

Per cent.	RESIDUE.			ADDITIONAL OBSERVATIONS.
	Siliceous Organisms.	Minerals.	Fine Washings.	
100·00	(5·00 %), Sponge spicules, Radiolaria, casts of Foraminifera, Diatoms.	(60·00 %), m. di. 0·20 mm., angular; felspar, plagioclase, pumice, augite, quartz, magnetite.	(35·00 %), amorphous matter, fine mineral and siliceous remains.	Green casts of Foraminifera are left after treatment with acid. In the trawl at the latter depth there were some very large hardened pieces of the bottom. These were perforated by worms and in some cases slightly coated with manganese. In the cup of the lead were several hardened clay nodules, and rather angular pebbles. The minerals are of volcanic origin.
95·55	(5·00 %), Radiolaria, Astrorhizidæ, Lituolidæ, Sponge spicules, Diatoms.	(30·00 %), m. di. 0·15 mm., angular; almost all volcanic minerals, monoclinic and triclinic felspars, augite, hornblende, magnetite, fragments of black vesicular glass, pumice, black mica, manganese.	(60·55 %), amorphous matter, minute fragments of minerals and siliceous organisms.	The trawl brought up many animals, much mud, several pumice stones, and many large blocks having the same mineralogical composition and clastic elements as the mud itself; these appear to be indeed simply hardened or conglomerated portions of the deposit. In these conglomerated portions there are fragments of plagioclase coated with glassy matter, splinters of augite and hornblende, magnetite, fragments or lapilli of basaltic rocks, vesicular or massive, and opaque splinters of pumice filled with microliths. In the washings of the mud were many arenaceous Foraminifera.
100·00	(8·00 %), Sponge spicules, Radiolaria, <i>Reophax nodulosa</i> , Diatoms.	(10·00 %), m. di. 0·07 mm., angular; felspar, plagioclase, augite, magnetite, glassy volcanic splinters.	(82·00 %), much amorphous matter, fine mineral fragments.	No blue lower layer was observed in the deposit, as was the case in the bottoms taken in the Japan stream. The deposit is a Red Clay, intermixed with which are remains of siliceous organisms, broken down pumice, and volcanic mineral particles.
100·00	(3·00 %), Radiolaria, <i>Reophax nodulosa</i> , Diatoms.	(10·00 %), m. di. 0·10 mm., angular; plagioclase, felspar, pumice, scorie, magnetite, palagonite, augite, manganese grains, olivine, microscopic lapilli.	(87·00 %), much amorphous red coloured matter, mineral and siliceous remains.	A considerable quantity of pumice is present; two pieces, about the size of a bean, quite black on the outside, were obtained on washing a quantity of the clay. The siliceous organisms do not seem to be so abundant as in the previous sounding. Among the washings were numerous black particles of manganese.
100·00	(5·00 %), Radiolaria, Sponge spicules, <i>Rhabdammina</i> , Lituolidæ, Diatoms.	(5·00 %), m. di. 0·07 mm., angular; plagioclase, pumice, scorie, glassy volcanic particles, magnetite, augite, palagonite.	(90·00 %), much red amorphous matter, siliceous and mineral remains.	This deposit is similar to that obtained at the last station, but the siliceous organisms seem to be more abundant. In the clay were worm-tubes much impregnated with manganese, also several blackened pieces of pumice about the size of a pea. The minerals are chiefly broken down pumice.
82·71	(15·00 %), Radiolaria, Astrorhizidæ, Lituolidæ, Diatoms.	(10·00 %), m. di. 0·10 mm., angular; felspar, chiefly monoclinic with numerous vitreous inclusions, augite, more rarely hornblende, magnetite, numerous fragments of pumice, manganese.	(57·71 %), amorphous matter, numerous small vitreous fragments, fine mineral particles, fragments of siliceous organisms.	The trawl brought up many hundreds of pumice stones and many animals. The tow-nets attached to the beam of the trawl were filled with fine soft clay. The arenaceous Foraminifera are very abundant and macroscopic. About fifty of the fragments of pumice had a diameter of from 8 to 15 cm. The majority were about 5 cm., but fragments of all sizes were abundant, down to small microscopic particles, those of the larger size being generally less decomposed than the smaller ones. Microscopic sections of these pumice stones show vitreous basis, sanidine, plagioclase, and augite.
100·00	(3·00 %), Radiolaria, <i>Haplophragmium luidorsatum</i> , Diatoms.	(5·00 %), m. di. 0·10 mm., angular; plagioclase, augite, pumice, some rounded grains of quartz.	(92·00 %), much fine reddish clayey matter, small particles of volcanic minerals and pumice, fragments of siliceous organisms.	There was a small quantity of the deposit in the sounding tube, and also a small quantity and two small manganese nodules in the water-bottle. The nodules had a nucleus of altered pumice, and a coating of manganese an eighth of an inch (3 mm.) in thickness.