High Resolution Seismic Profiles in Hood Canal and Southern Puget Sound, Washington

by

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Approximately 200 km of high-resolution seismic reflection profiles were recorded in the environs of Hood Canal and southern Puget Sound, Washington from the U.S. Geological Survey's research vessel DON J. MILLER on December 6 to 11, 1976. These data were obtained to provide information on the thickness and distribution of Quaternary deposits, to identify structures that deform them, and to provide a basis for assessing geo-environmental hazards.

Tracklines shown on the accompanying map were located by a combination of precision transponder navigation system and ship's radar with variable range marker. The tracklines are dashed where the ship circled due to equipment failures.

The source of seismic energy used was a 400 Joule double-back Uniboom system with recorder sweep rate of 1/4-second and a 1/4-second firing rate. Filter settings were 6000 Hz (high) and 200 Hz (low). Ship's speed averaged about 3.5-4 knots.

The superior seamanship of Captain Robert D. Stacey and his crew contributed substantially to the success of the cruise.

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