

County . . . PULASKI
T . . . 29 N . . . R . . . 4 W
Sec . . . NE NW SW . . . 16
Other Survey

Quarry or Pit... X ...Core Dim Other
Name ... Survey Drill Hole #318
Former Names
.....
Operator ... Western Materials Company
Former Operators

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

MEMORANDUM REPORTS BY:	
Name	Date
1 Gary Yoder & Robert Shaver	July 17, 1982
2 Nelson Shaffer	Jan. 15, 1986
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REMARKS

Survey Drill Hole 318
 1667' FSL x 1038' FWL SW¼ sec. 16, T. 29 N., R. 4 W.
 Pulaski County, Indiana
 Elevation 579 feet (floor of quarry)
 drilling completed June 17, 1982
 Core described by Gary Yoder and Robert Shaver

Unit	Description	Depth		Thick- ness	Sample
	Silurian System,				
	Wabash and upper Pleasant Mills Formations, reef facies, 353 ft.				
1	No samples	0.0	20.0		
2	Dolomite, light-gray to white, slightly tan-stained (in part), medium- to coarse- grained; has abundant vuggy and intercrystalline and lesser moldic porosity; is highly weathered; is highly fractured at base	20.0	22.5	2.5	CA86-0001
3.1	Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings	22.5	32.5	37.0	CA86-0002
3.2	Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings	42.5	42.5		CA86-0003
3.3	Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings	42.5	52.5		CA86-0004
3.4	Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings	52.5	59.5		CA86-0005
4	Dolomite, light-gray to slightly blue gray, less mottled than above, medium- to coarse- grained; very vuggy, abundant intergranular porosity; has abundant crinoid columnals and favositid debris, rare Fletcheria and possible brachiopod debris	59.5	10.5		CA86-0006
5.1	Dolomite, mottled light-gray, to blue-gray to slightly tan-gray, predominately medium-grained with lesser amounts of fine- and coarse-grained; has very abundant crinoid columnals, rare Fletcheria and brachiopod debris; vugs with palisade-cement linings; grades into unit below	70.0	80.0	27.0	CA86-0007

5.2	Dolomite, mottled light-gray, to blue-gray to slightly tan-gray, predominately medium-grained with lesser amounts of fine- and coarse-grained; has very abundant crinoid columnals, rare Fletcheria and brachiopod debris; vugs with palisade-cement linings; grades into unit below	80.0	90.0		CA86-0008
5.3	Dolomite, mottled light-gray, to blue-gray to slightly tan-gray, predominately medium-grained with lesser amounts of fine- and coarse-grained; has very abundant crinoid columnals, rare Fletcheria and brachiopod debris; vugs with palisade-cement linings; grades into unit below	90.0	97.0		CA86-0009
6.1	Dolomite, as above becoming much lighter in color; mottled (in part); has abundant Fletcheria debris, rare Arachnophylum debris	97.0	104.0	12.5	CA86-0010
6.2	Dolomite, as above becoming much lighter in color; mottled (in part); has abundant Fletcheria debris, rare Arachnophylum debris	104.0	109.5		CA86-0011
7.1	Dolomite, light-gray medium- to coarse-grained, alternating in bands with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris	109.5	119.5	35.5	CA86-0012
7.2	Dolomite, light-gray medium- to coarse-grained, alternating in bands with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris	119.5	129.5		CA86-0013
7.3	Dolomite, light-gray medium- to coarse-grained, alternating in bands with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris	129.5	139.5		CA86-0014
7.34	Dolomite, light-gray medium- to coarse-grained, alternating in bands with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris	139.5	145.0		CA86-0015
8.1	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	145.0	155.0	65.0	CA86-0016
8.2	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	155.0	165.0		CA86-0017
8.3	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	165.0	175.0		CA86-0018
8.4	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	175.0	185.0		CA86-0019

8.5	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	185.0	195.0		CA86-0020
8.6	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	195.0	205.0		CA86-0021
8.7	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	205.0	210.0		CA86-0022
9.1	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some Halysites debris	210.0	220.0	58.0	CA86-0023
9.2	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some Halysites debris	220.0	230.0		CA86-0024
9.3	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some Halysites debris	230.0	240.0		CA86-0025
9.4	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some Halysites debris	240.0	250.0		CA86-0026
9.5	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some Halysites debris	250.0	260.0		CA86-0027
9.6	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some Halysites debris	260.0	268.0		CA86-0028
10.1	Dolomite, as above, with vugs grading into "stromatactis" like structures; increasing amounts of finer grained blue-gray dolomite with depth; has crinoid debris becoming prominent near base	268.0	278.0	25.0	CA86-0029
10.2	Dolomite, as above, with vugs grading into "stromatactis" like structures; increasing amounts of finer grained blue-gray dolomite with depth; has crinoid debris becoming prominent near base	278.0	288.0		CA86-0030

10.3	Dolomite, as above, with vugs grading into "stromatactis" like structures; increasing amounts of finer grained blue-gray dolomite with depth; has crinoid debris becoming prominent near base	288.0	293.0		CA86-0031
11.1	Dolomite, medium- to dark-gray to blue-gray, medium- to coarse-grained; rock composed primarily of crinoid columnals; stylolitic; has abundant moldic, vuggy, and intercrystalline porosity	293.0	303.0	30.0	CA86-0032
11.2	Dolomite, medium- to dark-gray to blue-gray, medium- to coarse-grained; rock composed primarily of crinoid columnals; stylolitic; has abundant moldic, vuggy, and intercrystalline porosity	303.0	313.0		CA86-0033
11.3	Dolomite, medium- to dark-gray to blue-gray, medium- to coarse-grained; rock composed primarily of crinoid columnals; stylolitic; has abundant moldic, vuggy, and intercrystalline porosity	313.0	323.0		CA86-0034
	Pleasant Mills Formation, nonreef facies, (Salina Group) 26 ft:				
12	Dolomite, light-gray to medium-gray, medium-grained; has abundant green shale laminations; has slight amount vuggy porosity; retains some of the bioclastic texture of above unit; probable Waldron equivalent	323.0	328.4	5.4	CA86-0035
13	Dolomite, very light-gray to light-gray, with dark-gray mottling, medium-grained; has common intercrystalline and vuggy porosity; has slight amount shaly material on fracture surfaces	328.4	329.9	1.5	CA86-0036
14	Dolomite, light- to medium-gray, medium-grained; abundant crinoid debris; has abundant intercrystalline, vuggy, and moldic porosity; reef facies of Limberlost dolomite Member	329.9	332.1	2.2	CA86-0037
15.1	Dolomite, light-gray to tan-gray to brown-gray, with dark-gray mottling, medium-grained; with irregularly spaced shaly laminations and horsetail structures; has abundant crinoid and brachiopod debris; occasional stylolites; becomes lighter, less mottled with depth; abundant intercrystalline and vuggy porosity; grades into unit below; nonreef Limberlost Dolomite Member	332.1	342.1	16.9	CA86-0038
15.2	Dolomite, light-gray to tan-gray to brown-gray, with dark-gray mottling, medium-grained; with irregularly spaced shaly laminations and horsetail structures; has abundant crinoid and brachiopod debris; occasional stylolites; becomes lighter, less mottled with depth; abundant intercrystalline and vuggy porosity; grades into unit below; nonreef Limberlost Dolomite Member	342.1	349.0		CA86-0039
	Salamonie Dolomite, 99.8 ft:				
16.1	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	349.0	359.0	62.2	CA86-0040

