

OLO No. 693
Pattie M. Porter No. 4
Laurel Hill District
Lincoln County, West Virginia
Elevation: 836.7

Lin. 653

1 - 2	1486 - 1499	Dark gray mudstone, very light gray fine-grained sandstone and some gray limestone shell. Drills fine. (Hole caving.)
3 - 7	1499 - 1523	Gray limestone shell and gray siltstone. (Hole caving very bad.)
8 - 11	1523 - 1544	(Top Little Lime 1523). Light and dark gray limestone. Drills fine. (Gray mudstone caving.)
12 - 14	1544 - 1558	(Top Big Lime 1544.) White chalky limestone. Drills medium to fine. (7" Casing 1554.)
15	1558 - 1564	White limestone and some dark gray mudstone. Drills fine.
16 - 20	1564 - 1600	Very light gray limestone. Drills medium to fine.
21 - 22	1600 - 1619	Dense cherty gray limestone. Drills medium.
23 - 24	1619 - 1634	Dense cherty gray limestone and white limestone. Drills medium.
25 - 28	1634 - 1665	Dense light gray limestone. Drills medium to fine.
29 - 31	1665 - 1678	Dense very light gray limestone. Drills medium to fine.
32 - 34	1678 - 1697	Dense white limestone. Drills fine to very fine.
35 - 36	1697 - 1710	Very light gray oolitic limestone. Drills fine.
37 - 41	1710 - 1742	Dense very light gray limestone. Drills fine to very fine.
42 - 45	1742 - 1770	(Base Big Lime 1742). Deep red very fine-grained sandstone and gray very fine-grained sandstone. Drills small to coarse pieces.
46 - 47	1770 - 1793	Gray very fine-grained sandstone and siltstone. Drills fine to coarse with white milchy quartz pebbles - broken.
48 - 53	1793 - 1850	Gray siltstone and some gray very fine-grained sandstone, also very dark gray mudstone. Drills medium to fine.

Examined: 3-23-1945

54 - 56	1855 - 1885	Gray and light gray very fine-grained micaceous sandstone and siltstone. Drills medium.
57 - 61	1885 - 1934	Gray micaceous siltstone. Drills medium to coarse.
62 - 63	1934 - 1958	Light gray siltstone. Drills medium.
64 - 66	1958 - 1996	Gray siltstone. Drills medium to coarse.
67 - 68	1996 - 2016	Gray siltstone and light gray sandstone shell. Drills medium.
69 - 70	2016 - 2026-	Light gray fine-grained sandstone and a little gray siltstone. Drills into fine pieces.
71 - 72	2026 - 2035	Gray siltstone and some brown sandstone shell and a little gray limestone shell. Drills medium.
73 - 77	2035 - 2071	Gray siltstone and very light gray sandstone shell and some brown sandstone shell. Drills medium to fine.
78 - 85	2071 - 2143	Gray siltstone and some sandstone shell. Drills medium to fine.

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86 - 89	2182 - 2227	Gray siltstone and mudstone. Drills medium to fine.
90 - 93	2227 - 2267	Gray mudstone. Drills medium.
94 - 97	2267 - 2315	Gray siltstone and mudstone and a little sandstone shell. Drills medium.
98 - 99	2315 - 2340	Brown silty shale and white quartz, fine-grained sand. Pyrite. (Sunbury Shale.) Drills fine. (Top Berea 2340.)
100 - 101	2340 - 2355	Very fine white quartz sand. Drills free and into fine pellets. Much pyrite. Limy.
102 - 103	2355 - 2360	Fine white quartz sand and gray mudstone. Drills into fine pellets.
104 - 108	2360 - 2400	Dark gray siltstone and sandstone shell. Drills fine.
109 - 110	2400 - 2425	Do. Very little sandstone shell. Drills medium.
111	2425 - 2434	Gray mudstone and siltstone. Drills medium to fine.
112 - 113	2449 - 2469	Gray siltstone and very light gray micaceous sandstone shell. Drills medium.
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114 - 115	2492 - 2515	Very light gray fine-grained sandstone shell and gray mudstone. Drills into flat medium pieces.
116 - 123	2515 - 2618	Light gray sandstone shell and gray mudstone. Drills fine.
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124 - 125	2624 - 2645	Gray siltstone and some light gray sandstone shell. Drills fine.
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		Examined: 4-4-1945
126 - 127	2667 - 2692	Gray mudstone and siltstone shell. Drills fine.
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128	2717 - 2725	Dark gray mudstone and gray siltstone shell. Drills medium to fine.
129 - 130	2725 - 2748	Gray mudstone and siltstone and some light Brown silty Shale. Drills medium to fine.
131 - 135	2748 - 2812	Gray to dark gray mudstone and a little dark silty shale. Drills fine to coarse.
136 - 139	2812 - 2858	Gray mudstone and light gray siltstone. Drills medium to fine.
140 - 141	2858 - 2882	Do. Small amount of dark shale.
142 - 145	2882 - 2928	Gray to light gray mudstone. Drills medium to fine.
146	2928 - 2937	Light gray siltstone and mudstone. Drills coarse to fine.
147 - 150	2937 - 2979	Do. A little Brown Shale. Pyrite balls. Drills fine to medium.
151 - 152	2979 - 3002	Light gray mudstone and siltstone and a little Brown Shale. Pyrite balls. Drills medium to fine.
153 - 159	3002 - 3075	Light gray siltstone. Pyrite. Some gray mudstone. Drills medium to coarse.
160 - 167	3075 - 3178	Gray mudstone and light gray siltstone. Drills fine to medium.
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168 - 169	3187 - 3216	Light gray siltstone and a little Brown Shale. Drills medium to coarse.
170 - 172	3216 - 3250	Light gray and Brown Shale. Drills medium to coarse.

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173 - 174	3250 - 3278	Do. Some gray limestone shell.
175	3278 - 3293	Brown Shale, some pyrite. Some light gray siltstone. Drills medium.
176	3293 - 3305	Brown Shale. Some light gray limestone shell. Drills medium.
177 - 178	3305 - 3321	Brown Shale and light gray siltstone. Pyrite. Drills medium.
179 - 182	3321 - 3372	Do. Some limestone shell.
183	3372 - 3380	Light gray siltstone and some Brown Shale. Drills medium.
184 - 185	3385 - 3400	(Gas 3385 inc. from 245 cu. ft. to 5 $\frac{1}{2}$ M.) Dark brown carbonaceous shale. Pyrite. A little light gray siltstone. Drills medium.
186 - 187	3400 - 3425	Brown Shale. Pyrite. Some light gray siltstone. Drills medium.
188 - 189	3425 - 3455	Dark Brown Shale. A little light gray siltstone. Drills medium.
190 - 196	3455 - 3541	Dark brown carbonaceous shale. Pyrite. Drills medium.
TOTAL DEPTH	3546	No sample 3541-3545. Present depth 3498.

Br Shale 180 M