

GEOLOGICAL SURVEY CIRCULAR 249



LITHOLOGIC CHARACTER OF THE  
ST. PETER SANDSTONE AND THE  
EVERTON FORMATION IN THE  
BUFFALO RIVER VALLEY,  
NEWTON COUNTY, ARKANSAS

UNITED STATES DEPARTMENT OF THE INTERIOR

Douglas McKay, Secretary

GEOLOGICAL SURVEY

W. E. Wrather, Director

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By Ernest E. Glick and Sherwood E. Frezon

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# LITHOLOGIC CHARACTER OF THE ST. PETER SANDSTONE AND THE EVERTON FORMATION IN THE BUFFALO RIVER VALLEY NEWTON COUNTY, ARKANSAS

By Ernest E. Glick and Sherwood E. Frezon

## INTRODUCTION

Since 1949, the U. S. Geological Survey, with the informal cooperation of the Division of Geology, Arkansas Resources and Development Commission, has been engaged in stratigraphic investigations in northern Arkansas to aid in the search for oil and gas in the Arkansas Valley. These investigations include surface and subsurface studies, some of which have been completed and published (Lantz, 1950; Maher and Lantz, 1952, 1953).<sup>1</sup> Work currently in progress includes the preparation of subsurface cross sections of the pre-Atoka rocks in the Arkansas valley, and areal mapping in the Mount Judea and Snowball quadrangles of Searcy and Newton Counties. This report presents and discusses the detailed stratigraphic sections used in correlating and mapping the St. Peter sandstone and Everton formation in the Mount Judea and Snowball quadrangles.

The detailed descriptions of surface sections in this report are based on rock samples collected in the Buffalo River valley in Newton County, Ark., at the localities shown in figure 1. The sections were measured in the field by tape and hand level; all units were measured perpendicular to the bedding. Field descriptions were made with special emphasis on bedding and weathering, and representative samples were taken of each lithologic unit for laboratory examination and lithologic description. The samples were crushed, washed, and examined in the office with a binocular microscope. Field and laboratory data were then combined into the detailed sections included in this report.

The terminology used in the descriptions of the samples is essentially that used by most geologists in the mid-continent region, making microscopic examinations of well samples. A limestone or dolomite is called "crystalline" if the texture is rough and crystal faces can be seen, "granular" if the texture is rough and crystal faces cannot be seen, and "dense" if the texture is smooth. A carbonate rock that leaves a large residue of silt after digestion in acid is called "silty"; one containing indeterminate, round or ovate, particles about the size of oolites is termed "oolitoid." Sandstone with siliceous cement is called "quartzitic" if it breaks across the sand grains. The terms given below are used in accordance with the Wentworth Grade Scale:

Silt, 0.0039 to 0.062 mm in diameter.  
Very fine grained sandstone, 0.062 to 0.125 mm in diameter.

Fine-grained sandstone, 0.125 to 0.25 mm in diameter.  
Medium-grained sandstone, 0.25 to 0.50 mm in diameter.  
Coarse-grained sandstone, 0.50 to 1.00 mm in diameter.  
Very coarse grained sandstone, 1.00 to 2.00 mm in diameter.

Because the sand in the carbonate rocks and the sandstones is composed dominantly of frosted subrounded to rounded quartz grains, these characteristics are not included in the detailed descriptions. The approximate size of the sand grains is given for the sandstones but not for the carbonate rocks. In general, both fine- and medium-sized grains are present in the sandy carbonate rocks.

The bedding is described as follows:

Fissile, less than 1/16 inch thick.  
Platy, 1/16 to 1/2 inch thick.  
Very thin bedded, 1/2 to 2 inches thick.  
Thin-bedded, 2 to 4 inches thick.  
Medium-bedded, 4 to 12 inches thick.  
Thick-bedded, 12 to 36 inches thick.  
Massive, more than 36 inches thick.

The term "cryptozoon structure" refers to any structure which suggests that a unit is in part algal in origin. This includes a distinctive type of wavy banding in limestone and dolomite beds as well as preserved colonies of calcareous algae in limestone beds. In the past these algal colonies have been referred to Cryptozoon sp.

The National Research Council rock-color chart was used for color names in the descriptions. Colors obviously due to weathering were not described.

Colored log strips on the scale of 10 feet to the inch were prepared from the detailed lithologic descriptions of this report. A detailed cross section was constructed from information on these log strips and was generalized in the form of figure 2. This figure shows the lithologic character of the St. Peter sandstone and members of the Everton formation in ten sections along the Buffalo River designated A to J in figure 1. The datum used in aligning these sections is the top of the basal sandstone of the Jasper member of the Everton formation except in section A, where this unit is absent. Section A is aligned on the top of the Newton sandstone member.

<sup>1</sup>See page 39 for literature cited.

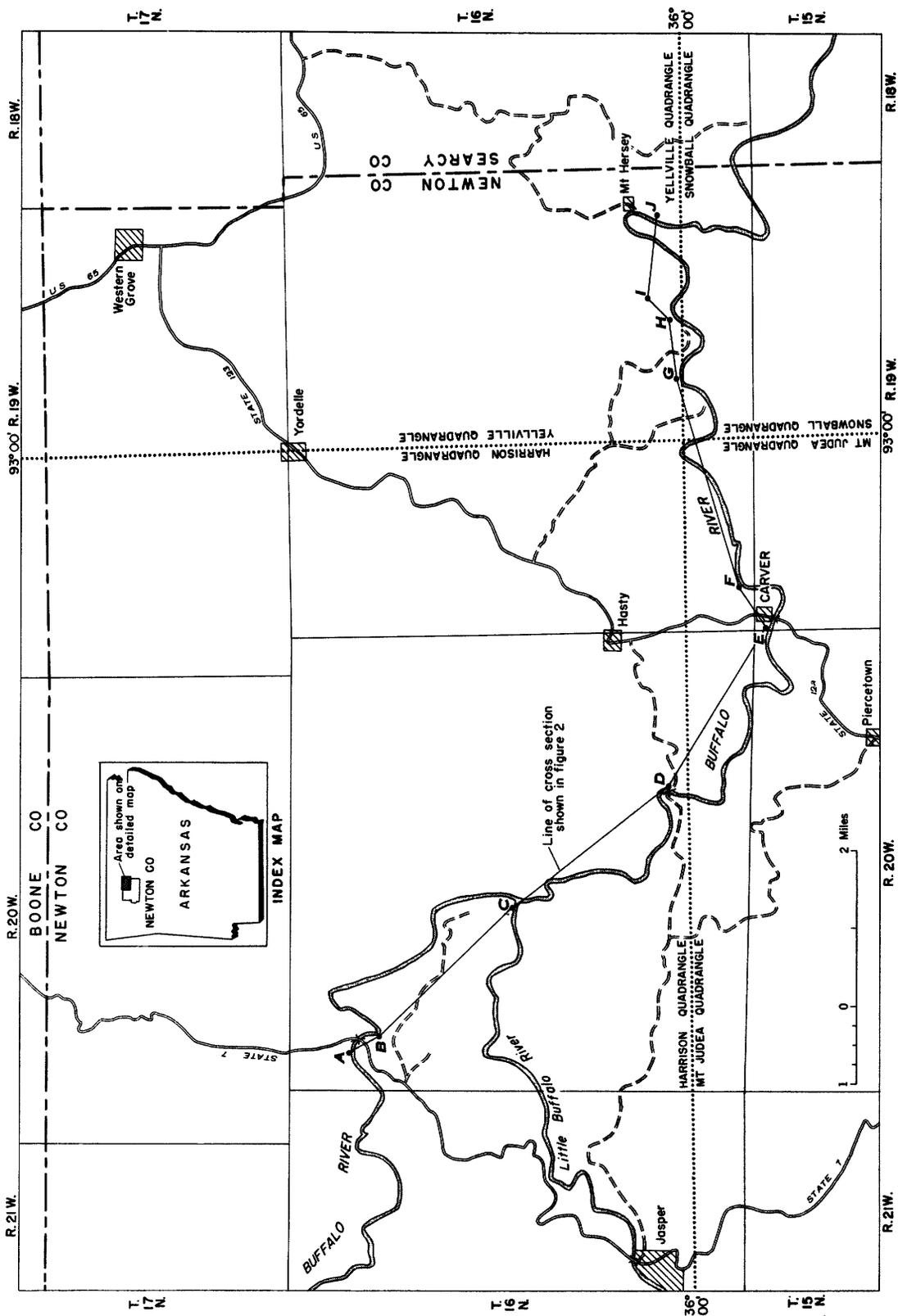
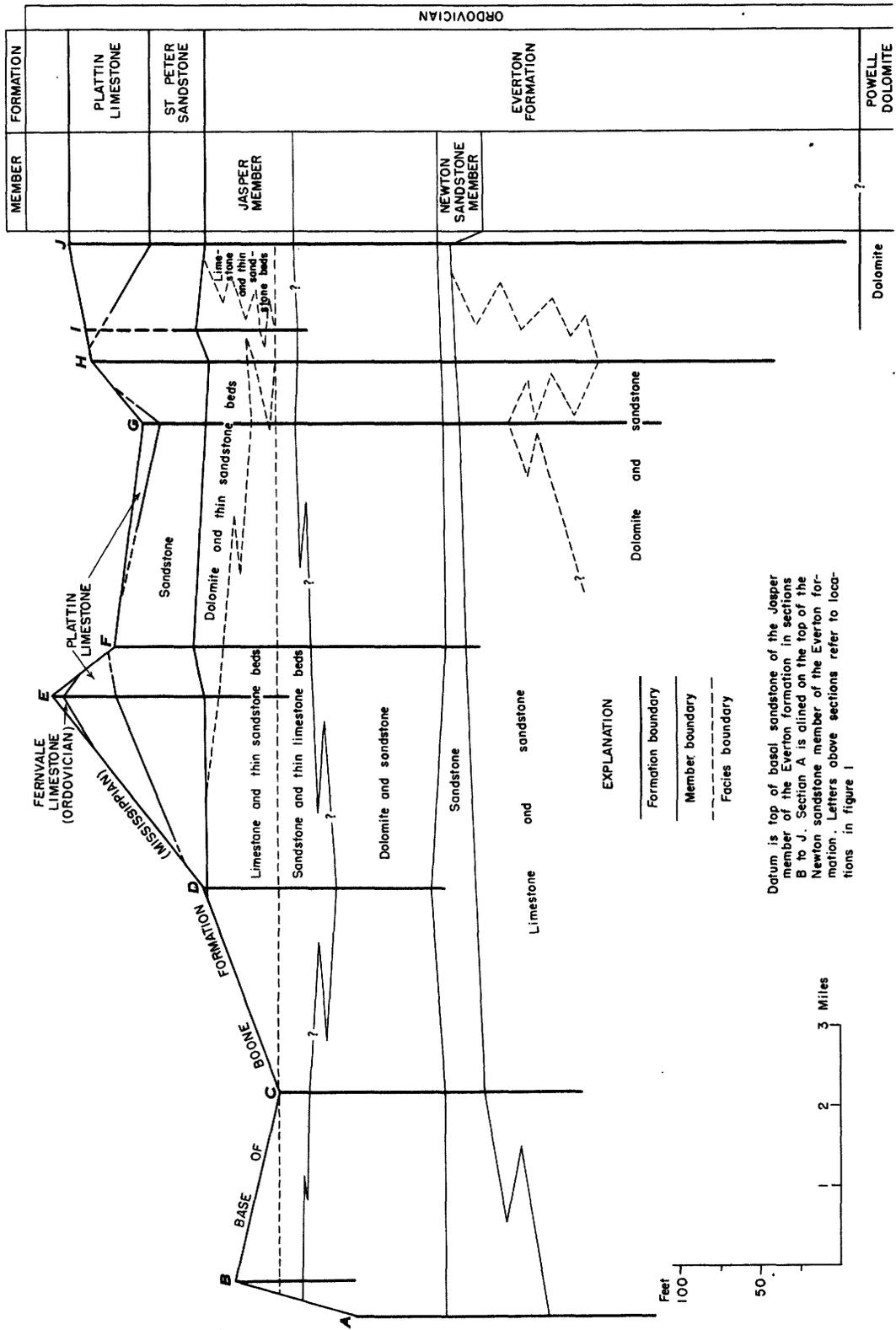


Figure 1. —Map showing location of sections of the St. Peter sandstone and Everton formation measured along the Buffalo River, Newton County, Ark.



Datum is top of basal sandstone of the Jasper member of the Everton formation in sections B to J. Section A is aligned on the top of the Newton sandstone member of the Everton formation. Letters above sections refer to locations in figure 1.

Figure 2. —Cross section showing the lithologic character of the St. Peter sandstone and Everton formation along the Buffalo River, Newton County, Ark.

The authors wish to thank H. D. Miser, of the U. S. Geological Survey, for giving generously of his time and experience in discussing some of the problems encountered, and N. F. Williams, director, Division of Geology, Arkansas Resources and Development Commission, who provided base maps and extended many courtesies. Section E of this report is a part of a previously published section at Carver, Ark. (Maher and Lantz, 1952, p. 10-12).

#### EVERTON FORMATION (MIDDLE ORDOVICIAN)

A Middle Ordovician sequence of limestone, sandstone, and dolomite beds, about 405 feet thick, separates the Powell dolomite (Lower Ordovician) and the St. Peter sandstone (Middle Ordovician) near Mount Hersey in the Yellville quadrangle (section J, figs. 1 and 2). McKnight (1935, pl. 3) mapped this sequence as the Everton formation and noted that the upper limestone beds are lithologically identical with the Jasper limestone mapped in the adjacent Harrison quadrangle by Purdue and Miser (1916, p. 8) as a separate formation. He also suggested that detailed stratigraphic work in the Buffalo River valley south of the Harrison and Yellville quadrangles would show that the Jasper limestone should be considered as a member of the Everton. The writers, who have assisted in the mapping of the Buffalo River valley immediately south of the Harrison and Yellville quadrangles (fig. 1), find that the Jasper limestone can be traced into the upper part of the Everton formation as suggested by McKnight. They also believe that, although the Jasper limestone is a mappable unit in the Harrison quadrangle, it is not a mappable unit farther east because the base becomes indistinct owing to gradation into underlying beds, and the upper limestones that typify the unit at Jasper grade laterally into dolomite beds (fig. 2). Therefore the Jasper limestone is treated in this report as the Jasper member of the Everton formation. The chart on page 5 shows the classification used in this report and the changes in names and correlations that have been made in the last four decades.

The Everton formation is widely distributed over northern Arkansas and is well exposed in the cliffs along the Buffalo River in northern Newton and Searcy Counties. The name is taken from the town of Everton in the Yellville quadrangle (Ulrich, 1911, pl. 27), where only part of the formation is exposed. The most complete exposure in the area of this investigation is at the locality of section J. (See fig. 1). There the formation is about 405 feet thick and is composed of four lithologic units. In ascending order these units are (1) a sequence of dolomite and sandstone, 245 feet exposed, base covered, (2) the Newton sandstone member, 8 feet thick, (3) a sequence of dolomite and sandstone, 90 feet thick, and (4) the Jasper member, 55 feet thick. The upper part of the Powell dolomite and the lower 10 feet or less of the Everton formation are covered at this locality; the contact of the two formations, which according to McKnight (1935, p. 40) is unconformable, is about 55 feet above river level. The base of the Everton formation is below river level at the localities of the other sections described in this report.

The Everton formation is unconformably overlain by the St. Peter sandstone and the basal sandstone

member of the Boone formation along the line of these sections. The St. Peter sandstone overlies the Jasper member of the Everton formation in sections D through J. At each of these localities the St. Peter rests upon an irregular wavy surface. This irregularity is most striking in section J where 4 feet of relief is present on the top of the limestone beds in a lateral distance of 25 feet. The basal sandstone member of the Boone formation overlies the Everton formation in sections A, B, and C. It rests on beds older than Jasper in section A, on a nearly complete thickness of Jasper in section B, and on a thin remnant of Jasper in section C. These irregularities are attributable mostly to truncation of local structures before deposition of the Boone formation.