16.2	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	359.0	369.0		CA86-0041
16.3	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	369.0	379.0		CA86-0042
16.4	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	379.0	389.0		CA86-0043
16.5	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	389.0	399.0		CA86-0044
16.6	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	399.0	409.0		CA86-0045
16.7	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	409.0	411.2		CA86-0046
17	Dolomite, clear-white to light-gray with distinct darker gray mottling, fine- to medium-grained; with abundant crinoid columnals; has common highly weathered chert nodules which appear to replace fossil material; slightly calcareous; prominent saw tooth stylolites, occasional clay seams	411.2	420.2	9.0	CA86-0047
18.1	Dolomite, light-gray to clear-white, fine- to medium-grained; calcareous to very calcareous with coarse-grained calcite crystals; grading in part into generally medium grained limestone; common crinoid fragments; prominent stylolites with clay concentrations; trace pyrite; porous to nonporous; slightly argillaceous at base	420.2	430.2	17.8	CA86-0048

18.2	Dolomite, light-gray to clear-white, fine- to medium-grained; calcareous to very calcareous with coarse-grained calcite crystals; grading in part into generally medium grained limestone; common crinoid fragments; prominent stylolites with clay concentrations; trace pyrite; porous to nonporous; slightly argillaceous at base	430.2	438.0		CA86-0049
19	Limestone, green-gray to green to brown, generally fine-grained, calcareous dolomite at top; very argillaceous, abundant shaly laminations and stylolites; occasional coarse-grained calcite crystals	438.0	449.2	11.2	CA86-0050
	Sexton Creek Limestone, 82.2 ft:				
20	Limestone, medium-gray to brown-gray, often darkly iron stained, sublithographic to medium-grained with thin coarse-grained layers; argillaceous, glauconitic; intermittent concentrations of fossil fragments including trilobites and clams; with basal 0.2 ft thick green shale seam	449.2	454.2	5.0	CA86-0051
21.1	Limestone, light brown gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite	454.2	464.2	50.1	CA86-0052
21.2	Limestone, light brown gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite	464.2	474.2		CA86-0053
21.3	Limestone, light brown gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite	474.2	494.2		CA86-0054
21.4	Limestone, light brown gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite	494.2	504.3		CA86-0055
22.1	Dolomite, medium-gray to brown-gray to brown, fine- to medium-grained; with abundant interbedded dolomitic brown-gray shale increasing with depth; calcareous, fossiliferous; dolomite becoming very argillaceous and silty with depth; Schweizer Member	504.3	514.2	27.1	CA86-0057

22.2	Dolomite, medium-gray to brown-gray to brown, fine- to medium-grained; with abundant interbedded dolomitic brown-gray shale increasing with depth; calcareous, fossiliferous; dolomite becoming very argillaceous and silty with depth; Schweizer Member	514.2	524.2		CA86-0058
22.3	Dolomite, medium-gray to brown-gray to brown, fine- to medium-grained; with abundant interbedded dolomitic brown-gray shale increasing with depth; calcareous, fossiliferous; dolomite becoming very argillaceous and silty with depth; Schweizer Member	524.2	531.4		CA86-0059
	Ordovician System				
	Brainard Shale (Maquoketa Group) 23.9 ft:				
23.1	Shale, green-gray to green, silty, non-calcareous; occasional pyrite; becoming darker with depth	531.4	541.4	23.9	CA86-0060
23.2	Shale, green-gray to green, silty, non-calcareous; occasional pyrite; becoming darker with depth	541.4	551.4		CA86-0061
23.3	Shale, green-gray to green, silty, non-calcareous; occasional pyrite; becoming darker with depth	551.4	555.3		CA86-0062
	Fort Atkinson Limestone (Maquoketa Group) 4.7 ft:				
24	Limestone, dark-gray to brown to white; argillaceous, with interbedded calcareous shale; contains blue phosphatic material, pyrite; commonly iron stained; very abundant fossil material including large coral fragments and brachiopods	555.3	560.0	4.7	CA86-0063

Survey Drill Hole 318
NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ (560 ft. NL, 300 ft. EL) sec 16, T. 29 N., R. 4 W
Pulaski County
Elev. approx. 590 ft.
Logged by Gary Yoder
August, 1982

