

8. These sediments are in the lower part of the Devonian System (actually Lower Middle Devonian), and rest on Precambrian strata throughout most of the area. The uppermost of them (just below the base of the reefs) is called the Keg River Formation. (D. L. Barss, et al., "Geology of Middle Devonian Reefs, Rainbow Area, Alberta, Canada," in Geology of Giant Petroleum Fields, 1970, p. 23-25.)

9. The main kinds of fossils found there are crinoids, brachiopods, sporadic corals, and some stromatoporoids. These are found in interbedded layers of limestone and dolostone of the lower part of the Keg River Formation. (Ibid., p. 25.)

10. Ibid., p. 24.

11. John C. Kraft, "Carbonate Analogs--Modern and Ancient," in Field Guide to Some Carbonate Rock Environments, Florida Keys and Western Bahamas, 1971, p. 134-136.

12. Barss, "Geology of Middle," p. 34-35.

13. Some of the other fossils which were found are, an abundant amount of stromatoporoids (the growth habit of which was important in building the wave-resistant parts of the reef), brachiopods, crinoids, gastropods (aquatic snails), ostracods, and several kinds of limestone-building algae. (Langton and Chin, "Rainbow Member," p. 1933-1943; and S. Machielse, "Devonian Algae and Their Contribution to the Western Canadian Sedimentary Basin," Bulletin of Canadian Petroleum Geology, v. 20 (1972), p. 204-206, 212, 220.)

14. Langton and Chin, "Rainbow Member," p. 1930-1942.

15. Barss, "Geology of Middle," p. 35.

16. Ibid., p. 34.

17. Langton and Chin, "Rainbow Member," p. 1943.

18. G. R. Davies and S. D. Ludlam, "Origin of Laminated and Graded Sediments, Middle Devonian of Western Canada," Geological Society of America Bulletin, v. 84 (1973), p. 3541-3543. The entire, large basin in which these changes were taking place is usually called the "Elk Point Evaporite Basin." It is then divided into subbasins, such as the Rainbow subbasin, for convenience in discussing local parts of the oil fields.

19. Bebout and Maiklem, "Ancient Anhydrite Facies," p. 298-301, 314-321.

20. Approximately the first 650 feet of the covering layers we are discussing here belong to what is called the Muskeg Formation. A brief but good description of them is given in J. G. McCamis, and L. S. Griffith, "Middle Devonian Facies Relations, Zama Area, Alberta," American Association of Petroleum Geologists Bulletin, v. 52 (1968), p. 1907-1912, 1915-1919.