#### Beds below the Newton sandstone member

Beds of the Everton formation below the Newton sandstone member are partially exposed in sections A, C, F, G, H, and J. The exposure of this sequence in section J is 245 feet thick. These beds exhibit a limy facies in section A which grades eastward into a dolomitic facies in section G to J. (See fig. 2.) The limy facies consists of light olive-gray oolitic ostracodal dense limestone interbedded with limy sandstone; the dolomitic facies is composed of brownish-gray finely to medium-crystalline dolomite interbedded with dolomitic sandstone. The limy facies locally contains preserved algal colonies; both facies locally exhibit wavy banded beds which are probably algal in origin. A loosely coiled cephalopod(?) and what seem to be molds of small pelecypod valves were found in the lower part of the limy facies of section G. In general fossils are poorly preserved in the dolomitic facies. The Kings River sandstone member and the Sneeds limestone lentil, which compose the lower part of the Everton formation in the Harrison quadrangle (Purdue and Miser, 1916, p. 5), are not identifiable in section J, a nearly complete exposure of this sequence.

#### Newton sandstone member

The Newton sandstone member of the Everton formation was named by McKnight (1935, p. 39) for its prominence in northern Newton County, Ark. Previously this sandstone had been mapped as the St. Peter sandstone in the Eureka Springs and Harrison quadrangles by Purdue and Miser (1916, p. 7). According to Purdue and Miser, the sandstone thins eastward from 150 feet in northwestern Newton County to 15 feet in northeastern Newton County. This eastward thinning is also present in the Buffalo River valley (fig. 2) where the Newton sandstone member thins from about 65 feet in section A to about 8 feet in section J. Much of this thinning seems to be the result of the basal beds of the sandstone grading laterally into limestone and dolomite beds.

The massive Newton sandstone member forms a prominent cliff along the Buffalo River in central Newton County; however, in the eastern half of the area of this study, it is thin and hardly distinguishable from other sandstones of the Everton formation. It is composed primarily of rounded and frosted fine to medium sand grains bound by a small amount of limy cement. The only fossiliferous bed found in the

Names and equivalents of Middle and Lower Ordovician rocks in Newton County, Ark.

Present report (Circ. 249)		McKnight, E. T., 1935, Zinc and lead deposits of northern Arkansas: U. S. Geol. Survey Bull. 853.		Purdue, A. H., and Miser, H. D., 1916, U. S. Geol. Survey Geol. Atlas, Eureka Springs-Harrison folio (no. 202).	
St. Peter sandstone.		St. Peter sandstone.		(Generally absent). <sup>1</sup>	
Everton formation	Jasper member.	Jasper limestone. <sup>2</sup>		Jasper limestone. <sup>2</sup>	
	Dolomite and sandstone.	Everton formation			Joachim limestone. <sup>3</sup>
	Newton sandstone member.		Newton sandstone member.		St. Peter sandstone. <sup>3</sup>
	Limestone, dolomite, and sandstone.				Everton formation
				Sneeds limestone lentil.	
Powell dolomite.		Powell dolomite.		Powell limestone.	

<sup>1</sup>Section D of the present report indicates that a thin remnant of true St. Peter sandstone is present locally in the Harrison quadrangle.

<sup>2</sup>McKnight (1935, table facing p. 16) states: "Future work may show that the Jasper limestone should be classed as a part of the Everton formation."

<sup>3</sup>McKnight, (1935, table facing p. 16) states: "The so-called 'Joachim limestone' and so-called 'St. Peter sandstone' of the Eureka Springs and Harrison quadrangles are equivalent to the upper portion of the Everton formation of the Yellville quadrangle."

member is a thin ostracodal limestone in the middle of the unit in section A.

#### Beds between the Newton sandstone and Jasper members

A sequence of dolomite, sandy dolomite, and dolomitic sandstone beds, about 90 feet thick, conformably overlies the Newton sandstone member. This dolomitic sequence becomes increasingly sandy toward the top and grades into the limy basal sandstone of the Jasper member. The contact with the overlying Jasper member, which is drawn arbitrarily at the top of the dolomitic beds, does not follow bedding planes. The character of the entire unit changes little within the area although individual beds do not remain distinctive when traced laterally. A few poorly preserved ostracods were found.

#### Jasper member

The Jasper member is composed of two major lithologic units, a basal limy sandstone unit and an overlying sandy limestone or sandy dolomite unit. The contact between the two units is so clearly defined by a sharp lithologic change from a sandstone to a massive limestone and dolomite bed that this horizon has been used as a datum for the cross section of figure 2.

In section B, the basal sandstone of the Jasper member is 14 feet thick and composed entirely of friable limy sandstone beds; in section D, the basal sandstone of the Jasper is 35 feet thick and includes five thin ostracodal limestone beds. Eastward from section D, the lower part of the basal sandstone of the Jasper grades into the underlying dolomitic beds. The basal sandstone is represented in section J by only 11 feet of limy sandstone and thin limestone beds.

Purdue and Miser (1916, p. 8) described the upper unit of the Jasper as a dense limestone "interbedded with a subordinate though considerable amount of sandstone." Much of the limestone is oolitic and some of it is sandy. Eastward from the type area, this limy facies (sections B and D) grades into a dolomitic facies (sections E, F, G, H, and I) and back into a limy facies (section J). Because individual sandstone beds of the Jasper can be correlated throughout this area, it is evident that the limy and the dolomitic facies are parts of the same unit.

The Jasper member is the most fossiliferous part of the Everton formation. Ostracods are abundant in most of the limestone beds, and cephalopods, gastropods, pelecypods, trilobites, worm borings, and fossil algae have been found in certain localities. Fossils in the dolomite beds of the Jasper are generally few and poorly preserved.

#### ST. PETER SANDSTONE

Adams and Ulrich (1905, p. 3) introduced the name St. Peter sandstone, first used by Owen (1847, p. 169) in Minnesota, into the geologic literature of

the Ozark region. In mapping the Eureka Springs and Harrison quadrangles, Purdue and Miser (1916, p. 7) applied the name to a massive sandstone which was thought to be correlative with the St. Peter of the Yellville district to the east. Cronels (1930) and Giles (1930) followed the correlations of Purdue and Miser in this area. Later McKnight (1935, p. 39) showed that the massive sandstone mapped by Purdue and Miser in the Eureka Springs and Harrison quadrangles is not correlative with the St. Peter of the Yellville quadrangle but is a member (Newton sandstone) of the Everton formation. (See chart.)

The St. Peter sandstone is exposed in the valley of the Buffalo River in northeastern Newton and northern Searcy Counties, Ark. It is present in sections D to J of this report, ranging in thickness from a fraction of a foot to 73 feet (section H). The St. Peter sandstone appears to rest unconformably on the Everton formation. No angular discordance between the formations was noted, but the contact is undulating—the lowermost sand beds of the St. Peter dip into the depressions and lap over the higher parts of the uneven surface of the Everton. The St. Peter is unconformably overlain by the Plattin limestone. Where the Plattin limestone has been cut out, the Boone formation overlies the St. Peter with evident angular unconformity. This angular unconformity is best seen in the area of section D.

The St. Peter sandstone is so poorly exposed in the Buffalo River valley that no complete section could be obtained. The maximum thickness of the St. Peter in the area investigated is 73 feet in section H, but a considerable part of this thickness could not be sampled or described.

The base of the formation in section H is a fine- to medium-grained sandstone bed, 6 feet 9 inches thick, containing thin quartzitic layers. The sand grains are partly rounded and frosted and partly angular as a result of secondary quartz growth. Topographically, this basal unit forms a low bench in all the sections from D to J. Above the basal sandstone of section H lies a covered interval, 58 feet thick, which has its counterpart in sections E, F, G, and J. Scattered exposures in sections E, F, and G indicate that the interval consists of a sequence of soft dolomitic or limy silty sandstone and silty sandy dolomite beds. Ostracod molds were found in this unit in sections E and F. A bed of sandstone about 8 feet thick is present above the covered interval in section H, but apparently it is not present in any of the other sections. This bed is similar in lithology and outcrop to the lower sandstone of the formation. The presence of upper and lower sandstone units separated by a thick covered interval suggests that the three lithologic units in the St. Peter noted by McKnight (1935, p. 43) in the Yellville quadrangle may be present in section H.



	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Newton sandstone member:		
Sandstone, thin- to medium-bedded, yellowish-gray, slightly limy, fine- to medium-grained.....	3	10
Sandstone, crossbedded, thin- to medium-bedded, yellowish-gray, fine- to medium-grained .....	5	0
Sandstone, crossbedded, thin- to medium-bedded, yellowish-gray, poorly sorted, very fine to medium-grained.....	5	0
Sandstone, crossbedded, thin- to medium-bedded, yellowish-gray, fine- to medium-grained .....	5	0
Sandstone, medium-bedded, yellowish-gray, very fine to medium-grained; grains exhibit secondary growth.....	5	0
Sandstone, thin- to medium-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth.....	5	0
Limestone, thin-bedded, light olive-gray, sandy, very finely granular; ostracods.....	2	
Limestone, medium-bedded, light olive-gray, oolitic, very finely granular; ostracods .....	10	
Sandstone, medium-bedded, yellowish-gray, very limy, fine- to medium-grained; grains exhibit secondary growth .....	2	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit much secondary growth .....	2	3
Sandstone, medium-bedded, yellowish-gray, fine- to medium-grained; grains exhibit secondary growth .....	5	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	5	0
Sandstone, medium-bedded, yellowish-gray, fine- to medium-grained; grains exhibit secondary growth.....	5	0
Sandstone, thin- to medium-bedded, yellowish-gray, slightly limy, fine- to medium-grained; grains exhibit secondary growth.....	10	0

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Newton sandstone member —Con.		
Sandstone, thin- to medium-bedded, yellowish-gray to white, limy, fine- to medium-grained; grains exhibit secondary growth .....	5	0
(Base of Newton sandstone member)		
Limestone, very thin to thin-bedded, light olive-gray, very finely crystalline; contains scattered sand grains .....	10	
Sandstone, thin- to medium-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth .....	5	8
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains and white, medium to coarse calcite crystals .....	1	8
Limestone, thin-bedded, light olive-gray, very sandy, finely crystalline .....	4	
Limestone, medium-bedded, light olive-gray, finely to medium-crystalline; contains scattered sand grains, dense limestone granules, and cryptozoon structures . . .	9	
Sandstone, thin- to medium-bedded, yellowish-gray, limy, fine- to medium-grained.....	2	9
Sandstone, thin- to medium-bedded, yellowish-gray, limy, fine- to medium-grained; thin limestone stringers in lower one-third of unit .....	2	6
Limestone, thick-bedded, light olive-gray, oolitic, dense to very finely granular; contains scattered sand grains, limestone granules, and some white medium-crystalline calcite; ostracods .....	1	9
Limestone, very thin to thin-bedded, yellowish-gray, sandy, very finely granular.....	1	3
Sandstone, thick-bedded, yellowish-gray, slightly limy, fine- to medium-grained; grains exhibit much secondary growth.....	5	8
Sandstone, thick-bedded, yellowish-gray, limy, very fine to medium-grained; grains exhibit much secondary growth .....	4	3

	<u>Ft</u>	<u>in</u>		<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued			Ordovician rocks —Continued		
Everton formation —Continued			Everton formation —Continued		
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	2	6	Limestone, medium-bedded, light olive-gray, oolitic, dense; contains scattered sand grains and thin sandstone stringers.....	5	0
Sandstone, medium- to thick-bedded, yellowish-gray, limy, very fine to medium-grained; grains exhibit secondary growth .....	6	6	Sandstone, medium-bedded, yellowish-gray to white, very limy, fine- to medium-grained; contains some white coarse calcite crystals .....		9
Limestone, very thin to medium-bedded, light olive-gray, oolitic, dense; contains scattered sand grains .....	1	2	Limestone, platy to very thin bedded, light olive-gray, oolitic, dense; contains scattered sand grains; grades into sandstone above and below .....	1	9
Limestone, very thin to medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains thin sandstone stringers.....		6	Sandstone, thin- to medium-bedded, yellowish-gray, limy, fine- to medium-grained.....	3	1
Limestone, medium-bedded, light olive-gray, oolitic, dense; contains scattered sand grains .....	1	6	Limestone, thin-bedded, light olive-gray, sandy, finely crystalline.....		3
Sandstone, thin- to medium-bedded, yellowish-gray, very limy, fine- to medium-grained .....	1	1	Limestone, medium-bedded, light olive-gray, oolitic, dense; contains scattered sand grains and thin sandstone stringers .....		9
Limestone, thin-bedded, light olive-gray, oolitic, very finely granular; contains scattered sand grains .....		2	Limestone, medium-bedded, light olive-gray, oolitic, dense; contains scattered sand grains .....	1	5
Sandstone, medium-bedded, yellowish-gray to white, limy, fine- to medium-grained; contains olive-gray, dense, limestone granules in the lower 1 inch.....	1	1	Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....		6
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	1	1	Limestone, very thin to thin-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	1	1
Limestone, very thin to thin-bedded, light olive-gray, oolitic, dense to very finely granular; contains some white coarse calcite crystals .....	1	8	Limestone, medium-bedded, yellowish-gray, sandy, finely crystalline; contains some flattened limestone granules .....		6
Limestone, thin- to medium-bedded, light olive-gray, dense to finely crystalline; contains scattered sand grains .....	3	0	Limestone, thin-bedded, light olive-gray, oolitic, dense; contains scattered sand grains .....	1	6
Limestone, thin-bedded, light olive-gray, sandy, finely crystalline.....	3		Base of section at river level.	186	7
Limestone, medium-bedded, yellowish-gray, very sandy, finely crystalline.....	1	0			
Limestone, thin-bedded, light olive-gray, oolitic, dense; contains scattered sand grains .....	4		B. Section of the Everton formation on the south side of the Buffalo River, 50 yards upstream from the mouth of Mill Creek in the NE $\frac{1}{4}$ sec. 7, T. 16 N., R. 20 W., Newton County, Ark. Base of section at river level.		
			Carboniferous (Mississippian) rocks:		
			Boone formation:		
			St. Joe limestone member.		
			Basal sandstone member.		

	<u>Ft</u>	<u>in</u>
Ordovician rocks:		
Everton formation:		
Jasper member:		
Limestone, medium-bedded, light olive-gray, slightly oolitic, dense; contains pyrite, especially in the upper 6 inches .....	1	7
Limestone, thin-bedded, light olive-gray to brownish-gray, sandy, oolitic, dense to finely crystalline; contains pyrite .....		4
Sandstone, thin-bedded, light olive-gray, limy, medium-grained .....		4
Sandstone, medium-bedded, yellowish-gray to light olive-gray, very limy, fine- to medium-grained; contains limestone granules; ostracods .....		8
Limestone, medium-bedded, light olive-gray, oolitic, dense; contains white medium-sized calcite crystals; ostracods .....	1	3
Sandstone, medium-bedded, yellowish-gray, limy, fine-grained .....	1	0
Limestone, thin-bedded, light olive-gray, oolitic, dense .....		2
Sandstone, medium-bedded, yellowish-gray, very limy, fine-grained .....	4	2
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; ostracods .....	4	0
Limestone, medium-bedded, light olive-gray, oolitic, dense to very finely granular; ostracods .....	4	3
Limestone, medium-bedded, light olive-gray, oolitic, dense to very finely granular .....	5	0
Limestone, medium-bedded, light olive-gray to light brownish-gray, oolitic, very finely granular to finely crystalline; contains scattered sand grains .....	5	0
Sandstone, medium-bedded, yellowish-gray, slightly limy, fine-grained; grains exhibit much secondary growth .....	4	0
Sandstone, medium-bedded, yellowish-gray, slightly limy, fine-grained; grains exhibit much secondary growth .....	5	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth .....	5	0
(Base of Jasper member)		

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains scattered sand grains .....	1	4
Dolomite, thin-bedded, brownish-gray, sandy, finely crystalline .....		3
Sandstone, medium-bedded, yellowish-gray to white, limy, slightly dolomitic, fine- to medium-grained; grains exhibit secondary growth .....	1	1
Dolomite, medium-bedded, light olive-gray, very sandy, finely crystalline .....	3	10
Sandstone, medium-bedded, yellowish-gray to white, slightly limy, fine- to medium-grained; grains exhibit much secondary growth .....	1	3
Sandstone, medium-bedded, yellowish-gray to white, slightly dolomitic, slightly limy, fine- to medium-grained .....	1	6
Sandstone, medium-bedded, light olive-gray, very dolomitic, fine- to medium-grained .....	1	6
Sandstone, medium-bedded, light olive-gray to white, dolomitic, slightly limy, fine- to medium-grained; contains thin stringers of limy sandstone and dolomite with scattered sand grains .....	3	11
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains scattered sand grains .....		9
Sandstone, medium-bedded, yellowish-gray, limy, dolomitic, fine- to medium-grained .....	3	0
Sandstone, medium-bedded, yellowish-gray, fine- to medium-grained; grains exhibit secondary growth .....	2	8
Dolomite, medium-bedded, brownish-gray, finely crystalline .....	1	8
Sandstone, medium- to thick-bedded, yellowish-gray to light olive-gray, very dolomitic, fine- to medium-grained .....	3	10
Dolomite, medium-bedded, medium dark gray, dense; contains scattered sand grains .....	6	0
Base of section at river level		

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C. Section of the Everton formation on the north side of the Little Buffalo River 50 yards upstream from the junction with Buffalo River in the NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 16 N., R. 20 W., Newton County, Ark. Base of section at river level.

