VIII. CORED MATERIALS

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During the present cruise, 13 piston core samples were obtained. Six of them are from the trenches, two of them are from the Pacific floor, four of them are from the continental slopes and one of them is from the trench slope. Fig. VIII-1 shows the characteristics of the core samples. Most of the samples are muddy sediments composed of silt or clay. They have many diatoms and some foraminifer. Generally, they include some layers of tuff, pumice and scoria. They sometimes include biogenic fragments such as sponges.

In general, scorias are found in samples from the Pacific floor and pumuces are found in samples from the continental slopes and trenches.

The core from St. 434 (Japan Trench) is composed of some rounded pebbles of cherts and basalts which have diameters of a few centimeters and little muddy sediment around the sampler. The core sample of St. 438 (Japan Trench) is composed of muddy sediment, thin sand layers, tuffs and volcanic sands. It differs from other samples, in containing three horizons of cabonate. The core sample of St. 442 (Ocean floor) has some small brown nodules in brown silt at the top. The sample is composed mainly of silty sediments.

Some tuffaceous layers, scorias and sandy layers are also present. Near the end of the core, there is a hard thin dark green silt layer.

The core sample of St. 449 (Kurile Trench) has many sulfide layers and has very poor bioturbation.

Core sample St. 455 (Kurile Trench) has some grayish brown soft balls at the top, and a layer of sponge fragments.

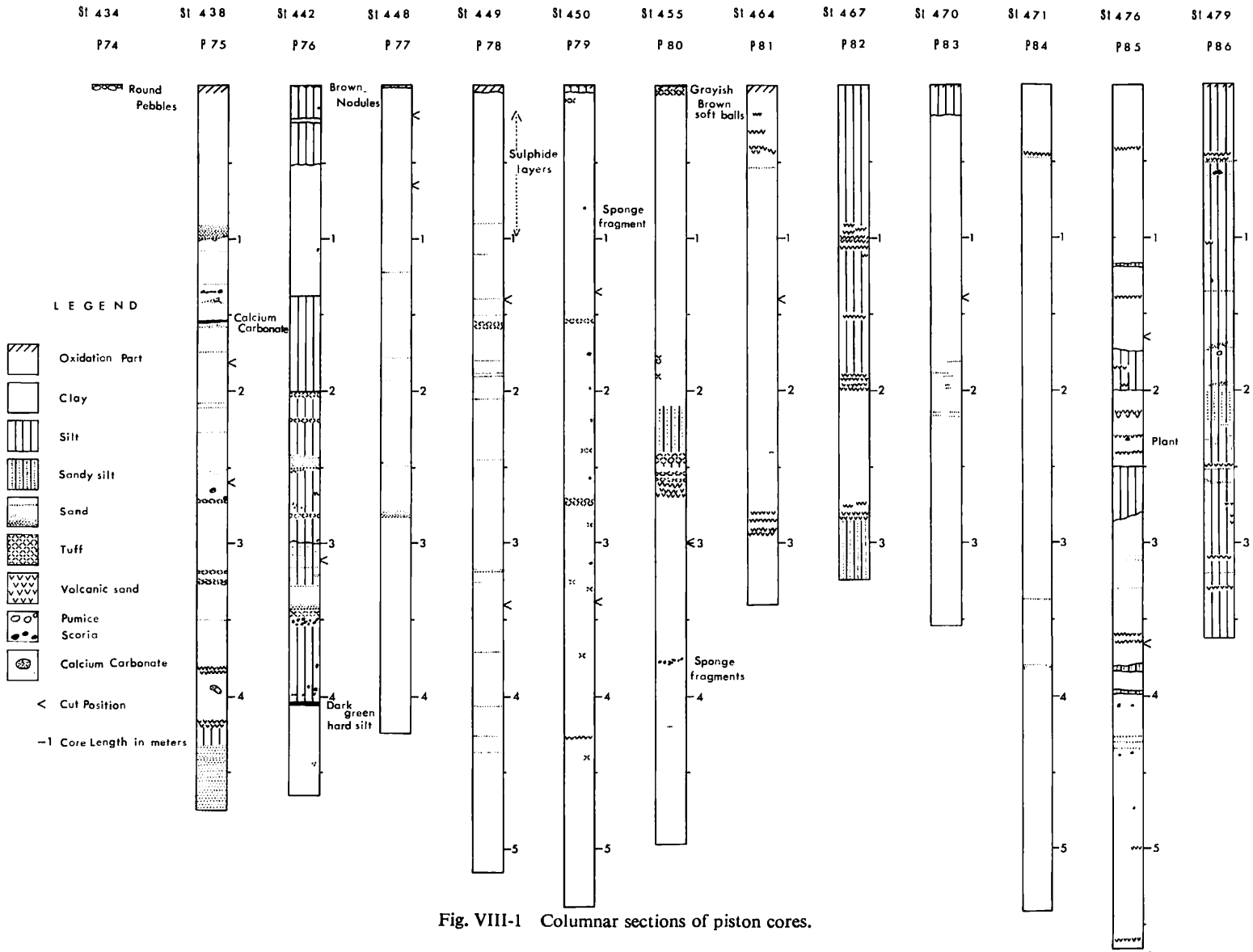

Fig. VIII-1 Columnar sections of piston cores.