



*An instrument cluster used for water sampling.*

oceans circulates through the porous ocean floor every eight to ten million years. It becomes superheated, and as it percolates it leaches various elements—potassium, calcium, silicon, iron, lithium and manganese—from the crust.

The Institute was also much involved in a cooperative project with Woods Hole called Hebble, for High Energy Benthic Boundary Layer Experiment. The Bedford scientists monitored current meters attached to buoyed mooring lines at various places between the Grand Banks and the outer edge of the continental shelf south of Cape Cod. They discovered two great currents on the floor of the northwest Atlantic, carrying water masses measured in cubic miles in clockwise and counter-clockwise "gyres" near the New England sea mounts, a chain of extinct volcanoes.

The scientists also found that "benthic storms" sweep the deep, deep sea, stirring up blizzards of sediment and leaving grooves in the ocean floor.



*A section of the General Bathymetric Chart of the Oceans, showing the waters off Labrador and Newfoundland.*