Kentucky Geological Survey James C. Cobb, State Geologist and Director University of Kentucky, Lexington

List of Publications November 1999

Compiled by Margaret Luther Smath

Kentucky Geological Survey 228 Mining and Mineral Resources Building University of Kentucky Lexington, KY 40506-0107

Phone (606) 257-5500, (606) 257-3896 Fax (606) 257-1147

www.uky.edu/KGS

UNIVERSITY OF KENTUCKY

Charles T. Wethington Jr., President

Fitzgerald Bramwell, Vice President for Research and Graduate Studies

Jack Supplee, Director, Administrative Affairs, Research and Graduate Studies

KENTUCKY GEOLOGICAL SURVEY ADVISORY BOARD

Jacqueline Swigart, Chair, Louisville Henry M. Morgan, Vice Chair, Utica William W. Bowdy, Fort Thomas Steve Cawood, Frankfort Hugh B. Gabbard, Winchester Kenneth Gibson, Madisonville Ron D. Gilkerson, Lexington Mark E. Gormley, Versailles Rosanne Kruzich, Louisville W.A. Mossbarger, Lexington John F. Tate, Bonnyman David A. Zegeer, Lexington Ralph N. Thomas, Emeritus Member, Owensboro George H. Warren Jr., Emeritus Member, Owensboro

KENTUCKY GEOLOGICAL SURVEY

James C. Cobb, State Geologist and Director John D. Kiefer, Assistant State Geologist Donald C. Haney, Special Assistant to the Vice President for Research and Graduate Studies, State Geologist Emeritus

ADMINISTRATIVE DIVISION

Personnel and Finance Section: James L. Hamilton, Administrative Staff Officer II Jackie Silvers, Administrative Staff Officer I

Clerical Section:

Juanita G. Smith, Office Assistant, Henderson office

Office of Communications and Technology Transfer:

Carol L. Ruthven, Manager Margaret Luther Smath, Geologic Editor III Douglas W. Reynolds Jr., Geologist II, Communications Coordinator for the Kentucky Board of Registration for Professional Geologists

Terry D. Hounshell, Chief Cartographic Illustrator Michael L. Murphy, Graphic Design Technician Collie Rulo, Graphic Design Technician Shirley Davis Dawson, Staff Support Associate II

Well Sample and Core Library:

Patrick J. Gooding, Manager Robert R. Daniel, Senior Laboratory Technician

Office of Geologic Information:

Bart Davidson, Manager
Richard A. Smath, Geologist II, Earth Science Information Center Coordinator
Kevin J. Wente, Geologist I
William A. Briscoe III, Publication Sales Supervisor
Roger S. Banks, Account Clerk I
Luanne Davis, Staff Support Associate II
Theola L. Evans, Staff Support Associate I

Computer and Laboratory Services Section:

Steven Cordiviola, Head Richard E. Sergeant, Geologist IV Joseph B. Dixon, Information Technology Manager I James M. McElhone, Information Systems Technical Support Specialist IV Henry E. Francis, Scientist II Karen Cisler, Scientist I Jason S. Backus, Research Analyst C. Lee Helms, Research Analyst Steven R. Mock, Research Analyst Mark F. Thompson, Research Analyst **GEOLOGICAL DIVISION Coal and Minerals Section:** Donald R. Chesnut Jr., Head Garland R. Dever Jr., Geologist V Cortland F. Eble, Geologist V Gerald A. Weisenfluh, Geologist V David A. Williams, Geologist V, Henderson office Stephen F. Greb, Geologist IV William M. Andrews Jr., Geologist II Ernest E. Thacker, Geologist I

Geologic Mapping and Hydrocarbon Resources Section:

James A. Drahovzal, Head Warren H. Anderson, Geologist IV David C. Harris, Geologist IV Brandon C. Nuttall, Geologist IV Thomas N. Sparks, Geologist II Douglas C. Curl, Geologist II John B. Hickman, Geologist II Steven L. Martin, Geologist II Jason A. Patton, Geologist II Anna E. Watson, Geologist I Xin-Yue Yang, Post-Doctoral Scholar R. Shawn Duncan, Geological Technician Christopher P. Hettinger, Geological Technician

Water Resources Section:

James S. Dinger, Head Daniel I. Carey, Hydrologist V R. Stephen Fisher, Hydrogeologist V David R. Wunsch, Hydrogeologist V James C. Currens, Hydrogeologist IV John F. Stickney, Hydrogeologist IV Robert M. Williams, Hydrogeologist IV Alex W. Fogle, Hydrologist III Robert E. Andrews, Hydrogeologist II E. Glynn Beck, Hydrogeologist II, Henderson office Dennis H. Cumbie, Hydrogeologist II Carlos M. Galcerán Jr., Hydrogeologist II C. Douglas R. Graham, Hydrogeologist II Philip K. Fields, Geological Technician, Henderson office Gregory L. Secrist, Geological Technician Steven E. Webb, Geological Technician

Geologic Hazards:

Edward W. Woolery, Geologist IV

Contents

Our Mission 1 Introduction 1 Purchasing Instructions 2 Kentucky Geological Survey Reports 3 **Bulletins** 3 County Reports 3 Information Circulars 3 Map and Chart Series 5 **Reports of Investigations** 5 **Reprints** 6 Special Publications 8 Thesis Series 12 Miscellaneous Kentucky Geological Survey Reports 12 Maps 13 Index Maps 13 General Kentucky Maps 13 Topographic Maps 13 7.5-Minute Quadrangle Series 13 15-Minute Quadrangle Series 13 30 x 60 Minute Quadrangle Series 13 1 x 2 Degree Quadrangle Series 14 15-Minute Metric (DMA) Topographic Maps 14 Metric County Maps 14 Clinometric (Slope) County Maps 14 Surface Management Maps 14 Bureau of Land Management Surface Management Status 14 Bureau of Land Management Surface-Minerals Management Status 14 Satellite Image Map of Kentucky 14 Geologic Quadrangle Maps 14 Bedrock Topography Maps 14 National Wetlands Inventory 15 Miscellaneous Field Studies 15 Beaver Creek Wilderness Study, Daniel Boone National Forest 15 Troublesome Roadless Area, McCreary County, Kentucky 15 Gravity and Magnetic Maps 15 Isopach and Structure Maps 15 Morgantown Energy Technology Center-Eastern Gas Shales Project Series 16 Linear Features Maps 16 Flood Maps 16 Flood-Prone-Area Maps 16 Miscellaneous Maps 17 Landslides and Related Features 17 Cross Sections 17 Illinois Basin Consortium Cross Section Project 17

Contents

(continued)

Maps Listed by Commodity 18 Clay 18 Coal 18 Fluorspar 18 Ground Water 18 Statewide 18 Blue Grass Region 18 Western Kentucky Coal Field 18 Eastern Kentucky Coal Field 18 Mississippian Plateau Region 18 Jackson Purchase Region 18 Ohio River Valley 19 Oil and Natural Gas 19 Statewide 19 7.5-Minute Quadrangle Oil and Gas Base Maps 20 Structural and Areal Maps 20 Computer-Generated Data 21 Oil and Gas Data 21 Coal Thickness and Quality Data 21 Water Well and Spring Data 22 **Conversion Routines** 22 GIS Coverages 22 Strong-Motion Records 22 Drillers' Logs and Other Mineral-Resource Records 23 KGS–Earth Science Information Center 23 **Open-File Reports** 24 Guidebooks for Geology Field Trips 34 Other Geologic Reports 36 University of Kentucky Institute for Mining and Minerals Research Reports 37 Illinois Basin Consortium Reports 38 Appalachian Oil and Natural Gas Research Consortium Products 38 U.S. Geological Survey Reports 39 Coal 39 **Engineering Geology 39** Paleontology 39 Vein Minerals 40 Water 40 Earthquakes and Tectonics 41 Stratigraphy 41 General 42 Posters 43 Author Index 44 **Geographic Index** 51 Subject Index 58

Our Mission...

The Kentucky Geological Survey at the University of Kentucky is a State-mandated organization whose mission is the collection, preservation, and dissemination of information about mineral and water resources and the geology of the Commonwealth. KGS has conducted research on the geology and mineral resources of Kentucky for more than 150 years, and has developed extensive public databases for oil and natural gas, coal, water, and industrial minerals that are used by thousands of citizens each year. The Survey's efforts have resulted in topographic and geologic map coverage for Kentucky that has not been matched by any other state in the Nation.

One of the major goals of the Kentucky Geological Survey is to make the results of basic and applied research easily accessible to the public. This is accomplished through the publication of both technical and nontechnical reports and maps, as well as providing information through open-file reports and public databases.

Introduction

The Kentucky Geological Survey (KGS) is a research and service unit in the University of Kentucky and shares with the University more than a century of service to the Commonwealth. The work of the Survey includes basic and applied research on Kentucky's geology and mineral resources and the compilation and dissemination of resulting data. In addition, KGS is engaged in a statewide cooperative program with the U.S. Geological Survey on a matching-funds basis for the continuing revision of topographic maps. Results of these programs are expressed in the various publications listed in this booklet.

In this publication list, Kentucky Geological Survey reports are listed serially, beginning with Series X. U.S. Geological Survey reports dealing with Kentucky are listed by mineral commodity and principal subject. University of Kentucky Institute for Mining and Minerals Research publications are listed alphabetically, as are Gas Research Institute reports. Complete subject, geographic, and author indexes are included at the back of the booklet.

Only items still in print are listed in this publication. Please refer to KGS Open-File Report OF-99-03 for a list of out-of-print KGS publications from Series IX through XI. KGS Information Circular 2 (Series XI), "Bibliography of the Kentucky Geological Survey, 1839 through 1978," by Howard R. Schwalb and others, lists all KGS publications printed through 1978, including many out-of-print publications. Copies of most out-of-print publications are available for reference at a number of geology libraries, including the Geological Sciences Library at the University of Kentucky.

In addition to publications, the Kentucky Geological Survey has an extensive collection of open-file reports. This material, which includes most well records and a number of unpublished maps and reports, is available at the Survey's offices in the Mining and Mineral Resources Building on the University of Kentucky campus in Lexington. Data on about 170,000 wells include drillers' logs, electric and gamma ray-neutron logs, location plats, and plugging affidavits. Most of the earlier, out-of-print Kentucky Geological Survey reports are also available.

Samples from more than 17,000 wells and cores from approximately 2,500 wells are on file at the Survey's Well Sample and Core Library. The Survey does not lend out sample sets or cores.

Kentucky Geological Survey office hours are 8:00 a.m. to 4:30 p.m., Monday through Friday. The Office of Geologic Information and Publication Sales office are also open to the public 8:00 a.m. to 4:00 p.m.

Purchasing Instructions

Publications may be purchased in the Publication Sales office on the first floor of the Mining and Mineral Resources Building on the University of Kentucky campus or may be ordered from:

Kentucky Geological Survey Publication Sales 228 Mining and Mineral Resources Building University of Kentucky Lexington, KY 40506-0107 Phone: (606) 257-3896, (606) 257-5500

(Rates are for the United States only)			
Amount of Order (Excluding Tax)	UPS* (Guaranteed Delivery)	First Class	
\$0.01-\$2.50	\$3.50	no charge	
\$2.51-\$6.00	\$3.75	\$1.90	
\$6.01-\$15.00	\$4.00	\$4.00	
\$15.01-\$30.00	\$4.75	\$5.00	
\$30.01-\$50.00	\$6.75	\$7.00	
\$50.01-\$75.00	\$7.75	\$8.00	
\$75.01-\$100.00	\$8.75	\$9.00	
over \$100.00	\$10.00	\$10.00	

POSTAGE AND HANDLING Bates are for the United States only

*UPS charge for all overlay maps, regardless of quantity, is \$6.00.

For UPS-residential orders, add an additional \$1.50.

For UPS-COD orders, add an additional \$5.00 (payment must be by cash, certified check, or money order).

For international orders, please call or write to request a *pro forma* invoice.

All sales are final. Prices are subject to change without notice. Materials may not be returned after they have been accepted by the customer. Any discrepancies in mail orders must be reported to the Publication Sales office within 10 days of receipt of order. To order a publication or map, you may call 1-877-778-7827.

Kentucky Geological Survey Reports

Serial reports of the Tenth, Eleventh, and Twelfth Surveys (Series X, 1958-78; Series XI, 1978-99; Series XII, 1999-present).

Bulletins

Series X

- B 1. Oil and gas geology of Muhlenberg County, Kentucky, by W.D. Rose, 1963, 118 p. **\$12.00** The Silurian formations of east-central Kentucky and
- B 2. adjacent Ohio, by C.B. Rexroad and others, 1965, 34 p. **\$1.25**
- B 3. Fuller's earth resources of the Jackson Purchase Region, Kentucky, by Preston McGrain, 1965, 23 p. \$1.00
- Limestone resources in the Appalachian region of B 4. Kentucky, by Preston McGrain and G.R. Dever, Jr., 1967, 12 p. **\$1.25**
- B 5. High-calcium and low-magnesium limestone resources in the region of the Lower Cumberland, Tennessee, and Ohio Valleys, western Kentucky, by G.R. Dever, Jr., and Preston McGrain, 1969, 192 p. \$3.00

Series XI

- B 1. Barite deposits of Kentucky, by W.H. Anderson and others, 1982, 56 p. \$6.00
- B 2. Geology and stratigraphy of the Western Kentucky Coal Field, by S.F. Greb, D.A. Williams, and A.D. Williamson, 1992, 77 p. \$8.00
- B 3. Stratigraphic and structural framework of the Carboniferous rocks of the Central Appalachian Basin in Kentucky, by D.R. Chesnut, Jr., 1992, 42 p., 8 plates \$12.00
- Gas exploration in the Devonian shales of Kentucky, by B 4. Terence Hamilton-Smith, 1993, 31 p. \$4.00
- Tectonic implications of erosional and depositional B 5. features in upper Meramecian and lower Chesterian (Mississippian) rocks of south-central and east-central Kentucky, by G.R. Dever Jr., 1999, 67 p. \$6.00

County Reports

Series X

- CR 1. Economic geology of Allen County, Kentucky, by E.R. Branson, 1966, 22 p. **\$1.50** Economic geology of Calloway County, Kentucky, by
- CR 2. Preston McGrain, 1968, 35 p. \$2.50
- CR 3. Economic geology of Simpson County, Kentucky, by E.R. Branson, 1969, 20 p. \$1.50
- Economic geology of Hancock County, Kentucky, by CR 4. Preston McGrain and others, 1970, 24 p. \$2.50
- CR 5. Economic geology of Marshall County, Kentucky, by Preston McGrain, 1970, 33 p. \$2.50
- Economic geology of Warren County, Kentucky, by CR 6. Preston McGrain and D.G. Sutton, 1973, 28 p. \$2.50
- CR 7. Economic geology of McCracken County, Kentucky, by Preston McGrain, 1978, 22 p. \$2.50

Series XI

- CR 1. Economic geology of Lincoln County, Kentucky, by Preston McGrain, 1979, 25 p. \$5.00
- CR 2. Economic geology of Rowan County, Kentucky, by Preston McGrain and M.C. Noger, 1982, 34 p. \$6.00

