Explanation of Detailed Log

Lithologic Units of Rock Type Column

- Siltstone
- Limestone
- Silty Shale/ Shaly Siltstone
- Sandstone/ Siltstone
- Mudstone
- Quartzite

Selected Column Headings

Fracture Width: Maximum width of calcite-filled fractures in drill-cutting fragments. ls=limestone. siltst=siltstone.

Color Value: Follows classification given in the Rock Color Chart (Goddard, 1975). mdst=mudstone. ls=limestone. siltst= siltstone. ss=sandstone.

Weight Loss of Carbonate (percent): Determined by dissolution of sample in 1.2 Normal solution of formic acid.

Calcareous: Relative effervescence of a sample in a 1.2 Normal solution of hydrochloric acid. Slightly calcareous, little effervescence; moderately calcareous, moderate effervescence; highly calcareous, vigorous effervescence. Dark shading represents a mini mum response to hydrochloric acid, and light shading represents a maximum.

Grain Size (micrometers): American/Canadian Stratigraphic chart was used for grain-size determination.

Loose Grains: Loose fossil and mineral grains without matrix. Fossil and mineral grains in rock matrix are listed in the "Notes" column.

Notes: This column contains lithologic classifications and descriptions, textures, mineralogy, grain sizes, fossils, additional color descriptions, percentages of predominant rock types, and fracture information. Ⓒ, the location of 30-ft-long cored intervals. vfL (very fine lower), vfU (very fine upper), fL (fine lower), fU (fine upper), mU (medium upper), cL (coarse lower) and vcL (very coarse lower) are as defined by the American/Canadian Stratigraphic chart for grain size. Trace amount is less than 1 percent.

Rock Type: Width of column approximates relative percentage by volume of different kinds of rock fragments in a sample interval. Total width of column represents 100 percent.

DETAILED LITHOLOGIC LOG OF THE DOW CHEMICAL #1 B.L. GARRIGAN DRILL HOLE, MISSISSIPPI COUNTY, ARKANSAS

By
Donley S. Collins and Gary L. Skipp
1995

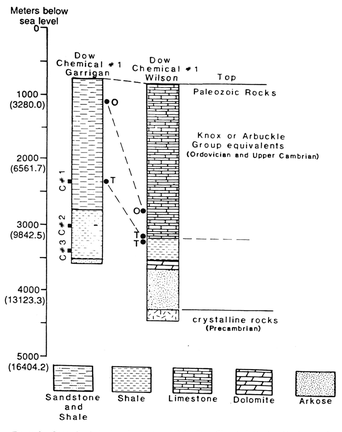

Figure 2. Generalized stratigraphic sections of the Dow Chemical #1 B.L. Garrigan and Dow Chemical #1 Wilson drill holes. After Taylor and others (1991, fig. 2) and modified after Swolfs (1991, fig. 1). C, cored intervals in the Garrigan drill hole. T, Upper Cambrian trilobites. O, Lower Ordovician conodonts. Dashed lines, approximate position of boundaries. Feet given in parentheses.

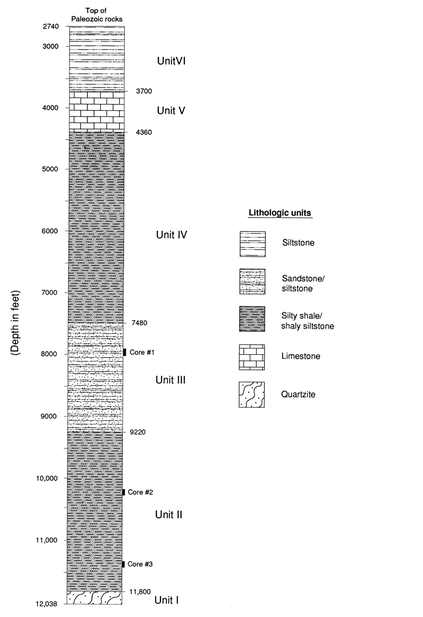

Figure 3. Generalized lithologic log of the Dow Chemical #1 B.L. Garrigan drill hole as summarized from the detailed descriptions of the Garrigan's lithologic log.