

United States  
Department of the Interior  
Geological Survey

MULTICHANNEL SEISMIC-REFLECTION PROFILES COLLECTED  
IN 1980 IN THE NORTHERN BERING SEA

by

Michael S. Marlow, Alan K. Cooper, Gregory L. Smith, and Thomas E. Chase

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During 1980 (cruise L6-80-BS) the U. S. Geological Survey collected 1800 km of 24-fold seismic-reflection data in the Gulf of Anadyr and across Navarin basin (Fig. 1). The profiles were collected on the R/V S. P. LEE using a sound source of five air guns totalling 1,326 in<sup>3</sup>. The recording equipment consists of a 24-channel streamer, 2400 meters long, with a group interval of 100 m, and a GUS (Global Universal Science) Model 4200 digital recording system. Shot records were recorded at a 2 millisecond sample rate, and later processed at a 4 millisecond rate. Navigational control of the survey was by satellite fixes integrated with Loran C (Rho-Rho) and doppler-sonar bottom-track navigation.

The seismic-reflection records vary from 10 to 12 seconds in length depending upon water depth and geologic structure. The first 10 seconds of the shot records were edited, stacked, deconvolved, filtered, and displayed on an electrostatic plot.

Copies of the data are available through the National Geophysical Data Center, NOAA/EDIS/NGDC, Code D64, 325 Broadway, Boulder, CO 80303. Telephone (303) 497-6338.

