

THE VOYAGE OF H.M.S. CHALLENGER.

52. GLOBIGERINA OOZE.—Station 332.

Lat. 37° 29' S., long. 27° 31' W., 2200 fathoms (Brazier).

	Loss on ignition after drying at 230° Fahr.,	2.82	
Portion soluble in Hydrochloric Acid = 84.95	} —	Alumina,	3.75
		Ferric oxide,	1.51
		Calcium phosphate,	1.74
		Manganese oxide,	trace
		Calcium sulphate,	0.58
		Calcium carbonate,	65.67
		Magnesium carbonate,	1.93
Portion insoluble in Hydrochloric Acid = 12.23	} —	Silica,	10.37
		Alumina,	2.18
		Ferric oxide,	0.55
		Lime,	0.38
		Magnesia,	0.11
		Silica,	9.06

53. GLOBIGERINA OOZE.—Station 338.

Lat. 21° 15' S., long. 14° 2' W., 1990 fathoms (Brazier).

	Loss on ignition after drying at 230° Fahr.,	1.40	
Portion soluble in Hydrochloric Acid = 97.11	} —	Alumina,	0.65
		Ferric oxide,	0.60
		Calcium phosphate,	0.90
		Manganese oxide,
		Calcium sulphate,	0.19
		Calcium carbonate,	92.54
		Magnesium carbonate,	0.87
Portion insoluble in Hydrochloric Acid = 1.49	} —	Silica,	1.36
		Consisting of alumina and ferric oxide, with silica,	1.49
		<hr/> 100.00	

54. RED MUD.—Station 120.

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

0.7287	gram. of substance dried at 100° C., lost 0.0131	gram.	= 2.43	per cent.
0.8569	" " " " 0.01659	" "	= 1.93	" "
0.9462	" " " " 0.0220	" "	= 2.32	" "
0.9808	" " " " 0.0230	" "	= 2.34	" "
	Mean loss on ignition,		= 2.27	" "

- I. 0.5884 gram. of substance dried at 100° C., fused with the carbonates of soda and potash, gave 0.0354 gram. of water, 0.1863 gram. of silica, 0.1511 gram. of lime, 0.0266 gram. of peroxide of iron, 0.0542 gram. of alumina, 0.0309 gram. of pyrophosphate of magnesia = 0.0122 gram. of magnesia.
- II. 0.8381 gram. of substance dried at 100° C., treated with hydrofluoric and sulphuric acids, gave 0.0435 gram. of the chlorides of soda and potash, 0.058 gram. of chloroplatinate of potash = 0.0112 gram. of potash and, by difference, 0.0137 gram. of soda.
- III. 0.9204 gram. of substance dried at 100° C. gave 0.02268 gram. of chlorine.
- IV. 0.9397 gram. of substance dried at 100° C. gave 0.1610 gram. of carbonic acid.
- V. 0.9484 gram. of substance dried at 100° C. gave 0.0076 gram. of sulphate of barium = 0.026 gram. of sulphuric anhydride.