Exploration of Map Symbols

Common contact and volcano symbols are shown in the map symbols legend. The colors on the map are used to denote different rock units. The map includes the following features:

- **Contact Type**: The contact symbols are used to indicate the type of contact relationship. They are color-coded to denote the type of contact. The contact symbols include:
  - Normal fault—Identity and existence are certain. The fault surface is defined by a single or multiple contact lines.
  - Strike slip—Identity and existence are certain. The fault surface is defined by a single or multiple contact lines.
  - Ductile shear—Identity and existence are certain. The fault surface is defined by a single or multiple contact lines.
  - Fold—Identity and existence are certain. The fold is defined by a single or multiple contact lines.
  - Antiform—Identity and existence are certain, and location is concealed where dotted.
  - Synform—Identity and existence are certain, and location is concealed where dotted.

- **Depositional Features**: Depositional features are shown in the map symbols legend. The colors on the map are used to denote different depositional features. The depositional features include:
  - Fluvial—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Lacustrine—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Estuarine—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Deltaic—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.

- **Tectonic Structures**: Tectonic structures are shown in the map symbols legend. The colors on the map are used to denote different tectonic structures. The tectonic structures include:
  - Fault—Identity and existence are certain. The fault is defined by a single or multiple contact lines.
  - Thrust—Identity and existence are certain. The thrust is defined by a single or multiple contact lines.
  - Anticline—Identity and existence are certain. The anticline is defined by a single or multiple contact lines.
  - Syncline—Identity and existence are certain. The syncline is defined by a single or multiple contact lines.

- **Other Features**: Other features are shown in the map symbols legend. The colors on the map are used to denote different other features. The other features include:
  - River—Identity and existence are certain. The river is defined by a single or multiple contact lines.
  - Lake—Identity and existence are certain. The lake is defined by a single or multiple contact lines.
  - Coastal feature—Identity and existence are certain. The coastal feature is defined by a single or multiple contact lines.

- **Geologic Formations**: Geologic formations are shown in the map symbols legend. The colors on the map are used to denote different geologic formations. The geologic formations include:
  - Capitan Formation—Identity and existence are certain. The formation is defined by a single or multiple contact lines.
  - Grayburg Formation—Identity and existence are certain. The formation is defined by a single or multiple contact lines.
  - Castile Formation—Identity and existence are certain. The formation is defined by a single or multiple contact lines.
  - Goat Seep Formation—Identity and existence are certain. The formation is defined by a single or multiple contact lines.

- **Regional Geology**: Regional geology is shown in the map symbols legend. The colors on the map are used to denote different regional geology. The regional geology includes:
  - Seven Rivers Formation—Identity and existence are certain. The formation is defined by a single or multiple contact lines.
  - Eddy Canyon Formation—Identity and existence are certain. The formation is defined by a single or multiple contact lines.

- **Other Symbols**: Other symbols are shown in the map symbols legend. The colors on the map are used to denote different other symbols. The other symbols include:
  - South direction—Identity and existence are certain. The direction is defined by a single or multiple contact lines.
  - North direction—Identity and existence are certain. The direction is defined by a single or multiple contact lines.
  - East direction—Identity and existence are certain. The direction is defined by a single or multiple contact lines.
  - West direction—Identity and existence are certain. The direction is defined by a single or multiple contact lines.

**Geologic Map of the Carlsbad Caverns 7.5-Minute Quadrangle, Eddy County, New Mexico**

The geologic map of the Carlsbad Caverns 7.5-Minute Quadrangle, Eddy County, New Mexico, was created by the New Mexico Bureau of Geology and Mineral Resources. The map includes the following features:

- **Contacts**: Contacts between rock units are shown in the map symbols legend. The colors on the map are used to denote different contacts. The contacts include:
  - Contact between Capitan Formation and Castile Formation—Identity and existence are certain. The contact is defined by a single or multiple contact lines.
  - Contact between Castile Formation and Goat Seep Formation—Identity and existence are certain. The contact is defined by a single or multiple contact lines.
  - Contact between Goat Seep Formation and Eddy Canyon Formation—Identity and existence are certain. The contact is defined by a single or multiple contact lines.

- **Depositional Features**: Depositional features are shown in the map symbols legend. The colors on the map are used to denote different depositional features. The depositional features include:
  - Fluvial depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Lacustrine depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Estuarine depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Deltaic depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.

