



EXPLANATION

Tertiary and Cretaceous rocks of the Atlantic coastal plain Partly overlain by Quaternary deposits	TKu	Diabase Includes dikes of porphyry, peridotite and related rocks of western age northeast of the Blue Ridge in Virginia	Dk
Newark Group	Nn	Dunkard Group	Dk
Upper Pennsylvanian sedimentary rocks In West Virginia and Ohio includes Monongahela and Conemaugh Formations. Conemaugh (Puv) mapped separately in Kentucky	Pu	Middle Pennsylvanian sedimentary rocks Includes all Pennsylvanian rocks overlying Lee Formation in Virginia and Tennessee	Pm
Middle and Lower Pennsylvanian sedimentary rocks In Ohio includes Allegheny and Pottsville Formations. In Virginia and Tennessee includes Lee Formation. Allegheny (Pva) and Pottsville (Ppv) shown separately in West Virginia, Kentucky, and Indiana	Pm Pva Ppv	Upper Mississippian sedimentary rocks In Indiana includes Chester Series. In Kentucky includes Chester Series and equivalents and upper part of Meramec Series and equivalents	Mu
Upper Mississippian sedimentary rocks Includes Opea and Kinderhook Series and equivalents	Mu	Meramec Series and equivalents In Kentucky includes only St. Louis through Warren Formations	Mm
Middle and Lower Devonian sedimentary rocks Includes only Middle Devonian rocks in Indiana	Dm	Lower Mississippian sedimentary rocks Includes Opea and Kinderhook Series and equivalents	Ml
Upper Devonian sedimentary rocks	Du	Upper Devonian sedimentary rocks	Du
Middle and Lower Devonian sedimentary rocks Includes only Middle Devonian rocks in Indiana	Dm	Devonian sedimentary rocks	Dr
Silurian sedimentary rocks	Sr	Mississippian sedimentary rocks In places, particularly in Tennessee, includes some Devonian rocks of Sale	Ms
Upper Ordovician sedimentary rocks	Ou	Upper Ordovician sedimentary rocks	Ou
Middle Ordovician sedimentary rocks	Om	Oriskany and Upper Cambrian sedimentary rocks Base Group included in this unit in eastern Tennessee and Virginia	Ocr
Upper and Middle Cambrian sedimentary rocks	Cum	Lower Cambrian sedimentary rocks	Cc
Lower Cambrian sedimentary rocks	Cc	Chilwee Group	Cc
Mafic intrusive rocks Locally may include metamorphosed mafic volcanic rocks	Im	Syenite	Sy
Granitic rocks Includes some rocks of probable Proterozoic age in the Blue Ridge. Locally includes the New	Gp	Metasedimentary and metamorphic rocks Includes Allegheny Group and other sedimentary and volcanic rocks of the Carboniferous age. Locally may include rocks of late Proterozoic age. Generally of low or medium metamorphic grade	Mm
Metasedimentary and metamorphic rocks of uncertain age Chiefly metasedimentary and metamorphic rocks of medium or high metamorphic grade, but includes some metamorphosed plutonic rocks	Mm	Colton Formation Chiefly mafic volcanic rocks of low to medium metamorphic grade	Cc
Metasedimentary and metamorphic rocks Includes Opea Series, Grandfather Mountain Formation, Lake Formation, Meigs River Formation, and Lynchburg Formation in the Blue Ridge and Clinch Mountain. Includes Clinch Mountain and Clinch Mountain Series in the western Piedmont. Metamorphic grade ranges from very low along north-south axis of Blue Ridge to medium or high farther westward	Mm	Basement rocks Chiefly granitic and gneissic rocks. Includes Clinch Mountain and related rocks in North Carolina and "Virginia Blue Ridge Complex" and Baltimore Gneiss in Virginia	Bc

Geology compiled in 1965-67

SOURCES OF DATA

Maryland: Maryland Geological Survey, 1933, Map of Maryland showing geological formations.

Indiana: Indiana Geological Survey, 1959, Map of Indiana showing location of sample sites, generalized geologic boundaries, and favorable areas for light-weight aggregate plants; Indiana Geol. Survey Survey Rept. Progress 12.

Kentucky: Kentucky Geological Survey, 1954, Geologic map of Kentucky, ser. 13, with additions from the geologic map of the United States, U.S. Geol. Survey, 1952.

Maryland: Maryland Geological Survey, 1933, Map of Maryland showing geological formations.

New Jersey: New Jersey Department of Conservation and Economic Development, 1950, Geologic map of New Jersey.

North Carolina: Completed principally from North Carolina Department of Conservation and Development, 1956, Geologic map of North Carolina.

Unpublished data furnished by G. H. Eppenshade, J. B. Hatley, A. E. Nelson, D. M. Rankin, A. A. Strossig, and H. W. Stullman of the U.S. Geological Survey, and by J. B. Butler and D. E. Doss of the University of North Carolina, Chapel Hill, N.C.

Ohio: Ohio Geological Survey, 1920, Geologic map of Ohio.

South Carolina: Data from U.S. Geological Survey and American Association of Petroleum Geologists, 1961, Tectonic map of the United States exclusive of Alaska and Hawaii; U.S. Geol. Survey [1961].

Tennessee: Completed principally from Tennessee Department of Education, Division of Geology, 1953, Geologic map of Tennessee. Unpublished data furnished by J. B. Hatley of the U.S. Geological Survey.

Virginia: Completed principally from Virginia Division of Mineral Resources, 1953, Geologic map of Virginia. Unpublished data furnished by D. M. Rankin of the U.S. Geological Survey, and by W. B. Brown of the University of Kentucky, Lexington, KY. West Virginia: West Virginia Geological Survey, 1932, Geologic map of West Virginia.

Depth to Precambrian rocks, seismic velocities, and velocity structure are from: Colton, G. W., 1961, Geologic summary of the Appalachian basin, with reference to the subsurface disposal of radioactive waste solutions. U.S. Geol. Survey TEI-791. Unpublished data from files of the U.S. Geological Survey.

Modified base assembled from U.S. Coast and Geodetic Survey World Mercatorial Charts. Lambert conformal conic projection.

