

FIGURE 3

GENERAL STRATIGRAPHY
HACKETT - POCOLA AREA
IN GREENWOOD QUADRANGLE¹

P E N N S Y L V A N I A N	DES MOINES SERIES KREBS GROUP	Boggy Formation	
		SAVANNA ⁴	<i>Savanna Formation: Dark grey shale, with gray siltstone and silty, very fine grained sandstone. Sediment flow structures reported. Ironstone concretions and pyrite locally abundant. Two minor coal beds. Charleston coal bed near base and Paris coal in upper part, with iron-rich limestone above later coal. Thickness approximately 1300'.</i>
		McALLESTER ³	<i>McAllester Formation: Dark gray shale, with minor siltstone and sandstone. At least four coal beds reported. Numerous occurrences of pyrite and ironstone concretions. Scattered plant and invertebrate fossils and phosphate pellets. Conformably overlies Hartshorne. Intertonguing with Savanna Formation thickness: 2000'. Variable bedding (thin, thick, regular to convolute.)</i>
		HARTSHORNE ²	<i>Hartshorne Sandstone: Light grey, very fine to fine grained sandstone, with minor, gray siltstone and dark gray shale, major coal bed (Lower Hartshorne Coal). Unconformable with Atoka Formation; thickness: Approximately 20' to 200'. Bedding is thin to massive and is regular, lenticular, convolute w/plant fragments abundant. Channel cut and fill sedimentary structures common. Channel fill of angular frags. of dark gray and ironstone concretions.</i>
A T O K A S E R I E S		Zone W	<i>Atoka Formation: Dark shale (55%); light to dark gray siltstone (20%) and light to medium gray sandstone (25%), very minor thin beds of bentonitic shale and common limestone in lower part. Thin coal beds. Plant fossils common, marine fossils rare. Thickness: Approximately 5000' to 15,000' thickening southward. Two petrographically distinctive zones. Contains thinly-bedded siderite zones associated with sandstone units in upper part.</i>
	ATOKA ²		
	Zone P		
M O R R O W S E R I E S		Kessler Limestone	<i>Bloyd Formation: Dark gray shale, with medium gray, sandy limestone in upper part; and minor, gray siltstone. Limestone grades laterally to the southwest into fine to medium grained calcareous sandstone. Thickness: Approximately 40' to 240', thickening to the southwest. Unconformable with Atoka Formation.</i>
		BLOYD	
		HALE	

1 AFTER HALEY AND HENDRICK, 1968

2 HALEY, 1966 AND, HALEY AND HENDRICKS, 1971 HALEY AND FREZON 1968

3 HALEY AND MEREWETHER, 1969

4 HALEY, 1966 HALEY AND HENDRICKS 1971