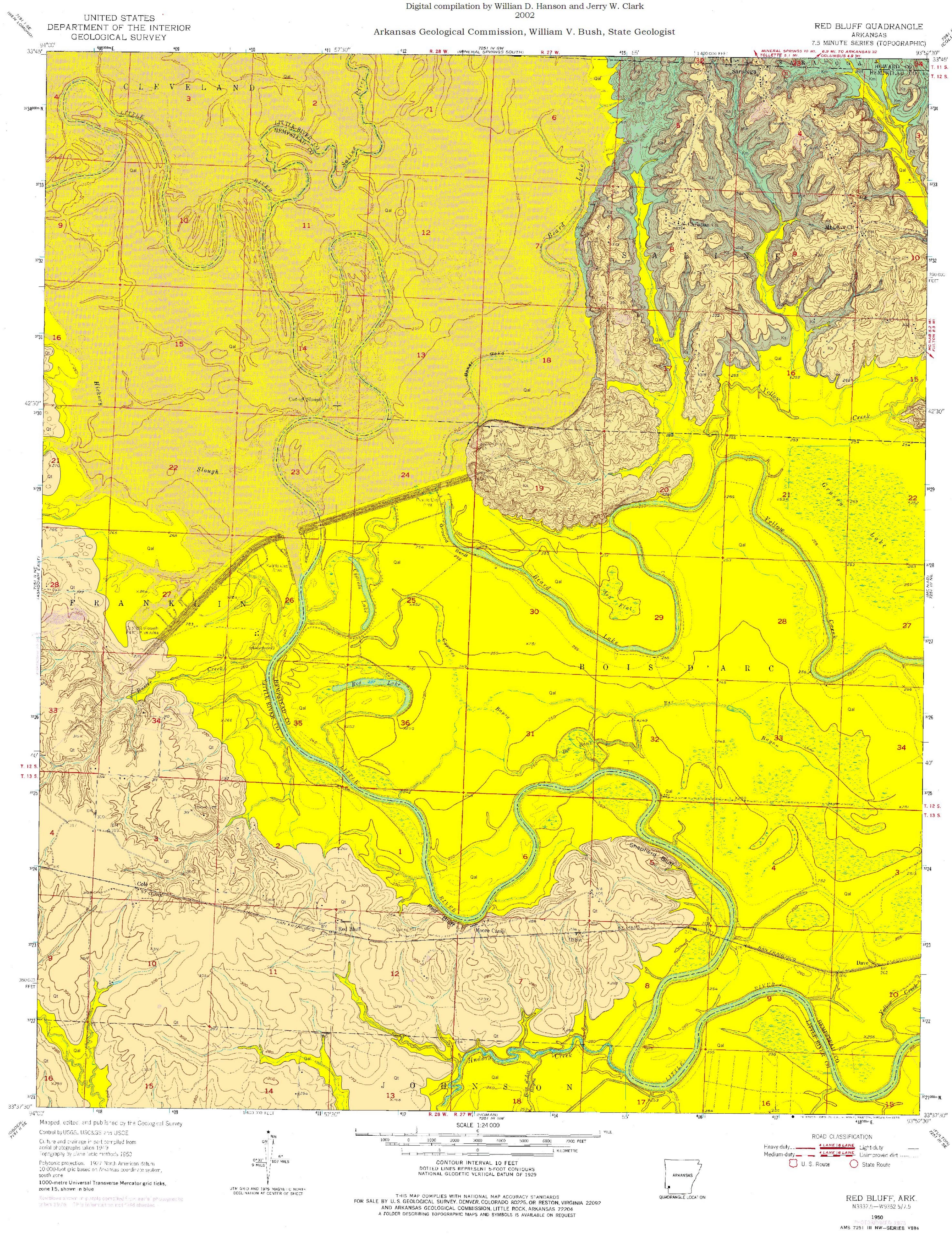
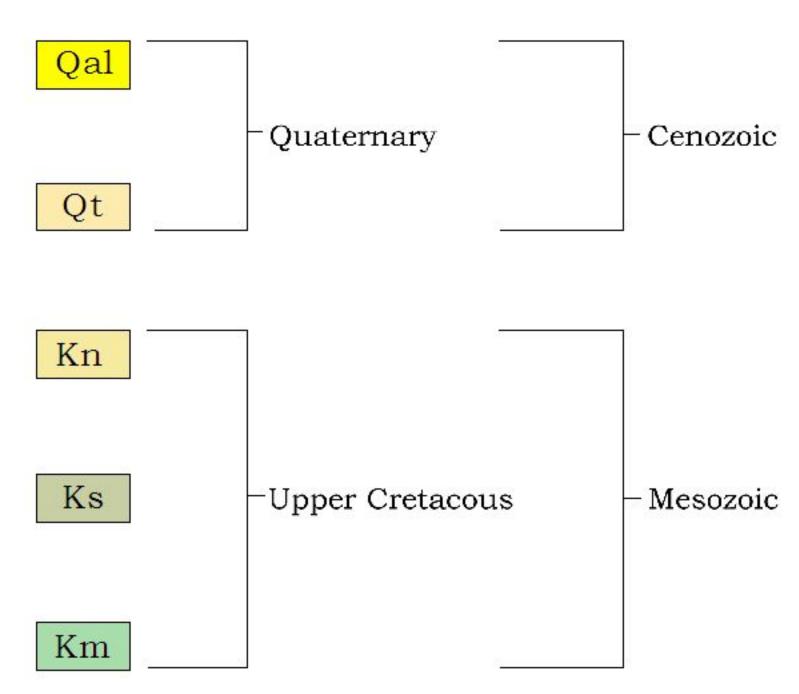