Unit	Description	Depth	
	Silurian System		
	Wabash and upper Pleasant Mills Formations, reef facies (Salina Group), 353 ft		
1	No samples	0.0	20.0
2	Dolomite, light-gray to white, slightly tan-stained (in part), medium- to coarse-grained has abundant vuggy and intercrystalline and lesser moldic porosity; is highly weathered; is highly fractured at base	20.0	22.5
3	Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings	22.5	59.5
4	Dolomite, light-gray to slightly blue gray, less mottled than above, medium- to coarse-grained; very vuggy, abundant intergranular porosity; has abundant crinoid columnals and favosited debris, rare Fletcheria and possible brachiopod debris	59.5	70.0
5	Dolomite, mottled light-gray, to blue-gray to slightly tan-gray, predominately medium-grained with lesser amounts of fine- and coarse-grained; has very abundant crinoid columnals, rare Fletcheria and brachiopod debris vugs with palisade-cement linings; grades into unit below	70.0	97.0
6	Dolomite, as above becoming much lighter in color; mottled (in part); has, abundant Fletcheria debris, rare Arachnophlyum debris	97.0	109.5
7	Dolomite, light-gray medium- to coarse-grained, alternating in bands with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris	109.5	145.0
8	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	145.0	210.0
9	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractured; has fossils as above with some Halysites debris	210.0	268.0
10	Dolomite, as above, with vugs grading into "stromotactis" like structures increasing amounts of finer grained blue-gray dolomite with depth; has crinoid debris becoming prominent near base	268.0	293.0
11	Dolomite, medium- to dark-gray to blue-gray, medium- to coarse-grained; rock composed primarily of crinoid columnals: stylolitic; has abundant moldic, vuggy, and intercrystalline porosity	293.0	323.0
	Pleasant Mills Formation, nonreef facies, (Salina group) 26 ft		
12	Dolomite, light-gray to medium-gray, medium-grained; has abundant green shale laminations; has slight amount vuggy porosity; retains some of the bioclastic texture of above unit; probable Waldron equivalent	323.0	328.4

13	Dolomite, very light-gray to light-gray, with dark-gray mottling, medium-grained; has common intercrystalline and vuggy porosity; has slight amount shaly material on fracture surfaces	328.4	329.9
14	Dolomite, light- to medium-gray, medium-grained: abundant crinoid debris; has abundant intercrystalline; vuggy and moldic porosity; reef facies of Limberlost Dolomite Member	329.9	332.1
15	Dolomite, light-gray to tan-gray to brown-gray, with dark-gray mottling, medium-grained; with irregularly spaced shaly laminations and horsetail structures; has abundant crinoid and brachiopod debris; occasional stylolites; becomes lighter, less mottled with depth; abundant intercrystalline and vuggy porosity; grades into unit below; nonreef Limberlost Dolomite Member	332.1	349.0
	Salamonie Dolomite, 99.8 ft:		
16	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	349.0	411.2
17	Dolomite, clear-white to light-gray with distinct darker gray mottling, fine- to medium-grained with abundant crinoid columns; has common highly weathered chert nodules which appear to replace fossil material; slightly calcareous prominent saw tooth stylolites, occasional clay seams	411.2	420.2
18	Dolomite, light-gray to clear-white, fine- to medium-grained calcareous to very calcareous with coarse-grained calcite crystals; grading in part into generally medium grained limestone; common crinoid fragments prominent stylolites with clay concentrations; trace pyrite; porous to nonporous; slightly argillaceous at base	420.2	438.0
19	Limestone, green-gray to green to brown, generally fine-grained, calcareous dolomite at top very argillaceous, abundant shaly laminations and stylolites; occasional coarse-grained calcite crystals	438.0	449.2
	Sexton Creek limestone, 82.2 ft:		
20	Limestone, medium-gray to brown-gray, often darkly iron stained, sublithographic to medium-grained with thin coarse-grained layers; argillaceous, glauconitic; intermittent concentrations of fossil fragments including trilobites and clams; with basal 0.2 ft thick green shale seam	449.2	454.2
21	Limestone, light brown-gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite	454.2	504.2
22	Dolomite, medium-gray to brown-gray to brown, fine- to medium-grained with abundant interbedded dolomitic brown-gray shale increasing with depth; calcareous, fossiliferous dolomite becoming very argillaceous and silty with depth Schweizer Member	504.2	531.4
	Ordovician System		
	Brainard Shale (Maquoketa Group) 23.9 ft:		
23	Shale, green-gray to green, silty, noncalcareous occasional pyrite becoming darker with depth	531.4	555.3
	Fort Atkinson Limestone (Maquoketa Group) 4.7 ft:		

24	Limestone, dark-gray to brown to white; argillaceous, with interbedded calcareous shale contains blue phosphatic material, pyrite; commonly iron stained; very abundant fossil material including large coral fragments and brachiopods	555.3	560.0
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Survey Drill Hole 318
Pulaski County
1/15/86
Nelson Shaffer

Unit	Description	Depth		Thick- ness	Sample
	Wabash Reef				
		0.0	20.0	20.0	
1	Dol, lt gr-white	20.0	22.5	2.5	CA86-0001
2	Dol lt gr to blue gray - mottled	22.5	32.5	10.0	CA86-0002
3	Dol lt gr to blue gray - mottled	32.5	42.5	10.0	CA86-0003
4	Dol lt gr to blue gray - mottled	42.5	52.5	10.0	CA86-0004
5	Dol lt gr to blue gray - mottled	52.5	59.5	7.0	CA86-0005
6	Dol lt gr less mottled	59.5	70.0	10.5	CA86-0006
7	Dol mottled lt gray	70.0	80.0	10.0	CA86-0007
8	Dol mottled lt gray	80.0	90.0	10.0	CA86-0008
9	Dol mottled lt gray	90.0	97.0	7.0	CA86-0009
10	Dol lt gray	97.0	104.0	7.0	CA86-0010
11	Dol lt gray	104.0	109.5	5.5	CA86-0011
12	Vuggy lt gray dol	109.5	119.5	10.0	CA86-0012
13	Vuggy lt gray dol	119.5	129.5	10.0	CA86-0013
14	Vuggy lt gray dol	129.5	139.5	10.0	CA86-0014
15	Vuggy lt gray dol	139.5	145.0	5.5	CA86-0015
16	Vuggy lt gray dol	145.0	155.0	10.0	CA86-0016
17	Vuggy lt gray dol	155.0	165.0	10.0	CA86-0017
18	Vuggy lt gray dol	165.0	175.0	10.0	CA86-0018
19	Vuggy lt gray dol	175.0	185.0	10.0	CA86-0019
20	Vuggy lt gray dol	185.0	195.0	10.0	CA86-0020
21	Vuggy lt gray dol	195.0	205.0	10.0	CA86-0021
22	Vuggy lt gray dol	205.0	210.0	5.0	CA86-0022
23	Vuggy banded in part lt gray dol	210.0	220.0	10.0	CA86-0023