Carboniferous (Mississippian) rocks:

Boone formation:

St. Joe limestone member.

Basal sandstone member.

Ordovician rocks:

Everton formation:

Jasper member:

	<u>Ft</u>	<u>in</u>
Sandstone, medium-bedded, yellowish-gray, slightly limy, fine- to medium-grained; grains exhibit secondary growth.....	2	6
Sandstone, thin-bedded, yellowish-gray, very limy, fine- to medium-grained; grains exhibit some secondary growth.....	2	6
Sandstone, medium-bedded, very light-gray to yellowish-gray, very limy, fine- to medium-grained; contains thin stringers of sandy limestone.....	2	3
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains; ostracods.....	5	
Limestone, medium-bedded, medium-gray to light olive-gray, sandy, finely crystalline.....	6	
Sandstone, medium-bedded, yellowish-gray to white, limy, fine- to medium-grained; grains exhibit secondary growth.....	4	0
Limestone, thin- to medium-bedded, gray to brownish-gray, oolitic, dense to finely crystalline; ostracods.....	1	5
Sandstone, medium- to thick-bedded, yellowish-gray to white, slightly limy, fine- to medium-grained; grains exhibit secondary growth.....	5	0
(Base of Jasper member)		
Sandstone, medium-bedded, light brownish-gray; very dolomitic, fine- to medium-grained.....	2	9
Sandstone, medium-bedded, light brownish-gray, dolomitic, medium-grained.....	5	0
Dolomite, medium-bedded, light olive-gray, finely crystalline; contains scattered sand grains and white very coarse calcite crystals.....	10	

Ordovician rocks —Continued

Everton formation —Continued

	<u>Ft</u>	<u>in</u>
Dolomite, medium-bedded, yellowish-gray to light brownish-gray, very sandy, finely to medium-crystalline; contains white medium to very coarse calcite crystals; grades into overlying unit.....	5	0
Sandstone, medium-bedded, yellowish-gray to white, dolomitic, slightly limy, fine- to medium-grained; grains exhibit secondary growth.....	3	1
Dolomite, medium-bedded, light brownish-gray, very sandy, dense to finely crystalline.....	1	10
Sandstone, medium-bedded, very light gray to light brownish-gray, limy, medium-grained; grains exhibit secondary growth.....	1	1
Sandstone, medium- to thick-bedded, light brownish-gray, very dolomitic, fine- to medium-grained.....	5	5
Dolomite, thick-bedded, brownish-gray and medium dark gray, dense to finely crystalline; contains scattered sand grains; ostracods.....	2	1
Sandstone, medium-bedded, light brownish-gray to brownish-gray, dolomitic, medium-grained.....	3	6
Sandstone, medium-bedded, light brownish-gray to light olive-gray, very dolomitic, medium-grained.....	5	8
Sandstone, medium-bedded, very light gray to brownish-gray, dolomitic, fine- to medium-grained.....	5	0
Dolomite, medium-bedded, light brownish-gray to brownish-gray, dense to finely crystalline; contains white coarse calcite crystals.....	9	
Sandstone, medium-bedded, dark-gray to light olive-gray, dolomitic, medium-grained.....	4	0
Dolomite, thin- to medium-bedded, medium dark gray, finely crystalline.....	1	3
Sandstone, medium-bedded, yellowish-gray, dolomitic, fine- to medium-grained.....	1	6

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, thin- to medium-bedded, medium light gray, dense to finely crystalline; contains scattered sand grains and white coarse calcite crystals . . . .	3	10
Dolomite, medium-bedded, dark-gray to yellowish-gray, sandy, finely crystalline; contains scattered sand grains and thin stringers of dolomitic sandstone . . . . .	2	2
Dolomite, medium-bedded, very light gray, pinkish-gray, and yellowish-gray, sandy, very limy, very finely granular to finely crystalline; contains scattered sand grains and thin stringers of dolomitic sandstone . . . . .	4	0
Dolomite, medium-bedded, medium-gray, very finely granular to finely crystalline; contains scattered sand grains . . . . .	1	2
Dolomite, medium-bedded, medium-gray to light olive-gray, dense to finely crystalline; contains scattered sand grains and white medium to coarse calcite crystals . . . . .	5	0
Dolomite, thin-bedded, light-gray, very finely granular to finely crystalline; contains scattered sand grains . . . . .	1	2
Dolomite, medium-bedded, medium dark gray, finely crystalline; contains white medium to coarse calcite crystals . . . . .	2	10
Dolomite, medium-bedded, olive-gray to light brownish-gray, dense; contains scattered sand grains . . . . .	1	2
Dolomite, medium-bedded, light brownish-gray, sandy, dense . . . . .	1	2
Sandstone, medium- to thick-bedded, yellowish-gray to white, limy, fine- to medium-grained . . . . .	3	1
Dolomite, medium-bedded, brownish-black to medium dark gray, dense; contains scattered sand grains . . . . .	9	
Dolomite, medium-bedded, medium dark gray, sandy, dense . . . . .	8	
Sandstone, thin-bedded, yellowish-gray, slightly dolomitic, fine- to medium-grained . . . . .	2	

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, thin- to medium-bedded, yellowish-gray to white, limy, fine- to medium-grained . . . . .	1	1
Dolomite, medium-bedded, medium dark gray to brownish-gray, finely crystalline; contains scattered sand grains . . . . .	2	5
Sandstone, medium-bedded, light brownish-gray to yellowish-gray, dolomitic, fine- to medium-grained . . . . .	5	0
Newton sandstone member:		
Sandstone, medium- to thick-bedded, yellowish-gray to white, fine- to medium-grained; grains exhibit secondary growth . . . . .	5	0
Sandstone, medium- to thick-bedded, yellowish-gray to white, fine- to medium-grained; grains exhibit secondary growth . . . . .	5	0
Sandstone, medium- to thick-bedded, yellowish-gray to white, slightly limy, fine- to medium-grained; grains exhibit secondary growth . . . . .	5	0
Sandstone, medium-bedded, yellowish-gray to white, slightly limy, fine- to medium-grained; grains exhibit secondary growth . . . . .	5	0
Sandstone, medium-bedded, yellowish-gray to white, limy, fine- to medium-grained; grains exhibit secondary growth . . . . .	4	3
(Base of Newton sandstone member)		
Limestone, medium-bedded, light-gray, sandy, oolitic, dense to finely crystalline; contains scattered sand grains at base; sand content increases upward . . . . .	2	0
Limestone, medium- to thick-bedded, medium-gray to light olive-gray, dense; contains scattered sand grains . . . . .	4	0
Sandstone, thin- to medium-bedded, very light gray to white, limy, fine- to medium-grained . . . . .	9	
Limestone, thin- to medium-bedded, medium-gray, sandy, dense to finely crystalline; ostracods . . . . .	1	0
Limestone, thin-bedded, medium light gray, dense to finely crystalline; contains scattered sand grains . . . . .	3	

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained.....	1	1
Limestone, medium-bedded, medium light gray, slightly oolitic, dense to finely crystalline; contains scattered sand grains .....	1	2
Sandstone, medium-bedded, very light gray to yellowish-gray, limy, fine- to medium-grained .....	1	8
Limestone, thin-bedded, medium-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	3	
Sandstone, medium-bedded, light olive-gray to yellowish-gray, limy, fine- to medium-grained .....	7	
Limestone, medium-bedded, light olive-gray to very light gray, oolitic, sandy, very finely granular; contains thin stringers of limy sandstone .....	6	
Sandstone, medium-bedded, very light gray, limy, fine- to medium-grained, contains limestone granules; wavy basal surface .....	6	
Limestone, medium-bedded, light brownish-gray to olive-gray, dense to finely crystalline; contains scattered sand grains .....	7	
Limestone, medium-bedded, light brownish-gray to light olive-gray, sandy, dense to finely crystalline .....	7	
Sandstone, thick-bedded, white, limy, fine- to medium-grained .....	2	6
Sandstone, thick-bedded, white, limy, fine- to medium-grained .....	5	0
Sandstone, thick-bedded, white, limy, fine- to medium-grained .....	4	0
Limestone, medium-bedded, medium-gray, dense to finely crystalline; contains scattered sand grains .....	1	0
Limestone, medium-bedded, medium-gray, sandy, dense to finely crystalline .....	11	
Limestone, medium-bedded, brownish-gray to olive-gray, dense to finely crystalline; cryptozoon structures .....	2	0
Sandstone, thin- to medium-bedded, light brownish-gray to light-gray, very limy, fine- to medium-grained .....	11	

	<u>Ft</u>	<u>in</u>
Ordovician rocks — Continued		
Everton formation —Continued		
Limestone, medium-bedded, brownish-gray to light olive-gray, dense to finely crystalline; cryptozoon structures .....	1	8
Sandstone, thin- to medium-bedded, yellowish-gray to light olive-gray, limy, fine- to medium-grained .....	5	4
Limestone, fissile to thin-bedded, medium light gray, slightly sandy, oolitic, dense to finely crystalline .....	5	
Sandstone, thin-bedded, light-gray to yellowish-gray, very limy, fine- to medium-grained; contains small flat limestone pebbles .....	9	
Limestone, thin- to medium-bedded, medium-gray to light brownish-gray, dense; contains thin stringers of white, limy sandstone .....	4	
Sandstone, medium-bedded, light-gray to yellowish-gray, limy, fine- to medium-grained; contains dense limestone granules in the lower part .....	1	3
Limestone, very thin to thin-bedded, medium-gray to medium dark gray, dense .....	4	
Sandstone, medium-bedded, light-gray to yellowish-gray, very limy, medium-grained .....	6	
Sandstone, medium-bedded, yellowish-gray, limy, medium-grained .....	1	2
Sandstone, medium-bedded, very light gray to yellowish-gray, very limy, medium-grained .....	1	5
Limestone, medium-bedded, medium-gray to light olive-gray, sandy, dense to finely crystalline; contains dense, oolitic limestone pebbles as much as 1 inch in diameter in a matrix of very sandy limestone .....	7	
Sandstone, medium-bedded, very light gray to yellowish-gray, very limy, medium-grained .....	9	
Limestone, medium-bedded, medium light gray to light olive-gray, oolitic, dense; contains scattered sand grains .....	7	
Limestone, medium-bedded, medium light gray to light olive-gray, oolitic, dense .....	7	

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Limestone, medium-bedded, yellowish-gray, very sandy, dense to finely crystalline .....	1	0
Limestone, thin-bedded, olive-gray to light-gray, oolitic, dense to finely crystalline .....	9	
Sandstone, medium-bedded, light-gray to yellowish-gray, limy, fine- to medium-grained .....	1	3
Sandstone, thick-bedded to massive, light-gray to yellowish-gray, slightly limy, medium- to coarse-grained; grains exhibit secondary growth .....	5	0
Sandstone, thick-bedded to massive, light-gray to yellowish-gray, slightly limy, medium-grained; grains exhibit secondary growth; (lower 4 feet of beds usually below water level).....	5	0
Base of section at river level.	<u>187</u>	<u>1</u>

D. Section of the St. Peter sandstone and Everton formation on the east side of the Buffalo River and north of Hasty-Jasper road in the SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 16 N., R. 20 W., Newton County, Ark. Base of section about 4 feet above river level.

	<u>Ft</u>	<u>in</u>
Carboniferous (Mississippian) rocks:		
Boone formation:		
St. Joe limestone member.		
Basal sandstone member.		
Covered interval .....	<u>7</u>	<u>0</u>
Ordovician rocks:		
St. Peter sandstone:		
Sandstone, medium-bedded, white to very light gray, very slightly limy, medium-grained; grains exhibit much secondary growth; quartzitic beds in middle of unit .....	<u>2</u>	<u>8</u>
Everton formation:		
Jasper member:		
Limestone, platy to thin-bedded, light-gray, dense .....	1	2
Sandstone, thin-bedded, very light gray, very limy, medium-grained .....	8	
Limestone, platy to thin-bedded, light-gray, dense .....	1	3
Limestone, medium-bedded, light-gray, oolitic, dense; contains scattered sand grains .....	2	9

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Covered interval .....		6
Limestone, thin-bedded, light-gray, oolitic, dense; contains scattered sand grains .....		2
Sandstone, thick-bedded, very light gray to white, slightly limy, medium-grained; grains exhibit secondary growth .....	3	8
Limestone, medium-bedded, light-gray to very light gray, very sandy, dense to finely crystalline .....	1	6
Limestone, medium- to thin-bedded, light-gray, oolitic, sandy, dense to finely crystalline; sand content decreases upward; ostracods .....	1	6
Limestone, medium-bedded, very light gray to yellowish-gray, dense to finely crystalline; contains scattered sand grains; ostracods .....		8
Limestone, thin-bedded, light-gray to yellowish-gray, dense to finely crystalline; contains scattered sand grains .....	1	1
Limestone, thin-bedded, light-gray to yellowish-gray, very sandy, finely crystalline .....		6
Sandstone, medium-bedded, white to very light gray, very limy, medium-grained .....	1	6
Covered interval .....		6
Limestone, medium-bedded, light-gray, oolitic, dense to finely crystalline; ostracods .....		6
Covered interval .....		6
Limestone, medium-bedded, yellowish-gray to light olive-gray, dense to finely crystalline; scattered sand grains .....	1	2
Limestone, medium-bedded, yellowish-gray to light olive-gray, very sandy, finely crystalline .....		3
Limestone, medium-bedded, yellowish-gray to light olive-gray, dense to finely crystalline; contains scattered sand grains .....	1	0
Sandstone, thin-bedded, white to very light gray, very limy, fine- to medium-grained .....		11
Limestone, medium-bedded, very light gray to light-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....		5

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Sandstone, thin-bedded, very light gray to yellowish-gray, very limy, medium-grained .....	1	9
Sandstone, medium-bedded, light-gray, medium-grained; grains exhibit secondary growth .....	1	0
Limestone, medium-bedded, medium light gray, oolitic, dense to finely crystalline .....	2	3
Limestone, thin-bedded, light-gray to light olive-gray, silty, oolitic, dense to finely crystalline .....	9	
Limestone, medium-bedded, light-gray, oolitic, dense to finely crystalline; ostracods .....	3	11
Limestone, thick-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains; ostracods, trilobites .....	2	4
Limestone, medium-bedded, very light gray to yellowish-gray, oolitic, sandy, finely crystalline; contains limestone granules; ostracods .....	2	2
Limestone, medium-bedded, very light gray to light-gray, oolitic, dense to finely crystalline; ostracods .....	1	7
Limestone, medium-bedded, light-gray to very light gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	11	
Limestone, thin-bedded, very light gray, oolitic, dense to finely crystalline; contains scattered sand grains; ostracods .....	1	6
Limestone, platy to very thin bedded, light-gray to light brownish-gray, sandy, dense to finely crystalline; ostracods .....	1	0
Limestone, thin- to medium-bedded, very light gray to yellowish-gray, finely to medium-crystalline; ostracods .....	1	2
Limestone, very thin bedded, light-gray to very light gray, silty, dense to medium-crystalline; ostracods; unit weathers back .....	6	
Limestone, medium-bedded, medium light gray to brownish-gray, oolitic, dense to finely crystalline; ostracods .....	5	

