PRELEASE INVESTIGATION MAPS OF THE NORTH ALEUTIAN SHELF OUTER CONTINENTAL SHELF BERING SEA ALASKA 1984

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The U.S. Department of the Interior has scheduled the North Aleutian Shelf, Outer Continental Shelf (OCS) Oil and Gas Lease Offering for April 1985. This map is one of five prepared as part of the prelease investigation of the surface and near-surface geologic environment of the North Aleutian Shelf. Maps in the study area are:


Map showing contemporary sea-floor bed forms, North Aleutian Shelf, Bering Sea, Alaska, by P. J. Hoose and K. H. Ashenfelter. Sheet 5.

The information presented in these five reports was interpreted mainly from 4,008 line km of multisensor piezoelectric and a 3.5-kHz piezoelectric profiler, 10- to 40-cubic-inch air guns recorded in single-channel, analog format and a 3.5-kHz piezoelectric profiler, a 40-kHz narrow-beam fathometer, and a side-scan sonar.

During the survey, navigation along preplotted track lines was accomplished using a Cubic Western DM-54 Automatic Ranging Grid Overlay (ARGO) system with an accuracy of 30 m and a precision of 8 m. A Motorola Mini-Ranger III system was used to calibrate the ARGO system and as a backup.

Copies of the data, base maps, and digital navigation tapes can be obtained from the National Geophysical Data Center (address: NOAA, EDIS/NGDC, Code OCS, 325 Broadway, Boulder, Colorado, 80303). Inquiries should refer to OCS Sale 92, data set identifier AK 1989.

The MTS data were supplemented by a 1976 survey performed by the U.S. Geological Survey aboard the R/V S.P. Lee. The seismic system used was an array of five air guns totaling 1,325 cubic inches and was recorded on 24 channels and CDP processed. The CDP data were sampled at a 2-ns rate and recorded for 5 s. Navigation was by satellite fixes supplemented by Loran C and doppler sonar. Approximately 672 line km of data were collected in the North Aleutian Shelf study area. Copies of the data and navigation are available from the National Geophysical Data Center, Boulder, Colorado. Inquiries should refer to OCS Sales 70 and 75.

The third data set used in this interpretation was collected in 1980 by Fugro Inc., of Long Beach, California, aboard the NOAA ship R/V Discoverer. Fugro performed this survey while under contract to the National Oceanic and Atmospheric Administration's Outer Continental Shelf Environmental Assessment Program (OCSEAP). The seismic systems used consisted of an array of up to two 10- to 40-cubic-inch air guns recorded in single-channel and a 3.5-kHz piezoelectric profiler. Navigation was by Loran C with periodic corrections by satellite fixes. Approximately 4,214 line km of data were collected and 108 sediment samples were taken.

The fourth data set used in this interpretation was collected in 1976 by Petty Ray Geophysical while under contract to the U.S. Geological Survey. The seismic systems used consisted of a 4.6-kJ spark recorded in single-channel, analog format and a 3.5-kHz piezoelectric profiler. Navigation was by Loran C and approximately 114 line km of data were collected in the North Aleutian Shelf study area. Copies of the data and navigation are available from the National Geophysical Data Center, Boulder, Colorado. Inquiries should refer to OCS Sale 70, data set identifier AK 15947.

The track lines from these four surveys are indicated on the maps. In addition, a 4.8- X 4.8-km grid representing the tract boundaries from the Bureau of Land Management Protraction Diagram is also superimposed on each map. The tracts to be offered for lease are entirely within the area shown on these maps. For lease purposes, the official Bureau of Land Management protraction diagrams should be used.