

RESIDUE.				ADDITIONAL OBSERVATIONS.
Per cent.	Siliceous Organisms.	Minerals.	Fine Washings.	
84.60	5.00 %, Radiolaria, Spongo spicules, Astrorhizidæ, Lituolidæ, Diatoms.	(1.00 %), m. di. 0.06 mm., angular; glassy volcanic particles, felspar, plagioclase, hornblende, augite, magnetite, quartz, small particles of andesitic rocks.	(78.60 %), much amorphous matter, fine mineral and siliceous remains.	A section of about four inches (10 cm.) came up in the sounding tube; the uppermost inch was of a red colour containing no calcareous organisms, the lower portion being a blue-grey compact mud containing the organisms noted, two or three pieces of pumice, and several manganese grains. One of the tow-nets at the trawl was half full of a red-brown mud, and some of this was in the bag of the trawl and adhering to the nodules, &c. In the trawl there was over a quart (over a litre) of nodules and fragments of pumice. Some of these nodules are manganese throughout; others are formed of pumice surrounded by a deposit of manganese, while one had a nucleus of altered basalt. In addition there were a hard angular piece of granite, small hardened concretions of the bottom, and a fragment of a Cephalopod beak. On one of the nodules was attached a large <i>Scalpellum darwini</i> . In the washings from the trawl were observed great numbers of <i>Rhizammia algaformis</i> .
45.91	(1.00 %), Radiolaria, Spongo spicules, Astrorhizidæ, Lituolidæ, arenaceous Textularidæ.	(2.00 %), m. di. 0.08 mm., angular; felspar, plagioclase, magnetite, augite, small volcanic lapilli, palagonite, manganese grains.	(42.91 %), amorphous brown coloured matter, fine mineral and siliceous remains.	Only a small quantity of ooze came up in the tube. A considerable quantity came up in the trawl, amongst which were several small basaltic pebbles having a slight coating of manganese, and three or four pieces of a hardened ruff of a red colour, flat, and coated with manganese to the thickness of $\frac{1}{4}$ or $\frac{1}{2}$ an inch (6 or 12 mm.). The ooze contains also a good many black particles and pebbles about the size of peas.
17.69	(1.00 %), Radiolaria, Astrorhizidæ, Lituolidæ, Textularidæ, casts of Foraminifera, Spongo spicules, Diatoms.	(1.00 %), m. di. 0.07 mm., angular; felspar, quartz, augite, pumice, palagonite, manganese grains, glauconite, zircon.	(15.69 %), red-brown amorphous matter, mineral and siliceous remains.	A considerable quantity of ooze was obtained in the sounding tube. In it were small pieces of manganese, pumice, and other mineral particles. In the trawl was about a peck (9 litres) of the ooze, in which were a number of manganese nodules, with nuclei of fragments of basalt with a vitreous base passing into palagonite, overgrown with worm tubes and <i>Hyperammia vagans</i> , some volcanic pebbles, and a piece of granite with a slight coating of manganese. There was also a fragment of a siliceous rock resembling flint, composed of calcedony and grains of crystalline silica. Red and yellow casts of the Foraminifera remain after treatment with acid. Some particles of quartz are large and rounded.
74.21	(1.00 %), Radiolaria, Spongo spicules, <i>Ricophax difflugiformis</i> , Textularidæ.	(10.00 %), m. di. 0.10 mm., angular; brown vesicular volcanic glass, felspar, plagioclase, augite, hornblende, magnetite, many particles of pumice, quartz, glauconite.	(63.21 %), grey coloured amorphous matter, fine mineral particles, and a few remains of siliceous organisms.	The tube brought up a considerable quantity of stiff light blue-grey mud containing the organisms noted. The surface of the section was of a yellowish colour and much softer than the deeper layers. The Foraminifera are fewer and pumice particles more abundant in the lower layers.
97.28	...	(96.28 %), m. di. 0.17 mm., rounded; quartz, yellow-green mica flakes with apatite inclusions, felspar, fragments of ancient crystalline rocks and schists, hornblende, green chloritic substance covering the quartz and the other mineral particles.	(1.00 %), a few fine mineral particles.	...

Valaparaíso to Gulf of Penha.

Gulf of Penha to Sandy Point through Megellan Strait.