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Sandstone, medium-bedded, white to very light gray, very slightly limy, fine- to medium-grained; grains exhibit secondary growth .....	2	10
Limestone, thin-bedded, very light gray to yellowish-gray, dense to finely crystalline; contains scattered sand grains .....		8
Sandstone, medium-bedded, very light gray to white, limy, medium-grained ....	4	11
Limestone, thin-bedded, light-gray to yellowish-gray, oolitic, finely to medium-crystalline; ostracods .....		8
Sandstone, medium- to thick-bedded, light-gray to white, limy, fine- to medium-grained; grains exhibit secondary growth .....	3	9
Limestone, thin-bedded, very light gray, sandy, dense to finely crystalline .....	1	3
Sandstone, medium-bedded, white to very light gray, slightly limy, fine- to medium-grained; grains exhibit secondary growth .....	4	7
Sandstone, thin-bedded, white to very light gray, very limy, fine- to medium-grained; contains a limestone stringer $\frac{1}{2}$ to 1 inch thick at top of unit .....	5	0
Limestone, thin-bedded, very light gray to yellowish-gray, dense to medium-crystalline; contains scattered sand grains; ostracods .....		2
Sandstone, medium-bedded, yellowish-gray to white, limy, fine- to medium-grained .....	2	2
Sandstone, medium-bedded, yellowish-gray to white, quartzitic, fine- to medium-grained .....	1	0
Sandstone, medium-bedded, yellowish-gray to white, limy, fine- to medium-grained .....	2	0
Sandstone, medium-bedded, white to very light gray, limy, fine- to medium-grained; contains stringers of sandstone with siliceous cement .....	1	4

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Limestone, medium-bedded, very light gray to yellowish-gray, dense to medium-crystalline; contains scattered sand grains; ostracods . . . . .	5	
Limestone, medium-bedded, very light gray to yellowish-gray, sandy, dense to medium-crystalline; ostracods . . . . .	5	
Sandstone; medium-bedded, light-gray to white, limy, medium- to fine-grained; grains exhibit secondary growth; ostracods . . . . .	5	0
(Base of Jasper member)		
Dolomite, thick-bedded, medium light gray to light brownish-gray, sandy, dense to finely crystalline . . . . .	5	6
Sandstone, thin-bedded, light-gray to dense, limy, dolomitic, medium-grained . . . . .	6	
Dolomite, medium- to thick-bedded, medium light gray to light brownish-gray, sandy, dense; contains scattered sand grains and thin stringers of dolomitic sandstone . . . . .	4	3
Dolomite, medium-bedded, medium-gray to brownish-gray, very sandy, dense to finely crystalline . . . . .	4	5
Sandstone, medium-bedded, white to very light gray, medium-grained; grains exhibit secondary growth . . . . .	2	5
Sandstone, very thin bedded, light-gray to white, quartzitic, slightly dolomitic, fine- to medium-grained . . . . .	2	8
Sandstone, medium-bedded, white to very light gray, slightly limy, medium- to coarse-grained; grains exhibit secondary growth . . . . .	1	7
Dolomite, medium-bedded, light-gray to light brownish-gray, sandy, finely to medium-crystalline; contains thin sandstone stringers . . . . .	1	6
Dolomite, thin- to medium-bedded, light-gray to light olive-gray, finely crystalline; contains white coarse dolomite crystals . . . . .	2	3
Dolomite, medium-bedded, light-gray, very sandy, dense to finely crystalline . . . . .	2	10

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium- to thick-bedded, light-gray, sandy, dense to finely crystalline; ostracods . . . . .	5	0
Dolomite, thick-bedded, light-gray, dense to finely crystalline . . . . .	5	7
Covered interval . . . . .	3	7
Dolomite, medium-bedded, light-gray, sandy, dense to finely crystalline . . . . .	1	2
Covered interval . . . . .	5	0
Sandstone, medium-bedded, very light gray to white, slightly dolomitic, medium-grained . . . . .	1	8
Covered interval . . . . .		10
Sandstone, medium-bedded, very light gray to white, slightly dolomitic, medium-grained; grains exhibit secondary growth . . . . .		11
Dolomite, medium-bedded, medium-gray to medium light gray, dense to finely crystalline; contains scattered sand grains . . . . .		10
Sandstone, medium-bedded, very light gray to white, slightly dolomitic, medium-grained; grains exhibit secondary growth . . . . .		10
Covered interval . . . . .	7	0
Newton sandstone member:		
Sandstone, medium- to thick-bedded, very light gray to white, medium-grained; grains exhibit secondary growth . . . . .	5	8
Sandstone, medium- to thick-bedded, very light gray to white, medium-grained; grains exhibit secondary growth . . . . .	1	10
Base of section about 4 feet above river level.	147	5
E. Section of the St. Peter sandstone and Everton formation at Carver near the north end of the Buffalo River bridge on State Route 123, NW $\frac{1}{4}$ sec. 6, T. 15 N., R. 19 W., Newton County, Ark.		
Carboniferous (Mississippian) rocks:		
Boone formation.		
	<u>Ft</u>	<u>in</u>
Ordovician rocks:		
Fernvale limestone . . . . .	<u>6</u>	<u>11</u>
Plattin limestone . . . . .	<u>32</u>	<u>7</u>
St. Peter sandstone:		
Sandstone, soft, greenish-white, very limy, fine- to medium-grained . . . . .	2	6

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
St. Peter sandstone —Continued		
Covered interval .....	3	3
Sandstone, thin-bedded, white, limy; similar to that above.....		4
Covered interval .....	2	4
Sandstone, thin-bedded, greenish- gray, slightly argillaceous, limy; similar to that above .....		5
Dolomite, dull-gray, silty, very finely granular; contains very thin laminae of very fine grained sandstone .....	4	3
Sandstone, greenish-white, limy; similar to the sandstones above .....	4	6
Dolomite, gray-buff, very finely granular .....		7
Covered interval .....	2	7
Sandstone, white, limy, fine- to medium-grained .....		4
Sandstone, thin-bedded, brown, dolomitic, fine-grained.....	4	9
Covered interval .....	3	0
Sandstone, thin-bedded, white to brown, dolomitic, fine- grained .....	2	5
Dolomite, very thin bedded, gray- buff, sandy, fine-grained; ostracods .....		4
Sandstone, medium-bedded, buff- brown, dolomitic, fine-grained; and white fine- to medium-grained sandstone .....	2	6
Covered interval.....	8	1
Sandstone, soft, very thin bedded, pinkish- to greenish-white, fine- to medium-grained; grains exhibit secondary growth .....	2	5
Covered interval .....	4	9
Sandstone, medium-bedded, white, limy, medium-grained; grains exhibit secondary growth .....	5	6
	<u>54</u>	<u>10</u>
Everton formation:		
Jasper member:		
Dolomite, massive, dark- gray to brown, medium to coarsely crystalline.....	8	7
Sandstone, thin-bedded, white, fine- to medium-grained ....	1	9
Covered interval .....	6	0
Sandstone, medium-bedded, white, fine- to medium- grained .....	2	5
Covered interval .....	2	0
Limestone, medium-bedded, light-buff, slightly sandy, finely crystalline.....	1	3
Limestone, medium-bedded, buff, finely crystalline.....		11
Limestone, medium-bedded, buff, sandy .....		8
Limestone, light-buff, oolitic or microfossiliferous, finely crystalline; grades downward into buff sandy limestone .....	1	1

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Sandstone, medium-bedded, white, very limy, medium-grained.....	2	3
Limestone, medium- to thick-bedded, buff, medium- crystalline; contains scattered sand grains; grades downward into white limy fine-grained sandstone .....	1	11
Limestone, medium-bedded, buff, finely crystalline to dense .....		5
Sandstone, greenish-white, limy, fine-grained .....		2
Dolomite, thin-bedded, brown, medium- crystalline.....		9
Covered interval .....	2	9
Limestone, medium-bedded, buff, microfossiliferous, finely crystalline; abundant ostracods .....	1	11
Limestone, medium-bedded, light-buff, sandy, finely crystalline .....	1	9
Limestone, thin-bedded, light-buff, sandy, finely crystalline .....	1	3
Limestone, thin-bedded, light-buff, oolitic or microfossiliferous, dense; calcite; sand grains in upper part.....	1	4
Limestone, thin-bedded, light-buff, oolitic or microfossiliferous, sandy; sand content increases upward .....	1	0
As above, but very thin bedded .....	1	2
Limestone, thin-bedded, light-buff, finely figured, finely crystalline .....	1	10
Covered interval .....		7
Limestone, thin-bedded, light-buff, finely figured, finely crystalline.....	2	0
Sandstone, white, slightly limy, medium-grained; grains exhibit secondary growth .....		6
Sandstone, massive, white, medium-grained.....	2	6
Limestone, gray-buff, microfossiliferous, finely crystalline; abundant ostracods.....		6
Sandstone, thin- to medium-bedded, tan to white, fine- to medium-grained (usually below water level) .....	3	0
	<u>52</u>	<u>3</u>

F. Section of the St. Peter sandstone and Everton formation on the north side of the Buffalo River in the SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 16 N., R. 19 W., Newton County, Ark. Base of section at river level.

	Ft	in
Carboniferous (Mississippian) rocks:		
Boone formation:		
St. Joe limestone member.		
Basal sandstone member.....	1	0
(The gradational contact of the St. Joe limestone member and the basal sandstone member is exposed at the top of this unit. The contact of the basal sandstone member and the underlying St. Peter sandstone is not exposed; it lies somewhere in the following covered interval.)		
Covered interval .....	10	6
Ordovician rocks:		
St. Peter sandstone:		
Sandstone, medium-bedded, dusky-yellow, silty, limy, fine- to medium-grained; grains exhibit some secondary growth .....	2	0
Covered interval .....	10	0
Sandstone, thin- to medium-bedded, yellowish-gray to white, slightly limy, fine- to medium-grained; grains exhibit some secondary growth .....	1	5
Dolomite, thin- to medium-bedded, pale-brown, silty, finely granular; contains scattered sand grains .....		8
Sandstone, medium-bedded, light-brown to white, quartzitic, slightly dolomitic, fine-grained; contains some white coarse dolomite crystals .....	1	7
Dolomite, thin- to medium-bedded, pale-brown, silty, finely granular; contains scattered sand grains .....		5
Sandstone, thick-bedded, dusky-yellow to light olive-gray, silty, dolomitic, very fine to fine-grained; the amount of dolomite increases upward in the unit; ostracods .....	2	11
Covered interval .....	9	0
Sandstone, deeply weathered and poorly exposed, medium-bedded, yellowish-gray to white, medium- to coarse-grained .....	5	0
Sandstone, medium-bedded, yellowish-gray to white, slightly limy; grains exhibit secondary growth; slightly irregular basal surface .....	5	8
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	38	8

Ordovician rocks —Continued

Everton formation:

  Jasper member:

	Ft	in.
Dolomite, medium-bedded, brownish-gray, medium-crystalline; contains scattered sand grains .....	1	1
Sandstone, medium-bedded, white, limy, fine- to medium-grained .....		8
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains .....	4	4
Dolomite, medium-bedded, brownish-gray, slightly silty, medium-crystalline; contains scattered sand grains .....	4	7
Sandstone, medium-bedded, yellowish-gray to white, slightly limy, fine- to medium-grained.....	1	4
Dolomite, thin-bedded, light brownish-gray, silty, finely crystalline; contains coarse calcite crystals and thin stringers of yellowish-gray dolomitic fine- to medium-grained sandstone.....	2	3
Covered interval .....	1	0
Sandstone, medium-bedded, brownish-gray, dolomitic, fine- to medium-grained .....	2	4
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	2	3
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; ostracods .....	2	6
Limestone, medium-bedded, light olive-gray, very sandy, finely crystalline .....		4
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; ostracods .....	1	4
Limestone, medium-bedded, light olive-gray, sandy, finely crystalline .....		9
Limestone, medium-bedded, yellowish-gray, sandy, finely crystalline .....	1	1
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; ostracods .....	3	4
Limestone, medium-bedded, light olive-gray, oolitic, finely to medium-crystalline .....		5

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Sandstone, thin-bedded, yellowish-gray, limy, fine- to medium-grained; grades into overlying unit . . . . .	2	6
Limestone, thin- to medium-bedded, light brownish-gray, slightly oolitic, dense to finely crystalline . . . . .	2	1
Limestone, thick-bedded, light brownish-gray, slightly oolitic, finely crystalline . . . . .	4	4
Limestone, thick-bedded, light brownish-gray, oolitic, finely crystalline; ostracods . . . . .	2	4
Limestone, thick-bedded, alternately sandy and nonsandy, light brownish-gray, oolitic, finely crystalline; ostracods . . . . .	5	6
Limestone, thin-bedded, light brownish-gray, sandy, finely crystalline . . . . .		7
Limestone, thin-bedded, light olive-gray, oolitic, finely crystalline; contains medium-sized calcite crystals and pyrite altered to limonite; ostracods . . . . .		6
Limestone, thin- to medium-bedded, light olive-gray, oolitic, finely crystalline; contains some thin stringers of sandy limestone . . . . .	4	6
Sandstone, thin- to medium-bedded, pale-brown to white, limy, medium-grained; grains exhibit secondary growth . . . . .	3	4
Limestone, medium-bedded, light brownish-gray, oolitic, finely to medium-crystalline . . . . .		11
Sandstone, medium-bedded, white, limy, fine- to medium-grained . . . . .		8
Limestone, medium-bedded, light brownish-gray, oolitic, finely to medium-crystalline . . . . .		9
Sandstone, medium-bedded, yellowish-gray to white, limy, medium-grained . . . . .	2	8
Limestone, medium-bedded, brownish-gray, oolitic, finely to medium-crystalline; ostracods . . . . .		6
Limestone, medium-bedded, brownish-gray, finely to medium-crystalline; contains limestone granules . . . . .	1	0
Sandstone, thick-bedded, yellowish-gray, limy, medium-grained . . . . .	3	4

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Limestone, thin- to medium-bedded, light olive-gray, finely to medium-crystalline; contains limestone granules; ostracods . . . . .	2	2
Limestone, thin-bedded, light olive-gray, sandy, finely to medium-crystalline . . . . .		4
Sandstone, thick-bedded, yellowish-gray, limy, medium-grained; grains exhibit secondary growth . . . . .	2	11
Limestone, fine- to medium-bedded, light brownish-gray, finely crystalline; contains scattered sand grains . . . . .	1	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained . . . . .	1	4
(Base of Jasper member)		
Sandstone, medium-bedded, yellowish-gray, dolomitic, fine- to medium-grained . . . . .	2	1
Sandstone, medium-bedded, light olive-gray to yellowish-gray, dolomitic, medium-grained . . . . .	5	0
Dolomite, medium-bedded, light brownish-gray, sandy, finely crystalline . . . . .	2	7
Sandstone, medium-bedded, light brownish-gray, dolomitic, medium-grained . . . . .	2	8
Sandstone, medium-bedded, yellowish-gray, limy, medium-grained . . . . .		10
Sandstone, medium-bedded, light brownish-gray, very dolomitic, fine- to medium-grained . . . . .	3	4
Sandstone, medium-bedded, yellowish-gray, slightly limy, medium-grained; grains exhibit secondary growth . . . . .	1	4
Dolomite, medium-bedded, brownish-gray, very sandy, finely crystalline . . . . .	5	6
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline . . . . .	5	0
Dolomite, medium-bedded, brownish-gray, finely crystalline . . . . .	1	0
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline . . . . .	4	0

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline; contains thin stringers of yellowish-gray fine- to medium-grained slightly dolomitic sandstone .....	5	0
Dolomite, medium-bedded, brownish-gray, sandy, finely to medium-crystalline .....	5	4
Dolomite, medium-bedded, brownish-gray, dense to finely crystalline; contains scattered sand grains .....	5	0
Sandstone, medium-bedded, yellowish-gray to brownish-gray, dolomitic, fine- to medium-grained; ostracods .....	2	0
Dolomite, medium-bedded, brownish-gray, sandy, finely to medium-crystalline .....	3	0
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline; contains some thin stringers of sandy dolomite .....	5	4
Dolomite, thin- to medium-bedded, brownish-gray, limy, finely to coarsely crystalline; contains many white coarse calcite and dolomite crystals .....	2	0
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains white coarse calcite crystals .....	2	6
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains scattered sand grains .....	2	2
Sandstone, medium-bedded, light brownish-gray, dolomitic, fine- to medium-grained .....	1	0
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains scattered sand grains .....	1	0
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains scattered sand grains .....	2	9
Sandstone, medium-bedded, light brownish-gray, dolomitic, medium-grained .....	1	10
Dolomite, medium-bedded, light brownish-gray, sandy, finely crystalline .....	1	9
Dolomite, thin- to medium-bedded, light brownish-gray, sandy, finely crystalline; sand content increases upward in unit (few scattered sand grains at base, very sandy at top) .....	3	4

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, medium-bedded, yellowish-gray, limy, medium-grained; contains stringers of light brownish-gray dolomitic medium-grained sandstone .....	2	3
Sandstone, medium-bedded, yellowish-gray to light brownish-gray, slightly limy, fine- to medium-grained; contains stringers of light brownish-gray dolomitic fine- to medium-grained sandstone .....	4	0
Dolomite, very thin bedded, brownish-gray, slightly sandy, finely crystalline ....		1
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; contains stringers of light-brownish-gray dolomitic fine- to medium-grained sandstone .....		11
Newton sandstone member:		
Sandstone, medium-bedded, yellowish-gray, slightly limy, fine- to medium-grained .....	4	9
Sandstone, medium- to thick-bedded, yellowish-gray, slightly limy, fine- to medium-grained .....	3	8
Sandstone, massive, yellowish-gray, limy, fine- to medium-grained; lime content increases downward; grains exhibit much secondary growth .....	5	0
(Base of Newton sandstone member)		
Limestone, medium-bedded, light olive-gray, sandy, finely crystalline .....		10
Limestone, thin-bedded, olive-gray, slightly dolomitic, dense to finely crystalline ....		4
Limestone, thin-bedded, olive-gray, sandy, slightly dolomitic, finely crystalline .....		7
Limestone, medium-bedded, light olive-gray, very sandy, finely crystalline .....		6
Sandstone, medium-bedded, light olive-gray, very limy, medium-grained .....		7
Limestone, medium-bedded, medium-gray, finely crystalline; contains white coarse calcite crystals .....	2	2
Sandstone, medium-bedded, yellowish-gray, slightly limy to dolomitic, fine- to medium-grained; grains exhibit secondary growth .....	2	5
Base of section at river level.		
	178	3

G. Section of the St. Peter sandstone and Everton formation on the north side of the Buffalo River in the NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 16 N., R. 19 W., Newton County, Ark. Base of section at river level.

