

## MAP DATA

Regional-level cell data are provided in each of the regional directories (regx.cls). Cell data are also used to construct the exploration-history maps shown for each province in DDS-30 (filexx00.cls). Play-level files containing cell data have a .cls extension (filexxx.cls and filxxxx.cls). Several plays lack cell data and are represented by .cls files that contain only an "end" statement. The documentation for the cell data is in appendix F and in file celldoc.txt (located in the root directory).

Files containing line data have a .lin extension. Files ending with a co.lin or st.lin are included solely for the purpose of providing a base map for other data. Those files ending with a st.lin (including natst.lin) show State boundaries, including coastlines, and are from the 1:2,000,000 data set compiled by the USGS. The full, original data set can be obtained through 'anonymous FTP' at edcftp.cr.usgs.gov (internet protocol address 152.61.128.6). Those files ending with a co.lin (including natco.lin) represent county lines that are not coincident with State boundaries or coastlines, and come from a 1:100,000 data set extracted from U.S. Census TIGER/line files by Doug Nebert and Mark Negri, USGS. The full, original data set is available through 'anonymous FTP' at waisqvarsa.er.usgs.gov (internet protocol address 130.11.50.175). The original 1:100,000 data set was generalized by W. R. Beeman to eliminate features smaller than 1,000 meters. The data sets were then divided into smaller subsets of approximately the same areal extent as the assessment regions and provinces, which allows them to be utilized as background coverages without adversely impacting the drawing time using the map viewing program quikvu20.exe. The data sets are provided on this disk as convenient base maps for those who might choose to review the data using that map viewing program.

The state and county lines in the .lin files have been clipped by the region or province boundary so that only those lines within the appropriate region or province are included in the file. This clipping causes some edge effects where the region or province boundary coincides with State or county lines (as is the normal case). The state and county lines may have been partially removed, resulting in an interrupted line when drawn. Drawing the region or province outline on top of this will usually solve the problem; those who need a clean copy of the complete state or county lines can find all of them in the files natco.lin and natst.lin in the directory "national".

Files that begin "reg" but do not contain "co" or "st" represent outlines of assessment regions (regx.lin). The files in the province directories that end with "00.lin" represent outlines of assessment provinces. The outlines of assessment regions and provinces were compiled originally for Open-File Reports 92-696 and 93-331, both by Dolton and others (1992, 1993). Those outlines were later modified and converted to a digital format by W. R. Beeman, D. K. Vaughan, R. J. Viger, Z. C. Valin, and S. Tang (see acknowledgments in DDS-30).

Files that have a "file" or "fil" prefix and contain a four-digit number followed by a .lin extension, or a four-digit number followed by a single letter and the .lin extension, represent play outlines and are stored in the respective province directories. The first two digits always represent the province number; the next two digits represent the play number within that province. Plays 5801, 5804, 5812, and 6101 have several distinct and separate geographic parts and therefore multiple boundaries; an extra character is assigned to the file (5801a) to indicate which of the boundaries is represented. For a complete explanation of these four plays, please see the play documentation for provinces 58 and 61 and appendix E. A name in the form filexx00.lin always represents the full province.

The play outlines and the factors controlling them were determined by the province geologists and described in the documentation for each play. Most play boundaries were scanned from base maps that were compiled at a scale of 1:500,000. Some maps were compiled at 1:100,000 on a computer display using the digital version of the 1:100,000 county lines and digital cell maps of oil and gas production. Scanned maps were edited and modified using ARC/INFO, a commercial geographic information system (GIS) software package that is a product of Environmental Systems Research Institute (ESRI). The stored line coverages were converted from an Albers Equal Area projection to an ASCII file format, in decimal degrees. Each ASCII file containing line information has an identifying number for each line segment, followed by a series of x, y pairs that identify the locations, in decimal degrees, of the line segment's vertices. There is an end statement signifying the end of each line segment, and a final end statement when all of the line segments have been listed.

The viewer quikvu20.exe can be used for a rough display of the map data. Rather than presenting the map in a particular projection, the viewer plots the data by longitude and latitude on linear X and Y axes. While for the lower 48 States the distortion of small areas may be acceptable, there is considerably more distortion for the high-latitude maps of Alaska. For that reason, an alternate set of files was created for all of the Alaskan play outlines. This set of files is in Albers Equal Area projection, with a central meridian of 150 degrees West, standard parallels of 55 degrees North and 65 degrees North, and a latitude of origin of 55 degrees North with no false easting or false northing. These Alaskan files have an "alb" prefix and are to be viewed using alaskavu.exe.

The digital compilers were W. R. Beeman, R. J. Viger, D. K. Vaughan, Z. C. Valin, D. L. Barnett, K. L. Aggen, R. R. Charpentier, and G. N. Seward (see acknowledgments in DDS-30).