Information Circulars

Series X

- IC 1. High-silica sandstone and conglomerate on Pine Mountain near Elkhorn City, Kentucky, by Preston McGrain and T.J. Crawford, 1959, 5 p. 50¢
- IC 2. High-silica sands in Calloway and Carlisle Counties, Kentucky, by Preston McGrain and T.J. Crawford, 1959, 14 p. **\$1.00**
- IC 4. Public and industrial water supplies of Kentucky, by W.K. Kulp and H.T. Hopkins, 1960, 102 p. \$1.25
- IC 5. A high-refractory clay in Hart County, Kentucky, by Preston McGrain, 1960, 10 p. \$1.00
- Water levels in observation wells in Jefferson County, IC 6. Kentucky, 1935 through 1960, by D.V. Whitesides and E.S. Nichols, 1961, 75 p. \$1.25
- IC 7. Water levels in observation wells in Kentucky excluding Jefferson County, 1948 through 1960, by D.V. Whitesides and E.S. Nichols, 1961, 56 p. **\$1.25**
- Characteristics of large springs in Kentucky, by J.A. Van IC 8. Couvering, 1962, 37 p. **\$1.25** Floods in Kentucky—Magnitude and frequency, by J.A.
- IC 9. McCabe, 1962, 196 p. \$2.50
- IC 10. The ground-water situation in the Louisville area, Kentucky, 1945–61, by E.A. Bell, 1962, 24 p. \$1.00
- IC 11. Coal reserves in portions of Butler, Edmonson, Grayson, Muhlenberg, Ohio, and Warren Counties, Kentucky, by A.T. Mullins and others, 1963, 29 p. **\$2.00**
- A deep fresh water aquifer in New Cypress Pool, IC 12. Muhlenberg County, Kentucky, corroborated by geophysical logs, by E.N. Wilson and J.A. Van Couvering, 1965, 25 p. **\$1.00**
- IC 14. A deposit of high-calcium limestone near Barkley Lake, Kentucky, by Preston McGrain, 1964, 12 p. 75¢
- IC 15. Pumping test of an Eocene aquifer near Mayfield, Kentucky, by J.H. Morgan, 1967, 20 p. 75¢
- Engineering geology of the Calvert City Quadrangle, IC 16. Livingston and Marshall Counties, Kentucky, by W.I. Finch, 1968, 28 p. 75¢
- Catalog of Devonian and deeper wells in western Kentucky, by H.R. Schwalb, 1969, 17 p. 50ϕ IC 17.
- IC 18. Effects of pumping from the Ohio River Valley alluvium between Carrollton and Ghent, Kentucky, by D.V. Whitesides and P.D. Ryder, 1969, 20 p. 75¢
- IC 19. Catalog of well samples and cores on file at Kentucky Geological Survey, by H.R. Schwalb and J.G. Smith, 1970, 182 p. **\$2.50**
- IC 20. Public and industrial water supplies of Kentucky, 1968-69, by D.S. Mull and others, 1971, 107 p. \$2.00
- IC 21. Yields and specific capacities of bedrock wells in Kentucky, by D.V. Whitesides, 1971, 18 p. **\$1.00** High-carbonate rock in the High Bridge Group (Middle
- IC 22. Ordovician), Boone County, Kentucky, by G.R. Dever, Jr., 1974, 35 p. **\$1.25**
- IC 23. Coal production in Kentucky, 1790–1975, by J.C. Currens and G.E. Smith, 1977, 66 p. \$2.50

Series XI

- IC 1. A Pennsylvanian channel in Henderson and Webster Counties, Kentucky, by J.G. Beard and A.D. Williamson, 1979, 12 p. **\$1.25**
- IC 2. Bibliography of the Kentucky Geological Survey, 1839 through 1978, by H.R. Schwalb and others, 1980, 171 p. **\$7.50**

- IC 3. Catalog of well samples, cores, and auger samples on file at the Kentucky Geological Survey, by P.J. Gooding, 1980, 408 p. **\$10.00**
- IC 4. High-carbonate and low-silica stone in the High Bridge Group (Middle Ordovician), Fayette County, central Kentucky, by G.R. Dever, Jr., 1981, 45 p. \$5.00
- IC 5. Quality of surface water in Bell County, Kentucky, by R.B. Cook, Jr., and R.E. Mallette, 1981, 11 p. \$3.00
- IC 6. Trends in the industrial minerals industries in Kentucky, by Preston McGrain, 1981, 8 p. \$1.00
- IC 7. Investigation of subsurface tar-sand deposits in western Kentucky: A preliminary study of the Big Clifty Sandstone Member of the Golconda Formation (Mississippian) in Butler County and parts of Edmonson, Grayson, Logan, and Warren Counties, by D.A. Williams and others, 1982, 25 p. **\$5.00**
- IC 8. Stratigraphic framework of coal-bearing rocks in the Western Kentucky Coal Field, by D.A. Williams and others, 1982, 201 p. **\$15.00**
- Compliance coal resources in Kentucky, by J.C. Cobb and others, 1982, 52 p. **\$3.50** IC 9.
- IC 10. Oil and gas drilling activity summary for Kentucky, 1982, 1983, 261 p. **\$18.00**
- IC 11. Bibliography and index of Kentucky geology for 1980, by American Geological Institute, 1983, 48 p. \$3.00
- IC 12. Geologic descriptions and coal analyses for 1982 coal drilling in the Daniel Boone National Forest, eastern Kentucky, by R.R. Bergeron, J.C. Cobb, E.R. Slucher, and R.A. Smath, 1983, 243 p. \$12.00
- IC 13. General coal reflectance and rank study of the Eastern Kentucky Coal Field, by D.A. Williams, 1984, 47 p. **\$3.75**
- IC 14. The Chaetetella zone in the Kinkaid Limestone (Mississippian): A useful stratigraphic marker along the southern rim of the Eastern Interior (Illinois) Basin, by R.D. Trace and Preston McGrain, 1985, 9 p. **\$1.00**
- Oil and gas drilling activity summary for Kentucky, IC 15. 1983, 1984, 243 p. **\$18.00**
- IC 16. Oil and gas drilling activity summary for Kentucky, 1984, 1985, 358 p. **\$18.00**
- Oil and gas drilling activity summary for Kentucky IC 17. 1985, compiled by B.C. Nuttall, 1986, 272 p. \$18.00
- Analysis of coal samples from the Princess District, IC 18. Kentucky, by J.C. Currens, L.J. Bragg, and J.C. Hower, 1986, 128 p. **\$7.50**
- IC 19. Analysis of coal samples from the Hazard District, Kentucky, by J.C. Currens, L.J. Bragg, and J.C. Hower, 1987, 381 p. **\$25.00**
- IC 20. Analysis of coal samples from the Big Sandy District, Kentucky, by J.C. Currens, L.J. Bragg, and J.C. Hower, 1987, 421 p. **\$25.00**
- Analysis of coal samples from the Southwestern IC 21. District, Kentucky, by J.C. Currens, L.J. Bragg, and J.C. Hower, 1987, 338 p. \$20.00
- Analysis of coal samples from the Upper Cumberland IC 22. District, Kentucky, by J.C. Currens, L.J. Bragg, and J.C. Hower, 1987, 178 p. **\$15.00**
- Analysis of coal samples from the Licking River IC 23. District, Kentucky, by J.C. Currens, L.J. Bragg, and J.C. Hower, 1987, 127 p. **\$10.00**
- IC 24. Oil and gas drilling activity summary for Kentucky 1986, compiled by B.C. Nuttall, 1987, 365 p. \$18.00
- IC 25. Directory of industrial and metallic mineral producers in Kentucky, 1984–1985, by E.J. Amaral and G.R. Dever, Jr., 1987, 25 p. **\$2.50**
- Oil and gas drilling activity summary for Kentucky, 1987, compiled by B.C. Nuttall, 1988, 200 p. **\$18.00** IC 26.
- IC 27. Index to oil and gas fields of Kentucky, compiled by B.C. Nuttall, 1989, 267 p. **\$20.00**
- Oil and gas drilling activity summary for Kentucky, IC 28. 1988, compiled by B.C. Nuttall, 1989, 164 p. \$18.00

- IC 29. Predicting the impact of changes in the EPA compliance standard for sulfur emissions on the coal resources of eastern Kentucky, by J.C. Cobb, J.C. Currens, and K.W. Teoh, 1989, 9 p. **\$2.50**
- IC 30. Oil and gas drilling activity summary for Kentucky, 1989, compiled by B.C. Nuttall, 1990, 180 p. **\$18.00**
- IC 31. Use of limestone, lime, and dolomite, for SO₂ emission control, by G.R. Dever, Jr., 1990, 14 p. \$2.50
- High-volume oil discovery in Clinton County, Ken-IC 33. tucky, 1990, by Terence Hamilton-Smith, B.C. Nuttall, P.J. Gooding, Dan Walker, and J.A. Drahovzal, 1990, 13 p. \$2.50
- IC 34. Low-silica and high-calcium stone in Pine Mountain, by G.R. Dever, Jr., J.R. Moody, T.L. Robl, and L.S. Barron, 1991, 34 p. **\$5.00**
- IC 35. Oil and gas drilling activity summary for Kentucky, 1990, comp. by B.C. Nuttall, 1991, 158 p. \$18.00
- Paleontological survey of the Pennsylvanian rocks of IC 36. the Eastern Kentucky Coal Field: Part 1, invertebrates, by D.R. Chesnut, Jr., 1991, 71 p. **\$5.00** Water quality in the Kentucky River Basin, by D.I.
- *IC 37. Carey, 1992, 56 p. **\$4.00**
- Sulfur in Kentucky coal and the Clean Air Act Amend-IC 38. ments of 1990, by J.C. Cobb and C.F. Eble, 1992, 14 p. **\$2.00**
- IC 39. Oil and gas drilling activity summary for Kentucky, 1991, comp. by B.C. Nuttall, 1992, 164 p. \$18.00
- Kentucky coal production, 1790–1990, comp. by J.A. IC 40. Cecil, J.K. Hiett, Dan O'Cana, G.A. Weisenfluh, and J.C. Cobb, 1992, 244 p. **\$18.00**
- IC 41. Low-silica and high-calcium stone in the Newman Limestone (Mississippian) on Pine Mountain, Letcher County, southeastern Kentucky, by G.R. Dever, Jr., and others, 1993, 73 p. \$6.00
- IC 42. Available coal resources of the Booneville 7.5-minute quadrangle, Owsley County, Kentucky, by G.A. Weisenfluh and others, 1993, 26 p. **\$3.00**
- Available coal resources of the Handshoe 7.5-minute IC 43. quadrangle, Knott County, Kentucky, by G.A. Weisenfluh and others, 1993, 45 p. **\$4.00**
- IC 44. Quality of private ground-water supplies in Kentucky, by D.I. Carey and others, 1993, 155 p. \$10.00
- IC 45. Oil and gas drilling activity summary for Kentucky, 1992, comp. by B.C. Nuttall, 1994, 138 p. \$18.00
- Impact of riparian grass filter strips on surface-water IC 46. quality, by A.W. Fogle, D.I. Carey, B.J. Barfield, R.L. Blevins, V.P. Evangelou, C.E. Madison, and S.P. Inamdar, 1994, 14 p. **\$3.00**
- IC 47. Available coal resources of the Salversville South 7.5minute quadrangle, Magoffin County, Kentucky, by R.E. Andrews, G.A. Weisenfluh, J.K. Hiett, and R.E. Sergeant, 1994, 44 p. \$4.00
- Trace elements in coal: The next challenge, by C.F. Eble IC 48. and J.C. Cobb, 1994, 4 p. \$1.00Limestone and lime for SO₂ and pollutant control in the
- IC 49. Ohio Valley, by J.C. Cobb and G.R. Dever, Jr., 1994, 5 p. **\$1.00**
- Oil and gas drilling activity summary for Kentucky, IC 50. 1993, comp. by B.C. Nuttall, 1994, 133 p. \$18.00
- Chemical and statistical analysis of a sampled interval in IC 51. the Camp Nelson Limestone (Upper Ordovician), Madison County, central Kentucky, by G.R. Dever, Jr., W.H. Anderson, H.E. Francis, O.B. Davidson, and M.F. Thompson, 1994, 19 p. **\$3.00** Ground water in the Kentucky River Basin, by D.I.
- IC 52. Carey and others, 1994, 67 p., 2 plates \$9.95
- High-carbonate, low-silica, high-calcium stone in the IC 53. High Bridge Group (Upper Ordovician), Mason County,

^{*}Printed in cooperation with the Kentucky River Authority.

north-central Kentucky, by W.H. Anderson and L.S. Barron, 1995, 33 p. **\$4.00**

- IC 54. Cambrian hydrocarbon potential indicated in Kentucky's Rome Trough, by D.C. Harris and J.A. Drahovzal, 1996, 11 p. **\$3.00**
- IC 55. The Middle and Upper Ordovician bioclastic carbonate ("Trenton") play in the Appalachian Basin, by B.C. Nuttall, 1996, 21 p. **\$5.00**
- IC 56. Oil and gas drilling activity summary of Kentucky, 1994, comp. by B.C. Nuttall, 1996, 116 p. **\$18.00**
- IC 57. Middle Ordovician St. Peter Sandstone gas play in the Appalachian Basin, by Matthew Humphreys and A.E. Watson, 1997, 19 p. \$5.00
 IC 58. Cambrian pre-Knox Group play in the Appalachian
- IC 58. Cambrian pre-Knox Group play in the Appalachian Basin, by D.C. Harris and M.T. Baranoski, 1997, 26 p. \$5.00
- IC 59. Kentucky's coal industry: Historical trends and future opportunities, by G.A. Weisenfluh, J.C. Cobb, J.C. Ferm, and C.L. Ruthven, 1998, 9 p. **\$5.00**
- IC 60. Ground-water quality in Kentucky: Nitrate-nitrogen, by P.G. Conrad, D.I. Carey, J.S. Webb, J.S. Dinger, and M.J. McCourt, 1999, 4 p. \$1.50

Series XII

IC 1. Ground-water quality in Kentucky: Fluoride, by P.G. Conrad, D.I. Carey, J.S. Webb, R.S. Fisher, and M.J. McCourt, 1999, 4 p. **\$1.50**

Map and Chart Series

Series XI

- MCS 1. Guide to interpretation of structural features associated with the Kentucky River Fault System along U.S. Highway 27 near Camp Nelson, Kentucky, by J.A. Gilreath, P.E. Potter, and George Losonsky, 1989, 1 sheet \$3.00
- MCS 2. Geologic highway cross section: Kentucky Highway 80, Hazard to Prestonsburg, by D.R. Chesnut, Jr., 1991, 1 sheet \$3.00
- MCS 3. Geologic highway cross section: Interstate Highway 75, Conway, Kentucky–Jellico, Tennessee, by D.R. Chesnut, Jr., 1992, 1 sheet \$3.00
- MCS 4. Geologic highway cross sections: Interstate Highway 64, Farmers to Catlettsburg, Kentucky, by D.R. Chesnut, Jr., 1993, 1 sheet \$3.00
 MCS 5. Structure on top of the Middle Ordovician High Bridge/
- MCS 5. Structure on top of the Middle Ordovician High Bridge/ Black River Groups in the tristate area of northern Kentucky, southwestern Ohio, and southeastern Indiana, by P.E. Potter, 1993, 1 sheet \$3.00
- MCS 6. Oil and gas maps of the Pikeville 30 X 60 minute quadrangle, Kentucky, by Dan Walker and others, 1994, 10 p. plus 2 sheets **\$7.00**
- MCS 7. Bouguer gravity map of Kentucky, by Randy Keller and D.C. Adams, 1995, scale 1:500,000 **\$10.00**
- *MCS 8. Preliminary map of the structure of the Precambrian surface in eastern Kentucky, by J.A. Drahovzal and M.C. Noger, 1995, 9 p. plus 1 sheet **\$12.00**
- M.C. Noger, 1995, 9 p. plus 1 sheet **\$12.00** *MCS 9. Distribution of oil and gas wells in Kentucky, by D.I. Carey and B.C. Nuttall, 1995–, scale 1:1,000,000 **\$12.00**
- MCS 10. Mapped karst ground-water basins in the Lexington 30 x 60 minute quadrangle, by J.C. Currens and J.A. Ray, 1996, scale 1:100,000 \$5.00
- MCS 11. Oil and gas map of the Middlesboro 30 x 60 minute quadrangle, by A.E. Watson, L.G. Morris, B.C. Nuttall, and D.I. Carey, 1997, scale 1:100,000 **\$12.00**