	<u>Ft</u>	<u>in</u>
Ordovician rocks:		
Plattin limestone.		
St. Peter sandstone:		
Sandstone, poorly exposed, medium-bedded, light-brown, silty, limy, slightly dolomitic, fine-grained .....	4	0
Covered interval .....	13	0
Sandstone, badly weathered, thin- to medium-bedded, yellowish-gray, very fine to fine-grained .....	2	7
Sandstone, medium-bedded, yellowish-gray, very fine to fine-grained with scattered coarse grains; grains exhibit secondary growth .....	4	7
Sandstone, medium-bedded, crossbedded, yellowish-gray to brownish-gray, fine-grained; grains exhibit secondary growth .....	3	10
Sandstone, thin-bedded, yellowish-gray, fine- to medium-grained .....	1	4
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	29	4

Everton formation:

Jasper member:

Dolomite, thin- to medium-bedded, brownish-gray, sandy, medium-crystalline; contains thin stringers of dolomitic sandstone .....	4	1
Covered interval .....	1	7
Dolomite, thin-bedded, brownish-gray, sandy, finely crystalline .....	4	
Dolomite, thin-bedded, dark-gray, medium-crystalline .....	3	
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline .....	3	10
Dolomite, medium-bedded, brownish-gray, medium-crystalline; contains scattered sand grains in lower half of unit .....	7	
Dolomite, medium-bedded, light-brown, sandy, finely crystalline .....	1	0
Sandstone, medium-bedded, light-brown to light olive-gray, dolomitic, medium-grained .....	9	
Dolomite, medium-bedded, light brownish-gray, medium-crystalline; slightly silty in lower part .....	2	7

Ordovician rocks —Continued

Everton formation —Continued

Jasper member —Continued

	<u>Ft</u>	<u>in</u>
Sandstone, medium-bedded, yellowish-gray, slightly dolomitic, fine- to medium-grained; grains exhibit secondary growth .....	4	4
Dolomite, thin-bedded, grayish yellow green, silty, finely crystalline; contains scattered sand grains and some white coarse calcite crystals .....	1	10
Dolomite, medium-bedded, brownish-gray, slightly silty, finely crystalline .....	2	8
Dolomite, thin-bedded, brownish-gray, medium-crystalline; contains scattered sand grains .....		4
Sandstone, medium-bedded, light brownish-gray, dolomitic, medium-grained .....	2	4
Sandstone, medium-bedded, yellowish-gray, very limy, medium-grained; ostracods .....	2	3
Covered interval .....	3	0
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; many ostracods .....	2	0
Limestone, medium-bedded, light olive-gray, finely crystalline; contains limestone granules; ostracods .....	1	0
Limestone, medium-bedded, light olive-gray, sandy, finely crystalline; contains limestone granules; ostracods .....	2	11
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; ostracods .....		5
Dolomite, medium-bedded, light brownish-gray, medium-crystalline; contains white coarse calcite crystals .....	1	1
Dolomite, thin-bedded, light brownish-gray, sandy, medium-crystalline; contains white coarse calcite crystals .....		4
Limestone, medium-bedded, yellowish-gray to light olive-gray, oolitic, finely crystalline; ostracods .....	3	2
Dolomite, medium-bedded, brownish-gray, slightly limy, finely to medium-crystalline .....		6
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth .....	3	6

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Limestone, medium-bedded, light olive-gray, oolitic and oolitic, finely crystal- line; ostracods in lower 4 inches .....	2	2
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth....	2	1
Covered interval .....		5
Limestone, thin- to medium- bedded, light olive-gray, oolitic, finely crystalline....		8
Covered interval .....		5
Sandstone, thin- to medium- bedded, yellowish-gray, medium-grained; grains exhibit secondary growth.....	2	4
(Base of Jasper member)		
Sandstone, thin-bedded, yellowish- gray, dolomitic, medium- grained .....		4
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; con- tains medium-sized calcite crystals and scattered sand grains .....	1	8
Sandstone, thin-bedded, yellowish-gray to light brownish- gray, very dolomitic, fine- to medium-grained; ostracods .....	3	8
Sandstone, medium-bedded, light brownish-gray, very dolomitic, fine- to medium-grained .....	4	11
Dolomite, medium-bedded, light brownish-gray, sandy, very finely granular; contains white coarse calcite crystals .....	2	10
Dolomite, medium-bedded, light brownish-gray, slightly limy, sandy, finely crystalline .....	4	11
Dolomite, thin- to medium- bedded, brownish-gray, finely crystalline; cryptozoon(?) structures .....	1	2
Sandstone, medium-bedded, light brownish-gray, very dolomitic, fine- to coarse- grained; slightly limy in upper half .....	2	7
Sandstone, thin- to medium- bedded, yellowish-gray, slightly limy, medium-grained; grains exhibit secondary growth .....		11
Dolomite, thin-bedded, brownish- gray, dense .....		2
Sandstone, thin-bedded, yellowish-gray, slightly limy, medium-grained .....		3

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium- bedded, light-gray to brownish-gray, sandy, finely granular .....	2	7
Dolomite, medium-bedded, brownish-gray, sandy, finely granular; contains thin nonsandy dolomite stringers .....	1	0
Sandstone, thin-bedded, light brownish-gray, limy, medium-grained .....		4
Dolomite, medium- to thick- bedded, brownish-gray, sandy, finely crystalline .....	2	11
Dolomite, thin-bedded, brownish-gray, sandy, finely crystalline; contains medium- sized calcite crystals; ostracods .....		4
Dolomite, medium-bedded, brownish-gray, dense to very finely granular; con- tains scattered sand grains and white coarse calcite crystals .....	2	6
Sandstone, medium- to thick- bedded, brownish-gray, dolomitic, fine- to medium- grained; contains white coarse calcite crystals .....	2	7
Dolomite, thin-bedded, brownish-gray, sandy, dense to very finely granular; con- tains thin stringers of nonsandy dolomite .....	1	0
Dolomite, medium- to thick- bedded, brownish-gray, very sandy; contains white coarse calcite crystals .....	4	8
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....		8
Sandstone, medium-bedded, light brownish-gray, dolomitic, fine- to medium- grained .....		10
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....		6
Dolomite, medium-bedded, brownish-gray, finely crystalline .....		6
Sandstone, medium-bedded, light brownish-gray, dolomitic, fine- to medium- grained .....		6
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....		6
Sandstone, medium- bedded, light brownish- gray, dolomitic, fine- to medium- grained .....	1	0

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, thin-bedded, dark-gray, sandy, siliceous, dense .....	4	
Dolomite, medium-bedded, brownish-gray, very sandy, finely to medium-crystalline .....	1	8
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains .....	1	0
Sandstone, thin-bedded, yellowish-gray, slightly limy, medium-grained; grains exhibit secondary growth .....	5	
Sandstone, thin- to medium-bedded, light brownish-gray, dolomitic, fine- to medium-grained .....	10	
Covered interval .....	1	0
Sandstone, medium-bedded, yellowish-gray, slightly limy, fine- to medium-grained; grains exhibit secondary growth .....	2	7
Dolomite, medium-bedded, light brownish-gray, sandy, finely crystalline; contains thin stringers of limy sandstone .....	2	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	1	6
Dolomite, medium-grained, brownish-gray, sandy, finely crystalline; contains stringers of nonsandy dolomite and dolomitic sandstone .....	2	6
Dolomite, medium-bedded, light brownish-gray, finely to medium crystalline .....	1	4
Dolomite, medium-bedded, light brownish-gray, finely to medium crystalline; contains white fine to coarse calcite crystals .....	4	11
Dolomite, thin-bedded, light olive-gray to brownish-gray, finely to medium-crystalline .....	1	5
Dolomite, medium-bedded, light olive-gray to brownish-gray, dense to finely crystalline; contains scattered sand grains .....	2	3
Dolomite, medium-bedded, light olive-gray to light brownish-gray with streaks and spots of dark-gray, very finely granular; contains scattered sand grains .....	1	0
Dolomite, medium-bedded, light brownish-gray, sandy, very finely granular .....	1	0

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, light brownish-gray, finely crystalline; contains scattered sand grains .....	1	0
Dolomite, medium-bedded, light brownish-gray, finely crystalline .....	1	0
Dolomite, medium-bedded, brownish-gray to dark-gray, very finely granular; contains scattered sand grains increasing in abundance downward .....	2	10
Sandstone, medium-bedded, yellowish-gray, dolomitic, medium-grained; grains exhibit secondary growth .....	1	0
Dolomite, medium-bedded, light olive-gray to light brownish-gray, slightly limy, finely crystalline; contains white coarse calcite crystals; scattered sand grains in the upper 4 inches .....	2	9
Sandstone, medium-bedded, yellowish-gray, dolomitic, slightly limy, fine- to coarse-grained .....	3	3
Dolomite, medium-bedded, brownish-gray, slightly limy, finely crystalline .....	10	
Sandstone, medium-bedded, yellowish-gray, dolomitic, slightly limy, fine- to coarse-grained .....	2	11
Sandstone, medium-bedded, yellowish-gray to light olive-gray, dolomitic, slightly limy, medium-grained .....	2	10
Dolomite, medium-bedded, light brownish-gray, slightly limy, medium-crystalline; contains scattered sand grains .....	1	2
Sandstone, medium-bedded, yellowish-gray, dolomitic, slightly limy, fine- to coarse-grained; contains white coarse calcite crystals .....	1	3
Newton sandstone member:		
Sandstone, medium-bedded, yellowish-gray, slightly limy, fine- to coarse-grained .....	5	0
Sandstone, thin- to medium-bedded, yellowish-gray, limy, fine- to coarse-grained .....	5	0
(Base of Newton sandstone member)		

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Limestone, medium-bedded, medium-gray, sandy, very finely granular .....	1	4
Limestone, medium-bedded, medium-gray, oolitic, very finely granular; contains scattered sand grains .....	2	1
Limestone, medium-bedded, medium-gray, oolitic, very finely granular .....	1	6
Sandstone, medium-bedded, yellowish-gray, very limy, fine- to coarse-grained .....	1	10
Dolomite, medium-bedded, yellowish-gray to light olive-gray, very limy, finely to medium-crystalline .....	2	6
Limestone, medium-bedded, light-gray, very dolomitic, slightly sandy, finely to medium-crystalline; loosely coiled cephalopods or gastropods, small ostracods, and pelecypods(?) .....	10	
Limestone, medium-bedded, light-gray, very dolomitic, finely to medium-crystalline .....	1	3
Limestone, medium-bedded, light-gray to light olive-gray, slightly dolomitic, finely crystalline .....	1	3
Sandstone, thin-bedded, yellowish-gray, limy, fine- to medium-grained .....	2	
Limestone, medium-bedded, light-gray to light olive-gray, slightly dolomitic, finely crystalline .....	1	5
Limestone, medium-bedded, yellowish-gray, very sandy, finely crystalline .....	10	
Limestone, thin-bedded, light olive-gray, oolitic, slightly dolomitic, finely to medium-crystalline .....	1	5
Sandstone, medium-bedded, yellowish-gray to light olive-gray, limy, fine- to coarse grained .....	6	
Limestone, medium-bedded, yellowish-gray to light olive-gray, sandy, finely crystalline .....	1	1
Limestone, medium-bedded, light olive-gray, slightly dolomitic, very finely granular to finely crystalline; well-developed cryptozoon structures .....	3	10
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	1	4

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, yellowish-gray to light brownish-gray, sandy, slightly limy, medium-crystalline .....		6
Dolomite, medium-bedded, yellowish-gray to light brownish-gray, slightly limy, medium-crystalline .....		10
Limestone, medium-bedded, light-gray, sandy, very finely granular .....	1	3
Limestone, medium-bedded, yellowish-gray, very sandy, very finely granular .....	4	4
Dolomite, medium-bedded, brownish-gray, sandy, slightly limy, finely crystalline; contains thin stringers of slightly limy, dolomitic sandstone .....		11
Dolomite, thick-bedded, medium light gray to light brownish-gray, finely to medium-crystalline; contains scattered sand grains .....	1	5
Dolomite, thick-bedded, light brownish-gray, sandy, finely crystalline .....	1	0
Dolomite, platy to thin-bedded, light olive-gray, limy, finely to medium-crystalline; sandy at base; well-developed cryptozoon structures .....	3	1
Dolomite, medium-bedded, yellowish-gray, very sandy, finely to medium-crystalline .....		10
Dolomite, medium-bedded, yellowish-gray to brownish-gray, finely to medium-crystalline; contains thin stringers of sandy dolomite .....	4	1
Sandstone, medium-bedded, yellowish-gray, dolomitic, fine- to medium-grained; contains thin stringers of brownish-gray dolomite; grains exhibit secondary quartz growth .....	3	7
Dolomite, very thin to thin-bedded, brownish-gray, medium-crystalline .....	1	10
Dolomite, medium-bedded, light brownish-gray, slightly limy, medium-crystalline; contains stringers of sandy dolomite .....	3	9
Dolomite, medium-bedded, medium light gray to brownish-gray, medium-crystalline; contains scattered sand grains .....	4	4

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, brownish-gray to olive-gray, medium-crystalline .....	3	6
Dolomite, medium-bedded, brownish-gray to olive-gray, very sandy, medium-crystalline .....	1	6
Dolomite, medium-bedded, light brownish-gray to brownish-gray, sandy, medium-crystalline; contains very sandy dolomite stringers in a darker, sandy dolomite; sand grains at the more sandy beds exhibit secondary growth .....	2	10
Dolomite, medium-bedded, medium-gray to brownish-gray, medium-crystalline; contains thin, sandy dolomite stringers .....		6
Dolomite, medium-bedded, medium-gray to brownish-gray, medium-crystalline .....	3	6
Sandstone, medium-bedded, yellowish-gray, dolomitic, fine- to medium-grained. The dolomite cement increases downward and the unit becomes sandy dolomite at the base .....	1	0
Dolomite, medium-bedded, brownish-gray, medium-crystalline .....	2	8
Dolomite, medium-bedded, light brownish-gray, slightly limy, medium-crystalline; contains scattered sand grains .....	5	0
Dolomite, medium-bedded, light brownish-gray, medium-crystalline; contains thin sandstone stringers and scattered sand grains .....	5	0
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains thin sandstone stringers and scattered sand grains .....	5	0
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains .....	4	7
Dolomite, thin- to medium-bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains .....	3	6
Dolomite, thin- to medium-bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains and thin sandstone stringers .....	1	6

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, thin- to medium-bedded, light brownish-gray to light olive-gray, finely to medium-crystalline; contains thin siliceous sandstone stringers that weather out in wavy bands .....	5	0
Dolomite, medium-bedded, light olive-gray to brownish-gray, medium-crystalline; to coarsely crystalline .....	3	4
Dolomite, thin- to medium-bedded, light brownish-gray to light olive-gray, finely to medium-crystalline; contains scattered sand grains and thin stringers of sandy dolomite .....	5	7
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains thin sandy dolomite stringers and scattered sand grains .....	5	0
Dolomite, medium- to thick-bedded, light brownish-gray, finely to medium-crystalline; contains thin sandy dolomite stringers and scattered sand grains .....	4	10
Sandstone, thin-bedded, white to medium light gray, quartzitic, fine- to medium-grained; grains exhibit much secondary growth .....		8
Dolomite, medium- to thick-bedded, light olive-gray, finely to medium crystalline; contains sandy dolomite stringers less than 3 inches thick and scattered sand grains .....	5	2
Base of section at river level	281	9
H. Section of the St. Peter sandstone and Everton formation on the north side of the Buffalo River in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 16 N., R. 19 W., Newton County, Ark. Base of section 15 feet above river level.		
Carboniferous (Mississippian) rocks:		
Boone formation:		
St. Joe limestone member.		
Covered interval to top of hill. Contains float blocks of chert from the Boone formation and limestone from the St. Joe limestone member.		