24	Vuggy banded in part lt gray dol	220.0	230.0	10.0	CA86-0024
25	Vuggy banded in part lt gray dol	230.0	240.0	10.0	CA86-0025
26	Vuggy banded in part lt gray dol	240.0	250.0	10.0	CA86-0026
27	Vuggy banded in part lt gray dol	250.0	260.0	10.0	CA86-0027
28	Vuggy banded in part lt gray dol	260.0	268.0	8.0	CA86-0028
29	Similar dol	268.0	278.0	10.0	CA86-0029
30	Similar dol	278.0	288.0	10.0	CA86-0030
31	Similar dol	288.0	293.0	5.0	CA86-0031
32	Similar vuggy dol	293.0	303.0	10.0	CA86-0032
33	Similar vuggy dol	303.0	313.0	10.0	CA86-0033
34	Similar vuggy dol	313.0	323.0	10.0	CA86-0034
	Pleasant Mills Fm				
35	Dol Waldron equivalent - green shale lam	323.0	328.4	5.4	CA86-0035
36	Dol - slightly shaly	328.4	329.9	1.5	CA86-0036
	Limberlost reef member				
37	Dol	329.9	332.1	2.2	CA86-0037
38	Dol - lt gray - some shaly lam	332.1	342.1	10.0	CA86-0038
39	Dol - lt gray - some shaly	342.1	349.0	6.9	CA86-0039
40	Dol - very lt gray	349.0	359.0	10.0	CA86-0040
41	Dol - very lt gray	359.0	369.0	10.0	CA86-0041
42	Dol - very lt gray	369.0	379.0	10.0	CA86-0042
43	Dol - very lt gray	379.0	389.0	10.0	CA86-0043
44	Dol - very lt gray	389.0	399.0	10.0	CA86-0044
45	Dol - very lt gray	399.0	409.0	10.0	CA86-0045
46	Dol - rare corals	409.0	411.2	2.2	CA86-0046
47	Dol - white to lt gray	411.2	420.2	9.0	CA86-0047
48	Dol - white to lt gray	420.2	430.2	10.0	CA86-0048
49	Dol - white to lt gray	430.2	438.0	7.8	CA86-0049
50	Limestone - green gray lt br	438.0	449.0	11.2	CA86-0050
	Sexton Creek				

51	Limestone - med gray to brown gray	449.2	454.2	5.0	CA86-0051
52	Limestone, w/weathered chert	454.2	464.2	10.0	CA86-0052
53	Limestone, w/weathered chert	464.2	474.2	10.0	CA86-0053
54	Limestone, w/weathered chert	474.2	484.2	10.0	CA86-0054
55	Limestone, w/weathered chert	484.2	494.2	10.0	CA86-0055
56	Limestone, w/weathered chert	494.2	504.2	10.0	CA86-0056
	Schweiger Member				
57	Dol - med gray - brown gray - brown	504.2	514.2	10.0	CA86-0057
58	Dol - med gray - brown gray - brown	514.2	524.2	10.0	CA86-0058
59	Dol - med gray - brown gray - brown	524.2	531.0	7.0	CA86-0059
	Ordovician				
	Brainard Sh				
60	Shale	531.4	541.4	10.0	CA86-0060
61	Shale	541.4	551.4	10.0	CA86-0061
62	Shale	551.4	555.3	3.9	CA86-0062
	Fort Atkinson Ls				
63	Ls	555.3	560.0	4.7	CA86-0063

SDH 318

pt

Sampled 1/15/86 By Nelson Shaffer

Strat	Sample No.	Interval		Slavery Unit	Th.	Lithology	
Wabash Reef	CA86						
	0	20	1	20.0			
	1	20	2	2.5		Dol - ltgr - white	
	2	22.5	3	10.0		{ Dol - ltgr to blue gray - mottled	
	3	32.5	3	10.0			
	4	42.5	3	10.0			
	5	52.5	3	7.0			
	6	59.5	4	10.5		Dol - ltgr - less mottled	
	7	70.0	5	10.0			
	8	80.0	5	10.0		{ Dol - mottled lt. gray	
	9	90.0	5	7.0			
	10	97.0	6	7.0		{ Dol - ltgray	
	11	104.0	6	5.5			
	12	109.5	7	10.0		{ Vuggy ltgray dol	
	13	119.5	7	10.0			
	14	129.5	7	10.0			
	15	139.5	7	5.5			
	16	145.0	8	10.0		{ vuggy ltgray dol	
	17	155.0	8	10.0			
	18	165.0	8	10.0			
	19	175.0	8	10.0			
	20	185.0	8	10.0			
	21	195.0	8	10.0			
	22	205.0	8	5.0			
	23	210.0	9	10.0		{ vuggy banded in part ltgray dol	
	24	220.0	9	10.0			
	25	230.0	9	10.0			
	26	240.0	9	10.0			
	27	250.0	9	10.0			
	28	260.0	9	8.0			
	29	268.0	10	10.0		{ similar dol.	
	30	278.0	10	10.0			
	31	288.0	10	5.0			
	32	293.0	11	10.0		{ similar vuggy dol	
	33	303.0	11	10.0			
	34	313.0	11	10.0			
Reservoir Hill Fm	35	323.0	12	5.4		dol - Waldron equivalent - green shaly lam.	
Limestone (Reef)	36	328.4	13	1.5		dol - slightly shaly	
	37	329.9	14	2.2		dol -	
	38	332.1	15	10.0		{ dol - ltgray - some shaly lam	
	39	342.1	15	6.9			
	40	349.0	16	10.0		{ dol - very lt. gray	
	41	359.0	16	10.0			
	42	369.0	16	10.0			
	43	379.0	16	10.0			
	44	389.0	16	10.0			
	45	399.0	16	10.0			
	46	409.0	16	2.2		dol - coral	
	47	411.2	17	9.0		dol - white & ltgray	
	48	420.2	18	10.0		{ dol - white & ltgray	
	49	430.2	18	7.8			
	50	438.0	19	11.2		Limestone - green gray - lt.	