- MCS 12. A deep-to-shallow transition in the Fort Payne Formation (Lower Mississippian), Kentucky Highway 61, Cumberland County, Kentucky, by D.L. Meyer, P.E. Potter, J.L. Thies, W.I. Ausich, and S.A. Leslie, 1997, 1 sheet \$3.00
- MCS 13. Oil and gas map of the Tompkinsville 30 x 60 minute quadrangle, comp. by B.C. Nuttall, 1997, scale 1:100,000 **\$12.00**
- MCS 14. Oil and gas map of the Evansville 30 x 60 minute quadrangle, comp. by B.C. Nuttall, 1998, scale 1:100,000 **\$12.00**
- MCS 15. Oil and gas map of the Hazard 30 x 60 minute quadrangle, comp. by B.C. Nuttall, 1998, scale 1:100,000 **\$12.00**
- MCS 16. Mapped karst ground-water basins in the Harrodsburg 30 x 60 minute quadrangle, by J.C. Currens and J.A. Ray, 1998, scale 1:100,000 **\$5.00**
- MCS 17. Mapped karst ground-water basins in the Campbellsville 30 x 60 minute quadrangle, by J.A. Ray and J.C. Currens, 1998, scale 1:100,000 \$5.00
- MCS 18. Mapped karst ground-water basins in the Somerset 30 x 60 minute quadrangle, by J.C. Currens and J.A. Ray, 1998, scale 1:100,000 **\$5.00**
- MCS 19. Mapped karst ground-water basins in the Beaver Dam 30 x 60 minute quadrangle, by J.A. Ray and J.C. Currens, 1998, scale 1:100,000 \$5.00
- MCS 20. Total coal thickness of the Lower Elkhorn coal in eastern Kentucky, by E.E. Thacker, G.A. Weisenfluh, and W.M. Andrews Jr., 1998, various scales **\$10.00**
- MCS 21. Mineral and fuel resources map of Kentucky, by W.H. Anderson and G.R. Dever, Jr., 1998, scale 1:500,000 **\$10.00**
- MCS 22. Oil and gas map of the Corbin 30 x 60 minute quadrangle, comp. by B.C. Nuttall, 1999, scale 1:100,000 **\$12.00**

Series X

MCS 1. Cambrian and deeper tests of Kentucky, 1999, comp. by B.C. Nuttall, 1999, scale 1:1,000,000 **\$12.00**

Reports of Investigations

Series X

- RI 1. Compilation of coal and petroleum production data for Kentucky, by T.J. Crawford, 1958, 43 p. **\$1.25**
- RI 2. Effects of Greensburg oilfield brines on the streams, wells, and springs of the Upper Green River Basin, Kentucky, by R.A. Krieger and G.E. Hendrickson, 1960, 36 p. \$1.25
- RI 3. Miscellaneous clay and shale analyses for 1957–1959, by Preston McGrain and others, p. 1–57. Evaluating ceramic clays for possible commercial utilization, by H.P. Hamlin, 1960, p. 58–71 \$2.00
- RI 4. The effect of oilfield brines on the potable ground water in the upper Big Pitman Creek Basin, Kentucky, by H.T. Hopkins, 1963, 36 p. \$1.25
- RI 5. Water resources of eastern Kentucky—Progress report, by G.A. Kirkpatrick and others, 1963, 67 p. **\$2.50**
- RI 6. Pennsylvanian cross sections in western Kentucky— Coals of the Lower Carbondale Formation, part 1, by G.E. Smith, 1967, 14 p. \$1.50
- RI 7. Industrial sand in Pike County, Kentucky, by R.P. Hollenbeck and others, 1967, 30 p. \$1.00
 RI 8. High-purity limestones at Somerset, Kentucky, by
- RI 8. High-purity limestones at Somerset, Kentucky, by Preston McGrain and G.R. Dever, Jr., 1967, 28 p. \$1.00
- RI 9. Water resources of the Middlesboro area, Kentucky, by D.S. Mull and R.J. Pickering, 1968, 51 p. **\$2.50**

^{*}Map may be laminated for \$3 extra.

- Paleozoic geology of the Jackson Purchase Region, RI 10. Kentucky, with reference to petroleum possibilities, by H.R. Schwalb, 1969, 40 p. **\$1.25**
- RI 11. Bethel Sandstone (Mississippian) of western Kentucky and south-central Indiana, a submarine-channel fill, by Sedimentation Seminar (Indiana University and University of Cincinnati), 1969, 24 p. \$1.25
- Miscellaneous analyses of Kentucky clays and shales RI 12. for 1960-1970, by Preston McGrain and T.A. Kendall, 1972, 62 p. \$2.00
- RI 13. Sedimentology of the Mississippian Knifley Sandstone and Cane Valley Limestone of south-central Kentucky, by Sedimentation Seminar (Indiana University and University of Cincinnati), 1972, 30 p. \$1.25
- Preliminary report of the oil and gas possibilities RI 14. between Pine and Cumberland Mountains, southeastern Kentucky, by A.J. Froelich, 1973, 12 p. \$2.00
- RI 15. Hydrology and geology of deep sandstone aquifers of Pennsylvanian age in part of the Western Coal Field region, Kentucky, by R.W. Davis and others, 1974, 26 p. **\$6.00**
- RI 16. Oil and gas in Butler County, Kentucky, by H.R. Schwalb, 1975, 65 p. \$4.00
- RI 17. Water in a limestone terrane in the Bowling Green area, Warren County, Kentucky, by T.W. Lambert, 1976, 43 p. **\$4.00**
- RI 18. Tidal-flat carbonate environments in the High Bridge Group (Middle Ordovician) of central Kentucky, by E.R. Cressman and M.C. Noger, 1976, 15 p. \$2.00
- Tar sands (rock asphalt) of Kentucky—A review, by Preston McGrain, 1976, 16 p. **\$1.25** RI 19.
- A geologic profile of Sloans Valley, Pulaski County, RI 20. Kentucky, by C.A. Malott and Preston McGrain, 1977, 11 p. **\$1.25**
- RI 21. Sedimentology of the Kyrock Sandstone (Pennsylvanian) in the Brownsville Paleovalley, Edmonson and Hart Counties, Kentucky, by Sedimentation Seminar, 1978, 24 p. **\$1.25**

Series XI

- RI 1. Overview of sand and gravel resources of Kentucky, by Preston McGrain, 1982, 19 p. \$3.00
- RI 2. Structure and thickness of the Devonian-Mississippian shale sequence in and near the Middlesboro Syncline in parts of Kentucky, Tennessee, and Virginia, by P.E. Potter, E.N. Wilson, and J.S. Zafar, 1984, 15 p. \$5.00
- RI 3. Pennsylvanian plants of eastern Kentucky: A flora from the Breathitt Formation near Grannies Branch and Rocky Branch of Goose Creek, Clay County, Kentucky, by P.A. Spurgeon and J.R. Jennings, 1985, 34 p. \$4.00
- RI 4. Mineralization and hydrocarbon emplacement in the Cambrian–Ordovician Mascot Dolomite of the Knox Group in south-central Kentucky, by W.H. Anderson, with contributions by Peter Price, 1991, 31 p. \$6.00
- RI 5. Amos and Foster coals: Low-ash and low-sulfur coals of western Kentucky, by D.A. Williams, C.T. Helfrich, J.C. Hower, F.L. Fiene, A.E. Bland, and D.W. Koppenaal, 1990, 34 p. **\$5.00**
- RI 6. Design, construction, and monitoring of the groundwater resources of a large mine spoil area: Star Fire tract, eastern Kentucky, by D.R. Wunsch, J.S. Dinger, and P.B. Taylor, 1992, 16 p. **\$2.00**
- Flooding of Sinking Creek karst area in Jessamine and RI 7. Woodford Counties, Kentucky, by J.C. Currens and C.D.R. Graham, 1993, 33 p. \$4.00
- Sand and gravel resources along the Ohio River Valley RI 8. in Boone, Gallatin, and Carroll Counties, by E.J. Amaral, with contributions by W.H. Anderson, 1994, 59 p. **\$7.95**

- RI 9. Effects of longwall mining on hydrogeology, Leslie County, Kentucky; part 1: Pre-mining conditions, by S.A. Minns and others, 1995, 37 p. **\$7.50**
- RI 10. Hydrogeology, hydrogeochemistry, and spoil settlement at a large mine-spoil area in eastern Kentucky: Star Fire tract, by D.R. Wunsch, J.S. Dinger, P.B. Taylor, D.I. Carey, and C.D.R. Graham, 1996, 49 p. \$12.00
- Hydrogeology and ground-water monitoring of coal-ash RI 11. disposal sites in a karst terrane near Burnside, southcentral Kentucky, by S.M. Hutcheson, L.V.A. Sendlein, J.S. Dinger, J.C. Currens, and A.M. Sahba, 1997, 21 p. **\$7.50**
- RI 12. Fresh-water aquifer in the Knox Group (Cambrian-Ordovician) of central Kentucky, by J.A. Kipp, 1997, 15 p. **\$7.50**
- RI 13. Impact of topographic data resolution on hydrologic and nonpoint-source pollution modeling in a karst terrane, by Å.W. Fogle, 1998, 22 p. **\$5.00**
- RI 14. Compositional variations in the Fire Clay coal bed of eastern Kentucky: Geochemistry, petrography, palynology, and paleoecology, by C.F. Eble, J.C. Hower, and W.M. Andrews Jr., 1999, 18 p. \$6.50

Reprints

Series X

- R 1. The mineral industry of Kentucky (1957), by A.H. Reed and others, 1959, 18 p. 50¢
- R 2. Oil and gas developments in Kentucky in 1958, by Edmund Nosow, 1959, 8 p. 75ϕ Services of state geological surveys to the structural clay
- R 3. products industry, by Preston McGrain, 1959, 3 p. 50¢
- The mineral industry of Kentucky (1958), by A.H. Reed R 4. and others, 1960, 19 p. 75¢
- Geology of the clay deposits in the Olive Hill District, R 5. Kentucky, by S.H. Patterson and J.W. Hosterman, 1960, 23 p. \$1.00
- R 6. Oil and gas developments in Kentucky in 1959, by Edmund Nosow, 1960, 6 p. 75¢
- The mineral industry of Kentucky (1959), by A.H. Reed R 7. and others, 1961, 21 p. 50¢
- Oil and gas developments in Kentucky in 1960, by R 8. Edmund Nosow, 1961, 6 p. 50¢
- R 9. The mineral industry of Kentucky (1960), by A.H. Reed and others, 1962, 20 p. 50¢
- R 10. Oil and gas developments in Kentucky in 1961, by Edmund Nosow, 1962, 5 p. 50¢
- R 11. The mineral industry of Kentucky (1961), by H.L. Riley and others, 1962, 19 p. 50¢
- Oil and gas developments in Kentucky in 1962, by R 12. Edmund Nosow, 1963, 4 p. 50¢
- The mineral industry of Kentucky (1962), by H.L. Riley R 13. and others, 1963, 21 p. 50¢
- R 14. Oil and gas developments in Kentucky in 1963, by Edmund Nosow, 1964, 5 p. 50¢
- R 16. The mineral industry of Kentucky (1963), by H.L. Riley and Preston McGrain, 1964, 22 p. 50¢
- R 17. Oil and gas developments in east-central states in 1964, by G.L. Carpenter and others, 1965, 14 p. 75¢
- The mineral industry of Kentucky (1964), by H.L. Riley R 18. and Preston McGrain, 1965, 18 p. 50¢
- R 19. Oil and gas developments in east-central states in 1965, by H.C. Milhous and others, 1966, 13 p. **75**¢
- Some sources of ceramic materials in Kentucky, by R 21. Preston McGrain, 1966, 5 p. 50¢
- R 22. The mineral industry of Kentucky (1965), by H.L. Riley and Preston McGrain, 1967, 16 p. 75¢
- R 23. Oil and gas developments in east-central states in 1966, by Edmund Nosow and others, 1967, 12 p. 50¢
- The mineral industry of Kentucky (1966), by H.L. Riley R 24. and Preston McGrain, 1968, 16 p. 75¢

Reprints

- R 25. Oil and gas developments in east-central states in 1967, by Jacob Van Den Berg and others, 1968, 11 p. 50¢
- R 26. Natural gas in Illinois Basin, by D.C. Bond and others, 1968, 15 p. **75¢**
- The mineral industry of Kentucky (1967), by H.L. Riley R 27. and Preston McGrain, 1968, 15 p. \$1.25
- R 28. Origin of the Jeptha Knob structure, Kentucky, by C.R. Seeger, 1969, 31 p. **\$2.50**
- The American Upper Ordovician standard. X. Upper R 29. Maysville and Richmond conodonts from the Cincinnati region of Ohio, Indiana, and Kentucky, by J.J. Kohut and W.C. Sweet, 1969, 22 p. \$1.00
- R 30. Oil and gas developments in east-central states in 1968, by Jacob Van Den Berg and others, 1969, 10 p. 50¢
- Extension of Lost River Chert across parts of Kentucky, R 31. by Preston McGrain, 1969, 2 p. 50¢
- R 32. The mineral industry of Kentucky, 1968, by H.L. Riley and Preston McGrain, 1970, 14 p. 50¢
- R 33. Oil and gas developments in east-central states in 1969, by Jacob Van Den Berg and others, 1970, 9 p. \$1.00
- R 34. The mineral industry of Kentucky, 1969, by S.A. Friedman and Preston McGrain, 1971, 15 p. 50¢
- Oil and gas developments in east-central states in 1970, R 35. by G.L. Carpenter and others, 1971, 9 p. 75¢
- The mineral industry of Kentucky, 1970, by H.L. Riley R 37. and Preston McGrain, 1972, 15 p. 50¢
- R 39. Compositional variations in high-calcium limestone deposits in western Kentucky, by G.R. Dever, Jr., and Preston McGrain, 1973, 8 p. \$1.00
- R 40. The mineral industry of Kentucky, 1971, by H.L. Riley and Preston McGrain, 1973, 13 p. 50¢
- R 41. Oil and gas developments in east-central states in 1972, by A.T. Statler and others, 1973, 11 p. **75¢**
- R 42. Oil and gas developments in east-central states in 1973, by Jacob Van Den Berg and others, 1974, 10 p. 75¢
- R 43. The mineral industry of Kentucky, 1972, by H.L. Riley and Preston McGrain, 1974, 13 p. 50¢Oil and gas developments in east-central states in 1974,
- R 44. by G.L. Carpenter and others, 1975, 14 p. **\$1.00**
- R 45. The mineral industry of Kentucky, 1973, by L.H. Frey and Preston McGrain, 1976, 13 p. **\$1.00**
- R 46. Oil and gas developments in east-central states in 1975, by Edmund Nosow and others, 1976, 11 p. \$1.00
- R 47. The mineral industry of Kentucky, 1974, by W.T. Boyd and Preston McGrain, 1977, 13 p. \$1.00
- R 48. Oil and gas developments in east-central states in 1976, by A.T. Statler and others, 1978, 15 p. 75¢
- R 49. Industrial limestone resources along the Ohio River Valley of Kentucky, by G.R. Dever, Jr., and others, 1978, 5 p. **\$1.25**

Series XI

- Recognition of lapies-type features in the Kentucky R 3. karst-An example of applied geomorphology, by Preston McGrain, 1979, 6 p. **\$1.00**
- R 4. Oil and gas developments in east-central states in 1978, by G.L. Carpenter and others, 1979, 14 p. **\$1.00**
- The Mississippian and Pennsylvanian (Ĉarboniferous) R 5. Systems in Kentucky, by C.L. Rice and others, 1980, 32 p. **\$4.00** The mineral industry of Kentucky, 1976, by W.T. Boyd
- R 6. and Preston McGrain, 1980, 15 p. 75¢
- Coal in Kentucky, by R.A. Brant and N.C. Hester, 1980, R 7. 11 p. **\$1.00**
- R 8. Oil and gas developments in east-central states in 1979, by Edmund Nosow and others, 1980, 14 p. **\$1.00**
- The mineral industry of Kentucky, 1977, by W.T. Boyd R 9. and Preston McGrain, 1981, 9 p. 75cThe mineral industry of Kentucky, 1978–1979, by D.K.
- R 10. Harrison and Preston McGrain, 1981, 7 p. 75¢

