Guthrie County, Exposure # 44.
Sec. 30, Jackson Twp.

Location.- A series of exposures, both natural and artificial, that occur in the NE¼ and along the northern boundary of Sec. 30 and along the south boundary of sec. 19. All of Cretaceous peanut gravel.

Stop # 1.- In a gravel pit that has only recently been in operation. Located just north of the road in the NE¼ of sec. 30 or else in the NW¼ of sec. 29, Jackson Twp. The pit may be on the section line between the two sections.

Here 34 plus or minus of Cretaceous peanut gravel is artificially exposed. It is typical peanut gravel in every respect. The lower half is more sandy than the upper half. Pockets of soft, friable ss., cross-bedded, intermingle with pockets of sand with quartz pebbles (would be a pudding-stone if consolidated). The gravel varies from loosely cemented to indurated phases cemented almost as hard as quartzite. The cement varies from calcareous to siliceous to ferruginous. The red and brown iron-cemented variety is the most characteristic (i.e., most easily recognizable) phase of the Dakota and makes the identification of fragments of it possible in the drift, in terrace gravels, and in float.

A fine-grained silt and clay band occurs from 26 to 28 feet above the quarry floor (2' thick). There is a thinned zone or pocket about 4½' above the floor of the pit. Above the 2' clay zone there is more peanut gravel exactly like that below the clay.

Guthrie County, Exp. # 44, cont'd.

Stop # 2.- Farther east, near the north-central part of sec. 30, there is another gravel pit in operation. The pit is in the north bluff of the South Raccoon River, is just north of the east-west road, and is near a farm house.

At this locality there is 25' of peanut gravel exposed in the bottom of the pit and it is truncated by an uneven erosional surface upon which rests 15' plus or minus of gray to white fine-grained sand, silt, and clay. The same type of material as the 2' clay seam described under the preceding stop. There are large red concretions of hematite (or turgite) and a little pyrite in the zone. It is quite carbonaceous.