SDIT 318 192

Strat	Sample No	Interval		Shave Unit	Th	Lithology	
Gilbertville	CA86-51	449.2	454.2	20	5.0	Limestone	med gray to brown gray
	52	454.2	464.2	21	10.0	Limestone, w/ weathered chert	
	53	464.2	474.2	21	10.0		
	54	474.2	484.2	21	10.0		
	55	484.2	494.2	21	10.0		
	56	494.2	504.2	21	10.0		
(Schweitzer Member)	57	504.2	514.2	22	10.0	Dol - med gray - brown gray - brown	
	58	514.2	524.2	22	10.0		
	59	524.2	531.4	22	7.0		
Ord. Brainerd	60	531.4	541.4	23	10.0	shale	[sh]
"	61	541.4	551.4	23	10.0		
"	62	551.4	555.3	23	3.9		
Fort Atkinson Ls	63	555.3	560.0	24	4.7	Ls	

Description of core recovered from Indiana State Geological Survey drill hole 318 in the NE1/4 NW1/4 SW1/4 (560 ft. NL, 300ft. EL) sec 16 T29N R4W Pulaski County, Indiana. Elev. approx. 590 ft.

Logged by Gary Yoder, August, 1982; supervised by Robert Swaven
Field checked, 19
SWK
1667'SL 1038'0
feet ELEV. 57

Silurian System:

Wabash and upper Pleasant Mills Formations, reef facies (Salina Group), 353 ft:

1. No samples..... 0.0-20.0

2. Dolomite, light-gray to white, slightly tan-stained (in part); medium- to coarse-grained; has abundant vuggy and intercrystalline and lesser moldic porosity; is highly weathered; is highly fractured at base 20-22.5

3. Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings. 22.5-59.5

4. Dolomite, light-gray to slightly blue gray, less mottled than above, medium- to coarse-grained; very vuggy, abundant intergranular porosity; has abundant crinoid columnals and favositid debris, rare Fletcheria and possible brachiopod debris 59.5-70.0

5. Dolomite, mottled light-gray, to blue-gray to slightly tan-gray, predominately medium-grained with lesser amounts of fine- and coarse-grained; has very abundant crinoid columnals, rare Fletcheria and brachiopod debris; vugs with palisade-cement linings; grades into unit below 70.0-97.0

6. Dolomite, as above becoming much lighter in color; mottled (in part); has abundant Fletcheria debris, rare Arachnophylum debris 97.0-109.5

CA86-1

CA86-2 (10')
-3 (10')
-4 (10')
-5 (7')

CA86-6 (10')

CA86-7 (10')
-8 (10')
-9 (7')

CA86-10 (7')
-11 (5.5')

CA86-1

10' CA86-2

10' 3

10' 4

7' — 5

CA86 -12 (10)
 -13 (10)
 -14 (10)
 -15 (5.5)

7. Dolomite, light-gray medium- to coarse-grained, alternating in bards with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris 109.5-145.0

CA86 -16 (10')
 -17 (10')
 -18 (10')
 -19 (10')
 -20 (10')
 -21 (10')
 -22 (5')

8. Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half 145.0-210.0

CA86 -23 (10)
 -24 (10)
 -25 (10)
 -26 (10)
 -27 (10)
 -28 (8)

9. Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractured; has fossils as above with some Halysites debris 210.0-268.0

CA86 -29 (10')
 -30 (10')
 -31 (5')

10. Dolomite, as above, with vugs grading into "stromatactis" like structures; increasing amounts of finer grained blue-gray dolomite with depth; has crinoid debris becoming prominent near base 268.0-293.0

CA86 -32 (10)
 -33 (10)
 -34 (10')

11. Dolomite, medium- to dark-gray to blue-gray, medium- to coarse-grained; rock composed primarily of crinoid columnals; stylolitic; has abundant moldic, vuggy, and intercrystalline porosity 293.0-323.0

Pleasant Mills Formation, nonreef facies,
 (Salira group) 26 ft:

CA86 -35 (5.4')

12. Dolomite, light-gray to medium-gray, medium-grained; has abundant green shale laminations; has slight amount vuggy porosity; retains some of the bioclastic texture of above unit; probable Waldron equivalent 323.0-328.4

CA86 -36 (15')

13. Dolomite, very light-gray to light-gray, with dark-gray mottling, medium-grained; has common intercrystalline and vuggy porosity; has slight amount shaly material on fracture surfaces 328.4-329.9

14. Dolomite, light- to medium-gray, medium-grained; abundant crinoid debris; has

CA86-37 (2.2') abundant intercrystalline; vuggy and moldic porosity; reef facies of Limberlost Dolomite Member 329.9-332.1

- 38 (10)
-39 (6.9')
15. Dolomite, light-gray to tan-gray to brown-gray, with dark-gray mottling, medium-grained; with irregularly spaced shaly laminations and horsetail structures; has abundant crinoid and brachiopod debris; occasional stylolites; becomes lighter, less mottled with depth; abundant intercrystalline and vuggy porosity; grades into unit below; nonreef Limberlost Dolomite Member 332.1-349.0

Salamonie Dolomite, 99.8 ft:

- 40 (10)
-41 (10)
-42 (10)
-43 (10)
-44 (10)
-45 (10)
-46 (2.2')
16. Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base 349.0-411.2

- CA86-47 (9.0)
17. Dolomite, clear-white to light-gray with distinct darker gray mottling, fine- to medium-grained; with abundant crinoid columnals; has common highly weathered chert nodules which appear to replace fossil material; slightly calcareous; prominent saw tooth stylolites, occasional clay seams 411.2-420.2

- CA86-48 (10)
-49 (7.8)
18. Dolomite, light-gray to clear-white, fine- to medium-grained; calcareous to very calcareous with coarse-grained calcite crystals; grading in part into generally medium grained limestone; common crinoid fragments; prominent stylolites with clay concentrations; trace pyrite; porous to nonporous; slightly argillaceous at base 420.2-438.0

- CA86-50 (11.2')
19. Limestone, green-gray to green to brown, generally fine-grained, calcareous dolomite at top; very argillaceous, abundant shaly laminations and stylolites; occasional coarse-grained calcite crystals 438.0-449.2

Sexton Creek Limestone, 82.2 ft:

CA86-51 (6)