- R 11. Exploration for tar sands in western Kentucky, by \$1.25 Preston McGrain and L.R. Ponsetto, 1981, 4 p.
- The mineral industry of Kentucky, 1980, by D.K. R 12. Harrison and Preston McGrain, 1982, 8 p. \$1.00
- Geology of construction materials in Kentucky, by R 13.
- Preston McGrain, 1982, 16 p. \$1.75 R 14. Oil and gas developments in east-central states in 1981
- by Jacob Van Den Berg and others, 1983, 18 p. \$1.25 The mineral industry of Kentucky, 1981, by D.K. R 15.
- Harrison and Preston McGrain, 1983, 8 p. \$1.25 Oil and gas developments in east-central states in 1982, R 16.
- by G.L. Carpenter, Jacob Van Den Berg, L.R. Ponsetto, and R.C. Gilbert, 1984, p. 1600–1611 **\$1.25** The mineral industry of Kentucky, 1982, by D.K.
- R 17. Harrison and Preston McGrain, 1984, 11 p. \$1.00
- R 18. Oil and gas developments in east-central states in 1983, by Jacob Van Den Berg, R.C. Gilbert, G.L. Carpenter, and F.H. Walker, 1985, p. 1353–1362 \$1.25
- The mineral industry of Kentucky, 1983, by D.K. R 19.
- Harrison, 1985, 10 p. **\$1.00** Kentucky coal, by J.C. Cobb, R.A. Brant, J.C. Currens, R 20. and A.D. Williamson, 1985, 20 p. \$2.50
- Oil and gas developments in east-central states in 1984, R 21. by R.C. Gilbert, G.L. Carpenter, F.H. Walker, and Jacob Van Den Berg, 1986, 10 p. **\$1.25**
- R 22. Limestone resources for the coal industry: An evaluation of the Newman Limestone (Mississippian) on the Cumberland Overthrust Block, southeastern Kentucky, by G.R. Dever, Jr., T.L. Robl, and J.R. Moody, 1986, 14
- p. **\$2.00** The mineral industry of Kentucky, 1984, by D.K. R 23. Harrison and G.R. Dever, Jr., 1986, 12 p. \$1.25
- R 24. The mineral industry of Kentucky, 1985, by D.K. Harrison and G.R. Dever, Jr., 1987, 10 p. \$1.25
- Report on the geological reconnoissance of Kentucky. R 25. made in 1838, by W.W. Mather, 1988, p. 253-292 \$7.50
- The mineral industry of Kentucky, 1986, by L.J. R 26. Prosser, Jr., 1988, 7 p. \$1.25
- The mineral industry of Kentucky, 1987, by L.J. R 27. Prosser, Jr., and G.R. Dever, Jr., 1989, 7 p. \$1.25
- Geology of six Kentucky carbonates: Sulfur sorbents for R 28. AFBC, by L.S. Barron, G.R. Dever, Jr., and T.L. Robl, 1991, 20 p. \$2.50
- Ordinance for the control of urban development in R 29. sinkhole areas in the Blue Grass karst region, Lexington, Kentucky, by J.S. Dinger and J.R. Rebmann, 1991, 14 p. **\$2.50**
- R 30. Stress-relief fracture control of ground-water movement in the Appalachian Plateaus, by J.A. Kipp and J.S. Dinger, 1991, 11 p. \$2.50
- High barium concentrations in ground water in eastern R 31. Kentucky, by D.R. Wunsch, 1991, 14 p. \$2.50
- R 32. The mineral industry of Kentucky, 1988, by L.J. Prosser, Jr., and G.R. Dever, Jr., 1991, 7 p. **\$1.25**
- R 33. The mineral industry of Kentucky, 1989, by L.J. Prosser, Jr., and G.R. Dever, Jr., 1991, 7 p. \$1.25
- R 34. Post-Pliocene displacement on faults within the Kentucky River Fault System of east-central Kentucky, by R.B. VanArsdale and R.E. Sergeant, 1992, 36 p. **\$2.50**
- The mineral industry of Kentucky, 1990, by L.J. R 35. Prosser, Jr., and G.R. Dever, Jr., 1993, 7 p. **\$1.25**
- Determination of fluorine in coal and coal fly ash by R 36. proton-induced gamma-ray emission analysis, by A.S. Wong and others, 1993, 7 p. **\$1.00**
- The mineral industry of Kentucky, 1991, by L.J. R 37. Prosser, Jr., and G.R. Dever, Jr., 1993, 7 p. **\$1.25**
- R 38. Stratigraphic effects of the Acadian Orogeny in the autochthonous Appalachian Basin, by Terence Hamilton-Smith, 1993, 12 p. \$3.00

- R 39. Near-surface deformation in the New Madrid Seismic Zone as imaged by high-resolution SH-wave seismic methods, by E.W. Woolery, R.L. Street, Zhenming Wang, and J.B. Harris, 1994, 4 p. **\$2.50**
- R 40. "Pipe-organ structures" in the Lee Formation (Pennsylvanian) of the Central Appalachian Basin: Animal or plant?, by D.R. Chesnut, Jr., J.C. Cobb, and S.F. Greb, 1994, 9 p. \$2.50
- R 41. Reptile trackway from the Lee Formation (Lower Pennsylvanian) of south-central Kentucky, by D.R. Chesnut, Jr., Donald Baird, J.H. Smith, and R.Q. Lewis, Sr., 1994, 5 p. \$2.50
- R 42. Rhythmic sedimentation in a mixed tide and wave deposit, Hazel Patch Sandstone (Pennsylvanian), Eastern Kentucky Coal Field, by S.F. Greb and A.W. Archer, 1995, p. 96–106 **\$2.50**
- R 43. The mineral industry of Kentucky, 1992, by L.J. Prosser, Jr., and G.R. Dever, Jr., 1995, 7 p. **\$2.50**
- R 44. Proterozoic sequences and their implications for Precambrian and Cambrian geologic evolution of western Kentucky: Evidence from seismic-reflection data, by J.A. Drahovzal, 1997, p. 553–566 \$2.50
- R 45. Tar-sand resources of western Kentucky, by M.C. Noger, 1999, 27 p. **\$2.50**

Series XII

R 1. Neotectonic structure in the central New Madrid Seismic Zone: Evidence from multimode seismicreflection data, by E.W. Woolery, R.L. Street, Z. Wang, J.B. Harris, and J. McIntyre, 1999, p. 554–576 **\$2.50**

Special Publications

Series X

- SP 1. Proceedings of the Technical Session, Kentucky Oil and Gas Association 22nd Annual Meeting, June 5–6, 1958, ed. by Preston McGrain and T.J. Crawford, 1958, 84 p. \$2.00
 - Secondary recovery operations on the L.C. Bailey lease, Oil Springs Pool, Magoffin County, Kentucky, by W.M. Nabors and C.E. Whieldon, Jr., p. 7–24
 - b. Stream pollution, by Tom Lewis, p. 25–27
 - c. Producers' Kentucky tax basis and income tax pitfalls, by W.E. Chellgren, p. 28–36
 - d. Bank financing of oil properties, by F.C. Newman, p. 37–42
 - e. Services of the Kentucky Geological Survey to the oil and gas industry, by Preston McGrain, p. 43–47
 - f. Problems created by oil and gas operations in coalbearing areas in Kentucky, by J.H. Phalan, p. 48–52
 - g. General geology and history of oil and gas development in northern Tennessee, by H.C. Milhous, p. 53–62
 - h. Airphotos in the mineral fuels industry, by T.A. Cheney, p. 63–71
 - i. Natural gas development in western Kentucky, by D.C. Benson, p. 72–74
 - j. Geology and development of Oak Hill West Pool, Hopkins County, Kentucky, by G.J. Hennessy, p. 75–82
 - k. Recent oil and gas development in Breathitt County, Kentucky [abs.], by Edmund Nosow, p. 83
 - 1. Oil production in Kentucky for 1957, by Kentucky Geological Survey, p. 84
 - Proceedings of the Technical Session, Kentucky Oil and Gas Association 25th Annual Meeting, June 1–2, 1961, ed. by Preston McGrain and T.J. Crawford, 1961, 83
 - p. **\$2.00**

SP 4.

a. Reservoir evaluation of empty bore holes by a new logging technique, by C.G. Rodermund, p. 7–10

- Progress report of Kentucky areal geologic mapping program, by W.W. Hagan, p. 11–20
- c. Paint Creek geology of the Handyville Pool,
- Daviess County, Kentucky, by R.E. Clark, p. 21–31
 d. Imports and their effect upon independents, by I.M. Korst, p. 32–35
- e. The 1960 Oil and Gas Conservation Act, the first year, by F.H. Walker, p. 36–48
- f. Evaluation of producing horizons by Flo-Pak/Fluid Density logging, by Lloyd Fons, p. 49–59
- g. Resume of drilling activities in eastern Kentucky in 1960, by E.O. Ray, p. 60–63
- h. The Kentucky three percent sales and use tax, by W.E. Chellgren, p. 64–71
- New reservoir possibilities in Kentucky, by Edmund Nosow, p. 72–77
- j. Diamond coring in the southern Appalachians, by B.G. Harmon, p. 78–82
- k. Oil production in Kentucky for 1960, by Kentucky Geological Survey, p. 83
- SP 6. The geologic story of Diamond Caverns, by Preston McGrain, 1961, 24 p. \$1.50
- SP 8. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 26th and 27th Annual Meetings, 1962 and 1963, ed. by Preston McGrain and others, 1964, 90 p. \$3.00 Technical Session 1962:
 - Recent developments in oil and gas exploration in southwestern Butler County, Kentucky, by B.D. Nuttall, p. 9–16
 - b. Does the oil and gas industry need drilling contractors?, by Hunter Eakle, p. 17–20
 - Gas development, production, and estimated ultimate recovery of Devonian shale in eastern Kentucky, by C.D. Hunter, p. 21–29
 - d. Recent developments in well completions, by A.A. Baker, p. 30–33
 - e. New developments in Appalachian logging services, by J.B. Gehr, p. 34–35
 - f. The determination of the bonding quality of cement to casing, by J.E. Gwinn, p. 36–39
 - g. Oil production in Kentucky for 1961, by Kentucky Geological Survey, p. 40
 - Technical Session 1963:
 - a. The Bon Harbor Gas Pool, Daviess County, Kentucky—A Waltersburg anomaly, by R.L. Norris, p. 41–48
 - b. Oil exploration in Hopkins County, Kentucky, relative to the Hanson Pool, by G.J. Hennessy, p. 49–56
 - c. Thermal recovery by in situ combustion, by J.D. Alexander, p. 57–59
 - d. The application of fracturing in the Oil Springs Pool, by J.V. George, p. 60–67
 - e. Geology of the St. Peter Sandstone in Clark and Estill Counties, Kentucky, by W.H. McGuire and Paul Howell, p. 68–82
 - f. Completion techniques and results of recent Berea sand development in Pike County, Kentucky, by G.R. Thomas and J.B. Lauffer, p. 83–89
 - g. Oil production in Kentucky for 1962, by Kentucky Geological Survey, p. 90
- SP 10. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 28th Annual Meeting, June 4–5, 1964, ed. by E.N. Wilson, 1965, 113 p. \$3.00
 - a. Secondary recovery by inert gas injection in Spring Grove Pool, Union County, Kentucky, by W.M. Duchscherer, Jr., p. 7–17
 - Application of well logging to underground gas storage in western Kentucky, by J.A. Brown, p. 18– 40

- c. Highlights of western Kentucky oil and gas exploration in 1963 and early 1964, by W.D. Rose, p. 41-52
- d. Improved secondary recovery by control of water mobility, by W.F. Seifert, p. 53-64
- Relationship of oil and gas production to major e. gravity anomalies in western Kentucky, by W.H. McGuire, p. 65–69
- f. Some aspects of waterflooding in the Big Sinking Field, Lee County, Kentucky, by Wayne Stack, p. 70 - 93
- g. Porosity zones in the Knox of northeastern Kentucky, by W.H. McGuire, p. 94-96
- h. Oil and gas conservation activities, by F.H. Walker, p. 97–101
- The new tax law—Problems and opportunities, by i. P.S. Townsend, p. 102-109
- Resume of drilling activity in eastern Kentucky in j. 1963, by E.B. Jenkins, p. 110-112
- Oil production in Kentucky for 1963, by Kentucky k. Geological Survey, p. 113
- SP 11. Geology of the Cumberland Falls State Park area, by Preston McGrain, 1955; reprinted with minor revisions 1966, 33 p. **\$1.50**
- Geology of the Carter and Cascade Caves area, by SP 12. Preston McGrain, 1954; reprinted with minor revisions 1966, 32 p. **\$2.50** The geologic story of Bernheim Forest, by Preston
- SP 13. McGrain, 1967, 26 p. \$1.50
- Proceedings of the Technical Sessions, Kentucky Oil SP 14. and Gas Association 29th Annual Meeting, June 3-4, 1965, ed. by W.D. Rose, 1967, 71 p. \$3.00
 - a. Limited-entry well completion technique, by R.B. Sublett, p. 7–11
 - b. The application of new geologic maps to the economic growth of Kentucky, by Preston McGrain, p. 12–18
 - c. Western Kentucky's Bethel Channel—The largest continuous reservoir in the Illinois Basin, by D.W. Reynolds and J.K. Vincent, p. 19-30
 - The geological procedures used in the evaluation of Camp Breckinridge, by John Avila, p. 31-38
 - e. Cambrian play in southwestern Ontario, by J.A. Pounder, p. 39-49
 - f. Geology of the L.S. Bales well, Lee County, Virginia—A Cambrian and Ordovician test, by L.D. Harris, p. 50-55
 - Trempealeau remnants defined by dipmeter surveys, g. by R.W. Bashe, p. 56–62
 - h. Using geologic maps in oil and gas exploration, by E.N. Wilson, p. 63-70
 - Oil production in Kentucky for 1965, by Kentucky i. Geological Survey, p. 71
- SP 15. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 30th and 31st Annual Meetings 1966 and 1967, ed. by W.D. Rose, 1968, 119 p. **\$4.00** Technical Sessions 1966:
 - Future prospective areas of western Kentucky, by a. F.L. Stanonis, p. 7-11
 - b. Petroleum potential of the Rough Creek tectonic element in Kentucky, by E.E. Rehn, p. 12-25
 - Petroleum-Where it came from, where it is found, c. how it got there, by D.C. Bond, p. 26-29
 - Operational aspects of the Fry in situ project, by W.W. Smith, p. 30-34
 - e. Shale stimulation—A new approach, by E.O. Ray, p. 35–42
 - f. Oil and gas conservation activities, by F.H. Walker, p. 43–45
 - Subsurface geology of the Sulphur Lick-Tompkinsg. ville area, Monroe County, Kentucky, by Hunt Perkins, p. 46–55

- Some aspects of drilling activities in eastern h.
- Kentucky in 1965–1966, by E.N. Wilson, p. 56–63 Exploration objectives in the Cambro-Ordovician of i. Kentucky, by W.H. McGuire, p. 64-69
- Technical Sessions 1967:
- A progress report on increasing permeability by a. explosives and heat, by W.E. Eckard, p. 70-80
- Pennsylvanian structure of western Kentucky, by b. A.T. Mullins, p. 81–86
- Applications and the future of the computer in the c. petroleum industry, by C.S. Riley, p. 87-89
- d. Oil-field technology applied to subsurface disposal of industrial fluid wastes, by F.L. Stanonis, p. 90-96 e.
 - Geophysical exploration in eastern Kentucky, by W.H. McGuire, p. 97-102
- Oil-field application of detergents, by Thomas f. Halloran, p. 103-104
- Low-mobility cement slurries reduce gas cutting and g. fall-back, by B.B. Bradford and others, p. 105-110
- Newburg gas development, Kanawha and Jackson Counties, West Virginia, by Gene Haney, p. 111– h. 117
- Oil production in Kentucky for 1964-66, by i. Kentucky Geological Survey, p. 118-119
- SP 16. Water in Kentucky, by R.A. Krieger and others, 1969, 51 p. **\$1.50**
- SP 17. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 32nd Annual Meeting, June 6-7, 1968, ed. by W.D. Rose, 1969, 84 p. \$3.00
 - Operations research and economic analysis a. application to the study of exploration decisions, by R.A. Franzoni and J.E. Green, p. 7-15
 - b. Deep (Cambro-Ordovician) exploration in western Kentucky, by H.R. Schwalb, p. 16-19
 - Using the drill-stem test as an exploratory tool, by c. S.J. Bateman, p. 20–25
 - Geology and drilling history of the Newburg sand in d. West Virginia, by D.G. Patchen, p. 26-41
 - Some aspects of recent production research and e. possible effects on petroleum recovery, by Joseph Pasini, III, p. 42–49
 - Resume of current activity of the oil industry f. northeast of the Mississippi River-geographic, geologic—and magnitude of recent years' discover-ies, by C.D. Fenstermaker, p. 50–77
 - Cartographic activities of the geologic mapping g. program in Kentucky, by H.T. Hopkins, Jr., p. 78-82
 - Oil production in Kentucky for 1967 and 1968, by h. Kentucky Geological Survey, p. 83-84
- SP 18. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 33rd Annual Meeting, June 5-6, 1969, ed. by W.D. Rose, 1969, 46 p. \$2.50
 - Geologic history of the Cambrian System in the a. Appalachian Basin, by E.J. Webb, p. 7–15
 - Drilling conditions and problems in eastern b. Kentucky, by G.B. Putnam, p. 16-19
 - Some important factors to consider when planning a fracturing treatment, by A.R. Jennings, Jr., and others, p. 20-27
 - Methods and considerations in appraising a coal d. property, by S.E. Fish, p. 28-31
 - Some petroleum prospects of the Cincinnati Arch e. Province, by J.B. Patton and T.A. Dawson, p. 32-39
 - Application of electronic computers to reservoir f. engineering, by H.D. Griffith, p. 40-45
 - Bethel Sandstone (Mississippian) of western g. Kentucky and south-central Indiana, a submarine channel fill [abs.], by J.F. Friberg and others, p. 46
 - h. Oil production in Kentucky for 1968, by Kentucky Geological Survey, p. 47

- SP 19. Bibliography of coal in Kentucky, by American Geological Institute, 1970, 73 p. \$3.00
- Water in the economy of the Jackson Purchase Region SP 20. of Kentucky, by R.W. Davis and others, 1971, 32 p. **\$2.00**
- SP 21. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 34th and 35th Annual Meetings, 1970 and 1971, ed. by D.W. Hutcheson, 1972, 80 p. **\$3.00**
 - Technical Sessions, 1970:
 - a. "Brown shale" problems in eastern Kentucky, by J.L. Wilson, p. 1–5
 - b. Delivery performance of fractured shale wells, by E.O. Ray, p. 6–9
 - c. Geology and economics of Knox Dolomite oil production in Gradyville East Field, Adair County, Kentucky, by J.H. Perkins, p. 10-25
 - d. Bottom-hole percussion tools-Where and how to use them, by S.C. Berube and R.N. Young, p. 26-29
 - Sixty years of exploration in Logan County, southe. central Kentucky, by Howard Schwalb, p. 30-34 Technical Sessions, 1971

SP 22.