- **Tectonic Structures**: Tectonic structures are shown in the map symbols legend. The colors on the map are used to denote different tectonic structures. The tectonic structures include:
  - Fault—Identity and existence are certain. The fault is defined by a single or multiple contact lines.
  - Thrust—Identity and existence are certain. The thrust is defined by a single or multiple contact lines.
  - Anticline—Identity and existence are certain. The anticline is defined by a single or multiple contact lines.
  - Syncline—Identity and existence are certain. The syncline is defined by a single or multiple contact lines.

- **Other Features**: Other features are shown in the map symbols legend. The colors on the map are used to denote different other features. The other features include:
  - River—Identity and existence are certain. The river is defined by a single or multiple contact lines.
  - Lake—Identity and existence are certain. The lake is defined by a single or multiple contact lines.
  - Coastal feature—Identity and existence are certain. The coastal feature is defined by a single or multiple contact lines.

**Geologic Cross Section A-A’**

The geologic cross section A-A’ shows the structural and stratigraphic relationships of the Carlsbad Caverns area. The cross section includes the following features:

- **Structural Features**: Structural features are shown in the map symbols legend. The colors on the map are used to denote different structural features. The structural features include:
  - Fault—Identity and existence are certain. The fault is defined by a single or multiple contact lines.
  - Thrust—Identity and existence are certain. The thrust is defined by a single or multiple contact lines.
  - Anticline—Identity and existence are certain. The anticline is defined by a single or multiple contact lines.
  - Syncline—Identity and existence are certain. The syncline is defined by a single or multiple contact lines.

- **Stratigraphic Features**: Stratigraphic features are shown in the map symbols legend. The colors on the map are used to denote different stratigraphic features. The stratigraphic features include:
  - Fluvial depositional sequence—Identity and existence are certain. The depositional sequence is defined by a single or multiple contact lines.
  - Lacustrine depositional sequence—Identity and existence are certain. The depositional sequence is defined by a single or multiple contact lines.
  - Estuarine depositional sequence—Identity and existence are certain. The depositional sequence is defined by a single or multiple contact lines.
  - Deltaic depositional sequence—Identity and existence are certain. The depositional sequence is defined by a single or multiple contact lines.

**Geologic Map Symbols**

- **Contact Symbols**: Contact symbols are shown in the map symbols legend. The colors on the map are used to denote different contact symbols. The contact symbols include:
  - Normal fault—Identity and existence are certain. The fault surface is defined by a single or multiple contact lines.
  - Strike slip—Identity and existence are certain. The fault surface is defined by a single or multiple contact lines.
  - Ductile shear—Identity and existence are certain. The fault surface is defined by a single or multiple contact lines.
  - Fold—Identity and existence are certain. The fold is defined by a single or multiple contact lines.
  - Antiform—Identity and existence are certain, and location is concealed where dotted.
  - Synform—Identity and existence are certain, and location is concealed where dotted.

- **Depositional Feature Symbols**: Depositional feature symbols are shown in the map symbols legend. The colors on the map are used to denote different depositional feature symbols. The depositional feature symbols include:
  - Fluvial depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Lacustrine depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Estuarine depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.
  - Deltaic depositional feature—Identity and existence are certain. The depositional feature is defined by a single or multiple contact lines.

- **Tectonic Structure Symbols**: Tectonic structure symbols are shown in the map symbols legend. The colors on the map are used to denote different tectonic structure symbols. The tectonic structure symbols include:
  - Fault—Identity and existence are certain. The fault is defined by a single or multiple contact lines.
  - Thrust—Identity and existence are certain. The thrust is defined by a single or multiple contact lines.
  - Anticline—Identity and existence are certain. The anticline is defined by a single or multiple contact lines.
  - Syncline—Identity and existence are certain. The syncline is defined by a single or multiple contact lines.

- **Other Feature Symbols**: Other feature symbols are shown in the map symbols legend. The colors on the map are used to denote different other feature symbols. The other feature symbols include:
  - River—Identity and existence are certain. The river is defined by a single or multiple contact lines.
  - Lake—Identity and existence are certain. The lake is defined by a single or multiple contact lines.
  - Coastal feature—Identity and existence are certain. The coastal feature is defined by a single or multiple contact lines.