

29. RADIOLARIAN OOZE.—Station 274. Lat. 7° 25' S., long. 152° 15' W., 2750 fathoms (Brazier).

	Loss on ignition after drying at 230° Fahr.,	7.41
Portion soluble in Hydrochloric Acid = 79.48	Alumina,	8.32
	Ferric oxide,	14.24
	Calcium phosphate,	1.39
	Manganese oxide,	3.23
	Calcium sulphate,	0.41
	Calcium carbonate,	3.89
	Magnesium carbonate,	1.50
	Silica,	46.50
Portion insoluble in Hydrochloric Acid = 13.11	Alumina,	2.20
	Ferric oxide,	0.75
	Lime,	0.39
	Magnesia,	0.25
	Silica,	9.52
		<hr/> 100.00

30. RADIOLARIAN OOZE.—Station 266. Lat. 11° 7' N., long. 152° 3' W., 2750 fathoms (Renard).

- I. 0.6580 gm. of substance gave 0.1087 gm. of loss on ignition, 0.3478 gm. of silica, 0.0011 gm. of cupric oxide, 0.0391 gm. of peroxide of iron, 0.0384 gm. of alumina, 0.0345 gm. of phosphate of alumina = 0.0145 gm. of alumina and 0.0200 gm. of phosphoric acid, 0.0099 gm. of pyrophosphate of magnesia, 0.0063 gm. of phosphoric acid, 0.0141 gm. of manganous sulphide = 0.0115 gm. of manganous oxide, 0.0435 gm. of lime, and 0.0884 gm. of pyrophosphate of magnesia = 0.0318 gm. of magnesia, and traces of cobalt, soda, and potash.
- II. 0.4725 gm. of substance heated with 2 grms. of carbonate of soda in the water-bath for thirty hours, water being constantly added, gave 0.0607 gm. of silica = 12.84 per cent.

Silica,	52.85
Copper,	0.16
Peroxide of iron,	5.94
Alumina,	8.22
Phosphoric acid,	3.99
Manganous oxide,	1.74
Lime,	6.61
Magnesia,	4.84
Cobalt, soda, potash,	traces
Loss on ignition,	16.52
	<hr/> 100.87

31. DIATOM OOZE.—Station 157. Lat. 53° 55' S., long. 108° 35' E., 1950 fathoms (Brazier).

	Loss on ignition after drying at 230° Fahr.,	5.30
Portion soluble in Hydrochloric Acid = 89.98	Alumina,	0.55
	Ferric oxide,	0.39
	Calcium phosphate,	0.41
	Manganese oxide,
	Calcium sulphate,	0.29
	Calcium carbonate,	19.29
	Magnesium carbonate,	1.13
	Silica,	67.92
Portion insoluble in Hydrochloric Acid = 4.72	Consisting of alumina and ferric oxide, with silica,	4.72
		<hr/> 100.00