

Per cent.	RESIDUE.			ADDITIONAL OBSERVATIONS.
	Siliceous Organisms.	Minerals.	Fine Washings.	
100·00	(8·00 %), Radiolaria, Astrorhizidæ, <i>Trochammina trullissata</i> , Diatoms.	(10·00 %), m. di. 0·10 mm., angular; almost entirely composed of microscopic splinters of brown volcanic scoriaeous glass (volcanic ash), plagioclase, magnetite.	(82·00 %), much amorphous matter, fine mineral and siliceous remains.	A considerable quantity of the deposit was obtained in the tube. The minerals consist mainly of broken down scoriae. In the trawl were about a dozen pieces of pumice stone, averaging an inch (25 mm.) in diameter; these fragments are impregnated with manganese and overgrown with <i>Hyperammia vagans</i> ; to one was attached a small Brachiopod.
100·00	(15·00 %), Radiolaria, Astrorhizidæ, Lituolidæ, <i>Gaudryina siphonella</i> , Diatoms.	(10·00 %), m. di. 0·10 mm., angular; pumice fragments, scoriae, felspar, plagioclase, hornblende, augite, magnetite, altered microscopic fragments of volcanic rocks.	(75·00 %), much fine amorphous matter, minute mineral and siliceous remains.	The upper portion of the deposit was red, the lower a blue colour. A great many Diatoms and Radiolaria are present; one fragment of pumice, 0·5 cm. in diameter, was noticed.
96·71	(3·00 %), Sponge spicules, fragments of Radiolaria, a few casts, Diatoms.	(80·00 %), m. di. 0·20 mm., angular; felspar, plagioclase, magnetite, augite, hornblende, glauconite, quartz, fragments of volcanic glass and pumice.	(13·71 %), a small quantity of amorphous matter, minute particles of volcanic minerals and siliceous organisms.	Some of the mineral particles are coated with manganese. Some fragments of rocks measure about 0·5 cm. in diameter. Among the minerals there are a large number of lapilli of black volcanic glass more or less rounded and vesicular, measuring from 1 to 2 mm. in diameter. A few pale green casts of Foraminifera remained after treatment with acid.
88·68	(10·00 %), Sponge spicules, <i>Haplophragmium canariensis</i> , Diatoms.	(50·00 %), m. di. 0·10 mm., angular and rounded; quartz, felspar, white and green mica sometimes altered, hornblende, rarely augite, zircon, chlorite.	(28·68 %), fine mineral particles, amorphous matter, and siliceous remains.	The mud proper shows only one or two points of effervescence when treated with dilute acid. Mixed with the mud are large Lamellibranch shells, twigs, &c. A great many Diatoms are present. The felspar is often kaolinised.
...	...	...	...	The dredge brought up several rounded fragments of rocks and irregular masses of conglomerate, the latter made up of smaller rock fragments cemented together by calcareous organisms; all these were overgrown with <i>Serpula</i> , <i>Balanus</i> , <i>Polyzoa</i> , Corals, and Molluscs.
95·71	(2·00 %), Radiolaria, Sponge spicules, Diatoms.	(40·00 %), m. di. 0·10 mm., rounded and angular; quartz, plagioclase, orthoclase, altered felspar, white mica, hornblende, tourmaline, zircon.	(53·71 %), fine mineral particles, some clayey matter, and remains of siliceous organisms.	These and other soundings in the Inland Sea gave a sticky Blue Mud. The washings of a large quantity of this mud consisted of a number of broken and dead Gasteropod, Lamellibranch, and <i>Dentalium</i> shells with a few Milliolidæ and Rotalidæ. There are many Diatoms present in the mud as well as on the surface. Shells of pelagic Foraminifera and Pteropods are apparently absent in these deposits.
100·00	(3·00 %), Radiolaria, Sponge spicules, Diatoms.	(15·00 %), m. di. 0·08 mm., angular, rounded, felspar, mica, magnetite, glassy particles, coloured altered glassy particles, hornblende.	(82·00 %), fine mineral fragments, Diatom and other siliceous remains, a small quantity of fine amorphous material.	Only traces of the bottom came up on the outside of the tube, but in the water-bottle was a quantity of Blue Mud, having streaks here and there of a red tinge. The great mass of the washings consists of fine mineral particles, remains of Diatoms and Radiolaria. Only one or two <i>Globigerina</i> shells were observed and these small. Among the Radiolaria were noticed several specimens of <i>Challengeria tizardi</i> .
[95·00]	(5·00 %), Radiolaria, Sponge spicules, casts of Foraminifera, Diatoms.	(60·00 %), m. di. 0·20 mm., angular; plagioclase, felspar, quartz, augite, magnetic particles, pumice, glauconite, fragments of volcanic rocks.	(30·00 %), fine amorphous matter, minute mineral and siliceous remains.	No mud was obtained from the sounding tube or trawl, but in the trawl were three or four pieces of pumice, and about the bases of some Actinias were traces of the bottom. Worm-tubes were present. After treatment with acid a good many light and dark green casts of Foraminifera are observed. The percentages have been approximated, there being too small a quantity for analysis.

Admiralty Islands to  
Yokohama—continued.

Off Japan.