20. Limestone, medium-gray to brown-gray, often darkly iron stained, sublithographic to medium-grained with thin coarse-grained layers; argillaceous, glauconitic; intermitant concentrations of fossil fragments including trilobites and clams; with basal 0.2 ft thick green shale seam 449.2-454.2

CA86 - 52 (10)
- 53 (10)
- 54 (10)
- 55 (10)
- 56 (10)

21. Limestone, light brown-gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite 454.2-504.2

CA86-57 (10)
- 58 (10)
- 59 (7.1)

22. Dolomite, medium-gray to brown-gray to brown, fine- to medium-grained; with abundant interbedded dolomitic brown-gray shale increasing with depth; calcareous, fossiliferous; dolomite becoming very argillaceous and silty with depth; Schweizer Member 504.3-531.4

Ordovician System

CA86 - 60 (10)
- 61 (10)
- 62 (3.9)

Brainard Shale (Maquoketa Group) 23.9 ft:

23. Shale, green-gray to green, silty, non-calcareous; occasional pyrite; becoming darker with depth 531.4-555.3

Fort Atkinson Limestone (Maquoketa Group) 4.7 ft:

CA86-63
(4.7)

24. Limestone, dark-gray to brown to white; argillaceous, with interbedded calcareous shale; contains blue phosphatic material, pyrite; commonly iron stained; very abundant fossil material including large coral fragments and brachiopods 555.3-560.0

Indiana Geological Survey
Survey Drill Hole 318

1667' FSL x 1038' FWL SW¼ sec. 16, T. 29 N., R. 4 W.
Pulaski County, Indiana

Elevation 579 feet (floor of quarry)
drilling completed June 17, 1982

Core described by Gary Yoder and Robert Shaver

<u>Unit</u>	<u>Description</u>	<u>Depth to top of Unit</u>	<u>Thick- ness (ft)</u>	<u>Sample number</u>
Silurian System,				
Wabash and upper Pleasant Mills Formations, reef facies, 353 ft.				
1.	No samples	0.0	20.0	
2.	Dolomite, light-gray to white, slightly tan-stained (in part), medium- to coarse-grained; has abundant vuggy and intercrystalline and lesser moldic porosity; is highly weathered; is highly fractured at base	20.0	2.5	CA86-1 20.0-22.5
3.	Dolomite, as above, becoming significantly blue gray to gray mottled; has abundant crinoid columnals, rare favositid debris, rare brachiopod fragments; is extensively fractured; contains numerous vugs with palisade-cement linings	22.5	37.0	CA86-2 22.5-32.5 CA86-3 32.5-42.5 CA86-4 42.5-52.5 CA86-5 52.5-59.5 CA86-6
4.	Dolomite, light-gray to slightly blue gray, less mottled than above, medium- to coarse-grained; very vuggy, abundant intergranular porosity; has abundant crinoid columnals and favositid debris, rare <u>Fletcheria</u> and possible brachiopod debris	59.5	10.5	
5.	Dolomite, mottled light-gray, to blue-gray to slightly tan-gray, predominately medium-grained with lesser amounts of fine- and coarse-grained; has very abundant crinoid columnals, rare <u>Fletcheria</u> and brachiopod debris; vugs with palisade-cement linings; grades into unit below	70.0	27.0	CA86-7 70.0-80.0 CA86-8 80.0-90.0 CA86-9 90.0-97.0

Ordovician System

Brainard Shale (Maquoketa Group) 23.9 ft:

23.	Shale, green-gray to green, silty, non-calcareous; occasional pyrite; becoming darker with depth	531.4	23.9	CA86-60 531.4-541.4 CA86-61 541.4-551.4 CA86-62 551.4-555.3
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Fort Atkinson Limestone (Maquoketa Group) 4.7 ft:

24.	Limestone, dark-gray to brown to white; argillaceous, with interbedded calcareous shale; contains blue phosphatic material, pyrite; commonly iron stained; very abundant fossil material including large coral fragments and brachiopods	555.3	4.7	CA86-63 555.3-560.0
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17.	Dolomite, clear-white to light-gray with distinct darker gray mottling, fine- to medium-grained; with abundant crinoid columnals; has common highly weathered chert nodules which appear to replace fossil material; slightly calcareous; prominent saw tooth stylolites, occasional clay seams	411.2	9.0	CA86-47 411.2-420.2
18.	Dolomite, light-gray to clear-white, fine- to medium-grained; calcareous to very calcareous with coarse-grained calcite crystals; grading in part into generally medium grained limestone; common crinoid fragments; prominent stylolites with clay concentrations; trace pyrite; porous to nonporous; slightly argillaceous at base	420.2	17.8	CA86-48 420.2-430.2 CA86-49 430.2-438.0
19.	Limestone, green-gray to green to brown, generally fine-grained, calcareous dolomite at top; very argillaceous, abundant shaly laminations and stylolites; occasional coarse-grained calcite crystals	438.0	11.2	CA86-50 438.0-449.2
Sexton Creek Limestone, 82.2 ft:				
20.	Limestone, medium-gray to brown-gray, often darkly iron stained, sublithographic to medium-grained with thin coarse-grained layers; argillaceous, glauconitic; intermittent concentrations of fossil fragments including trilobites and clams; with basal 0.2 ft thick green shale seam	449.2	5.0	CA86-51 449.2-454.2
21.	Limestone, light brown gray to tan to tan-gray, fine- to coarse-grained becoming generally fine-grained at depth; abundant white to gray highly weathered chert less common at depth; limestone and chert with abundant fossil debris including clams, trilobites, corals, brachiopods, gastropods, and possible crinoid and bryozoan fragments; becoming dolomitic, with decreasing glauconite at depth; with trace pyrite	454.2	50.1	CA86-52 454.2-464.2 CA86-53 464.2-474.2 CA86-54 484.2-494.2 CA86-55 494.2-504.2
22.	Dolomite, medium-gray to brown-gray to brown, fine- to medium-grained; with abundant interbedded dolomitic brown-gray shale increasing with depth; calcareous, fossiliferous; dolomite becoming very argillaceous and silty with depth; Schweizer Member	504.3	27.1	CA86-57 504.2-514.2 CA86-58 514.2-524.2 CA86-59 524.2-531.4

