

32. DIATOM OOZE (after removal of carbonate of lime by dilute acid).—Station 157.

Lat. 53° 55' S., long. 108° 35' E., 1950 fathoms (Renard).

- I. 0.5618 gm. of substance, dried at 120° C., gave 0.0330 gm. of loss on ignition, then treated with hydrofluoric and sulphuric acids gave 0.5092 gm. of silica, 0.00112 gm. of barium, 0.0056 gm. of the chlorides of potash and soda, 0.0044 gm. of chloroplatinate of potash, corresponding to 0.00134 gm. of chloride of potash = 0.00085 gm. of potash, and 0.00426 gm. of chloride of soda = 0.00225 gm. of soda.
- II. 0.6487 gm. of substance, dried at 120° C., gave 0.0379 gm. of loss on ignition, then treated with hydrofluoric and sulphuric acids gave 0.5870 gm. of silica, 0.0013 gm. of barium, 0.0057 gm. of peroxide of iron, 0.0089 gm. of alumina, 0.0022 gm. of lime, and 0.0055 gm. of pyrophosphate of magnesia = 0.00198 gm. of magnesia, and traces of phosphoric acid.

	I.	II.	Mean.
Silica, . . . . .	90.63	90.49	90.56
Peroxide of iron, . . . . .	...	0.88	0.88
Alumina, . . . . .	...	1.31	1.31
Lime, . . . . .	...	0.33	0.33
Barium, . . . . .	0.20	0.20	0.20
Magnesia, . . . . .	...	0.30	0.30
Potash, . . . . .	0.15	...	0.15
Soda, . . . . .	0.40	...	0.40
Phosphoric acid, . . . . .	trace	trace	trace
Loss on ignition, . . . . .	5.87	5.84	5.85
			<hr/> 99.98

32A. DIATOMS from Surface-net.—Station 157.

Lat. 53° 55' S., long. 108° 35' E. (Anderson).

Water, . . . . .	4.87
Organic matter, . . . . .	16.75
Alumina, . . . . .	1.38
Silica soluble in acid, . . . . .	1.00
Silica insoluble in acid, . . . . .	76.00
	<hr/> 100.00

33. GLOBIGERINA OOZE.—Station 1.

Lat. 27° 24' N., long. 16° 55' W., 1890 fathoms (Brazier).

	Loss on ignition after drying at 230° Fahr.,	7.91
Portion soluble in Hydrochloric Acid = 73.07	Alumina, . . . . .	5.26
	Ferric oxide, . . . . .	3.95
	Calcium phosphate, . . . . .	large trace
	Calcium sulphate, . . . . .	0.44
	Calcium carbonate, . . . . .	50.00
	Magnesium carbonate, . . . . .	1.32
Portion insoluble in Hydrochloric Acid = 19.02	Silica, . . . . .	12.10
	Alumina, . . . . .	8.47
	Ferric oxide, . . . . .	
	Lime, . . . . .	1.26
	Magnesia, . . . . .	0.52
	Silica, . . . . .	13.77
		<hr/> 100.00