RESIDUE.				Additional Observations.
Per cent.	Siliceous Organisms.	Minorals.	Fine Washings.	
	Radiolaria, Astrorhizidæ, Lituo- lidæ, arenaceous Textularidæ.	Particles of volcanic glass some of them black, and minute rock fragments.	•••	The water in the sounding tube on being allowed to settle deposited some brown coloured sediment, composed of Globigerina, Pulvinulina, Echini spines, Ostracode valves; a good many small manganese particles, and many small red mineral fragments were also observed, as also a few Uvigerina. Altogether, this indicates a red coloured Globigerina Ooze. In the tow-not at the weights there were an angular pebble about one inch (25 mm.) long, and a great many small rock fragments, measuring from 1 to 5 mm. in diameter, some of them augite-andesite.
35·66	(1.00%), Radiolaria, Spongo spicules, Astrorhizidæ, Lituo- lidæ, arenaccous Textularidæ.	(3.00 %), m. di. 0.10 mm., angular; plagioclase, augite, altered olivine, many white glassy volcanic splinters, palagonite, phillipsite in single crystals and fibro-radiating aggregations, magnetite, manganese grains.	(31.66 %), much fine amorphous matter, a few mineral frag- ments, and remains of siliceous organisms.	Two layers were noticeable in the tube, a straw coloured upper and a dark brown lower. The upper layer contained the organisms noted, while in the lower layer the organisms were few and manganese abundant. A small nodule (the size of a pea) was observed. In the washings of the coze from the trawl there were a few volcanic pebbles, some of them transformed into palagonite.
28·85	(1.00 %), 'Radiolaria, Sponge spicules, Astrorhizidæ, Litu- olidæ.	(1.00%), m. di. 0.08 mm., angular; manganese grains, plagioclase, magnetite, a few isolated yellow crystals of phillipsite, augite, glassy volcanic particles.	(26.85 %), a quantity of dark red-brown, very fine grained, amorphous matter, some mineral fragments.	There was no trace of deposit in the tube, except a few shells of Globigerina at the valves. The trawl brought up a large quantity of manganese nodules (3 to 4 quarts = 3 4 to 4 5 litres) varying from the size of a peat to that of a hen's egg. One of the tow-nets at the trawl was full of a yellow coloured coze in which were many rounded manganese nodules. The nuclei of some of the larger of these nodules are composed of a yellow or dark green material easily cut with a knife, showing the last stage of decomposition of palagonite. There were some lumps of the coze in the tow-net, showing the beginning of the nodule formation.
94.35	(4.00 %), Radiolaria, Reophax, casts of Foraminifera, Diatoms.	(1.00 %), m. di. 0.07 mm., angular; felspar, plagioclase, pumice, augite, quartz, mica, hornblende palagonite, glauconite.	(89.35 %), much blue-grey amorphous matter, some mineral and siliceous remains.	A section of about a foot (30 cm.) of mud of a blue colour was in the tube; on the surface there was a layer of a reddish colour which gave no trace of carbonate of lime on treatment with acid. The tow-nets at the trawl had each a little mud of a red or brown colour which did not effervesce with acid; evidently from the surface layers of the deposit. In a tow-net there was a manganese nodule, flat and round, about one inch (25 mm.) across and one and a quarter inches (81 mm.) thick, with a neucleus of pumice, also portions of a Cephalopod beak, and two pieces of twigs. Many excreta of Echinoderms are present. Imperfect casts of Foraminifera remain after treatment with dilute acid.
100.00	(1.00 %), Lituolidæ, arenaceous Textularidæ, Diatoms.	(1.00 %), m. di. 0.08 mm., angular; felspar, plagioclase, hornblende, white or yellow- ish mica, olivine, magnetite, quartz (rare).	(98.00 %) much greenish amorphous matter, fine minerals, and a few siliceous remains.	No effervescence is noticed when the mud is treated with dilute acid, but a strong smell of sulphuretted hydrogen is evolved. The mica and clivine are both altered and yellowish or nearly opaque. The particles are very small for a shore deposit.