Water,	6·02
Silica,	31·66
Alumina,	9·21
Peroxide of iron,	4·52
Lime,	25·68
Magnesia,	2·07
Soda,	1·63
Potash,	1·33
Sulphuric anhydride,	0·27
Carbonic acid,	17·13
Chlorine,	2·46
	101·98
On subtracting the oxygen corresponding to the chlorine,	0·87
There remain	101·11

55. Red Mud (determination of soluble salts retained in the sediment).—Station 120.

Lat. 8° 37′ S., long. 34° 28′ W., 675 fathoms (Hornung).

The substance was washed with warm and cold distilled water till the water no longer gave the reaction of chlorine. It was afterwards pulverised and treated with hydrofluoric and sulphuric acids.

1·4088 grms. of substance dried at 100° C. gave 0·0496 grm. of the chlorides of soda and potash, and 0·1013 grm. of chloroplatinate of potash = 0·0195 grm. of potash and 0·0099 grm. of soda :—

Potash (K_2O),	1·38 per cent.
Soda (Na_2O),	0·70 ,,

56. Globigerina Ooze.—Station 176.

Lat. 18° 30′ S., long. 173° 52′ E., 1450 fathoms (Renard).

I. 1·0463 grms. of substance dried at 110° C., fused with the carbonates of soda and potash, gave 0·1852 grm. of silica, 0·0508 grm. of alumina, 0·0711 grm. of peroxide of iron, 0·0176 grm. of peroxide of manganese, 0·3670 grm. of lime, 0·0474 grm. of pyrophosphate of magnesia = 0·0171 grm. of magnesia.

II. 1·9834 grms. of substance dried at 110° C., treated with hydrofluoric and sulphuric acids, gave 0·0328 grm. of the chlorides of soda and potash, 0·0347 grm. of chloroplatinate of potash = 0·0065 grm. of potash and, by difference, 0·0129 grm. of soda.

III. 0·9571 grm. of substance dried at 110° C. served for the determination of carbonic acid = 0·2785 grm.

IV. 1·2462 grms. of substance dried at 110° C. served for the determination of water.

Silica,	17·71
Alumina,	4·86
Peroxide of iron,	6·80
Peroxide of manganese,	1·69
Lime,	35·08
Magnesia,	1·64
Potash,	0·32
Soda,	0·65
Carbonic acid,	29·10
Water,	2·95
Copper, nickel, cobalt, and phosphoric acid,	traces
	100·80