- a. Cambro-Ordovician structural and stratigraphic relationships of a portion of the Rome Trough, by J.D. Silberman, p. 31–45
- b. Notes on "Corniferous" production in eastern Kentucky, by P.M. Miles, p. 46–49
- c. Stratigraphic relationships of certain Mississippianage pools in southeastern Kentucky and northeastern Tennessee, by E.J. Webb, p. 50–58 d. External corrosion of well casings in salt sands of
- the Lee Formation, by H.L. Baldridge, p. 59-61
- Inorganic geochemical prospecting for oil and gas accumulations, by A.C. Johnson, p. 62–66 Independents should automate, by N.I. Lieberman, e.
- f. p. 67–70
- Petroleum exploration opportunities in Butler g. County, Kentucky, by Howard Schwalb, p. 71-75
- Frac pad acidizing in carbonate reservoirs, by D.R. Wieland, p. 76-79
- Oil production in Kentucky for 1969-1970, by i. Kentucky Geological Survey, p. 80
- A symposium on the geology of fluorspar (Proceedings of the Ninth Forum on Geology of Industrial Minerals), ed. by D.W. Hutcheson, 1974, 107 p. \$4.00
- a. Fluorine resources-An overview, by Gill Mont-
- gomery, p. 1-3The environments of deposition of fluorspar, by b. R.M. Grogan and others, p. 4-9
- c. Geology of the Derbyshire fluorspar deposits, United Kingdom, by J.E. Mason, p. 10-22
- d. Geology of Mexican fluorspar deposits, by G.W. Pickard, p. 23-30
- Geology of fluorspar deposits of the western United e. States, by R.G. Worl, p. 31–54
- Some fluorite-barite deposits in the Mississippi Valley in relation to major structures and zonation, by A.V. Heyl, p. 55–57
- g. Illinois-Kentucky Fluorspar District, by R.D. Trace, p. 58–76
- Structure of the fault systems in the Illinoish. Kentucky Fluorspar District, by J.W. Hook, p. 77-
- Geology and history of Pennwalt Corporation's i. Dyers Hill Mine, Livingston County, Kentucky, by J.S. Tibbs, p. 87–95
- The Eagle-Babb-Barnes fluorspar project, Critį. tenden County, Kentucky, by F.B. Moodie, III, and Preston McGrain, p. 96-107
- SP 23. Bibliography of industrial and metallic minerals in Kentucky through August 1973, by Preston McGrain and J.C. Currens, 1975, 90 p. \$2.50

- SP 24. Scenic geology of Pine Mountain in Kentucky, by Preston McGrain, 1975, 34 p. **\$1.50**
- Topography of Kentucky, by Preston McGrain and J.C. SP 25. Currens, 1978, 76 p. \$3.00
- Series XI
- SP 1. Bibliography of karst geology in Kentucky, by J.C. Currens and Preston McGrain, 1979, 59 p. \$5.00
- SP 2. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 36th and 37th Annual Meetings. 1972 and 1973, ed. by M.K. Luther, 1980, 71 p. \$8.50 Technical Sessions, 1972:
 - Reconnaissance report, Lamar County, Alabama, a. Black Warrior Basin, by William Duchscherer, Jr., p. 1–14
 - Polymer treatments in producing wells to reduce the b. water-oil ratio, by D.R. Wieland, p. 15-21
 - Role of geophysics in exploration of stratigraphic c. traps, by V.J. Satoskar, p. 22–26
 - Technical Sessions, 1973:
 - Oil and gas possibilities of the Big Lime formation in southeastern Kentucky, by J.H. Murphy, p. 27–30 a.
 - Structures of the Appalachian Plateau—What role b. for basement?, by E.J. Webb, p. 31–34 Hydrocarbon entrapment along a Middle Ordovi-
 - c. cian disconformity, by H.R. Schwalb, p. 35-41
 - The Newman Limestone (Mississippian): An d. indicator of tectonic activity in northeastern Kentucky, by G.R. Dever, Jr., p. 42-54
 - Sub-Pennsylvanian valleys in the Chesterian surface e. of the Illinois Basin, by H.M. Bristol and R.H. Howard, p. 55-71
- SP 3. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 38th Annual Meeting, June 6–7, 1974, ed. by M.K. Luther, 1981, 76 p. **\$6.00**
 - A regional study of the St. Peter Sandstone in a. eastern Kentucky, by M.L. Price, p. 1-19
 - Exploration along the northwestern margin of the b. Rome Trough, by J.D. Silberman, p. 20-30
 - Deep exploration in eastern Kentucky by the SCLAW group during the early seventies, by E.M. Sutton, p. 31-44
 - Geology and petroleum occurrences in the Rough d. Creek Fault Zone: Some new ideas, by A.E. Smith and J.E. Palmer, p. 45-59
 - Regional setting of the Cambro-Ordovician in the e. Illinois Basin, by John Avila, p. 60-70
- SP 4. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 39th and 40th Annual Meetings 1975 and 1976, ed. by M.K. Luther, 1981, 54 p. \$6.00 Technical Sessions, 1975:
 - a. Oil shale development, when?, by Paul Wellman, p. 1 - 6
 - Tertiary recovery and the MarafloodTM oil recovery b. process, by F.H. Poettmann, p. 7-14
 - Coal liquefaction—A source of hydrocarbons, by c. J.V. Fox, p. 15-20
 - Technical Sessions, 1976:
 - Radioactive-logging survey of the Pickett Chapela. Exie South Field, Adair and Green Counties, Kentucky, by Sam Norris, p. 21-31
 - Massive hydraulic fracturing—From planning to b. performance, by W.T. Malone and others, p. 32-40
 - A geophysical and tectonic study of east-central c. Kentucky with emphasis on the Rome Trough, by G.R. Keller and others, p. 41–48
 - d. Silurian reefs in southwestern Indiana and their relation to petroleum accumulation, by L.E. Becker and S.J. Keller, p. 49–54

- SP 5. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 41st Annual Meeting, June 15-17, 1977, ed. by M.K. Luther, 1982, 55 p. \$6.00
 - The potential of the Knox Dolomite in the Illinois Basin for petroleum production, by D.L. Stevenson, р. 1–6
 - b. A regional view of the Knox, by H.R. Schwalb, p. 7-10
 - c. Evaluation of coal mines and coal reserves, by C.A. Beasley, p. 11-19
 - d. Status and results of ERDA's Devonian Shale Program, by A.E. Hunt and W.K. Overbey, Jr., p. 20 - 24
 - An overview of micellar flooding, by J.A. Davis, p. e. 25-35
 - f. Stratigraphic geophysics—A tool for the future, by B.E. Ausburn and others, p. 36-55
 - Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 42nd Annual Meeting, June 14-16,
 - 1978, ed. by M.K. Luther, 1983, 42 p. **\$6.00**
 - The effectiveness of hydraulic fracturing treatments a. in the Devonian shale, by A.B. Yost, II, p. 1-8
 - b. Future exploration targets in western Kentucky, by D.W. Reynolds, p. 9–12
 - c. Some results of Eastern Gas Shale Program of interest to Illinois Basin operators, by James Howard, p. 13–15
 - d. Enhanced oil recovery by micellar/polymer flooding, by Ron Lee, p. 16-23
 - e. Planning for enhanced oil recovery, by Harry Surkalo, p. 24-31
 - f. Reservoir identification by chromatographic methods, by R.M. Dyer, p. 32-37
 - Energy control-Exploded you get, by Jack g. Schreiber, p. 38-42
 - Proceedings of the Technical Sessions, Kentucky Oil and Gas Association 43rd Annual Meeting, June 13-15,
 - 1979, ed. by M.K. Luther, 1983, 96 p. \$8.50
 - a. Geology and geophysics of Spring Garden area, Jefferson County, Illinois, by P.M. Caserotti, p. 1-22
 - b. The Wabash Valley Fault System in Indiana and its economic implications, by D.M. Sullivan and
 - others, p. 23–30 c. Boyd County Clinton Gas Field, by W.A. Watson, Jr., p. 31–43
 - The Natural Gas Policy Act of 1978-Updated, by d. L.E. Dickinson, p. 44-51
 - e. A preliminary assessment of the natural gas potential of the New Albany Shale Group in Illinois, by R.M. Cluff, p. 52-64
 - f. Relationship of basal Big Lime producing zone to the lower Newman Limestone (Mississippian) of the Hyden West Pool area, Leslie County, Kentucky, by Michael Birch, p. 65–82
 - g. Western Kentucky-Faults and unconformities-Keys to exploration, by Howard Schwalb, p. 83-88
 - h. Fracture porosity and hydrocarbon potential of the Valley and Ridge of southwestern Virginia and adjacent Tennessee, by R.C. Milici and T.M. Gathwright, p. 89-96
- SP 8. The geologic story of Kentucky, by Preston McGrain, 1983, 74 p. **\$2.50**
- SP 9. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association Forty-Fourth Annual Meeting, June 11-13, 1980, ed. by M.K. Luther, 1983, 50 p. **\$6.00**
 - a. Regional and local geologic factors control Big Lime stratigraphy and exploration for petroleum in eastern Kentucky, by W.C. MacQuown and J.L. Pear, p. 1–20

- b. Polymer: A practical approach to enhanced oil recovery, by Dick Peddycoart, p. 21-27
- Coal liquefaction processes and the coal liquefacс. tion program at the University of Kentucky Institute for Mining and Minerals Research, by B.H. Davis, p. 28–41
- Correlation of the Devonian-Mississippian black d. shale in the Appalachian and Eastern Interior Basins in Kentucky, by J.G. Beard and R.C. Kepferle, p. 42 - 50
- SP 10. Geologic cross sections and columnar sections for Kentucky, by Kentucky Geological Survey, 1983, 71 p. **\$25.00**
- SP 11. Proceedings of the Technical Sessions, Kentucky Oil and Gas Association Forty-Fifth Annual Meeting, June 10–12, 1981, ed. by M.K. Luther, 1984, 74 p. \$6.00
 - Subsurface stratigraphy of the Corniferous (Sila. urian-Devonian) of eastern Kentucky, by M.T. Currie and W.C. MacQuown, p. 1-21
 - b. Geology of the Eastern Overthrust, by J.M. Dennison, p. 22-36
 - How to raise capital in the oil and gas business under Federal and State securities laws, by H.Z. Gopman, p. 37–43
 - Comparative analysis of stimulations in the eastern d. gas shales, by A.I. Horton, p. 44-54
 - An evaluation of acid gelling agents for use in well e. stimulation, by Kevin Hudock and Homer Skelton, p. 55-59
 - Update on oil and gas regulations and planning f. ahead, by H.M. Morgan, p. 60-61
 - Fracturing: Mechanism for secondary hydrocarbon g. migration and influence on production patterns in the Illinois Basin of western Kentucky and southern Indiana, by M.P. Sanders, p. 62-74
- SP 12. Caves and karst of Kentucky, ed. by P.H. Dougherty,
 - 1985, 196 p. **\$12.50** a. An overview of the geology and physical geography a. of Kentucky, by P.H. Dougherty, p. 5-17
 - Caves of Kentucky, by A.I. George, p. 18-27 b.
 - The Inner Blue Grass Karst Region, by John
 - Thrailkill, p. 28-62 d. Patterns of cavern development along the Cumberland Escarpment in southeastern Kentucky, by R.O. Ewers, p. 63–77
 - e. Caves of northeastern Kentucky (with special emphasis on Carter Caves State Park), by John Tierney, p. 78–85
 - Pine Mountain karst and caves, by J.W. Saunders, p. f. 86-96
 - The Mammoth Cave region and Pennyroyal Plateau, g. by A.N. Palmer, p. 97–118
 - h. Western Kentucky region, by John Mylroie and Mike Dyas, p. 119–145 Cave life of Kentucky, by T.C. Barr, Jr., p. 146–167
 - i.
 - Vertebrate remains in Kentucky caves, by R.C. J. Wilson, p. 168-175
 - k. Archeology, by P.J. Watson, p. 176-186
 - Caves and the saltpeter industry in Kentucky, by 1. S.D. Sides, p. 187–196
- Guide to "Progression of Life," with notes on the history of life in Kentucky, by S.F. Greb, 1989, SP 13. 44 p. **\$6.00**
- SP 14. The great Central Mississippi Valley earthquakes of 1811–1812, by R. Street and Otto Nuttli, 1990, 14 p. **\$3.00**
- SP 15. A guide to Kentucky place names [rev. ed.], by T.P. Field, 1991, 268 p. \$15.00
- Roadside geology along Interstate Highway 75 in SP 16. Kentucky, by D.C. Haney and M.C. Noger, 1992, 39 p. **\$5.75**

SP 6.

SP 7.

