

Alumina and iron as per oxide,	2.90
Iron and alumina as phosphates,	.11
Manganese, (a trace,)	
Lime as carbonate,	.32
Magnesia,	.18
Potash and soda,	.07
Sulphuric acid and chlorine in sufficient quantities.	

This is a very productive soil, made so by the application of manure.

No. 5.

Specimen from Tuckahoe Neck, Caroline county, was composed of—

Organic matter,	4.60
Silica or sand,	92.10
Alumina and iron as per oxide,	2.80
Iron and alumina as phosphates,	.03
Lime as carbonate,	.17
Magnesia,	.10
Potash and soda,	.04
Sulphuric acid, a trace,	
Chlorine, not deficient.	

This is rather more productive than most of the unimproved "white oak soils," the quantity of lime in it being above, and the quantity of phosphoric acid, under, the average. Besides oyster shell lime, bone dust or guano, particularly the Patagonian or African, should be used on these soils.

Several examinations of soils in this Neck, show very nearly the same composition as the above.

No. 6.

Soil from near Cambridge, Dorchester county, Md. Specimen taken to the depth of six inches. This soil had never been improved; it was composed as follows, of—

Organic, i. e., vegetable matter,	7.20
Silica, i. e., sand,	90.50
Alumina, (clay,) and Iron as per oxide,	1.70
Alumina, and iron as phosphates,	.09
Lime as carbonate,	.10
Magnesia,	.21
Potash and soda,	.111
Sulphuric and acid,	.008
Chlorine,	.006

This soil was experimented on by J. Wallace, Esq., with the following result, which I cannot do better than give in his own words:—

"I accordingly purchased five hundred bushels of ashes in Baltimore, and had them landed at the cost of 12½ cents per bushel, and applied them upon lot No. 1, of field No. 1, at the rate of one hundred bushels per acre; immediately alongside, I applied one hundred bushels of shell lime, at a cost of 3 cents per bushel. The whole was sown in wheat in the fall of 1847, upon an oat