



INTRODUCTION

These cross sections were constructed as part of the U.S. Geological Survey's Evolution of Sedimentary Basins Program. The purpose of the cross sections is to better correlate the Upper Cretaceous through Eocene sections of the Uinta basin of eastern Utah and western Colorado with similar age rocks in the Piceanace basin of western Colorado. Although there are several detailed cross sections available for each basin (Fouch and Carlson, 1979; Fouch, 1981; Johnson, 1979a, b, and c), and a cross section correlating the rock-unit sequence between the two basins (Carlson and Fouch, 1979), this is the first detailed cross section that attempts to correlate the entire Upper Cretaceous through Eocene section between the two basins. The cross sections were generally east-west along the deep trough of the Uinta basin, over the Douglas Creek arch, and from the deepest part of the Piceanace basin of western Colorado. The cross sections are a larger scale, more detailed version of a cross section that was recently published in a report describing the early Cenozoic history of the Uinta and Piceanace basins (Johnson, 1983), and the reader is urged to refer to that report for more information.

The principal goal in constructing these two cross sections was to correlate measurements of deposition and stratigraphic thickness. Stratigraphic correlation is also shown on the cross sections in areas where measurements are fairly well established. The stratigraphic thicknesses shown are those that were measured in the field. In many instances, and overlaps in the usage of stratigraphic nomenclature. There was an attempt to resolve any of these inconsistencies. For a more extensive of the nomenclature used in outcrop in the Douglas Creek arch, see the cross sections of Johnson and others (1983).

Detailed stratigraphic framework of the pre-Long Point lower Cenozoic section is highly time enabled in the Piceanace Basin. The Uinta basin is considered largely by a general lack of stratigraphic control in the western part of the basin. The stratigraphic control is a scarcity of drill holes that penetrate the stratigraphic interval, particularly in the western part of the basin. Key marker units are present in the stratigraphic interval in the Uinta basin, but they could not be detected because of the approximate one-mile spacing between wells used for these cross sections.

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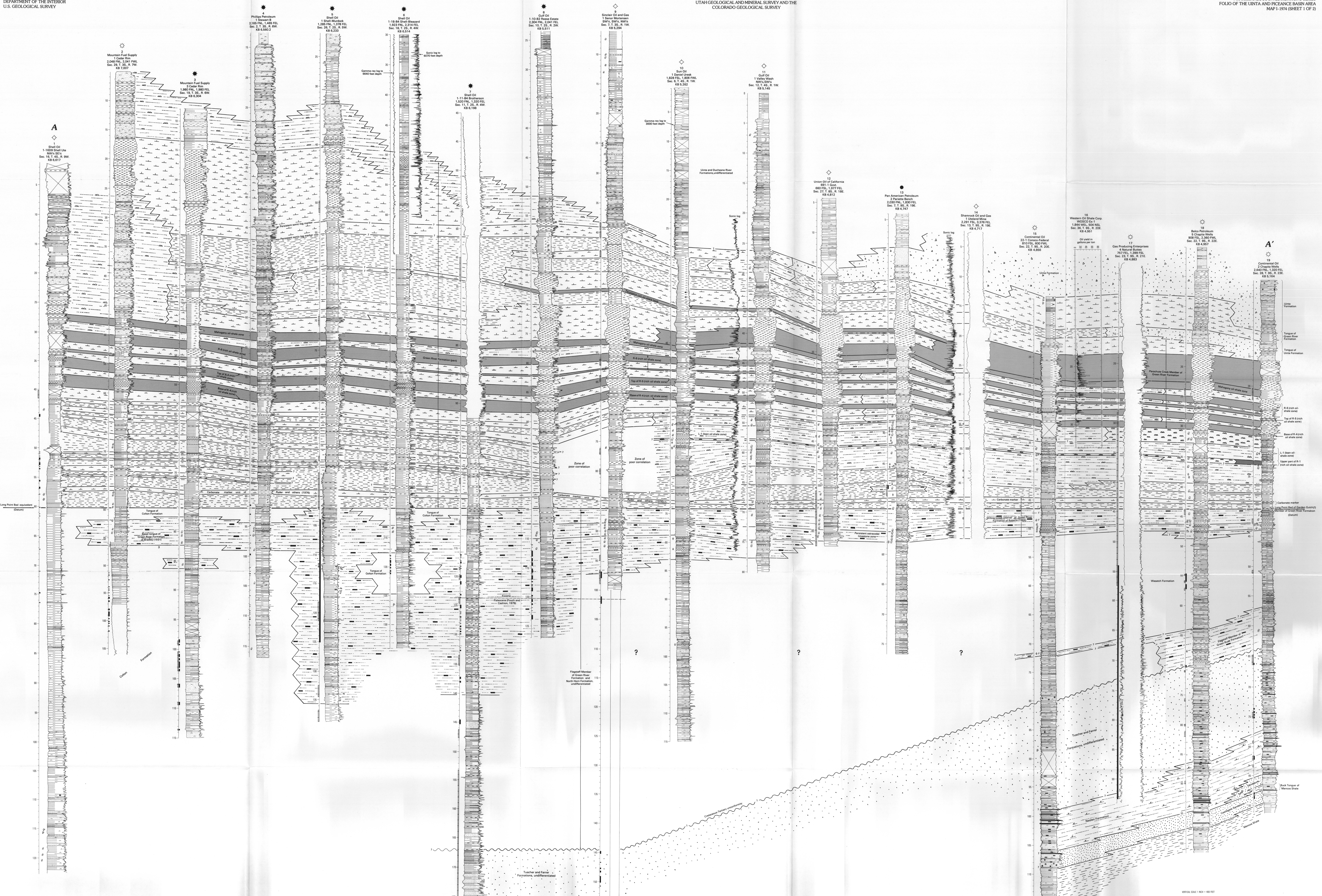
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DETAILED CROSS SECTIONS CORRELATING UPPER CRETACEOUS AND LOWER TERTIARY ROCKS BETWEEN THE UTAH BASIN OF EASTERN UTAH AND WESTERN COLORADO AND THE PICEANACE BASIN OF WESTERN COLORADO

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