	<u>Ft</u>	<u>in.</u>
Ordovician rocks:		
St. Peter sandstone:		
Sandstone, thick-bedded to massive, white, fine- to medium-grained; grains exhibit much secondary growth .....	4	3
Sandstone, medium- to thick-bedded, yellowish-gray, fine- to medium-grained; grains exhibit secondary growth .....	3	11
Covered interval.....	58	0
Sandstone, medium- to thick-bedded, yellowish-gray to white, fine- to medium-grained; grains exhibit secondary growth .....	6	9
	<u>72</u>	<u>11</u>

Everton formation:

  Jasper member:

Dolomite, thin- to medium-bedded, medium-gray to brownish-gray, slightly silty, finely to medium-crystalline.....	2	0
Sandstone, thin- to medium-bedded, brownish-gray, very dolomitic, fine- to medium-grained .....	1	0
Sandstone, thin- to medium-bedded, yellowish-gray, slightly limy, fine- to medium-grained; grains exhibit secondary growth .....	10	
Dolomite, medium- to thick-bedded, brownish-gray, very sandy, finely crystalline.....	3	3
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline.....	1	6
Sandstone, medium-bedded, yellowish-gray, dolomitic, slightly limy, fine- to medium-grained.....	6	
Dolomite, medium-bedded, brownish-gray, medium-crystalline .....	1	7
Sandstone, medium- to thick-bedded, yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth .....	2	8
Dolomite (weathers back and could not be adequately sampled), medium-bedded, greenish-gray, silty, finely crystalline .....	1	0
Dolomite, medium-bedded, brownish-gray, slightly silty, finely to medium-crystalline .....	2	3
Dolomite, thin- to medium-bedded, brownish-gray, medium-crystalline.....	1	6

Ordovician rocks —Continued

  Everton formation—Continued

    Jasper member —Continued

Dolomite, thin- to medium-bedded, light brownish-gray, very finely granular; contains scattered sand grains in the lower part .....	2	0
Sandstone, medium- to thick-bedded, yellowish-gray to white, limy, dolomitic, fine- to medium-grained .....	1	11
Dolomite, medium-bedded, dark-gray to brownish-gray, finely to medium-crystalline; contains scattered sand grains .....	10	
Limestone, thick-bedded, olive-gray, sandy, dense to finely crystalline; ostracods .....	1	2
Sandstone, medium-bedded, greenish-gray and yellowish-gray, limy, fine- to medium-grained; contains sandy limestone concretions 1 to 2 inches in diameter .....	1	1
Limestone, very thin to thin-bedded, yellowish-gray to olive-gray, sandy, finely crystalline.....	1	0
Limestone, very thin to thin-bedded, olive-gray, oolitic, dense to very finely granular.....	2	3
Dolomite, badly weathered, very thin to thin-bedded, pale-olive to grayish-olive, limy, silty, finely crystalline.....	1	6
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline .....	3	6
Dolomite, medium-bedded, light olive-gray to light brownish-gray, slightly limy, medium-crystalline.....	1	9
Dolomite, medium-bedded, light olive-gray to light brownish-gray, slightly limy, medium-crystalline; contains scattered sand grains .....	2	0
Dolomite, medium-bedded, grayish-orange pink to pale-olive, medium-crystalline; contains scattered sand grains .....	2	0
Limestone, medium-bedded, olive-gray, oolitic, dense to finely crystalline .....	6	
Dolomite, thick-bedded, light-gray to light brownish-gray, slightly limy, medium-crystalline .....	2	0
Sandstone, medium-bedded, yellowish-gray to white, limy, very fine to medium-grained; grains exhibit secondary growth.....	2	3

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Sandstone, medium-bedded, light brownish-gray, very dolomitic, fine- to medium- grained .....		6
Limestone, medium-bedded, medium-gray to light olive- gray, sandy, finely crystalline .....		6
Limestone, medium-bedded, medium-gray to light olive- gray, oolitic, dense to finely crystalline; ostracods .....	1	8
Sandstone, thick-bedded, yellowish-gray to white, very limy, fine- to medium- grained .....	2	9
Limestone, medium-bedded, me- dium-gray to olive-gray, oolitic, dense to finely crystalline ...	1	3
Sandstone, medium- to thick- bedded, yellowish-gray to white, limy, fine- to medium- grained .....	1	7
Sandstone, medium- to thick-bedded, yellowish-gray to brownish-gray, dolomitic, limy, fine- to medium- grained .....	1	6
Dolomite, thick-bedded, medium-gray to light olive- gray, limy, finely medium-crystalline; sandy in the upper few inches .....	1	1
Limestone, thin-bedded, olive- gray, oolitic, finely crystalline .....		3
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....		6
(Base of Jasper member)		
Sandstone, medium-bedded, yellowish-gray, dolomitic, fine- to medium- grained .....		6
Sandstone, medium-bedded, brownish-gray to white, dolomitic, fine- to medium- grained; grains exhibit second- ary growth .....	1	3
Dolomite, medium-bedded, dark brownish-gray, sandy, finely crystalline; ostracods .....	1	0
Dolomite, very thin to medium- bedded, dark brownish-gray, dense to finely crystalline ...	2	3
Dolomite, medium- to thick-bedded, brownish- gray, very sandy, finely crystalline .....	3	0
Sandstone, medium- to thick-bedded, white, dolo- mitic, slightly limy, fine- to medium-grained .....	1	2

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, thin-bedded, brownish-gray, sandy, finely crystalline .....		3
Sandstone, medium- to thick-bedded, light brownish- gray, dolomitic, fine- to medium-grained .....	1	7
Dolomite, medium-bedded, light brownish-gray, very sandy, finely crystalline .....	1	0
Dolomite, medium-bedded, medium-gray to brownish- gray, sandy, very finely granular .....	6	2
Dolomite, medium-bedded, dark brownish-gray, finely crystalline .....	1	0
Sandstone, thin-bedded, white, limy, dolomitic, fine- to medium-grained .....		4
Dolomite, medium-bedded, brownish-gray, very sandy, dense to finely crystalline .....	3	0
Dolomite, thin- to medium- bedded, medium-gray to brownish-gray, dense .....	1	4
Sandstone, medium-bedded, yellowish-gray, dolomitic, quartzitic, fine- to medium- grained; grains exhibit secondary growth .....		6
Dolomite, thick-bedded, brownish- gray, sandy, dense to very finely granular .....	2	4
Dolomite, very thin to thin- bedded, brownish-gray, dense to very finely granular .....		5
Sandstone, very thin to thin- bedded, white, limy, dolo- mitic, fine- to medium- grained .....		3
Dolomite, very thin to thin- bedded, brownish-gray, sandy, very finely granular .....		4
Dolomite, medium-bedded, brownish-gray, sandy, very finely granular .....	4	0
Dolomite, medium- to thick- bedded, brownish-gray, sandy, very finely granular; contains thin stringers of nonsandy dense dolomite ...	5	3
Dolomite, medium-bedded, brownish-gray, sandy, very finely granular .....	3	7
Sandstone, medium-bedded, white, fine- to medium- grained; grains exhibit secondary growth .....		8
Dolomite, medium-bedded, brownish-gray to medium- gray, dense to finely crystalline; contains scattered sand grains .....	1	10

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, medium-bedded, light brownish-gray, dolomitic, limy, fine- to medium-grained .....	10	
Dolomite, medium-bedded, brownish-gray to medium-gray, dense to finely crystalline; contains scattered sand grains .....	2	0
Sandstone, thin-bedded, white, limy, fine- to medium-grained; grains exhibit secondary growth .....	4	
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline; contains thin stringers of nonsandy very finely granular dolomite .....	4	11
Dolomite, medium-bedded, light brownish-gray, very sandy, very finely granular .....	1	2
Sandstone, medium-bedded, yellowish-gray, limy, dolomitic, fine- to medium-grained .....	1	7
Dolomite, medium-bedded, light brownish-gray, very sandy, very finely granular .....	2	0
Sandstone, medium-bedded, brownish-gray to yellowish-gray, dolomitic, fine- to medium-grained .....	1	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	6	
Sandstone, medium-bedded, brownish-gray to yellowish-gray, dolomitic, fine- to medium-grained .....	7	
Dolomite, thin- to medium-bedded, light brownish-gray, sandy, dense to finely crystalline .....	8	
Dolomite, thin- to medium-bedded, light brownish-gray, dense to finely crystalline; contains scattered sand grains .....	1	4
Dolomite, thin-bedded, light brownish-gray, dense to finely crystalline .....	4	
Dolomite, medium-bedded, brownish-gray to medium-gray, medium-crystalline .....	5	0
Dolomite, thin- to medium-bedded, brownish-gray to medium-gray, finely to medium-crystalline; contains scattered sand grains .....	4	4
Dolomite, medium-bedded, light brownish-gray to olive-gray, slightly silty, finely to medium-crystalline; contains scattered sand grains .....	4	1

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, medium-bedded, brownish-gray, limy, dolomitic, fine- to medium-grained .....	2	6
Dolomite, thick-bedded, medium-gray, finely crystalline .....	1	6
Sandstone, medium-bedded, light brownish-gray, dolomitic, fine- to medium-grained .....	3	4
Dolomite, medium-bedded, brownish-gray, finely crystalline .....	8	
Sandstone, medium-bedded, light brownish-gray, dolomitic, fine- to medium-grained .....	1	0
Sandstone, medium-bedded, light brownish-gray, very dolomitic, fine- to medium-grained; contains thin stringers of dolomite .....	4	0
Dolomite, medium-bedded, light brownish-gray, slightly limy, finely to medium-crystalline; contains pinkish-brown finely crystalline calcite .....	1	0
Dolomite, medium-bedded, brownish-gray, sandy, finely to medium-crystalline; contains thin dolomitic and limy sandstone stringers .....	1	6
Newton sandstone member:		
Sandstone, thin- to medium-bedded, yellowish-gray, very slightly limy, very fine to medium-grained; grains exhibit secondary growth .....	4	2
Sandstone, thin- to medium-bedded, yellowish-gray to white, limy, fine- to medium-grained; more limy at the base .....	4	9
(Base of Newton sandstone member)		
Limestone, medium-bedded, light olive-gray, sandy, finely crystalline .....	2	2
Limestone, medium-bedded, olive-gray, oolitic, dense to finely crystalline .....	2	1
Limestone, medium-bedded, light olive-gray, sandy, finely crystalline .....	8	
Sandstone, medium-bedded, yellowish-gray to light olive-gray, limy, fine- to medium-grained .....	3	0
Dolomite, medium-bedded, brownish-gray, sandy, finely to medium-crystalline .....	6	
Limestone, medium-bedded, medium-gray, dense to finely crystalline; contains scattered sand grains .....	11	

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, thin-bedded, yellowish-gray, limy, fine- to medium-grained .....	3	
Limestone, medium-bedded, medium-gray, finely crystalline; contains scattered sand grains .....	1	9
Limestone, medium-bedded, medium-gray to olive-gray, finely crystalline; contains scattered sand grains .....	1	0
Sandstone, medium-bedded, yellowish-gray, very limy, fine- to medium-grained .....	9	
Limestone, medium-bedded, medium-gray to olive-gray, finely crystalline; contains scattered sand grains .....	1	2
Sandstone, medium-bedded yellowish-gray, very limy, fine- to medium-grained .....	11	
Limestone, thin- to medium-bedded, olive-gray, oolitic, finely to medium crystalline .....	1	0
Limestone, thin-bedded, olive-gray, sandy, finely to medium crystalline .....	4	
Sandstone, thin- to medium-bedded, white, limy, fine- to medium-grained .....	6	
Limestone, thin- to medium-bedded, olive-gray, oolitic, finely crystalline; ostracods .....	1	9
Sandstone, thin- to medium-bedded, light-gray, limy, fine- to medium-grained .....	5	
Limestone, medium- to thick-bedded, oolitic, dense to finely crystalline; cryptozoon structures .....	2	7
Sandstone, medium-bedded, yellowish-gray to white, limy, fine- to medium-grained .....	1	10
Limestone, medium-bedded, olive-gray, sandy, slightly oolitic, finely crystalline .....	9	
Sandstone, medium- to thick-bedded, yellowish-gray, very limy, fine- to medium-grained .....	1	4
Limestone, medium-bedded, olive-gray, sandy, dense to finely crystalline .....	8	
Sandstone, medium- to thick-bedded, yellowish-gray, very limy, fine- to medium-grained .....	2	2
Sandstone, thick-bedded, light brownish-gray, very dolomitic, fine- to medium-grained; contains thin stringers of dolomite .....	1	10

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded brownish-gray, dense .....	9	
Dolomite, medium-bedded, brownish-gray, sandy, finely crystalline .....	2	0
Chert, medium-bedded, brownish-gray, oolitic, dense (porous where weathered ....	5	
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	5	
Limestone, medium-bedded, olive-gray, dense to finely crystalline; cryptozoon structures .....	1	11
Dolomite, medium-bedded, light brownish-gray, limy, sandy, finely crystalline ....	10	
Limestone, medium- to thick-bedded, medium-gray, dense to finely crystalline; cryptozoon structures .....	1	5
Dolomite, medium- to thick-bedded, brownish-gray, sandy, silty, limy, finely crystalline .....	2	0
Dolomite, thin-bedded, yellowish-gray to light brownish-gray, medium-crystalline .....	3	
Sandstone, medium-bedded, yellowish-gray, very dolomitic, fine- to medium-grained .....	3	0
Limestone, medium- to thick-bedded, medium-gray to olive-gray, oolitic, dense to finely crystalline; cryptozoon structures .....	3	0
Limestone, medium-bedded, olive-gray, oolitic, dense to finely crystalline .....	1	6
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....	6	
Limestone, medium-bedded, light olive-gray, sandy, finely crystalline .....	1	6
Limestone, very thin to medium-bedded, medium-gray, dense .....	1	1
Limestone, thin- to medium-bedded, yellowish-gray, very sandy, finely crystalline .....	10	
Limestone, thin- to medium-bedded, light olive-gray, dolomitic (especially in the lower 6 inches), finely crystalline .....	2	9
Sandstone, thin- to medium-bedded, light-gray to yellowish-gray, dolomitic, limy, fine- to medium-grained .....	1	0
Limestone, thin- to medium-bedded, olive-gray, oolitic, slightly dolomitic, dense to finely crystalline .....	1	7

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, thin- to medium-bedded, light-gray to white, very limy, fine- to medium-grained . . . . .	1	11
Limestone, thin-bedded, light olive-gray, very sandy, finely crystalline . . . . .		3
Sandstone, thin- to medium-bedded, light-gray, very limy, fine- to medium-grained . . . . .		8
Limestone, thin-bedded, light olive-gray, very sandy, finely crystalline . . . . .		4
Limestone, medium-bedded, olive-gray, dense to finely crystalline; cryptozoon structures . . . . .	2	11
Limestone, thin-bedded, light-gray, very sandy, finely crystalline; contains limestone granules . . . . .		2
Limestone, thin-bedded, olive-gray, dense to finely crystalline . . . . .		3
Limestone, thin- to medium-bedded, olive-gray, dense to finely crystalline; contains streaks of sandy dolomitic limestone . . . . .	4	6
Limestone, thin- to medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains thin sand stringers; cryptozoon structures in the upper 18 inches . . . . .	5	2
Limestone, platy to medium-bedded, light olive-gray, dense to finely crystalline; contains scattered sand grains and sandy limestone stringers . . . . .	4	9
Limestone, thin- to medium-bedded, olive-gray, oolitic, dense to finely crystalline . . . . .	4	4
Limestone, platy to thin-bedded, olive-gray, oolitic, slightly dolomitic, dense to finely crystalline . . . . .	4	2
Sandstone, thin-bedded, light-gray, slightly limy, quartzitic; grains exhibit secondary growth . . . . .		7
Limestone, thick-bedded, olive-gray to medium-gray, oolitic, dolomitic, dense to medium-crystalline . . . . .	1	5
Sandstone, thin-bedded, light brownish-gray to white, slightly dolomitic, quartzitic, fine- to medium-grained; grains exhibit much secondary growth . . . . .		8