- SP 17. Roadside geology along Interstate Highways 71 and 65 in Kentucky, by D.C. Haney and M.C. Noger, 1992, 44 p. \$5.75
- p. \$5.75
 SP 18. The East Continent Rift Basin: A new discovery, by J.A. Drahovzal, D.C. Harris, L.H. Wickstrom, Dan Walker, M.T. Baranoski, Brian Keith, and L.C. Furer, 1992, 25 p. \$4.00
- SP 19. Fossil beds of the Falls of the Ohio, by S.F. Greb, R.T. Hendricks, and D.R. Chesnut, Jr., 1993, 39 p. **\$6.00**
- SP 20. Rocks and minerals of Kentucky, by W.H. Anderson, 1994, 82 p. **\$5.95**
- SP 21. Impact of hazardous air pollutants on mineral producers and coal-burning plants in the Ohio Valley (Title III, Clean Air Act Amendments of 1990): Abstracts for conference, March 19-21, 1995, Hyatt Regency Lexington, Lexington, Kentucky, 1995, 25 p. \$3.00
- SP 22. Exploring the geology of the Cincinnati/northern Kentucky region, by P.E. Potter, 1996, 118 p. **\$10.00**

Thesis Series

Series X

- TS 1. Geology and successful farm ponds in the Inner Blue Grass region of Kentucky, by M.O. Smith, 1966, 64 p. **\$3.00**
- TS 2. Silurian–Devonian stratigraphy of Pulaski County, Kentucky, by W.L. Helton, 1968, 35 p. **\$1.50**
- TS 3. Relation of fracture traces, joints, and ground-water occurrence in the area of the Bryantsville Quadrangle, central Kentucky, by G.T. Hine, 1970, 27 p. **\$1.00**
- TS 4. Lithofacies and biofacies of the Haney Limestone (Mississippian), Illinois, Indiana, and Kentucky, by J.W. Vincent, 1975, 64 p. **\$2.50**

Series XI

- TS 1. Stratigraphic relationships in the lower and middle Newman Limestone (Mississippian), east-central and northeastern Kentucky, by G.R. Dever, Jr., 1980, 49 p. **\$5.00**
- TS 2. Kimberlite of Elliott County, Kentucky, by S.L. Bolivar, 1982, 37 p. **\$6.00**
- TS 3. Relationship of possible Silurian reef trend to middle Paleozoic stratigraphy and structure of the southern Illinois Basin of western Kentucky, by G.L. Seale, 1985, 63 p. \$7.50
- TS 4. Unconformity at the top of the Knox Group (Cambrian and Ordovician) in the subsurface of south-central Kentucky, by P.J. Gooding, 1992, 40 p. **\$10.00**
- TS 5. Ground-water geochemistry and its relationship to the flow system at an unmined site in the Eastern Kentucky Coal Field, by D.R. Wunsch, 1993, 128 p. **\$10.00**
- TS 6. Conceptual model of local and regional ground-water flow in the Eastern Kentucky Coal Field, by S.A. Minns, 1993, 194 p. **\$10.00**
- TS 7. Site amplification of seismic ground motions in the Paducah, Kentucky, area, by J.B. Harris, 1994, 52 p. **\$5.00**

Miscellaneous Kentucky Geological Survey Reports

- Abstracts and program, symposium—Kentucky Geologic Mapping Project, 1960–1978, by Kentucky Geological Survey, 33 p. **75**¢
- Annual report, 1979–1980, by Kentucky Geological Survey, 1980, 40 p. **\$1.00**
- Annual report, 1980–1981, by Kentucky Geological Survey, 1981, 48 p. **\$1.00**
- Annual report, 1981–1982, by Kentucky Geological Survey, 1982, 65 p. **\$1.00**
- Annual report, 1982–1983, by Kentucky Geological Survey, 1983, 63 p. **\$1.00**
- Annual report, 1983–1984, by Kentucky Geological Survey, 1984, 67 p. **\$1.00**
- Annual report, 1984–1985, by Kentucky Geological Survey, 1985, 62 p. **\$1.00**
- Annual report, 1985–1986, by Kentucky Geological Survey, 1986, 66 p. **\$1.00**
- Annual report, 1986–1987, by Kentucky Geological Survey, 1987, 72 p. **\$1.00**
- Annual report, 1987–1988, by Kentucky Geological Survey, 1988, 96 p. **\$1.00**
- Annual report, 1988–1989, by Kentucky Geological Survey, 1989, 99 p. **\$1.00**
- Annual report, 1989–1990, by Kentucky Geological Survey, 1990, 58 p. **\$1.00**
- Annual report, 1990–1991, by Kentucky Geological Survey, 1991, 39 p. **\$1.00**
- Annual report, 1991–1992, by Kentucky Geological Survey, 1992, 50 p. **\$1.00**
- Annual report, 1992–1993, by Kentucky Geological Survey, 1993, 58 p. **\$1.00**
- Annual report, 1993–1994, by Kentucky Geological Survey, 1994, 59 p. **\$1.00**
- Annual report, 1994–1995, by Kentucky Geological Survey, 1995, 66 p. **\$1.00**
- Annual report, 1995–1996, by Kentucky Geological Survey, 1996, 54 p. **\$1.00**
- Annual report, 1996–1997, by Kentucky Geological Survey, 1997, 67 p. **\$1.00**

Annual report, 1997–1998, by Kentucky Geological Survey, 1998, 57 p. **\$1.00**

Annual report, 1998–99, by Kentucky Geological Survey, 1999, 63 p. no charge

An economic evaluation of the Kentucky Geologic Mapping Program, by Preston McGrain, 1979, 12 p. **75**¢

- Kentucky Geological Survey, a plan for the future: 1986–1991, by Kentucky Geological Survey, 1981, 78 p. **\$2.50**
- Kentucky Geological Survey, a plan for the future: 1991–1996, by Kentucky Geological Survey, 1991, 104 p. **\$2.50**
- Middle Chesterian rocks in the Stevens Hill Cut, Caldwell County, Kentucky, by R.D. Trace, 1981, 1 sheet **\$2.00**
- ♦Progression of life, by S.F. Greb, 1988, poster \$4.75

Maps

Lamination of any single-sheet purchase up to 24 inches wide is now available at a cost of \$1.25 per foot.

Index Maps

- Status of topographic mapping revision program in Kentucky no charge
- Index to geologic maps for Kentucky (index to 7.5-minute geologic quadrangle maps) no charge

General Kentucky Maps

- Base map of Kentucky with Carter coordinates, 1957 (scale 1:1,000,000; approx. 1 in.=16 mi.) 75¢
- Base map of Kentucky with Carter coordinates, 1960 (scale 1:500,000; approx. 1 in.=8 mi.) \$1.25
- Base map of Kentucky (USGS) with highways, 1973 (scale 1:500,000) \$5.00
- Base map of Kentucky (USGS) with highways and 200' contours, 1973 (scale 1:500,000) \$5.00
- Base map of Kentucky (USGS) with highways, 200' contours, and shaded relief, 1973 (scale 1:500,000) \$5.00
- Carter coordinate and topographic index map of Kentucky (shows relationship of 5-minute Carter coordinate rectangles to 7.5minute topographic quadrangles; scale 1:1,000,000 or 1 in.=approx. 16 mi.) **\$1.25**
- Carter coordinate base map series of Kentucky, 1969 (1° X 2° bases for Corbin, Dyersburg, Evansville, Huntington, Jenkins, Johnson City, Louisville, Nashville, Paducah, and Winchester sheets; scale 1:250,000), each \$1.25
- Generalized geologic map of Kentucky, 1979 (page size) 15¢ Generalized geologic map of Kentucky, 1979 (scale
- 1:1,000,000) \$1.25 Generalized geologic map of Kentucky, post card, 1991 15¢
- Geologic map of Kentucky, with lithologic columns and cross sections, scale 1:500,000 (54" x 2') \$6.00
- Geologic maps of the Jackson Purchase Region, Kentucky, by W.W. Olive, 1980, USGS Map I-1217 (scale 1:250,000) \$3.75
- High-calcium limestone resources in Kentucky, 1996 (page size) 15¢
- Lithofacies and stratigraphic nomenclature of part of the Upper Ordovician section of Kentucky, by G.W. Weir and others, 1979, USGS Map I-1155 (scale 1:250,000) \$3.75
- +Mineral resources and mineral industries map of Kentucky, 1962 (scale 1:500,000; approx. 1 in.=8 mi.) \$2.50
- +Mineral resources and mineral industries of Kentucky, 1974 (approx. 1 in.=20 mi.) **50¢**
- Occurrences of oil and gas in Kentucky, 1991 (page size) 15¢
- Physiographic diagram of Kentucky (page size) 15¢
- Principal outcrop of limestone and dolomite resources in Kentucky, 1996 (page size) 15¢
- Seismicity map of the State of Kentucky, 1981 (rev. and reprinted, 1987), by C.W. Stover, B.G. Reagor, and S.T. Algermissen, USGS Map MF-1144 (scale 1:1,000,000; approx. 1 in.=16 mi.) \$1.50

Topographic Maps

7.5-Minute Quadrangle Series (Scale 1:24,000)

Mapped and published by the U.S. Geological Survey in cooperation with the Kentucky Geological Survey.

Scale 1:24,000 or 1 in.=2,000 ft (7.5-min. X 7.5-min.=approx. 59 sq. mi. coverage).

All 7.5-minute quadrangle topographic maps are \$4.00 each, plus mailing charge as indicated on page 2. Order by quadrangle name (see "Status of Topographic Mapping Revision Program in Kentucky," available free on request).

Additional time may be required for filling orders for more than five copies of any one quadrangle map.

15-Minute Quadrangle Series (Scale 1:62,500)

This series was initiated in the early 1900's. Total coverage for Kentucky was never completed. Scale 1:62,500 or 1 in.=1 mi.=approx. 239 sq. mi. coverage. Maps are \$2.50 each.

Adolphus (1931) Cave in Rock (1958) Alexandria (1931) Golconda (1958) Alton (1950) Hickman (1954) Barthell (1934) Kosmosdale (1950) Bayouville (1955) Mammoth Cave (1922/1955*) Beattyville (1892/1932) New Concord (1955) Benton (1955)

*Shaded relief version

Other quadrangles available in large-format black and white. Please call to find out if map is available for your area.

30 x 60 Minute Quadrangle Series (Scale 1:100,000)

Maps are either topographic (T) (contours are in meters) or planimetric (P). Each map covers 30' latitude by 60' longitude. Each map is available for \$7.00, plus mailing charge as indicated on page 2. Order by quadrangle name. The following 32 maps are needed for complete state coverage (see index map on next page).

Beaver Dam (T) Beckley (T) Bowling Green (T) Bristol (T) Campbellsville (T) Jasper (P) Cincinnati (T) Corbin (T) Elizabethtown (T) Evansville (T) Falmouth (T) Maysville (T)

Harrodsburg (T) Hopkinsville (T) Huntington (T) Ironton (T) Lexington (T) Louisville (T) Madison (T) Madisonville (T) Middlesboro (T) Morehead (T) Murray (T) Paducah (T) Sikeston (P) Tell City (T) Tompkinsville (P) West Frankfort (P) Williamson (T)



Index to 30 x 60 minute quadrangle maps.

⁺Printed in cooperation with Kentucky Department of Commerce.

1 x 2 Degree Quadrangle Series (1:250,000 Scale)

Scale 1:250,000 or 1 in.=approx. 4 mi. Contours in feet. Each map covers 1° latitude by 2° longitude.

Each map is available for \$7.00, plus mailing charge as indicated on page 2. Order by quadrangle name. The following 13 maps are needed for complete State coverage (see index map).

BluefieldJohnson CityCincinnatiLouisvilleCorbinNashvilleDyersburgPaducahEvansvilleVincinnesHuntingtonWinchesterJenkinsJenkins



Index to 1 x 2 degree quadrangle maps.

15-Minute (1:50,000-Scale) Metric (DMA) Topographic Maps

The following 15-minute quadrangle maps are available for \$3.00 each.

Ekron (SE corner: $37^{\circ}45'$ lat., 86° long.) Hopkinsville West (SE corner: $36^{\circ}45'$ lat., $87^{\circ}30'$ long.) Shepherdsville (SE corner: $37^{\circ}45'$ lat., $85^{\circ}30''$ long.) Vine Grove (SE corner: $37^{\circ}45'$ lat., $85^{\circ}45''$ long.)

Metric County Maps (1:50,000-Scale)

The following county maps are available for \$5.00 each.

Boone Campbell Jefferson Kenton McCracken

Clinometric (Slope) County Maps

Published by the U.S. Geological Survey in 1982, these special limited edition maps are available for \$4.00 each. Scale is 1:50,000, and contour interval is 10 m. They show slope zones in 5 percent intervals (unedited), which are generated by a semiautomated photomechanical process that translates distance between adjacent contours into percentage of slope.

Boone	Kenton
Jefferson	Campbell

Surface Management Maps

The following planimetric maps, scale 1:100,000, showing agency ownership, are available for \$5.00 each. Each map covers 30' latitude by 60' longitude.

Bureau of Land Management Surface Management Status

Hazard (NE corner: 37°30' lat., 83°00' long.) Middlesboro (Ky.-Tenn.-Va.) (NE corner: 37°00' lat., 83°00' long.)

Bureau of Land Management Surface-Minerals Management Status

Hazard (NE corner: 37°00' lat., 83°00' long.) Middlesboro (Ky.-Tenn.-Va.) (NE corner: 37°30' lat., 83°00' long.)

Satellite Image Map of Kentucky

1972–76 Landsat 4 and 5 imagery, band 7, scale 1:1,000,000, composite map is available for \$3.00.

Geologic Quadrangle Maps (7.5-Minute Quadrangles, Scale 1:24,000)

Published by the U.S. Geological Survey as a result of the cooperative Kentucky Geological Survey-U.S. Geological Survey geologic mapping program, which was completed in 1978. Each map covers approximately 59 sq. mi. Locations of individual quadrangles are shown on "Index to Geologic Maps for Kentucky," available free on request.

All geologic quadrangle maps are \$7.00 each, plus mailing charge as indicated on page 2. Order by quadrangle name only.

Bedrock Topography Maps (7.5-Minute Quadrangles, Scale 1:24,000)

Prepared as part of the Kentucky Geological Survey-U.S. Geological Survey cooperative program, and published by the U.S. Geological Survey as part of their Miscellaneous Geologic Investigations series. These maps are prepared for areas where the bedrock is extensively covered by alluvium. Topography of the buried bedrock surface is shown by contour lines based on available subsurface data; the locations of ancient stream courses are also indicated. Bedrock topography maps are printed on semitransparent paper suitable as an overlay for the geologic quadrangle maps. Location and availability of quadrangles are shown on "Index to Geologic Maps for Kentucky," available free on request.

All bedrock topography maps are \$2.00 each, plus mailing charge as indicated on page 2.

- Beech Grove (Webster, Hopkins, and McLean Cos.), by R.L. Norris, 1975, Map I-887
- Calhoun (McLean and Hopkins Cos.), by A.E. Smith, 1975, Map I-906
- Curdsville (Daviess, McLean, and Henderson Cos.), by R.L. Norris, 1973, Map I-765
- Delaware (Henderson, McLean, and Daviess Cos.), by R.L. Norris, 1973, Map I-825
- Evansville South (Henderson Co.), by A.E. Smith and T.E. Ball, 1973
- Glenville (McLean and Daviess Cos.), by A.E. Smith, 1973, Map I-760
- Grove Center and Shawneetown (Union Co.), by A.E. Smith, 1976, Map I-954
- Henderson (Henderson Co.), by T.E. Ball, 1973, Map I-812
- Livermore (McLean and Muhlenberg Cos.), by A.E. Smith and R.E. Sergeant, 1978, Map I-1085.
- Newburgh and Yankeetown (Henderson and Daviess Cos.), by R.L. Norris, 1973, Map I-803

- Owensboro West (Daviess Co.), by G.L. Carpenter, Jr., 1971, Map I-633
- Panther (Daviess Co.), by A.E. Smith, 1971, Map I-598
- Reed (Henderson and Daviess Cos.), by R.L. Norris, 1973, Map I-802
- Sacramento (McLean, Hopkins, and Muhlenberg Cos.), by A.E. Smith, 1977, Map I-1036
- Smith Mills (Henderson and Union Cos.), by R.L. Norris, 1975, Map I-889
- Spottsville (Henderson Co.), by R.L. Norris, 1973, Map I-814
- Sutherland (Daviess Co.), by A.E. Smith, 1969, Map I-596
- Uniontown and Wabash Island (Henderson and Union Cos.), by A.E. Smith and R.L. Norris, 1976, Map I-938
- West Franklin, Caborn, and Mount Vernon (Henderson and Union Cos.), by R.L. Norris, 1974, Map I-864
- Wilson (Henderson Co.), by A.E. Smith and T.E. Ball, 1974, Map I-859

National Wetlands Inventory

(7.5-Minute Quadrangles, Scale 1:24,000)

Published by the U.S. Fish and Wildlife Service, using the U.S. Geological Survey 7.5-minute topographic quadrangle series as a base.

Each map is available for \$5.00, plus mailing charge as indicated on page 2. Order by quadrangle name (see "Status of Topographic Mapping Revision Program in Kentucky," available free on request).

Miscellaneous Field Studies

- Estimated maximum regional seismic intensities associated with an ensemble of great earthquakes that might occur along the New Madrid Seismic Zone, east-central United States, by S.T. Algermissen and M.G. Hopper, 1984, USGS Map MF-1712 **\$1.75**
- Map showing low flows, average flows, and drainage areas in Kentucky River Area Development District, Kentucky, by R.W. Davis, 1978, USGS Map MF-865-H (scale 1:250.000) \$4.00
- Map showing quality of ground water in Kentucky River Area Development District, Kentucky, by R.W. Davis, 1978, USGS Map MF-865-E (scale 1:250,000) \$4.00
- Map showing sulfate in selected streams in Kentucky River Area Development District, Kentucky, by R.W. Davis, 1978, USGS Map MF-865-F (scale 1:250,000) \$4.00

The Wilderness Act (Public Law 88-577, September 3, 1964) and related acts require the U.S. Geological Survey to survey certain areas on Federal lands to determine their mineral-resource potential.

