



TRACKLINES OF MULTICHANNEL SEISMIC-REFLECTION DATA  
COLLECTED IN THE BEAUFORT AND CHUKCHI SEAS IN 1977  
FOR WHICH DEMULTIPLEXED FIELD TAPES  
ARE AVAILABLE FROM THE U.S. GEOLOGICAL SURVEY

By  
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The U.S. Geological Survey (USGS) collected approximately 5700 km of 24-channel seismic-reflection data from late August through early October, 1977, over the continental shelf, slope, and rise in the Beaufort Sea, and the continental shelf in the Chukchi Sea. The data were collected aboard the USGS research vessel *Samuel P. Lee*. The seismic energy source consisted of a tuned array of five air-guns with a total volume of 126 cubic inches of air compressed to approximately 1900 psi. The recording system consisted of a 2400-meter, 24-group streamer and a GEI (Geophysical Electronics Institute) model 4200 digital recording instrument. Shots were fired every 50 meters and the group interval was 150 meters. A 2-millisecond sample rate was used in the field; the field data were later decimated to a 4-millisecond rate during the demultiplexing process. The survey was positioned by a Raytheon integrated satellite-aided inertial navigation system. Record length for most of the data is 7 seconds, but for a few lines the record length was 6 seconds. A deep-water-delay was used over the continental slope and rise to allow recording of 6 to 7 seconds of data below the seafloor. The pre-demultiplexing editing and demultiplexing were done at the USGS Marine Geology Multichannel Seismic Data Processing Center in Menlo Park, California. Copies of the shot-sequential demultiplexed tapes and information concerning tape formats can be obtained, at the requester's expense, by contacting:

Data Center  
Pacific-Arctic Branch of Marine Geology  
United States Geological Survey  
341 Middlefield Road  
Menlo Park, California 94025

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 U.S.G.S.

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