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation — Continued		
Dolomite, medium-bedded, light brownish-gray, limy, fine- to medium-crystalline; contains scattered sand grains; cryptozoon structures . . . . .	3	0
Limestone, light olive-gray, slightly dolomitic, dense to finely crystalline; cryptozoon structures . . . . .		8
Dolomite, platy to very thin bedded, light brownish-gray, finely to medium-crystalline . . . . .	2	11
Dolomite, very thin to medium-bedded, medium light gray, finely to medium-crystalline; contains scattered sand grains . . . . .	3	7
Dolomite, medium- to thick-bedded, finely to medium-crystalline; contains scattered sand grains . . . . .	1	8
Sandstone, medium-bedded, medium light gray, very dolomitic, fine- to medium-grained . . . . .		6
Dolomite, medium- to thick-bedded, medium-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	2	6
Dolomite, medium- to thick-bedded, light brownish-gray, very sandy, finely crystalline; contains thin stringers of dolomitic sandstone . . . . .	1	5
Dolomite, platy to thin-bedded, medium-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	2	10
Sandstone, thin-bedded, light-gray to white, dolomitic, quartzitic, fine- to medium-grained; grains exhibit much secondary growth . . . . .		5
Dolomite, platy to thin-bedded, medium-gray, finely to medium-crystalline; contains scattered sand grains . . . . .		8
Dolomite, thin- to medium-bedded, light olive-gray, medium-crystalline; contains scattered sand grains . . . . .	4	1
Dolomite, thin-bedded, light-gray, very sandy, finely crystalline . . . . .		3
Sandstone, thin-bedded, yellowish-gray, quartzitic, slightly dolomitic, fine- to medium-grained; grains exhibit secondary growth; ostracods(?) fragments . . . . .	1	2
Dolomite, thin- to medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	4	3

Ordovician rocks —Continued		<u>Ft</u>	<u>in</u>
Everton formation —Continued			
Dolomite, very thin to medium-bedded, medium light gray, finely to medium-crystalline; cryptozoon(?) structures . . . . .	1	2	
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	1	8	
Sandstone, medium-bedded, light-gray, dolomitic, fine- to medium-grained; grains exhibit secondary growth . . . . .		6	
Sandstone, thin- to medium-bedded, light-gray, slightly dolomitic, fine- to medium-grained; grains exhibit secondary growth . . . . .	1	0	
Dolomite, thin- to medium-bedded, medium light gray, finely to medium-crystalline; contains scattered sand grains . . . . .		6	
Dolomite, thin- to medium-bedded, medium light gray, finely to medium-crystalline . . . . .	2	8	
Dolomite, thin- to medium-bedded, medium light gray, finely to medium-crystalline; contains scattered sand grains . . . . .		6	
Dolomite, thin- to medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	4	6	
Chert, thin-bedded, white, dense (tripolitic in part) . . . . .		3	
Dolomite, thin-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .		3	
Sandstone, thin- to medium-bedded, white to light-gray, quartzitic, slightly dolomitic, fine- to medium-grained; grains exhibit secondary growth . . . . .	1	6	
Dolomite, thin- to medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	3	9	
Sandstone, thin-bedded, light-gray to light brownish-gray, dolomitic, fine- to medium-grained; grains exhibit secondary growth . . . . .	1	1	
Dolomite, thin- to medium-bedded, brownish-gray, finely crystalline . . . . .	3	10	
Dolomite, very thin to medium-bedded, light brownish-gray, finely to medium-crystalline . . . . .	1	0	

Ordovician rocks —Continued		<u>Ft</u>	<u>in</u>
Everton formation —Continued			
Dolomite, very thin to medium-bedded, light brownish-gray, sandy, finely to medium-crystalline . . . . .	2	6	
Dolomite, very thin to medium-bedded, light brownish-gray, finely to medium-crystalline . . . . .		6	
Dolomite, very thin to medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .		6	
Dolomite, thin- to medium-bedded, light brownish-gray, finely to medium-crystalline . . . . .	1	9	
Chert, medium-bedded, yellowish-gray, dense . . . . .		6	
Dolomite, thin- to medium-bedded, light brownish-gray, finely to medium-crystalline . . . . .	1	9	
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains beds and stringers of light brownish-gray oolitic chert . . . . .	4	1	
Dolomite, thin-bedded, light brownish-gray, finely to medium-crystalline; contains yellowish-gray oolitic dense chert in the upper 1 inch and lower 6 inches . . . . .	3	7	
Dolomite, thin- to medium-bedded, light brownish-gray, medium-crystalline; contains yellowish-gray dense and white tripolitic chert lenses . . . . .	2	0	
Dolomite, thin- to medium-bedded, bedded, brownish-gray, finely to medium-crystalline . . . . .	1	11	
Dolomite, medium- to thick-bedded, brownish-gray, finely to medium-crystalline . . . . .	4	4	
Sandstone, medium-bedded, light brownish-gray, slightly dolomitic, quartzitic, fine- to medium-grained; grains exhibit secondary growth . . . . .	1	6	
Dolomite, medium-bedded, medium-gray, finely to medium-crystalline . . . . .	2	10	
Covered interval . . . . .	2	0	
Sandstone, medium-bedded, light brownish-gray to white, dolomitic, quartzitic, fine- to medium-grained; grains exhibit secondary growth . . . . .	6	6	
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline . . . . .	3	7	

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline.....	3	3
Dolomite, medium-bedded, brownish-gray, sandy, finely to medium-crystalline.....		6
Sandstone, thin-bedded; light brownish-gray, quartzitic, fine- to medium- grained.....		3
Dolomite, medium- bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains.....	2	2
Dolomite, medium- bedded, brownish-gray, sandy, finely to medium- crystalline.....		8
Dolomite, medium- bedded, brownish-gray, finely to medium-crystalline; con- tains scattered sand grains.....		8
Dolomite, thick-bedded, brownish-gray, finely to medium-crystalline; con- tains scattered sand grains.....		6
Dolomite, thick-bedded, brownish-gray, finely to medium-crystalline.....	3	9
Dolomite, thin- to medium- bedded, medium-gray to light brownish-gray, finely crystalline.....	2	6
Base of section 15 feet above river level.	<hr/>	<hr/>
	350	10

I. Section of the lower part of the St. Peter sandstone and the upper part of the Everton formation in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 16N., R., 19W., Newton County, Ark. The bottom of the section is at the base of a small waterfall at an approximate altitude of 1,000 feet.

Covered interval to top of hill. Represents most of the St. Peter sandstone interval and probably the Plattin limestone.

	<u>Ft</u>	<u>in</u>
Ordovician rocks:		
St. Peter sandstone (lower part only):		
Sandstone, thin- to medium- bedded, yellowish-gray, fine- to medium-grained.....	6	0
Everton formation (upper part only):		
Jasper member:		
Dolomite, medium-bedded, brownish- gray to olive-gray, silty (?), finely to medium-crystalline; contains scattered sand grains; upper 1 foot is slightly more sandy and silty.....	5	3

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Dolomite, medium-bedded, brownish-gray to dark- gray, medium-crystalline; contains scattered sand grains.....	5	0
Sandstone, medium-bedded, yellowish-gray to light brownish-gray, dolomitic, slightly silty and limy, fine- to medium-grained.....	1	1
Dolomite, thin-bedded, medium-gray to brownish- gray, medium- crystalline.....	2	10
Sandstone, thin-bedded, yellowish-gray, limy, fine- to medium-grained.....	2	7
Covered interval.....	1	8
Dolomite, thin- to medium- bedded, light olive-gray to light brownish-gray, finely to medium-crystalline; contains scattered sand grains.....	2	6
Dolomite, thin- to medium- bedded, light brownish-gray, very finely granular; con- tains scattered sand grains.....	1	2
Sandstone, thin-bedded, yellowish-gray to light brownish-gray, dolomitic, slightly limy, fine- to medium- grained.....		8
Sandstone, thick-bedded, yellowish-gray, limy, fine- to medium-grained; con- tains coarse white calcite crystals.....	1	10
Covered interval.....	1	0
Dolomite, medium- to thick-bedded, medium- gray to brownish-gray, finely to medium-crystalline; contains scattered sand grains.....	1	11
Dolomite, medium- bedded, light-gray to light brownish-gray, limy, sandy, medium-crystalline.....	1	0
Sandstone, medium-bedded, light-gray to yellowish-gray, limy, dolomitic, fine- to medium-grained.....	1	2
Dolomite, very thin bedded, yellowish-gray, limy, medium-crystalline.....		2
Sandstone, medium-bedded, yellowish-gray to light- gray, very limy, fine- to medium-grained.....	2	4
Limestone, thin-bedded, light olive-gray, oolitic, dense.....		11
Dolomite, thin-bedded, light- gray to light brownish-gray, limy, medium-crystalline...		3

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation (upper part only) —Con.		
Jasper formation —Continued		
Dolomite, thin-bedded, medium-gray to brownish- gray, finely crystalline; contains some white coarse calcite crystals . . . . .	1	2
Covered interval . . . . .		7
Dolomite, medium- to thick-bedded, medium-gray to brownish-gray, finely crystalline . . . . .	5	11
Limestone, thin-bedded, light olive-gray, dense to finely crystalline; con- tains scattered sand grains; ostracods . . . . .	1	3
Limestone, thick-bedded, light olive-gray, oolitic, dense to finely crystalline; ostracods . . . . .	1	9
Dolomite, medium-bedded, medium-gray, very limy, finely to medium-crystalline; contains scattered sand grains . . . . .		10
Dolomite, thin- to medium- bedded, light gray to light brownish-gray, limy, finely to medium-crystalline; con- tains scattered sand grains . . . . .	1	6
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline . . . . .	1	0
Dolomite, thin- to medium- bedded, light brownish- gray, finely to medium- crystalline; contains scattered sand grains . . . . .	1	1
Dolomite, medium-bedded, very light gray to yellowish- gray, very limy, finely to medium-crystalline . . . . .	1	7
Sandstone, medium-bedded, light-gray to light brownish- gray, limy, dolomitic, fine- to medium-grained . . . . .	2	7
Limestone, thin- to medium- bedded, light olive-gray, dense to finely crystalline; many ostracods. This bed pinches out in a short distance . . . . .	1	0
Limestone, thin- to medium- bedded, light olive-gray, dense to finely crystalline; many ostracods . . . . .	1	1
Sandstone, thin- to medium- bedded, very light gray to white, very limy, fine- to medium-grained . . . . .	2	8
Limestone, thin- to medium- bedded, medium-gray to olive-gray, oolitic, dense to finely crystalline . . . . .	1	7

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation (upper part only) —Con.		
Jasper formation —Continued		
Sandstone, thin- to medium- bedded, yellowish-gray, limy, fine-grained . . . . .	3	0
Limestone, discontinuous, thin-bedded, olive-gray, oolitic, dense to finely crystalline; contains scat- tered sand grains. . . . .		4
Sandstone, thin-bedded, yellowish-gray to white, limy, fine-grained; lower half of unit is quartzitic . . . . .	1	0
(Base of Jasper member)		
Dolomite, medium-bedded, light brownish-gray to medium- gray, very sandy, dense to finely crystalline; ostracods . . . . .	1	11
Dolomite, thin- to medium- bedded, medium-gray to brownish-gray, dense to finely crystalline; contains scattered sand grains . . . . .	1	0
Dolomite, thin- to medium- bedded, brownish-gray, sandy, dense to finely crystalline; ostracods . . . . .		8
Dolomite, thin- to medium- bedded, brownish-gray, dense to finely crystalline; contains scattered sand grains . . . . .		10
Dolomite, thin- to medium- bedded, medium-gray, dense to finely crystalline; con- tains scattered sand grains and sandy dolomite stringers . . . . .	1	5
Sandstone, thin- to medium- bedded, yellowish-gray to white (stained brown in spots), fine- to medium-grained; grains exhibit much secondary growth . . . . .		8
Bottom of section at base of small waterfall.		9
	69	9

J. Section of the St. Peter sandstone and Everton formation on the east side of the Buffalo River about  $\frac{1}{2}$  mile downstream from Mount Hersey in the SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 16 N., R. 19 W., Newton County, Ark. Base of section 65 feet above river level.

	<u>Ft</u>	<u>in</u>
Ordovician rocks:		
Plattin limestone:		
Covered interval. (The contact between the Plattin limestone and the St. Peter sandstone is present in this interval.)	21	

	<u>Ft</u>	<u>in.</u>
Ordovician rocks—Continued		
St. Peter sandstone:		
Sandstone, medium- to thick-bedded, light-gray and brownish-gray, medium- to coarse-grained; grains exhibit secondary growth .....	5	7
Sandstone, medium- to thick-bedded, white and gray banded, slightly limy, medium- and coarse-grained; grains exhibit secondary growth .....	5	0
Sandstone, medium-bedded, light-gray to white, limy, medium-grained; grains exhibit secondary growth; irregular basal surface-basal beds appear to fill hollows in underlying limestone.....	<u>3</u>	<u>4</u>
	<u>13</u>	<u>11</u>

Everton formation:

  Jasper member:

Limestone, medium-bedded, light-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	9	
Sandstone, thin-bedded, white, very limy, medium-grained .....	4	
Limestone, thin- to medium-bedded, light-gray and light pinkish-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	3	2
Sandstone, medium-bedded, white, very limy, medium- to fine-grained; basal part contains small flat limestone pebbles .....	9	
Limestone, light-gray, oolitic, dense to finely crystalline; contains scattered sand grains .....	4	
Limestone, light-gray to white, sandy, dense to finely crystalline .....	1	1
Sandstone, light-gray to white, very limy, fine- to medium-grained .....	2	
Covered interval .....	3	6
Limestone, medium-bedded, light-gray, dense to finely crystalline; contains small flat, greenish-gray silty and sandy limestone pebbles; pelecypod fragments and gastropods .....	2	4
Limestone, medium-bedded, light-gray, and light olive-gray, oolitic, dense to finely crystalline; upper 2 inches sandy and contains small flat oolitic limestone pebbles .....	10	
Covered interval .....	5	

	<u>Ft</u>	<u>in.</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Jasper member —Continued		
Limestone, medium-bedded, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains and greenish silty patches; pelecypod fragments, ostracods, and gastropods .....	2	2
Limestone, platy to thin-bedded, light olive-gray and light-gray, dense to finely crystalline; contains silty partings between the beds; sandy in the lower 2 inches .....	1	3
Sandstone, medium-bedded, very light gray to white, limy, fine-grained .....	1	3
Limestone, medium-bedded, light olive-gray and light-gray, oolitic, dense; contains scattered sand grains, greenish silty patches, and limonite; upper 3 inches is sandy, contains ostracods .....	1	0
Limestone, medium-bedded, light brownish-gray and light olive-gray, oolitic, finely crystalline; upper part contains scattered sand grains; lower part is sandy, contains ostracods .....	1	3
Sandstone, thin- to medium-bedded, very light gray to white, medium-grained; contains scattered coarse grains; grains exhibit secondary growth .....		6
Limestone, medium-bedded, light-gray to very light gray, sandy, oolitic, dense to finely crystalline; ostracods in upper 1 foot 2 inches; lower 7 inches contains only scattered sand grains .....	1	9
Sandstone, medium-bedded, very light gray to white, very limy, fine- to medium-grained .....	1	9
Limestone, thin-bedded, light-gray and light brownish-gray, sandy; grades downward into a limy sandstone .....	1	8
Limestone, medium-bedded, light bluish-gray, slightly oolitic, dense to finely granular; contains scattered sand grains .....	2	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained .....		8
Limestone, medium-bedded, medium light gray to very light gray, oolitic, dense to medium-crystalline; contains greenish-gray silt partings and limonite; ostracods .....	2	1

