

Analysis of Diatomaceous Ooze.

By Dr. Sipöcz.

Station 157; 1950 fathoms, Southern Ocean.

I. 0.5618 gm. of substance dried at 120° C. gave 0.0330 gm. loss on ignition, treated with hydrofluoric and sulphuric acids gave 0.5092 gm. of silica, 0.00112 gm. of barium oxide, 0.00085 gm. of potash and 0.00225 gm. soda.

II. 0.6487 gm. of substance dried at 120° C. gave 0.0379 gm. loss on ignition, treated with hydrofluoric and sulphuric acids gave 0.5870 gm. of silica, 0.0013 gm. of barium oxide, 0.0057 gm. of ferric oxide, 0.0085 gm. of alumina, 0.0022 gm. of lime, 0.00198 gm. of magnesia, and traces of phosphoric acid.

	I.	II.	Mean.
Silica (SiO ₂),	90.63	90.49	90.56
Ferric oxide (Fe ₂ O ₃), . . . . .	...	0.88	0.88
Alumina (Al ₂ O ₃), . . . . .	...	1.31	1.31
Lime (CaO), . . . . .	...	0.33	0.33
Baryta (BaO),	0.20	...	0.20
Magnesia (MgO), . . . . .	...	0.30	0.30
Potash (K ₂ O),	0.15	...	0.15
Soda (Na ₂ O),	0.40	...	0.40
Phosphoric acid (P ₂ O ₅),	trace	...	trace
Water (H ₂ O),	5.87	5.84	5.85
Loss on ignition, . . . . .	...	...	...
			<hr/> 99.98 <hr/>

For analysis of glauconitic grains and casts see p. 468; and of Globigerina ooze see p. 915.