Geology by William D. Hanson and Benjamin F. Clardy



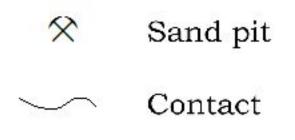
COORELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Alluvium (Quaternary) Variably sized gravel overlain by unconsolidated sand, silt, and clay comprises the unit. This unit occurs in the floodplains of streams and rivers. The sediments form a rich loam and are excellent for agriculture. Gravels, primarily novaculite, originated in the Ouachita Mountain region and from local Cretaceous formations. Thickness varies from 0 to 25 feet. Areas of alluvium are presently receiving sediment deposition.
- Terrace Deposit (Quaternary) Terrace deposits generally grade from basal gravel to silt and clay at the top. Gravels, primarily novaculite, originated in the Ouachita Mountain region and from local Cretaceous formations. Thicknesses are generally less than 50 feet. Terraces are topographic features which are former floodplains of nearby streams and/or rivers. The sediments form a rich loamy soil. The basal gravel is sometimes utilized for water-well production and gravel-mining
- Nacatoch Sand (Upper Cretaceous) The Nacatoch Sand is composed of unconsolidated, cross-bedded, yellowish and gray fine quartz sand, glauconitic sand, and bedded light-gray clay. The Nacatoch Sand is approximately 100 to 150 feet thick in the mapped area. The unit strikes to the northeast and has a dip of approximately 80 feet per mile to the southeast in this quadrangle. Fossils found in the unit include corals, echinoderms, bryozoa, annelids, bivalves, gastropods, cephalopods, crab remains, and shark teeth. The Nacatoch Sand was deposited in a nearshore marine environment and rests unconformably on top of the Saratoga
- Saratoga Chalk (Upper Cretaceous) The Saratoga Chalk is a fossiliferous, hard, glauconitic chalk with beds of marly chalk and sandy chalk. It is blue-gray when freshly exposed and weathers white, light gray, and light brown. The Saratoga Chalk is 30 to 40 feet thick in the mapped area. The unit strikes to the northeast and has a dip of approximately 80 feet per mile to the southeast in this quadrangle. Fossils found in the unit include sponges, bryozoa, echinoderms, annelids, bivalves, gastropods, cephalopods, crustaceans, and fish teeth. The Saratoga Chalk was deposited in a nearshore marine environment and rest unconformably on top of the Marlbrook Marl.
- Marlbrook Marl (Upper Cretaceous) The Marlbrook Marl is a uniform chalky marl that is blue-gray when freshly exposed and weathers white to light brown. The unit is moderatly fossiliferous in the upper part and slightly fossiliferous in the lower part. Notable fossils include Exogyra, Gryphaea, and Ostrea oyster species and reptile remains. The Marlbrook Marl is approximately 100 to 150 feet thick in the mapped area. The unit strikes to the northeast and has a dip of approximately 80 feet per mile to the southeast in this quadrangle. The Marlbrook Marl was deposited in a nearshore marine environment and rests unconformably on top of the Ozan Formation.

SYMBOLS



REFERENCES

Bush, W. V., and Clardy, B. F., 1971, Geologic Map of The Red Bluff Quadrangle, Little River and Hempstead Counties Arkansas: Arkansas Geological Commission Open-File Report, scale 1:24,000.

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