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation—Continued		
Jasper member —Continued		
Limestone, medium- to thick-bedded, light brownish-gray to very light gray, oolitic, dense to finely crystalline; contains finely to medium-crystalline calcite; ostracods .....	3	4
Limestone, medium-bedded, medium-gray to light-gray, light olive-gray, oolitic, dense to finely crystalline; contains scattered sand grains; ostracods.....	3	0
Limestone, medium-bedded, light-gray to very light gray, finely crystalline; contains scattered sand grains and stringers of sandy limestone; ostracods .....	4	0
Limestone, medium-bedded, light-gray and light brownish-gray, oolitic, dense to finely crystalline; contains scattered sand grains.....	2	5
Sandstone, thin-bedded, light-gray, medium-grained; grains exhibit secondary growth.....	2	3
Limestone, medium-bedded, light brownish-gray and olive-gray, oolitic, finely to medium-crystalline; contains scattered sand grains; ostracods .....	2	0
Sandstone, medium-bedded, yellowish-gray, limy, fine- to medium-grained; lime cement increases upward .....	2	9
Limestone, medium-bedded, very light gray to yellowish-gray, oolitic, finely to medium-crystalline; ostracods .....		11
Sandstone, thick-bedded, yellowish-gray, very limy, fine- to medium-grained .....	3	3
(Base of Jasper member)		
Dolomite, medium-bedded, gray, dense to finely crystalline; very sandy in upper 1 inch and lower 3 inches. (This bed pinches out 150 feet to the west.) ....	1	5
Sandstone, thin- to medium-bedded, light-gray, slightly limy, quartzitic, medium-grained; grains exhibit secondary growth.....	1	9
Sandstone, medium-bedded, light-gray and grayish-brown, dolomitic, fine- to medium-grained; contains stringers of gray dense dolomite .....	5	4
Sandstone, medium-bedded, light brownish-gray, fine- to medium-grained .....		6

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Sandstone, medium-bedded, light brownish-gray, dolomitic, fine- to medium-grained.....	1	10
Dolomite, medium-bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains .....		7
Sandstone, medium-bedded, light-gray to brownish-gray, dolomitic, medium-grained .....	3	2
Dolomite, medium-bedded, light-gray and grayish-brown, sandy, finely crystalline; sand content increases downward .....	1	10
Sandstone, medium-bedded, gray-brown, dolomitic, fine- to medium-grained .....	1	11
Dolomite, medium-bedded, gray-brown, sandy, dense to finely crystalline.....		6
Dolomite, medium-bedded, gray-brown, dense to finely crystalline; contains white calcite crystals .....		11
Sandstone, medium-bedded, very light gray to white, limy, medium-grained .....		10
Dolomite, medium-bedded, dark brownish-gray, finely to medium-crystalline; contains scattered sand grains.....	1	1
Sandstone, medium-bedded, very light gray, fine- to medium-grained; secondary growth .....		7
Sandstone, medium-bedded, brownish-gray, dolomitic, medium-grained .....	2	7
Dolomite, medium-bedded, brownish-gray, dense to finely crystalline; contains coarse calcite crystals.....		11
Dolomite, medium-bedded, light brownish-gray, sandy, finely crystalline; contains stringers of very light gray to white limy sandstone and brownish-gray dense dolomite .....	5	2
Dolomite, medium-bedded, light brownish-gray, limy, finely to medium-crystalline .....	1	6
Dolomite, medium-bedded, brownish-gray, sandy, dense to finely crystalline; contains stringers of dense dolomite and medium-grained sandstone .....	4	3

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation—Continued		
Dolomite, medium-bedded, light brownish-gray to brownish-gray, sandy, dense to finely crystalline; contains stringers of nonsandy dolomite with coarsely crystalline calcite .....	5	0
Dolomite, thin- to medium-bedded, light brownish-gray to pale-brown, very sandy, dense to finely crystalline .....	2	6
Dolomite, thin- to medium-bedded, brownish-black, finely to medium-crystalline; contains scattered sand grains .....	1	1
Sandstone, thin-bedded, light-gray to yellowish-gray, limy, fine- to medium-grained; grains exhibit secondary growth .....		6
Dolomite, thin- to medium-bedded, light brownish-gray to pale-brown, very sandy, dense to finely crystalline .....	1	0
Dolomite, thin- to medium-bedded, light olive-gray, sandy, finely crystalline; contains stringers of nonsandy dolomite .....	2	11
Sandstone, thin-bedded, white, limy, fine- to medium-grained; grains exhibit secondary growth .....		3
Dolomite, thin- to medium-bedded, medium-gray to brownish-gray, sandy, finely crystalline; sand content decreases downward .....	1	11
Sandstone, medium-bedded, yellowish-gray to white, dolomitic, medium-grained; grains exhibit secondary growth .....	2	0
Sandstone, medium-bedded, light brownish-gray, dolomitic, medium-grained .....	3	5
Dolomite, thin-bedded, light-gray, dense to finely crystalline; contains coarse calcite crystals ..		5
Dolomite, thin-bedded, light-gray, sandy, dense to finely crystalline; sand content decreases downward .....	1	4
Dolomite, medium-bedded, light-gray to gray, very finely granular to finely crystalline; contains medium-crystalline calcite .....	5	7
Dolomite, medium-bedded, light-gray and light olive-gray, very finely granular to finely crystalline; contains coarsely crystalline calcite .....	4	10

	<u>Ft</u>	<u>in</u>
Ordovician rocks—Continued		
Everton formation —Continued		
Dolomite, medium-bedded, light brownish-gray, finely crystalline; contains coarse calcite crystals .....	3	3
Dolomite, medium-bedded, very dark gray, dense .....	1	0
Dolomite, medium-bedded, dark-gray to gray, sandy, finely crystalline dolomite; contains scattered sand grains and thin sandy dolomite stringers .....		6
Sandstone, medium-bedded, light brownish-gray, dolomitic, medium-grained .....	1	3
Sandstone, medium-bedded, very light gray, limy, fine- to medium-grained; grains exhibit secondary growth .....	2	0
Dolomite, medium-bedded, brownish-gray, finely crystalline; contains coarse calcite crystals .....		8
Sandstone, medium-bedded, light-gray, dolomitic, medium-grained; grains exhibit secondary growth .....	1	0
Sandstone, medium-bedded, light-gray to very light gray, limy, fine- to medium-grained; grains exhibit secondary growth .....	2	0
Sandstone, medium-bedded, light-gray to very light gray, dolomitic, fine- to medium-grained .....	3	0
Sandstone, medium-bedded, very light gray to light-gray, dolomitic, slightly limy, fine- to medium-grained .....	4	6
Newton sandstone member:		
Sandstone, medium-bedded, very light gray to white, limy, slightly dolomitic; fine- to medium-grained; grains exhibit secondary growth .....	3	11
Sandstone, medium-bedded, very light gray to white, slightly limy, fine- to medium-grained; grains exhibit secondary growth .....	4	9
(Base of Newton sandstone member)		
Dolomite, medium-bedded, light brownish-gray, very sandy, finely granular to finely crystalline .....	2	6
Dolomite, medium-bedded, light-gray and light brownish-gray, very sandy, finely to medium crystalline .....	2	3
Dolomite, medium-bedded, brownish-gray, finely granular to finely crystalline .....		6

	<u>Ft</u>	<u>in</u>
Ordovician rocks—Continued		
Everton formation—Continued		
Sandstone, medium-bedded, light-gray to white, medium-grained; contains calcite crystals . . . . .	2	3
Dolomite, medium-bedded, medium light gray, sandy, finely to medium-crystalline; contains calcite crystals . . . . .	3	7
Dolomite, medium-bedded, medium light gray, limy, finely to medium-crystalline . . . . .	1	0
Dolomite, medium-bedded, light-gray to brownish-gray, sandy, limy, finely to medium-crystalline . . . . .	5	0
Dolomite, medium-bedded, light-gray, slightly limy, finely to medium-crystalline; contains sandy dolomite beds as much as 1 foot thick . . . . .	5	0
Dolomite, medium- to thick-bedded, light-gray to gray, finely to medium-crystalline; contains sandy dolomite beds as much as 1 foot thick . . . . .	5	0
Dolomite, medium-bedded, light-gray to light olive-gray, limy, finely to medium-crystalline; contains a sandy dolomite bed 1 foot thick slightly above the middle . . . . .	4	0
Dolomite, medium-bedded, light brownish-gray to gray, sandy, finely to medium-crystalline; nonsandy in upper 1 foot . . . . .	4	5
Dolomite, medium-bedded, light-gray to light brownish-gray, sandy, finely to medium-crystalline . . . . .	5	0
Dolomite, thin- to medium-bedded, light-gray and light brownish-gray, sandy, finely to medium-crystalline; nonsandy in lower 1 foot . . . . .	4	7
Dolomite, medium-bedded, light-gray and light brownish-gray, very sandy in part, finely to medium-crystalline . . . . .	5	0
Sandstone, medium- to thick-bedded, light-gray to light brownish-gray, dolomitic, slightly limy, medium-grained . . . . .	2	8
Dolomite, thin-bedded, light brownish-gray, finely to medium-crystalline . . . . .	4	

	<u>Ft</u>	<u>in</u>
Ordovician rocks—Continued		
Everton formation—Continued		
Sandstone, medium- to thick-bedded, light-gray to light brownish-gray, dolomitic, slightly limy, medium-grained . . . . .	2	0
Dolomite, very thin to medium-bedded, light-gray to brownish-gray, sandy, finely to medium-crystalline; sand content increases upward . . . . .	3	8
Dolomite, thin- to medium-bedded, light-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	5	0
Dolomite, medium-bedded, light-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	15	1
Sandstone, very thin bedded, light-gray to light olive-gray, dolomitic, fine- to medium-grained . . . . .		3
Dolomite, medium-bedded, light-gray to light olive-gray, finely to medium-crystalline; contains scattered sand grains, wavy bedding; cryptozoon(?) structures . . . . .	4	7
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains a silty bed 18 inches from top . . . . .	4	8
Dolomite, very thin to medium-bedded, brownish-gray, finely to medium-crystalline . . . . .	2	10
Sandstone, very thin to medium-bedded, brownish-gray, dolomitic, medium-grained . . . . .	1	2
Dolomite, very thin to medium-bedded, brownish-gray, finely to medium-crystalline; contains scattered sand grains . . . . .	1	0
Dolomite, medium-bedded, light olive-gray, finely to medium-crystalline . . . . .	2	10
Dolomite, medium-bedded, light olive-gray, very sandy, finely to medium-crystalline . . . . .	1	2
Dolomite, thin-bedded, brownish-gray, finely to medium-crystalline; sandy in lower 6 inches . . . . .	2	3
Dolomite, medium-bedded, light olive-gray, finely to medium-crystalline . . . . .	3	8
Dolomite, medium-bedded, light olive-gray, finely to medium-crystalline . . . . .	1	3

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, very light gray, very sandy, finely to medium-crystalline .....	1	0
Dolomite, medium-bedded, light olive-gray, finely to medium-crystalline .....	2	9
Dolomite, medium-bedded, medium-gray to light-gray, finely to medium-crystalline .....	1	0
Dolomite, medium-bedded, medium-gray to light-gray, sandy, finely to medium-crystalline .....	1	0
Dolomite, medium-bedded, medium-gray to light-gray, finely to medium-crystalline .....	3	0
Sandstone, medium-bedded, light-gray to white, dolomitic, fine- to medium-grained; upper 3 inches is sandy dolomite .....	3	6
Dolomite, medium-bedded, light-gray, finely to medium-crystalline; contains scattered sand grains .....	1	9
Dolomite, medium-bedded, light-gray to light olive-gray, finely to medium-crystalline; contains scattered sand grains .....	2	0
Sandstone, medium-bedded, very light gray to white, dolomitic, medium-grained .....	1	0
Dolomite, medium-bedded, light-gray to light olive-gray, finely to medium-crystalline; contains scattered sand grains .....	2	0
Sandstone, medium-bedded, light-gray to white, dolomitic, quartzitic, fine- to medium-grained; contains thin dolomite stringers .....	2	1
Dolomite, medium-bedded, light olive-gray, finely to medium-crystalline; contains scattered sand grains .....	1	4
Sandstone, medium-bedded, light-gray to white, dolomitic, quartzitic, fine- to medium-grained .....	2	0
Dolomite, medium-bedded, brownish-gray to light brownish-gray, sandy, finely to medium-crystalline; sand content increases upward .....	5	0
Sandstone, medium-bedded, brownish-gray to white, dolomitic, fine- to medium-grained .....	1	8

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, medium-bedded, light brownish-gray to brownish-gray, finely crystalline .....	1	6
Dolomite, medium-bedded, light brownish-gray to grayish-brown, sandy, finely crystalline; becomes increasingly sandy downward .....	3	4
Sandstone, very thin bedded, very light gray to white, limy, fine- to medium-grained .....		6
Dolomite, medium-bedded, light brownish-gray to grayish-brown, finely crystalline; contains scattered sand grains .....	1	2
Dolomite, medium-bedded, light brownish-gray to dark brownish-gray, finely crystalline; contains a 2-inch dolomitic sandstone stringer near the top .....	5	0
Dolomite, medium-bedded, light-gray to white, sandy, finely to medium-crystalline; sand content increases downward .....	1	0
Sandstone, medium-bedded, light-gray to white, quartzitic, fine- to medium-grained .....		6
Dolomite, medium-bedded, light brownish-gray, finely to medium-crystalline; contains scattered sand .....	4	3
Dolomite, medium-bedded, brownish-gray to light olive-gray, finely to medium-crystalline .....	5	0
Dolomite, medium-bedded, medium-gray, finely to medium crystalline .....	5	0
Dolomite, medium-bedded, brownish-gray to light brownish-gray, finely to medium-crystalline; lower 4 inches sandy to very sandy .....	5	0
Sandstone, medium-bedded, very light gray to white, fine- to medium-grained; lower 2 inches is dolomitic .....	5	0
Dolomite, medium- to thick-bedded, medium dark gray to brownish-gray, finely granular, finely to medium-crystalline .....	4	6
Sandstone, thin- to medium-bedded, white, dolomitic, medium-grained .....	2	4

	<u>Ft</u>	<u>in</u>
Ordovician rocks—Continued		
Everton formation—Continued		
Dolomite, very thin to thin-bedded, light olive-gray to light-gray, finely granular to finely crystalline.....	2	7
Dolomite, medium-bedded, dark-gray to brownish-gray, finely granular to finely crystalline.....	4	1
Dolomite, medium-bedded, medium dark gray to brownish-gray, very finely granular to finely crystalline.....	5	0
Dolomite, medium-bedded, medium-gray to brownish-gray, sandy, finely to medium-crystalline.....	1	8
Dolomite, medium-bedded, medium-gray to brownish-gray, finely to medium-crystalline.....	3	8
Covered interval.....	6	6
Dolomite, platy, light-gray to light brownish-gray, finely granular to finely crystalline.....	1	5
Sandstone, platy to thin-bedded, white, dolomitic, medium-grained.....		6
Dolomite, platy to medium-bedded, light-gray to light brownish-gray, sandy, finely granular to finely crystalline.....	1	3
Dolomite, medium- to thick-bedded, medium- to dark-gray, very finely granular to finely crystalline; 6-inch sandy dolomite bed near middle of unit.....	4	1
Dolomite, medium- to thick-bedded, brownish-gray, finely to medium-crystalline.....	5	0

	<u>Ft</u>	<u>in</u>
Ordovician rocks —Continued		
Everton formation —Continued		
Dolomite, thin- to medium-bedded, medium-gray to light olive-gray, sandy, finely granular to finely crystalline.....	4	0
Sandstone, medium-bedded, light-gray to yellowish-gray, dolomitic, fine- to medium-grained.....		8
Dolomite, thin- to medium-bedded, light-gray and light brownish-gray, very finely granular to finely crystalline.....	3	2
Dolomite, medium- to thick-bedded, light-gray to brownish-gray, very finely granular to finely crystalline; sandy in lower 18 inches.....	4	0
Dolomite, medium-bedded, light-gray and light brownish-gray, finely to medium-crystalline; sandy in lower 18 inches.....	5	0
Sandstone, medium-bedded, white, quartzitic, fine- to medium-grained; dolomitic in the upper 4 inches.....		10
Dolomite, medium-bedded, light-gray (orange-mottled), sandy, dense to finely crystalline; sand content decreases upward.....	4	7
Dolomite, medium- to thick-bedded, orange-gray mottled light-gray and light olive-gray, very finely granular to finely crystalline.....	3	2
Dolomite, medium- to thick-bedded, light-gray to light olive-gray, dense to finely crystalline.....	5	0
Base of section 65 feet above river level.		0
	398	0

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