Beaver Creek Wilderness Study, Daniel Boone National Forest

- Geologic map of the Beaver Creek Wilderness, McCreary County, Kentucky, by K.J. Englund and N.K. Teaford, 1981, USGS Map MF-1348-A (scale 1:50,000) \$1.75
- Geochemical survey of the Beaver Creek Wilderness, McCreary County, Kentucky, by A.E. Grosz and D.F. Siems, 1982, USGS Map MF-1348-B (scale 1:50,000) **\$1.75**

Mineral resource potential maps of the Beaver Creek Wilderness, McCreary County, Kentucky, by K.J. Englund, P.L. Johnson, R.W. Hammack, and R.B. Ross, Jr., 1983, USGS Map MF-1348-D **\$1.75**

Troublesome Roadless Area, McCreary County, Kentucky

- Geochemical survey of the Troublesome Roadless Area, McCreary County, Kentucky, by A.E. Grosz and D.F. Siems, 1987, USGS Map MF-1341-B (scale 1:50,000) **\$1.75**
- Mineral resource potential map of the Troublesome Roadless Area, McCreary County, Kentucky, by W.R. Sigleo and others, USGS Map MF-1341-C (scale 1:50,000) **\$1.75**

Gravity and Magnetic Maps

- Bouguer gravity map of Kentucky: Western sheet, by G.R. Keller and others, 1978 (scale 1:250,000) \$3.75
- Residual total intensity aeromagnetic map of Kentucky: Central sheet, by R.W. Johnson, Jr., and others, 1980 (scale 1:250,000) **\$3.75**
- Residual total intensity aeromagnetic map of Kentucky: Eastern sheet, by R.W. Johnson, Jr., and others, 1980 (scale 1:250,000) \$3.75
- Residual total intensity aeromagnetic map of Kentucky: Western sheet, by R.W. Johnson, Jr., and others, 1978 (scale 1:250,000) \$3.75
- Simple Bouguer gravity map of Kentucky, by J.S. Watkins, 1963, USGS Map GP-421 \$3.00
- Structural geology, Bouguer gravity, and aeromagnetic intensity for a portion of central Kentucky, northeast sheet (includes portions of Bourbon, Fayette, and Clark Counties), by D.F.B. Black and others, 1977 (scale 1:48,000) **\$2.50**
- Structural geology, Bouguer gravity, and aeromagnetic intensity for a portion of central Kentucky, northwest sheet (includes portions of Franklin, Shelby, Anderson, and Woodford Counties), by D.F.B. Black and others, 1977 (scale 1:48,000) \$2.50
- Structural geology, Bouguer gravity, and aeromagnetic intensity for a portion of central Kentucky, southeast sheet (includes portions of Madison, Garrard, Estill, and Jessamine Counties), by D.F.B. Black and others, 1977 (scale 1:48,000) \$2.50
- Structural geology, Bouguer gravity, and aeromagnetic intensity for a portion of central Kentucky, southwest sheet (includes portions of Washington, Mercer, Marion, Boyle, and Lincoln Counties), by D.F.B. Black and others, 1977 (scale 1:48,000) \$2.50

Isopach and Structure Maps

- Contour map of the base of the Pennsylvanian System, eastern Kentucky, by T.D. Coskren and C.L. Rice, 1979, USGS Map MF-1100 \$5.00
- #Structure and isopach map of the New Albany-Chattanooga-Ohio Shale (Devonian and Mississippian) in Kentucky: Central sheet, by P.E. Potter, 1978 (scale 1:250,000) \$3.75
- Structure and isopach map of the New Albany-Chattanooga-Ohio Shale (Devonian and Mississippian) in Kentucky: Eastern sheet, by L.P. Fulton, 1979 (scale 1:250,000) \$3.75
- Structure and isopach map of the New Albany-Chattanooga-Ohio Shale (Devonian and Mississippian) in Kentucky: Western

Published in cooperation with the Appalachian Regional Commission.

sheet, by H.R. Schwalb and P.E. Potter, 1978 (scale 1:250,000) **\$3.75**

Morgantown Energy Technology Center–Eastern Gas Shales Project Series

The maps in this series were constructed as part of a study to characterize the eastern black shales.

- Isopach map of highly radioactive black shale in the Three Lick Bed and Huron Shale Member (units 2, 3, 4, and 5) in Kentucky, by S.B. Dillman and F.R. Ettensohn, 1981, METC/EGSP series no. 505 (scale 1:370,000) **\$2.50**
- Isopach map of the Devonian black-shale sequence (New Albany-Chattanooga-Ohio Shale) in eastern Kentucky, by S.B.
 Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 515 (scale 1:370,000) \$2.50
- Isopach map of the Rhinestreet Shale (unit 7) in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 516 (scale 1:370,000) **\$2.50**
- Isopach map of the Upper Olentangy Shale (unit 6) in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 517 (scale 1:370,000) **\$2.50**
- Isopach map of the Lower Huron Shale (unit 5) of the Ohio Shale in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 518 (scale 1:370,000) \$2.50
- Isopach map of the Middle Huron Shale Member (unit 4) of the Ohio Shale in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 519 (scale 1:370,000) **\$2.50**
- Isopach map of the Upper Huron Shale Member (unit 3) of the Ohio Shale in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 520 (scale 1:370,000) **\$2.50**
- Isopach map of the Three Lick Bed (unit 2) of the Ohio Shale in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 521 (scale 1:370,000) **\$2.50**
- Isopach map of the Cleveland Shale Member (unit 1) of the Ohio Shale in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 522 (scale 1:370,000) \$2.50
- Structure contour map on the base of the Devonian black-shale sequence (New Albany-Chattanooga-Ohio Shale) in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 507 (Scale 1:370,000) **\$2.50**
- Structure contour map on the base of the West Falls Formation (Rhinestreet Shale, unit 7) in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 508 (Scale 1:370,000) **\$2.50**
- Structure contour map on the base of the Java Formation/Olentangy Shale (unit 6) in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 509 (Scale 1:370,000) \$2.50
- Structure contour map on the base of the Lower Huron Shale Member (unit 5) of the Ohio Shale in eastern Kentucky, by
 S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 510 (Scale 1:370,000) \$2.50
- Structure contour map on the base of the Middle Huron Shale Member (unit 4) of the Ohio Shale in eastern Kentucky, by
 S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 511 (Scale 1:370,000) \$2.50
- Structure contour map on the base of the Upper Huron Shale Member (unit 3) of the Ohio Shale in eastern Kentucky, by

S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 512 (Scale 1:370,000) **\$2.50**

- Structure contour map on the base of the Three Lick Bed (unit 2) of the Ohio Shale in eastern Kentucky, by S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 513 (Scale 1:370,000) **\$2.50**
- Structure contour map on the base of the Cleveland Shale Member (unit 1) of the Ohio Shale in eastern Kentucky, by
 S.B. Dillman and F.R. Ettensohn, 1980, METC/EGSP series no. 514 (Scale 1:370,000) \$2.50
- Map showing structure on top of the Maquoketa Group (Ordovician), by J.L. Bassett and N.R. Hasenmueller, 1980, METC/ EGSP series no. 812 (Scale 1:370,000) **\$2.50**
- Isopach map of the Blocher Member of the New Albany Shale, western Kentucky, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 902 (Scale 1:370,000) \$2.50
- Isopach map of the Sweetland Creek Member of the New Albany Shale, western Kentucky, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 903 (Scale 1:370,000) **\$2.50**
- Isopach map of the Grassy Creek Member of the New Albany Shale, western Kentucky, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 905 **\$2.50**
- Occurrence of natural gas in the New Albany Shale, western Kentucky, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 906 **\$2.50**
- Structure map on the base of the New Albany Shale, western Kentucky, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 907 (scale 1:370,000) **\$2.50**
- Structure of the New Albany-Chattanooga-Ohio Shale (Devonian and Mississippian) in Kentucky, by P.E. Potter and others, 1982 (scale 1:1,000,000) **\$1.25**

Linear Features Maps

Blue-line copies of the following 1:250,000-scale maps are available for \$4.00 each. Each sheet covers an area 1 degree by 2 degrees; maps are accompanied by a brief explanatory text.

Corbin	Johnson City
Dyersburg	Louisville
Evansville	Paducah
Huntington	Nashville
Jenkins	Winchester

Flood Maps

- Floods on Levisa Fork in vicinity of Paintsville, Kentucky, by
 C.H. Hannum, 1969, USGS Hydrologic Atlas HA-328 \$3.75
- Floods on Licking River in vicinity of Salyersville, Kentucky, by
 C.H. Hannum, 1969, USGS Hydrologic Atlas HA-329 \$3.75
- Floods on Triplett Creek in vicinity of Morehead, Kentucky, by C.H. Hannum, 1969, USGS Hydrologic Atlas HA-342 **\$4.00**

Flood-Prone-Area Maps

Flood-prone-area maps are available for many parts of Kentucky. They consist of 7.5-minute topographic bases on which areas that may be subject to flooding have been outlined. Inquire about the availability of individual maps. Each map is available at a cost of \$1.50, plus mailing charge as indicated on page 2.

17

Flood Insurance Rate Maps (FIRM's) may be ordered from Federal Emergency Management Agency (FEMA), Flood Map Distribution Center, P.O. Box 1038, Jessup, MD 20794, or phone 1-800-358-9616.

Miscellaneous Maps

- Earthquake hazards map showing areas of relative potential for shaking and for liquefaction in the states of Illinois, Indiana, Missouri, Kentucky, Tennessee, Arkansas, Mississippi, published by Central United States Earthquake Consortium, 1995, scale 1:2,000,000 **\$2.50**
- Belectric transmission in Kentucky, published by Kentucky Department of Commerce, 1976 (scale 1 in.=approx. 20 mi.) \$1.00
- #Gas transmission in Kentucky, published by Kentucky Department of Commerce, 1978 (scale 1 in.=approx. 20 mi.)
 \$1.00
- General county highway maps, prepared by the Kentucky Transportation Cabinet, Department of Highways, scale 1:62,500, 1991 (scale 1"=1 mile) \$5.00 per county
- Generalized geologic bedrock conditions as related to solid waste landfills in Kentucky, by M.C. Noger, 1991 (scale 1:500,000) **\$6.00**
- Geologic map of the Hazard [30 x 60 minute] quadrangle, by C. Rice, 1985, USGS Map I-1727-A **\$4.00**
- Groundwater sensitivity regions of Kentucky, by Kentucky Department for Environmental Protection, Division of Water, Groundwater Branch, 1994, scale 1:500,000 **\$7.00**
- Lexington-Bluegrass area city map, by Rand McNally **\$2.95** Map showing foundation and excavation conditions in the
- Burtonville Quadrangle (7.5-min.; parts of Fleming and Lewis Cos.), by Ernest Dobrovolny and R.H. Morris, 1965, USGS Map I-460 **\$3.50**
- Types of damage that could result from a great earthquake in the New Madrid, Missouri, seismic zone, by M.G. Hopper and S.T. Algermissen, 1984 **\$1.50**

Landslides and Related Features

These 7.5-minute quadrangle maps depict generalized slope-stability conditions as they exist at the time of field checking (1977–1979). Mapped units depict the dominant stability conditions within delineated areas. These are preliminary maps and are suited for general planning purposes only. Because of the generally poor quality of the original reproducible materials, some of the linework (especially the base) on copies is indistinct and may be difficult to read. Landslide maps are available for most of southeastern and south-central Kentucky. Please contact the Publications Sales office concerning the availability of specific quadrangles. Each map is available at a cost of **\$4.00**, plus mailing charge as indicated on page 2.

Cross Sections

- Correlation of United Fuel Gas Co. deep well in Bell County, Kentucky, to measured surface section from Cumberland Gap area, by K.J. Englund and others, 1961 **25**¢
- East–west cross sections, north and south of Rough Creek Fault System, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 900 **\$2.50**
- North-south cross section, west side of [Rough Creek Fault System] area, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 901 **\$2.50**
- North–south cross section, east side of [Rough Creek Fault System] area, by Howard Schwalb and Ronald Norris, 1980, METC/EGSP series no. 904 \$2.50
- # *Phanerozoic cross section along 88 degrees longitude, by W.H. Anderson, 1985 \$5.50

Illinois Basin Consortium (Illinois, Indiana, and Kentucky Geological Surveys) Cross Section Project

- West–east (Ozark Dome, Missouri, to Rough Creek Graben, western Kentucky), by M.L. Sargent, J.D. Treworgy, and S.T. Whitaker, 1 sheet \$2.00
- *Northwest-southeast (Sparta Shelf, southern Illinois, to Rough Creek Graben, western Kentucky), by S.T. Whitaker, J.D. Treworgy, and M.L. Sargent, 1 sheet \$2.00
- #Southwest-northeast (Southeastern flank of the Ozark Dome, Missouri, to southern Illinois), by J.D. Treworgy, S.T. Whitaker, and M.L. Sargent, 1 sheet \$2.00
- #6 o'clock (Wayne County, Illinois, to Gibson County, Tennessee), by S.T. Whitaker, J.D. Treworgy, and M.C. Noger, 1 sheet \$4.00
- #11:30 o'clock (Wayne County, Illinois, to Stephenson County, Illinois), by J.D. Treworgy, S.T. Whitaker, and Z. Lasemi, 1 sheet \$4.00

[₩]Photocopy only.

^{*}Printed in cooperation with the Kentucky River Authority.

Maps Listed by Commodity

Clay

Structure-contour map of the Olive Hill Clay Bed in northeastern Kentucky, by J.W. Hosterman, 1963, USGS Map MF-261 \$1.75

Coal

- Campton Quadrangle (7.5-min.; parts of Wolfe, Lee, and Breathitt Cos.; coal resources and structure), by R.P. Briggs, 1957, USGS Map C-42 \$3.50
- Correlation of coal beds, coal zones, and key stratigraphic units in the Pennsylvanian rocks of eastern Kentucky, by C.L. Rice and J.K. Hiett, 1994, USGS Map MF-2275 **\$3.00**
- Cornettsville Quadrangle (15-min.; covering Hazard South, Vicco, Leatherwood, and Tilford 7.5-min. quadrangles; parts of Perry, Knott, Letcher, Harlan, and Leslie Cos.; coal resources and structure), by J.E. Johnston and others, 1955, USGS Map C-22 **\$6.50**

Fluorspar

Geologic map of the Western Kentucky Fluorspar District, by Stuart Weller and A.H. Sutton, 1951, USGS Map MF-2 **\$4.00**

Ground Water

"HA" refers to U.S. Geological Survey Hydrologic Atlas series, published cooperatively with the Kentucky Geological Survey; these atlases include composite geologic maps.

Statewide.

- Fresh-saline water interface map of Kentucky, by H.T. Hopkins, 1966 **\$1.25**
- Hydrologic unit map of Kentucky, 1974 (scale 1:500,000) \$3.75

Blue Grass Region.

- Bourbon County, by D.K. Hamilton and E.M. O'Connell, 1948 **75¢**
- Fayette County, by D.K. Hamilton and others, 1948 **75¢**
- Jessamine County, by D.K. Hamilton and others, 1948 **75¢**
- Scott County, by D.K. Hamilton and E.M. O'Connell, 1948 75¢
- HA-15. Boone, Campbell, Grant, Kenton, and Pendleton Counties, by W.N. Palmquist, Jr., and F.R. Hall, 1960 \$10.25
- HA-16. Bracken, Harrison, Mason, Nicholas, and Robertson Counties, by W.N. Palmquist, Jr., and F.R. Hall, 1960 \$10.25
- HA-17. Lewis and Rowan Counties, by W.N. Palmquist, Jr., and F.R. Hall, 1960 **\$10.25**
- HA-18. Bath, Fleming, and Montgomery Counties, by F.R. Hall and W.N. Palmquist, Jr. **\$10.25**
- HA-19. Clark, Estill, Madison, and Powell Counties, by F.R. Hall and W.N. Palmquist, Jr., 1960 **\$10.25**
- HA-20. Boyle, Garrard, Lincoln, and Mercer Counties, by W.N. Palmquist, Jr., and F.R. Hall **\$10.25**
- HA-21. Marion, Nelson, and Washington Counties, by F.R. Hall and W.N. Palmquist, Jr., 1960 **\$10.25**
- HA-22. Bullitt, Jefferson, and Oldham Counties, by W.N. Palmquist, Jr., and F.R. Hall, 1960 **\$10.25**

- HA-23. Carroll, Gallatin, Henry, Owen, and Trimble Counties, by F.R. Hall and W.N. Palmquist, Jr., 1960 \$10.25
- HA-24. Anderson, Franklin, Shelby, Spencer, and Woodford Counties, by F.R. Hall and W.N. Palmquist, Jr., 1960 \$10.25
- HA-25. Bourbon, Fayette, Jessamine, and Scott Counties, by W.N. Palmquist, Jr., and F.R. Hall, 1960 **\$10.25**

Western Kentucky Coal Field.

