**PART B**

FILES AND FORMATS

This section is an introduction to the data files on the CD-ROM. Each type of data is briefly described here, specifics are given in table AW1 and in the metadata in Part D. All of the .PDF files were constructed in MapInfo and may be viewed with Adobe Acrobat Reader (provided on this CD in PartB\AAcrobat\ar405eng.exe). The ESRI ArcView and ArcInfo files were exported from MapInfo using its built-in Universal Translator and ArcLink tools, respectively. The ArcView files were used to create ArcExplorer project files (.AEP extension). ArcExplorer software is provided on this CD (PartC\ArcExplorer\aeclient.exe).

Topographic maps

Each of the twelve 1:100,000 Digital Raster Graphic (DRG) quadrangle maps in the GMUG National Forests are provided as a .TIF image with its associated georeferenced world .TFW file (PartB\Data\Topographic Maps). These files are in Universal Transverse Mercator (UTM) zone 13 projection (PartD\metadata\topos).

Mines and Prospects

Mines and prospects (PartB\Data\mines.*) are plotted on each of the twelve 1:100,000 Digital Raster Graphic (DRG) quadrangle maps in the GMUG National Forests, as shown in a .series of PDF files (Figures 5-16, PartB\PDFimage\Mines by Quadrangle). Inset maps are provided where data points are closely spaced. These files are prefixed “inset” (table 3) and will plot at 1:24,000 scale.

Mineralized areas

Mineralized areas (mnrlarea.*), discussed in Part A, are shown in a .PDF image overlying simplified geology and mines and prospects (figure 2, PartB\PDFimage\mnrlareas&mines.pdf).

Forest, County, and Study Area Boundaries

Files containing the outline of GMUG (PartB\Data\...\GMUG-FB.*) and the approximate county boundaries (PartB\Data\...\counties.*) are provided in Lambert Conformal Conic projection with a 108º west longitude central meridian (PartD\metadata) for use with the entire GMUG study area (PartB\Data\...\GMUGmask.*). These outlines are also shown on the mine and prospect maps (figures 5-16) of each of the twelve, 1:100,000-scale maps in UTM zone 13 projection. This was accomplished in MapInfo, which readily reprojects data “on the fly.”

Quadrangles

An index map of the 7 1/2-minute quadrangles (PartB\Data\...\QuadGrid.*) at 1:24,000 scale, covers the GMUG study area from 106º to 109º west longitude and from 37º 45' to 39º 30' north latitude.

Claim Density

Claim data (PartB\Data\...\claims.*) are excerpted from a digital data series by Hyndman and Campbell (1996), imported into MapInfo, and reprojected to Lambert Conformal Conic 108° west longitude central meridian. The data outside of the study area (PartB\Data\...\gmugmask.*) were manually deleted and cells (polygons) overlapping the study area boundary were kept.

Simplified Geologic Map

A simplified geologic map was constructed by importing the spatial data model of Day and others (1999) into MapInfo. Units were queried and combined into ten layers (data files are all in PartB\Data\...): 1) Precambrian rocks (XYcombo.*), 2) Cambrian to Mississippian sedimentary rocks (MDOCseds.*), 3) Pennsylvanian to Permian sedimentary rocks (P&seds.*), 4) Triassic to Jurassic sedimentary rocks (JTRseds.*), 5) Cretaceous sedimentary rocks (Kseds.*), 6) Tertiary sedimentary rocks (Tseds.*), 7) Tertiary plutonic rocks (Tplutons.*), 8) Tertiary volcanic rocks (Tvolc.*), 9) Tertiary basalt (Tbasalt.*), and 10) Quaternary sediments (Qseds.*). Because of overlapping criteria, these should be considered a rough classification. For detailed work and individual map units, the original files of Day and others (1999) should be used.

References

Day, W.C., Green, G.N., Knepper, D.H., Jr., and Phillips, R.C., 1999, Spatial geologic data model for the Gunnison, Grand Mesa, Uncompahgre National Forest mineral resource assessment area, southwestern Colorado and digital data for the Leadville, Montrose, Durango, and the Colorado parts of the Grand Junction, Moab, and Cortez 1° x 2° geologic maps, U.S. Geological Survey Open-File Report 99-427.

Hyndman, P.C. and Campbell, H.W., 1996, Digital mining claim density map for Federal lands in Colorado: U.S. Geological Survey Open-File Report 96-410.