

County... PUTNAM
T... 16 N R... 5 W
Sec... SE NE SW 8
Other Survey.....

Locality 39

Quarry or Pit... ☒ Core..... Dim..... Other....
Name.. Russellville Section
Former Names.....
.....
Operator.....
Former Operators.....

POSTAGE

INDUSTRIAL MINERALS SECTION
INDIANA GEOLOGICAL SURVEY
DEPARTMENT OF NATURAL RESOURCES
611 NORTH WALNUT GROVE
BLOOMINGTON, INDIANA, 47401

MEMORANDUM REPORTS BY:

Name

Date

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REMARKS

RUSSELLVILLE SECTION

Locality 39

The quarry of the Russellville Stone Company is located in adjacent parts of the NW $\frac{1}{4}$ SE $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 16 N., R. 5 W., 1 mile south of Russellville, in Putnam County. The measured section given below was obtained from the SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8. The top of the measured section is approximately 793 feet above sea level.

Stratigraphic section measured in the Russellville quarry

	Thin Section	Feet
Blue River Group:		
St. Louis Limestone:		
13. Crystal-calcilutite: Grayish-brown, granular in appearance, medium-bedded, pyritic		2.1
12. Crystal-calcilutite: Blue-gray, granular in appearance, irregularly bedded, somewhat color banded, pyritic.		2.3
11. Crystal-calcilutite: Gray, weathered tan, has a granular appearance and is fine-grained fossil-arenaceous, thick-bedded, dense. Thin, irregular bands of chert nodules are found 0.6-and 1.0-foot above base		2.7
10. Crystal-calcilutite: Gray, nearly lithographic in texture, dense, thin-bedded. Contains shale partings		1.7
9. Crystal-calcilutite: Tannish-gray, has a granular appearance and is fossil-arenaceous, thick-bedded, dense, and fractured. Faintly banded by laminations composed of arenaceous fossils and a few quartz grains.		2.1
8. Crystal-calcilutite: Gray to light-gray, has a granular appearance and is medium-grained fossil-arenaceous, medium-bedded, dense. Contains arenaceous quartz grains, pebbles of limestone and possibly quartz; quartz is subhedral to anhedral	S54-16	1.9
7. Crystal-calcilutite: Gray granular to lithographic in texture, banded, locally brecciated, argillaceous. A few thin shaly partings are found in the upper part	S54-15	2.3

	<u>Thin Section</u>	<u>Feet</u>
6. Crystal-dololomite: Mottled light- and dark-gray, very fine-grained granular texture, contains arenaceous grains of rounded quartz.	S54-14	<u>3.2</u>
Thickness of exposed St. Louis Limestone		17.4
Sanders Group:		
Salem Limestone:		
5. Calcareous argillite: Gray to tannish-gray, very fine-grained, massive-bedded, dense. Pods or small nodules of silicified fossil-arenite occur locally and low in unit.	S54-13	6.6
4. Calcareous argillite: Dark-gray to tannish-gray, fine-grained, slightly coarser near top, dense, pyritic. Some silicification of arenaceous fossils has taken place. Thin, black fissile argillite partings are between the thin beds	S54-17	3.4
3. Calcareous argillite: Black, fissile.		0.2
2. Calcareous argillite: Dark-gray, medium-grained, dense. Some arenaceous fossils are silicified. A black, fissile argillite, similar to unit 3 above, is at the base. Rock of unit adjacent to both argillites is shaly crystal-calclite.	S54-37	<u>3.2</u>
Total thickness of Salem Limestone		13.4
Harrodsburg Limestone:		
1. Calcareous argillite: Gray to dark-gray, fine- to medium-grained, dense. The thin beds of this unit contain small silicified grains and are separated by black, fissile shaly partings	S54-39	<u>8.0</u>
Total thickness of measured section.		38.8

Russellville Section

Locality 39

The quarry of the Russellville Stone Company is located in adjacent parts of the NW¼SE¼ and NE¼SW¼ sec. 8, T. 16 N., R. 5 W., 1 mile south of Russellville, in Putnam County. The measured section given below was obtained from the SE¼NE¼SW¼ sec. 8. The top of the measured section is approximately 793 feet above sea level.

Unit	Description	Thick- ness	Sample
	Blue River Group:		
	St. Louis Limestone:		
13	Crystal-calcilutite: Grayish-brown, granular in appearance, medium-bedded, pyritic	2.1	
12	Crystal-calcilutite: Blue-gray, granular in appearance, irregularly bedded, somewhat color banded, pyritic	2.3	
11	Crystal-calcilutite: Gray, weathered tan, has a granular appearance and is fine-grained fossil-arenaceous, thick-bedded, dense. Thin, irregular bands of chert nodules are found 0.6-and 1.0-foot above base	2.7	
10	Crystal-calcilutite: Gray, nearly lithographic in texture, dense, thin-bedded. Contains shale partings	1.7	
9	Crystal-calcilutite: Tannish-gray, has a granular appearance and is fossil-arenaceous, thick-bedded, dense, and fractured. Faintly banded by laminations composed of arenaceous fossils and a few quartz grains	2.1	
8	Crystal-calcilutite: Gray to light-gray, has a granular appearance and is medium-grained fossil-arenaceous, medium-bedded, dense. Contains arenaceous quartz grains, pebbles of limestone and possibly quartz; quartz is subhedral to anhedral	1.9	S54-0016
7	Crystal-calcilutite: Gray granular to lithographic in texture, banded, locally brecciated, argillaceous. A few thin shaly partings are found in the upper part	2.3	S54-0015
6	Crystal-dololutite: Mottled light- and dark-gray, very fine-grained granular texture, contains arenaceous grains of rounded quartz	3.2	S54-0014
	Thickness of exposed St. Louis Limestone	17.4	
	Sanders Group:		
	Salem Limestone:		
5	Calcareous argillutite: Gray to tannish-gray, very fine-grained, massive-bedded, dense. Pods or small nodules of silicified fossil-arenite occur locally and low in unit	6.6	S54-0013
4	Calcareous argillutite: Dark-gray to tannish-gray, fine-grained, slightly coarser near top, dense, pyritic. Some silicification of arenaceous fossils has taken place. Thin, black fissile argillutite partings are between the thin beds	3.4	S54-0017
3	Calcareous argillutite: Black, fissile	0.2	

2	Calcarenite: Dark-gray, medium-grained, dense. Some arenaceous fossils are silicified. A black, fissile argillutite, similar to unit 3 above, is at the base. Rock of unit adjacent to both argillutites is shaly crystal-calculutite.	3.2	S54-0037
	Total thickness of Salem Limestone	13.4	
	Harrodsburg Limestone:		
1	Calcarenite: Gray to dark-gray, fine- to medium-grained, dense. The thin beds of this unit contain small silicified grains and are separated by black, fissile shaly partings	8.0	S54-0039
	Total thickness of measured section	38.8	