

come to my knowledge, has not been dug into at any point sufficiently deep to enable us to judge of its characters fully.

I have only been able to inspect the upper portions of the beds in a few places where it has been recently opened, and in these the deeper the bed was penetrated the better was the marl. Besides the larger proportion of common sand near the surface, much of the lime has been dissolved out of the shells, and also the silicate of potash out of the green particles.

Many analyses are on record of the European and Jersey green sands, which need not be stated at the present time. The purer kinds in Jersey, according to Prof. Rogers, who conducted the geological survey of that State, contain about

	50 per cent. of silica,
6 to 07	“ “ “ alumina,
21 to 22	“ “ “ oxide of iron,
9 to 12	“ “ “ potash,
7 to 09	“ “ “ water, and

of lime and magnesia seldom more than one per cent of each. In some parts of the formation its value is lessened by more or less common sand being mixed with it.

The lowest of the tertiary formation, called Eocene, is found covering the cretaceous or lowest green sand on the southeast. It contains thick beds of siliceous sand mixed up with green sand and shells, and is largely developed on the banks of Port Tobacco creek, and other Points in Charles and Calvert counties, and appears very little above the tide level on West river and on Herring bay, in Anne Arundel county.

A sample from the farm of Charles J. Pye, Esq., four miles northeastward of Port Tobacco, consists of—

Silica,	55.73	
Protoxide of iron,	9.45	
Alumina,	5.45	
Carbonate of lime, marine shells,	12.91	lime, 6.67
Potash,	2.07	
Water,	9.90	
Magnesia,	}	quantity not determined
Phosphoric acid,		
Organic matter.	do.	do.

The sample, as in other cases, in our State, was taken from near the surface, and has undoubtedly been deprived by water of large portions of its lime and potash,

Mr. Pye was engaged, at the time of my visit, in taking out this marl for his land, and also promised to sink lower into the bed in search of a purer article.

A sample of the same kind of marl was furnished from the lands of Dr. George, of Prince George's county, consisting of—