11.	Dolomite, medium- to dark-gray to blue-gray, medium- to coarse-grained; rock composed primarily of crinoid columnals; stylolitic; has abundant moldic, vuggy, and intercrystalline porosity	293.0	30.0	CA86-32 293.0-303.0 CA86-33 303.0-313.0 CA86-34 313.0-323.0
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Pleasant Mills Formation, nonreef facies, (Salina Group) 26 ft:

12.	Dolomite, light-gray to medium-gray, medium-grained; has abundant green shale laminations; has slight amount vuggy porosity; retains some of the bioclastic texture of above unit; probable Waldron equivalent	323.0	5.4	CA86-35 323.0-328.4
13.	Dolomite, very light-gray to light-gray, with dark-gray mottling, medium-grained; has common intercrystalline and vuggy porosity; has slight amount shaly material on fracture surfaces	328.4	1.5	CA86-36 328.4-329.9
14.	Dolomite, light- to medium-gray, medium-grained; abundant crinoid debris; has abundant intercrystalline, vuggy, and moldic porosity; reef facies of Limberlost dolomite Member	329.9	2.2	CA86-37 329.9-332.1
15.	Dolomite, light-gray to tan-gray to brown-gray, with dark-gray mottling, medium-grained; with irregularly spaced shaly laminations and horsetail structures; has abundant crinoid and brachiopod debris; occasional stylolites; becomes lighter, less mottled with depth; abundant intercrystalline and vuggy porosity; grades into unit below; nonreef Limberlost Dolomite Member	332.1	16.9	CA86-38 332.1-342.1 CA86-39 342.1-349.0

Salamonie Dolomite, 99.8 ft:

16.	Dolomite, very light-gray to light-gray to clear-white, generally medium-grained, very clean; bioclastic in texture, with rare clay seams and stylolites, slightly calcareous in part; abundant porosity; becomes banded in medium-gray and coarse-grained clear-gray layers; occasional crinoid debris, rare corals near base	349.0	62.2	CA86-40 349.0-359.0 CA86-41 359.0-369.0 CA86-42 369.0-379.0 CA86-43 379.0-389.0 CA86-44 389.0-399.0 CA86-45 399.0-409.0 CA86-46 409.0-411.2
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6.	Dolomite, as above becoming much lighter in color; mottled (in part); has abundant <u>Fletcheria</u> debris, rare <u>Arachnophylum</u> debris	97.0	12.5	CA86-10 97.0-104.0 CA86-11 104.0-109.5
7.	Dolomite, light-gray medium- to coarse-grained, alternating in bands with blue-gray fine- to medium-grained; very vuggy; has abundant crinoid and common tabulate coral debris	109.5	35.5	CA86-12 109.5-119.5 CA86-13 119.5-129.5 CA-14 129.5-139.5 CA-15 139.5-145.0
8.	Dolomite, as above with large palisade-cement lined vugs; has possible bedding plane fractures at 0 to 15 degree dips, slight amount green mud vug fill at 180 feet; unit becoming stylolitic in lower half	145.0	65.0	CA86-16 145.0-155.0 CA86-17 155.0-165.0 CA86-18 165.0-175.0 CA86-19 175.0-185.0 CA86-20 185.0-195.0 CA86-21 195.0-205.0 CA86-22 205.0-210.0
9.	Dolomite, as above, with decreasing mottling, rock becoming banded into lighter medium- to coarse-grained and darker bluish gray finer grained layers; noticeable increase in large botryoidal palisade cement lined vugs; less fractures; has fossils as above with some <u>Halysites</u> debris	210.0	58.0	CA86-23 210.0-220.0 CA86-24 220.0-230.0 CA86-25 230.0-240.0 CA86-26 240.0-250.0 CA86-27 250.0-260.0 CA86-28 260.0-268.0
10.	Dolomite, as above, with vugs grading into "stromatactis" like structures; increasing amounts of finer grained blue-gray dolomite with depth; has crinoid debris becoming prominent near base	268.0	25.0	CA86-29 268.0-278.0 CA86-30 278.0-288.0 CA86-31 288.0-293.0

DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 318 FARM: WESTERN MATERIALS. Co. COMMENCED: 3/14/22 COMPLETED: _____

LOCATION: County PULASKI Twp. 29N Rge. 4W Sec. 16 560'N, 300'E NENW, SW ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
	0	5				domolite white		
	5	10				domolite white		
	10	15				domolite white		
	15	20				domolite white		
1	20	30	1			10' domolite very porous		
2	30	40	2			10' domolite very porous		
2	40	50	3			10' domolite very porous		
2	50	60	4			10' domolite very porous		
3	60	70	5			10' domolite less porous		
3	70	80	6			10' domolite less porous		
4	80	90	7			10' domolite less porous		
4	90	100	8			10' domolite less porous		
5	100	110	9			10' domolite less porous		
5	110	120	10			10' domolite less porous		
6	120	130	11			10' domolite less porous		
6	130	140	12			10' domolite less porous		

DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 310 FARM: WESTERN MATH CO. COMMENCED: 3/14/82 COMPLETED: _____

LOCATION: County PULASKI Twp. 29N Rge. 4W Sec. 16 560NL, 300'EL ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
7	140	150	13			10' domolite more porous		
7	150	160	14			10' domolite less porous		
8	160	170	15			10' domolite less porous		
8	170	180	16			10' domolite less porous		
9	180	190	17			10' domolite more porous		
9	190	200	18			10' domolite more porous		
10	200	210	19			10' domolite more porous		
10	210	220	20			10' domolite more porous		
11	220	230	21			10' domolite less porous		
11	230	240	22			10' bluish white domolite less porous		
12	240	250	23			10' domolite less porous		
12	250	260	24			10' domolite less porous		
13	260	270	25			10' domolite less porous		
13	270	280	26			10' domolite less porous		
14	280	290	27			10' domolite less porous		

DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 318 FARM: WESTERN MATERIALS Co. COMMENCED: 3/14/ COMPLETED:

LOCATION: County PULASKI Twp. 29N Rge. 4W Sec. 16 56dk 300' BL ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
14	290	300	28			10' bluish-white cl <i>glomerite</i> less porous		
15	300	310	29			10' bluish-white domo. less por.		
15	310	320	30			10' bluish-white domo. less por.		
16	320	330	31			10' bluish-white domo. less por.		
16	330	340	32			10' bluish-white domo. less por.		
17	340	350	33			10' bluish-white domo. less por.		
17	350	360	34			10' bluish-white domo. less por.		
18	360	370	35			10' greenish-lt. gray domo. less por.		
18	370	380	36			10' greenish-gray domo. less por.		
19	380	390	37			10' greenish-gray domo. less por.		
19	390	400	38			10' greenish-gray domo. less por.		
20	400	410	39			10' greenish-lt. gray domo. less por.		
20	410	420	40			10' greenish-lt. gray domo. less por.		
21	420	430	41			10' greenish-lt. gray domo. less por.		
21	430	440	42			10' greenish-lt. gray domo. less por.		

