Purpose

The seismic data and information contained on this CD-ROM were acquired by Jebco Seismic, Inc. (Jebco) in 1988 offshore Oceanside, California. Jebco acquired these data under speculation for Outer Continental Shelf(OCS) Lease Sale 95. Lease Sale 95 was canceled on June 6, 1990. The Minerals Management Service subsequently purchased ownership rights to the data set and is now releasing it to the public 17 years ahead of its regulatory release date*.

In 1996, the Pacific OCS Region of the MMS acquired full ownership rights to these data under MMS Purchase Order No. 1435-02-96-PO-25228. MMS' intent in purchasing full ownership rights is to release these data to the public as swiftly as possible so they can be scrutinized by academia and research organizations. This data can serve as an instructional aid, a data set for earthquake hazards assessment, and for unraveling the tectonic history of the southern California borderland. Simultaneously, MMS hopes that the oil and gas industry will benefit by analyzing these data for potential accumulations of oil and gas.

*Federal regulations mandate that geophysical data and processed geophysical information, acquired under a Federal OCS permit (including reprocessed information and interpreted geophysical information) be released to the public no later than 50 and 25 years after the date on which the information was submitted to the MMS, respectively (see 30CFR251.14-1(d)(1) and (2)). Processed geophysical information (migrated and unmigrated film and paper copies), collected under Federal OCS Permit number C88-505, were submitted to the MMS by Jebco on March 6, 1989. Digital data and information, excluding navigation data, were never requested by the MMS nor submitted to the MMS. Therefore, the only data that MMS would have been able to release are the paper and film copies submitted on March 6, 1989; these data would not have been releasable to the public until March 6, 2014.

The Data Set

We have tried to include as much information as possible on this CD-ROM, and to provide it in an easy to use format. The processed geophysical data (pre-stack migration seismic lines) were scanned from analog film playbacks using a Calcomp Scanplus III drum scanner. Limitations in the display program on the CD-ROM prevented scanning densities of more than 400 dots per inch. The display program, Adobe Acrobat Reader©, was selected for use on this CD-ROM because of its universal acceptance for many forms of computer displayed

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material and Adobe's allowance that it be freely distributed. An Adobe Acrobat Reader file uses a Portable Document File (.pdf) file extension. Acrobat Reader allows the user to print the files and zoom in and out of the displays with relative ease. All of the scanned seismic data can be accessed directly by clicking on the *Seismic Lines* heading under *Data Set* in the *Table of Contents* or by clicking on the line name that is highlighted in blue on the *navigation map*.

The navigation map that can be displayed on the screen by clicking on *Navigation Map* in the *Table of Contents* can also be downloaded in ASCII format from the *Downloads* section on this CD. This allows the user to import the navigation data into CAD programs and mapping software for incorporation into existing navigation databases, which allows scalable output to printers and plotters. The shot point locations are referenced to latitude/longitude and X/Y coordinates. X/Y locations are based on a NAD (North American Datum) 27 Datum and a California State Plane, Zone 6 projection.

Also included on this CD are scanned Tagged Image File Format (.tif) images of the pre-stack migrated lines. These were included for users who want to import an image for use on their own image viewer. We have also included the pre-stack migrated data in a standard SEG-Y format and included a SEG-Y display program written by the United States Geological Survey(USGS). This program allows the user to manipulate playback parameters on the screen. See the *Downloads* section on this CD entitled USGS SEG-Y Display Program for details regarding the use of program.

Interpreted Seismic Lines

In the *Interpretation* section of this CD we have included a few "dip" lines with limited interpretation on a stratigraphic horizon to highlight the geologic structural configuration near the top of a body of rocks that may be correlative to near the top of the Monterey Formation. These interpretations are provided for the user to quickly view the structural relationships from north to south in the basin. They are not intended to be used as MMS' definitive interpretation of the structure near the top of the Monterey Formation in the Oceanside basin.

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Resource Estimates

Also in the *Interpretation* section of this CD we have included an excerpt from an MMS report regarding the assessment of oil and gas resources in the Pacific OCS Region. The excerpt presents a discussion of the petroleum geology of the Oceanside-Capistrano basin and estimates of the oil and gas resources therein.

More Data Available

This CD-ROM contains only a fraction of the data that were purchased by MMS and are available for reproduction. In addition to the images and SEG-Y data presented here, MMS also has all of the SEG-Y data for the final stack and final DMO migration on nine-track tape. Additionally, Landmark T-Save backup tapes of these data, multiple boxes of nine-track field tapes and an Observer's log are available. To view the full inventory of data available, click here. These data, as well as a full report regarding the assessment of oil resources in the Pacific OCS Region, can be acquired by directing inquiries to:

Regional Supervisor
Office of Resource Evaluation
Minerals Management Service
Pacific OCS Region
770 Paseo Camarillo
Camarillo, CA 93010

Phone (805) 389-7700
Fax (805)389-7737

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Limitations of the Scanned Images

Inherent in the scanning of data with fine, closely spaced, parallel lines(such as signal traces on seismic data) is an aliasing of the lines in the water column. The aliasing is most apparent under low magnification but decreases when magnified. MMS geophysicists compared the scanned images to the original analog copies and concluded that the aliasing phenomenon did not impact the integrity of these data. On some of the scanned lines MMS found a large scale fading of these data in and below the water column. The cause of this phenomenon remains a mystery, as it is not in the original data set. A professional scanning company that has experience in scanning seismic lines was contacted and samples of these data were sent to determine if professional scanning could eliminate the fading. This was not successful. Again, our geophysicists determined that the integrity of these data was not compromised by this phenomenon as it is very easy to detect. However, the interpreter should be aware that this problem exists.

Acknowledgments

Production of this CD could not have been accomplished without the following individuals: Drew Mayerson, Frank Victor, Erik Johnson, Jeff Kennedy, Harold Syms, Catherine Dunkel, Kenneth Piper, Scott Drewry, and Frederick Arnold.

Finally, this CD would not be possible if not for the valuable administrative and managerial support of J. Lisle Reed and Robert G. Paul, who were instrumental in acquiring MMS' full ownership of these data.

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