UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SEISMIC REFLECTION PROFILE ACROSS THE QUEEN
CHARLOTTE FAULT ZONE, DIXON ENTRANCE, CANADA-U.S.

By

P. D. Snavely, Jr., U.S. Geological Survey
D. L. Tiffin, Geological Survey of Canada
D. H. Tompkins, U.S. Geological Survey

Open-File Report
80-1063

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

SEISMIC REFLECTION PROFILE ACROSS THE QUEEN
CHARLOTTE FAULT ZONE, DIXON ENTRANCE, CANADA-U.S.

by

P. D. Snavely, Jr., D. L. Tiffin, and
D. H. Tompkins

During the summer of 1977 the U.S. Geological Survey (USGS) in cooperation with the Geological Survey of Canada collected approximately 670 km of 24-channel seismic reflection, magnetic, and gravity data on the continental margin off Graham Island, British Columbia and off Dixon Entrance, Canada-U.S. These geophysical data were collected on USGS R/V S. P. LEE with Snavely and Tiffin as co-chief scientists. The profile, Line L5-77WC, crosses the continental margin off Dixon Entrance and includes the Queen Charlotte fault zone.

The profile, Line L5, was obtained using a sound source of a tuned array of five air guns totaling 1326 in^3. The recording system consisted of a 24-group streamer, 2400 meters long and a GUS (Global Universal Science) model 4300 digital recording instrument. Records were sampled at a 2-millisecond rate and later processed at a 4-millisecond rate. Navigational control for the survey was by satellite fixes augmented by doppler-sonar dead reckoning.

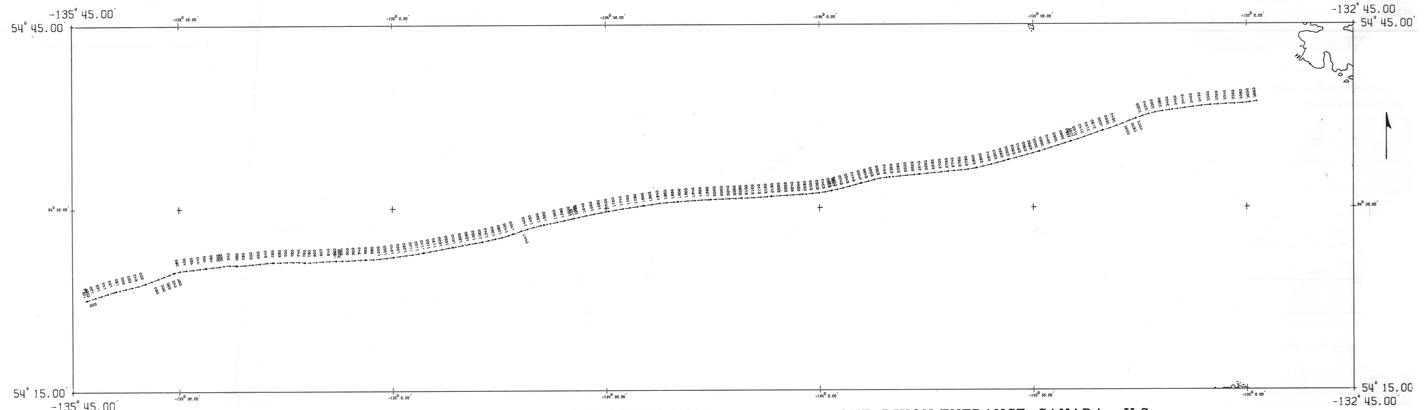
The seismic data along Line L5 can be examined at USGS office, Room B-164, Deer Creek Facility, 3475 Deer Creek Road, Palo Alto, CA and in the library of the Pacific Geoscience Center, Institute of Ocean Sciences, Sidney, British Columbia. Copies of the data on 35-mm continuous flow film are available through the National Geophysical and Solar-Terrestrial Data Center, NOAA, Boulder, CO 80302, telephone (303) 499-1000, extension 6542. The data can also be examined in Room B-164, U.S. Geological Survey, Deer Creek Facility, Palo Alto, CA.

REFERENCES

Seemann, D. A., and Tiffin, D. L., 1980, Physiography of Dixon Entrance and approaches: Geological Survey of Canada Open-file 684.

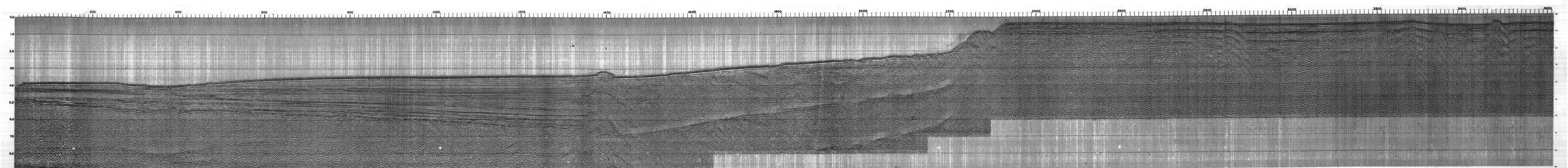
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

USGS OPEN FILE 80-1063



L577WC LINE 5 SHOT POINTS MERCATOR 1:250K

SEISMIC REFLECTION PROFILE ACROSS THE QUEEN CHARLOTTE FAULT ZONE, DIXON ENTRANCE, CANADA - U.S.

By

P. D. Snavely, Jr., D. L. Tiffin, D. H. Tompkins