 20%.

At the present time the Uinta basin has nine wildcat locations, either drilling or announced, and five pool wells in operation. Current indications offer considerable promise of additional Tertiary discoveries in the near future.

2. ERWIN W. CLARK, Standard Oil Company of California, Salt Lake City, Utah
Exploration in the Basin-and-Range Province

Most of the exploratory activities by oil companies has been confined to the major sedimentary basins located in western Utah, eastern Nevada, and southeast Idaho. The intensive exploratory program carried on by the oil industry in this province has resulted in the acquisition of large blocks of acreage and has been the basis for the drilling of fourteen new exploratory wildcats. All of these wells, which include abandoned and current drilling wells, are located within the following four major sedimentary basins: Southern Nevada basin, Eastern Nevada basin, Confusion basin, and Oquirrh basin. The results of this drilling have certainly been encouraging, and there is every indication that the past rate of exploratory activity will be continued by the major companies, minor companies and independents in the Basin-and-Range Province.

3. KENNETH M. WILSON, Consultant, Durango, Colorado, and Dallas, Texas
Regional Geologic Considerations and Clear Creek Area, Utah

(1) Lines of weakness roughly parallel with the major mountain systems of the North American continent exist in modified form throughout the Rocky Mountain area. The three directions of diastrophism are closely tied to axial positions of the Wichita-Arbuckle group, the Appalachians, and the Rockies. Folds, faults, and their combinations provide not only structural traps but affect the type of deposits which accumulate and help to localize them.

(2) The shore of the Cretaceous sea extended northwestward from northern Mexico past Gallup, New Mexico, to and far beyond Provo, Utah. Near Provo there are important deposits of sand with some shale instead of the usual thin sands and thick shales. This vicinity, therefore, offers an excellent place to explore for various types of oil and gas traps.

(3) Sands which approach the sheet type, as well as smaller lenticular bodies, were deposited near and off shore in these seas at practically all stratigraphic positions extending from Dakota time, or earlier, through Pictured Cliffs time. Therefore, oil or gas production may be expected at almost any position in the stratigraphic column of Cretaceous time when a wide geographic area is considered.

(4) Oil and gas accumulations occur, may be expected, and will be found blanketing structure, lying on slopes in high and low structural positions and irregularly arranged over structures and slopes.

4. GRAHAM S. CAMPBELL, Phillips Petroleum Company, and L. AUSTIN WEEKS, General Petroleum Corporation, Salt Lake City, Utah
1951 Western Utah Field Trip Review

The Intermountain Association of Petroleum Geologists conducted its 1951 field trip through the Canyon, House, and Confusion ranges of west central Utah within the Basin and Range Province. Rocks of the Canyon Range have recently been assigned to the Cambrian and pre-Cambrian with contiguous Cretaceous conglomerates whereas previously considered as of Carboniferous and Tertiary age. The 10,000-foot Cambrian section of the House Range was studied in conjunction with close-up observations of the Wheeler Amphitheater, Rainbow Canyon (Marjum Pass), and the Notch Peak granite mass. The Confusion Range includes rocks of each Paleozoic period from Ordovician through Permian with an aggregate section of about 20,000 feet. A thin Triassic mask is also present in isolated outcrops. The Confusion Range is generally synclinal with an extended and interrupted east limb. Both normal and reverse faulting may be observed along with textbook anticlines, notwithstanding spectacular examples of major overturning. Three exploratory wells are now being drilled as a result of recent geologic research in west central Utah.