

KANSAS GEOLOGICAL SURVEY OPEN-FILE REPORT 84-16

**A NEW EXPOSURE OF THE KANSAS CITY AND LANSING GROUPS,
PENNSYLVANIAN, NEAR SHAWNEE KANSAS**

by

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Recent construction of U. S. Interstate Hiway 435 in very northern Johnson County, Kansas (see Fig. 1), has resulted in an impressive exposure of about 205 vertical feet of section in the upper Kansas City and lower Lansing Groups. Exposed Formations and measured thicknesses include, in ascending order: upper Chanute Shale, 15 feet; Iola Limestone, 13 feet; Lane Shale, 44 feet; Wyandotte Limestone, 57 feet; Bonner Springs Shale, 25 feet; Plattsburg Limestone, 17 feet; Vilas Shale, 16 feet; and lower Stanton Limestone, 18 feet. Remarkable for their essentially continuous exposure, these fresh outcrops provide a unique opportunity in the Kansas City area to study these well-exposed units in great detail.

In order to facilitate future studies of these outcrops, a detailed stratigraphic column of the exposed units has been prepared. Field work on the outcrops was conducted in late November, 1984. A composite measured section was derived from four separate, but adjacent, outcrops (labeled A through D on Fig. 1). Measuring techniques entailed direct measurement of vertical limestone faces with a steel tape, and Brunton compass leveling of thicker shale intervals. Field note format followed a modified "K. U. Geology Department graphic technique". Numerous rock samples and color transparencies were also taken to assist in documentation. A final copy of the lithologic column was drafted at a scale of 1:48 and blue-line copies may be obtained from the K. U. Geology Department. It is hoped that this preliminary product may in some way facilitate future field studies of this excellent new exposure.

References

- O'Conner, Howard G., 1971. Geology and groundwater resources of Johnson County, northeastern Kansas. Kansas Geological Survey, Bulletin 203, 70pp.
- Parizek, Eldon J., 1965. Stratigraphy of the Kansas City Group in The geology of the Kansas City Group at Kansas City. Missouri Geological Survey and Water Resources, Report of Investigations No. 31, p. 32-49.

Fig. 1: Map showing locations of outcrops measured.