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DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 319 FARM: WESTERN MATERIALS COMMENCED: 3/14/82 COMPLETED: _____

LOCATION: County PULASKI Twp. 29N Rge. 4W Sec. 16 560N' 300'E ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
22	440	450	43			10' smooth white limestone, some shale		
22	450	460	44			10' smooth white limestone, some chert		
23	460	470	45			10' smooth white limestone, some chert		
23	470	480	46			10' smooth white & gray limestone, some chert		
24	480	490	47			10' smooth white & gray limestone, some chert		
24	490	500	48			10' smooth white & gray limestone, some chert		
25	500	510	49			10' smooth white & gray limestone		
25	510	520	50			10' smooth gray limestone, some dark gray		
26	520	530	51			10' smooth gray limestone, some greenish, gray		
26	530	540	52			10' smooth greenish gray shale		
27	540	550	53			10' smooth greenish gray shale		
27	550	560	54			10' greenish gray shale, limestone, shale some oil		

DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 318 FARM: Western Materials Company COMMENCED: 3/14/82 COMPLETED: 6/17/82

LOCATION: County Pulaski Twp. 29N Rge. 4W Sec. 16 NE NW SW ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
	0	5				White dolomite		
	5	10				White dolomite		
	10	15				White dolomite		
	15	20				White dolomite		
1	20	30	1			10'-Dolomite, very porous		
1	30	40	2			10'-Dolomite, very porous		
2	40	50	3			10'-Dolomite, very porous		
2	50	60	4			10'-Dolomite, very porous		
3	60	70	5			10'-Dolomite, less porous		
3	70	80	6			10'-Dolomite, less porous		
4	80	90	7			10'-Dolomite, less porous		
4	90	100	8			10'-Dolomite, less porous		
5	100	110	9			10'-Dolomite, less porous		
5	110	120	10			10'-Dolomite, less porous		
6	120	130	11			10'-Dolomite, less porous		

DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 318 FARM: Western Materials Company COMMENCED: 3/14/82 COMPLETED: 6/17/82

LOCATION: County Pulaski Twp. 29N Rge. 4W Sec. 16 NE NW SW ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
6	130	140	12			10'-Dolomite, more porous		
7	140	150	13			10'-Dolomite, less porous		
7	150	160	14			10'-Dolomite, less porous		
8	160	170	15			10'-Dolomite, less porous		
8	170	180	16			10'-Dolomite, more porous		
9	180	190	17			10'-Dolomite, more porous		
9	190	200	18			10'-Dolomite, more porous		
10	200	210	19			10'-Dolomite, more porous		
10	210	220	20			10'-Dolomite, less porous		
11	220	230	21			10'-Blueish white dolomite, less porous		
11	230	240	22			10'-Dolomite, less porous		
12	240	250	23			10'-Dolomite, less porous		
12	250	260	24			10'-Dolomite, less porous		
13	260	270	25			10'-Dolomite, less porous		
13	270	280	26			10'-Dolomite, less porous		

DRILLER'S RECORD
(Indiana Geological Survey)

SDH NUMBER: 318 FARM: Western Materials Company COMMENCED: 3/14/82 COMPLETED: 6/17/82

LOCATION: County Pulaski Twp. 29N Rge. 4W Sec. 16 NE NW SW ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
14	280	290	27			10'-Blueish white dolomite, less porous		
14	290	300	28			10'-Blueish white dolomite, less porous		
15	300	310	29			10'-Blueish white dolomite, less porous		
15	310	320	30			10'-Blueish white dolomite, less porous		
16	320	330	31			10'-Blueish white dolomite, less porous		
16	330	340	32			10'-Blueish white dolomite, less porous		
17	340	350	33			10'-Blueish white dolomite, less porous		
17	350	360	34			10'-Greenish light gray dolomite, less porous		
18	360	370	35			10'-Greenish gray dolomite, less porous		
18	370	380	36			10'-Greenish gray dolomite, less porous		
19	380	390	37			10'-Greenish gray dolomite, less porous		
19	390	400	38			10'-Greenish light gray dolomite, less porous		
20	400	410	39			10'-Greenish light gray dolomite, less porous		
20	410	420	40			10'-Greenish light gray dolomite, less porous		
21	420	430	41			10'-Greenish light gray dolomite, less porous		

DRILLER'S RECORD -
(Indiana Geological Survey)

SDH NUMBER: 318

FARM: Western Materials Company

COMMENCED: 3/14/82 COMPLETED: 6/17/82

LOCATION: County Pulaski Twp. 29N Rge. 4W Sec. 16 NE NW SW ELEVATION: 300'

CORE				LOG			CORE LIBRARY NOTATIONS	
RUN NO.	FROM	TO	RECOVERY	FROM	TO	DESCRIPTION (REMARKS)		
21	430	440	42			10'-Smooth white limestone, some green shale		
22	440	450	43			10'-Smooth white limestone, some chert		
22	450	460	44			10'-Smooth white limestone, some chert		
23	460	470	45			10'-Smooth white & gray limestone, some chert		
23	470	480	46			10'-Smooth white & gray limestone, some chert		
24	480	490	47			10'-Smooth white & gray limestone, some chert		
24	490	500	48			10'-Smooth white & gray limestone		
25	500	510	49			10'-Smooth gray limestone, some dark gray		
25	510	520	50			10'-Smooth gray limestone, some greenish gray		
26	520	530	51			10'-Smooth greenish gray shale		
26	530	540	52			10'-Smooth greenish gray shale		
27	540	550	53			6'-Greenish gray shale; 4'-Limestone, shale, some oil		