

Echinoids, sharks' teeth, etc., are present. A few rods downstream the marine Cretaceous appears, while $\frac{3}{4}$ mile above the bluff, where the other Eocene section described below is exposed, the Cretaceous also appears. This shows that the Eocene occupies a basin in the Cretaceous.

SECTION JUST ABOVE 83 MILEPOST, NEUSE RIVER.

Pleistocene:

Talus-covered slope	FEET. 25-35
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Eocene (Trent):

White to greenish-white soft limestone containing some fossil casts. <i>Pecten</i> is common. Limestone contains some glauconite	40
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Greenish-blue, hard, argillaceous limestone, with echinoid spines, portions of echinoid tests, etc.....	6
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The limestone has been burned for lime.

On the farm of D. L. Flowers, about 3 miles directly west of Mount Olive, there is a marl pit from which marl is taken for fertilizing purposes. The marl consists principally of a rotten limestone containing many fragments of shells. Casts of bivalves, fragments of Echinoderm tests and spines were observed. Lithologically, the material resembles the other Eocene of the region. The pits are located near a small branch. A few feet of surface clays are stripped off and pits are dug to a depth of about 25 feet in the marl. The material is very dry, no water interfering with the digging. After exposure to the air the marl soon crumbles to powder.

One pit penetrated the marl at 25 feet. One pit 23 feet in depth did not pass through it. Near the upper surface the marl is of a light yellowish color, but deeper it is of a very pale greenish color.

About 100 yards to the west of the pits, on the other side of the branch, a well was drilled to a depth of 151 feet. It is perhaps 20 feet below general level of the surrounding country. The water rises near enough to the surface to pump with a pitcher pump.

SECTION 3 MILES WEST OF MOUNT OLIVE.

Pleistocene:

Sand and clay.....	FEET. 0- 12
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Eocene (Trent):

Marl similar to that in marl pit.....	12-150
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The water comes from just below the marl, from material containing small leaves resembling cypress leaves, probably of Cretaceous age.

About 1 mile west of Mount Olive marl is reported which contains an abundance of sharks' teeth.

Marl is also reported to the northwest of Mount Olive 1 mile, and to the east 2 miles.