- HA-26. Butler and Ohio Counties, by B.W. Maxwell and R.W. Devaul, 1962 **\$11.25**
- HA-27. Daviess and Hancock Counties, by R.W. Devaul and B.W. Maxwell, 1962 **\$11.25**
- HA-28. Union and Henderson Counties, by B.W. Maxwell and R.W. Devaul, 1962 **\$11.25**
- HA-29. McLean and Muhlenberg Counties, by R.W. Devaul and B.W. Maxwell, 1962 **\$11.25**
- HA-30. Hopkins and Webster Counties, by B.W. Maxwell and R.W. Devaul, 1962 \$11.25

Eastern Kentucky Coal Field.

- HA-36. Breathitt, Floyd, Harlan, Knott, Letcher, Martin, Magoffin, Perry, and Pike Counties, by W.E. Price and others, 1962 \$11.25
- HA-37. Boyd, Carter, Elliott, Greenup, Johnson, Lawrence, Lee, Menifee, Morgan, and Wolfe Counties, by W.E. Price, Jr., and others, 1962 \$7.50
- HA-38. Bell, Clay, Jackson, Knox, Laurel, Leslie, McCreary, Owsley, Rockcastle, and Whitley Counties, by Chabot Kilburn and others, 1962 \$11.25

Mississippian Plateau Region.

- HA-32. Allen, Barren, Edmonson, Green, Hart, Logan, Metcalfe, Monroe, Simpson, and Warren Counties, by R.F. Brown and T.W. Lambert, 1962 \$11.25
- HA-33. Breckinridge, Grayson, Hardin, Larue, and Meade Counties, by R.F. Brown and T.W. Lambert, 1963 \$11.25
- HA-34. Caldwell, Christian, Crittenden, Livingston, Lyon, Todd, and Trigg Counties, by T.W. Lambert and R.F. Brown, 1963 \$11.25
- HA-35. Adair, Casey, Clinton, Cumberland, Pulaski, Russell, Taylor, and Wayne Counties, by T.W. Lambert and R.F. Brown, 1963 \$11.25

Jackson Purchase Region.

- HA-13. Jackson Purchase Region (Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, McCracken, and Marshall Cos.), by L.M. MacCary and T.W. Lambert, 1962 \$7.25
- HA-92. Farmington Quadrangle (Graves Co.), by J.H. Morgan, 1964 **\$4.50**
- HA-93. Dexter Quadrangle (Calloway and Marshall Cos.), by R.W. Davis, 1964 **\$4.50**
- HA-112. Lynn Grove Quadrangle (Calloway and Graves Cos.), by R.W. Davis, 1964 \$3.00
- HA-113. Kirksey Quadrangle (Calloway, Graves, and Marshall Cos.), by J.H. Morgan, 1964 **\$4.50**
- HA-114. Briensburg Quadrangle (Marshall and Livingston Cos.), by L.M. MacCary, 1964 \$4.50

- HA-115. Hardin Quadrangle (Marshall and Calloway Cos.), by L.M. MacCary, 1964 **\$4.50**
- HA-116. Oak Level Quadrangle (Marshall, Graves, and Calloway Cos.), by J.H. Morgan, 1964 **\$4.50**
- HA-117. Elva Quadrangle (Marshall, Graves, and McCracken Cos.), by J.H. Morgan, 1964 **\$4.50**
- HA-118. New Concord Quadrangle (Calloway Co.), by T.W. Lambert, 1964 **\$4.50**
- HA-124. Hazel Quadrangle (Calloway Co. and Tenn.), by L.M. MacCary, 1964 **\$4.50**
- HA-125. Lynnville Quadrangle (Graves Co. and Tenn.), by T.W. Lambert, 1965 **\$4.50**
- HA-155. Little Cypress and Calvert City Quadrangles (Marshall and McCracken Cos.), by J.H. Morgan, 1965 **\$4.50**
- HA-156. Fairdealing Quadrangle (Marshall, Trigg, and Lyon Cos.), by T.W. Lambert, 1965 **\$4.50**
- HA-157. Symsonia Quadrangle (Graves and McCracken Cos.), by R.W. Davis, 1965 \$4.50
- HA-158. Hico Quadrangle (Calloway and Marshall Cos.), by J.H. Morgan, 1965 **\$4.50**
- HA-159. Birmingham Point Quadrangle (Marshall, Lyon, and Livingston Cos.), by L.M. MacCary, 1965 \$4.50
- HA-160. Rushing Creek Quadrangle (Calloway, Trigg, and Marshall Cos.), by T.W. Lambert, 1965 **\$4.50**
- HA-161. Cuba Quadrangle (Graves Co. and Tenn.), by J.H. Morgan, 1965 **\$4.50**
- HA-162. Water Valley Quadrangle (Graves, Hickman, and Fulton Cos. and Tenn.), by T.W. Lambert, 1965 **\$4.50**
- HA-163. Hickory Quadrangle (Graves Co.), by J.H. Morgan, 1965 **\$4.50**
- HA-164. Mayfield Quadrangle (Graves Co.), by R.W. Davis, 1965 \$4.50
- HA-165. Hamlin and Paris Landing Quadrangle (Calloway Co.), by T.W. Lambert, 1965 **\$4.50**
- HA-166. Westplains Quadrangle (Graves Co.), by L.M. MacCary and R.W. Davis, 1966 **\$4.50**
- HA-167. Crutchfield Quadrangle (Fulton and Hickman Cos. and Tenn.), by A.J. Hansen, Jr., 1966 **\$4.50**
- HA-168. Heath Quadrangle (McCracken and Ballard Cos.), by T.W. Lambert, 1966 **\$4.50**
- HA-169. Fancy Farm Quadrangle (Graves, Carlisle, and Hickman Cos.), by R.W. Davis, 1966 **\$4.50**
- HA-170. Dublin Quadrangle (Graves and Hickman Cos.), by A.J. Hansen, Jr., 1966 **\$4.50**
- HA-171. Joppa and Metropolis Quadrangles (McCracken Co.), A.J. Hansen, Jr., 1966 **\$4.50**
- HA-172. Lovelaceville Quadrangle (Carlisle, Graves, Mc-Cracken, and Ballard Cos.), by R.W. Davis, 1966 \$4.50
- HA-173. La Center Quadrangle (Ballard and McCracken Cos.), by T.W. Lambert, 1966 **\$4.50**
- HA-174. Melber Quadrangle (McCracken and Graves Cos.), by R.W. Davis, 1967 **\$4.50**
- HA-175. Clinton Quadrangle (Hickman Co.), by A.J. Hansen, Jr., 1967 **\$4.50**
- HA-176. Olmstead and Bandana Quadrangles (Ballard and McCracken Cos.), by A.J. Hansen, Jr., 1967 **\$4.50**
- HA-177. Paducah West and Paducah East Quadrangle (Mc-Cracken Co. and Ill.), by T.W. Lambert, 1967 **\$7.25**
- HA-178. New Madrid Southeast, Hubbard Lake, and Bondurant Quadrangles (Fulton Co. and Tenn.), by T.W. Lambert, 1967 **\$7.50**
- HA-179. Milburn Quadrangle (Carlisle and Hickman Cos.), by R.W. Davis, 1967 **\$4.50**

- HA-180. Cayce Quadrangle (Fulton and Hickman Cos. and Tenn.), by A.J. Hansen, Jr., 1967 **\$4.50**
- HA-181. Hickman Quadrangle (Fulton Co. and Mo. and Tenn.), by T.W. Lambert, 1968 **\$4.50**
- HA-182. Oakton and Wolfe Island Quadrangle (Hickman and Fulton Cos.), by A.J. Hansen, Jr., 1968 **\$4.50**
- HA-183. Arlington and Wickliffe Southwest Quadrangles (Carlisle and Hickman Cos.), by R.W. Davis, 1968 **\$4.50**
- HA-184. Blandville Quadrangle (Ballard and Carlisle Cos.), by A.J. Hansen, Jr., 1968 **\$4.50**
- HA-185. Wickliffe and Wickliffe Northwest Quadrangles (Carlisle and Ballard Cos.), by T.W. Lambert, 1968 **\$4.50**
- HA-186. Cairo and Barlow Quadrangles (Ballard Co.), by A.J. Hansen, Jr., 1968 **\$4.50**

Ohio River Valley.

- HA-72. Breckinridge and Hancock Co. alluvial deposits, by J.T. Gallaher, 1963 **\$7.25**
- HA-73. Greenup and Lewis Co. alluvial deposits, by W.E. Price, Jr., 1963 **\$4.50**
- HA-74. Hancock and Daviess Co. alluvial deposits, by J.T. Gallaher, 1963 **\$4.50**
- HA-75. Boyd and Greenup Co. alluvial deposits, by W.E. Price, Jr., 1964 **\$7.25**
- HA-91. Henderson Co. alluvial deposits, by J.T. Gallaher, 1964 **\$7.25**
- HA-94. Lewis, Mason, Bracken, Pendleton, and Campbell Co. alluvial deposits, by W.E. Price, Jr., 1964 **\$7.25**
- HA-95. Hardin and Meade Co. alluvial deposits, by J.T. Gallaher, 1964 **\$4.50**
- HA-96. Daviess and Henderson Co. alluvial deposits, by J.T. Gallaher, 1963 **\$7.25**
- HA-97. Gallatin, Carroll, Trimble, and Oldham Co. alluvial deposits, by W.E. Price, Jr., 1964 **\$7.25**
- HA-98. Campbell, Kenton, Boone, and Gallatin Co. alluvial deposits, by W.E. Price, Jr., 1964 **\$7.25**
- HA-110. Daviess Co. alluvial deposits, by J.T. Gallaher, 1964 \$7.25
- HA-111. Southwestern Jefferson Co. alluvial deposits, by W.E. Price, Jr., 1964 **\$7.25**
- HA-129. Henderson, Union, Crittenden, Livingston, Marshall, McCracken, and Ballard Co. alluvial deposits, by J.T. Gallaher, 1964 \$7.25
- HA-130. Northern Jefferson Co. alluvial deposits, by W.E. Price, Jr., 1964 \$7.25

Oil and Natural Gas

Farm ownership tract lines are not indicated on maps of the Kentucky Geological Survey. However, wells shown on county and quadrangle oil and gas maps are indexed by farm name (lessor or mineral owner).

Statewide.

- ₩■Locations of wells that penetrated Cambrian or older units in Kentucky, by F.H. Walker, 1980 (scale 1:500,000) \$10.00
- Oil and gas map of Kentucky, sheet 1, western part, by H.R. Schwalb and others, 1971 (scale 1:250,000) **\$1.50**

₩Photocopy only.

Accompanying well list, an additional \$15; with stratigraphic tops, an additional \$20.

Oil and gas map of Kentucky, sheet 2, west-central part, by H.R. Schwalb and others, 1972 (scale 1:250,000) **\$3.00**

7.5-Minute Quadrangle Oil and Gas Base Maps.

Computer-generated base maps showing locations of wells by quadrangle for those wells on computer are available for \$35 each. For an additional \$5, a well list showing identifying and other pertinent data may be obtained. Order by specifying standard U.S. Geological Survey 7.5-minute quadrangle name. Locations of individual quadrangles are shown on "Index to Geologic Maps for Kentucky," available free on request. Contact Publication Sales for a count of the number of wells for each quadrangle.

Structural and Areal Maps

- East Fork Quadrangle (7.5-min., scale 1:24,000; parts of Adair, Green, and Metcalfe Cos.; planimetric base, no structure), by R.C. Price and G.R. Dever, Jr., 1963 **\$1.25**
- + Elkton Quadrangle (7.5-min.; part of Todd Co.; areal, with structural geology on top of the Paint Creek Formation), by H.W. Settle, 1952 \$1.25
- Fort Knox and vicinity (geology of an area 15 min. X 30 min., covering parts of Breckinridge, Meade, Hardin, and Bullitt Cos. and Harrison Co., Ind.), by L.L. Ray and others, 1946, Army Map Service map \$1.25
- #Golconda and Cave in Rock Quadrangles (15-min.; Ky. portions only; parts of Livingston, Crittenden, and Caldwell Cos.; fault structure), by Stuart Weller, 1925 \$1.75
- Greenville Quadrangle (7.5-min., scale 1:24,000; part of Muhlenberg Co.; with structure on base of Vienna Limestone), by W.D. Rose, 1960 **\$1.25**
- Halls Gap Quadrangle (7.5-min., scale 1:24,000; part of Lincoln Co.; with structure on base of New Albany Shale), by T.J. Crawford, 1962 \$1.25
- Hanson Quadrangle (7.5-min., scale 1:24,000; parts of Hopkins and Webster Cos.; with structure on base of Beech Creek Limestone), by W.D. Rose and A.E. Smith, 1963 **\$1.25**

- +Hopkinsville Quadrangle (7.5-min., scale 1:24,000; part of Christian Co.; areal, with structural geology on top of the Paint Creek Formation), by H.W. Settle, 1952 \$1.25
- Irvine-Berea (structural geology on top of the Chattanooga Shale and oil and gas development of a region south of Irvine and Berea, covering parts of Estill, Jackson, Lee, Madison, and Rockcastle Cos.), by J.S. Hudnall and others, 1924; reprinted 1949 **\$1.25**
- Madisonville West Quadrangle (7.5-min., scale 1:24,000; part of Hopkins Co.; with structure on base of Vienna Limestone), by W.D. Rose, 1964 **\$1.25**
- Nortonville Quadrangle (7.5-min., scale 1:24,000; parts of Hopkins and Christian Cos.; with structure on base of Vienna Limestone), by W.D. Rose, 1964 **\$1.25**
- Paint Creek Uplift (structural geology on top of the Fire Clay coal and oil and gas development of an area covering parts of Floyd, Johnson, Magoffin, Morgan, Lawrence, and Elliott Cos.), by J.S. Hudnall and I.B. Browning, 1924; reprinted 1949 \$2.00
- +Pembroke Quadrangle (planimetric base; 7.5-min., scale 1:24,000; parts of Christian and Todd Cos.; areal and structural geology on top of the Paint Creek Formation), by H.W. Settle, 1952 \$1.25
- Seitz Quadrangle (7.5-min., scale 1:24,000; parts of Breathitt, Magoffin, Morgan, and Wolfe Cos.; with structure on top of Magoffin Limestone), by M.J. Bergin, 1956, USGS Map OM-173 \$3.00
- Slaughters Quadrangle (7.5-min., scale 1:24,000; parts of Hopkins and Webster Cos.; with structure on base of Vienna Limestone), by W.D. Rose, 1963 **\$1.25**
- Sulphur Well Quadrangle (7.5-min., scale 1:24,000; parts of Metcalfe and Green Cos.; no structure), by R.C. Price and G.R. Dever, Jr., 1964 \$1.25
- Tiptop Quadrangle (7.5-min., scale 1:24,000; parts of Breathitt, Magoffin, and Knott Cos.; with structure on Magoffin Limestone), by S.W. Welch, 1955, USGS Map OM-163 **\$3.00**
- White Oak Quadrangle (7.5-min., scale 1:24,000; parts of Magoffin and Morgan Cos.; with structure on Fire Clay coal), by W.L. Adkison, 1954 USGS Map OM-156 \$3.00

₩Photocopy only.+Printed in cooperation with Kentucky Department of Commerce.

⁺Printed in cooperation with Kentucky Department of Commerce.

Computer-Generated Data

Oil and Gas Data

- 1. Overlay maps and standard well-list printouts are ordered through Publication Sales at (606) 257-3896.
- 2. Standard diskette orders for overlay maps and well lists are made through the Office of Geologic Information at (606) 257-8238.
- 3. All custom orders are made through Brandon Nuttall at (606) 257-5500.

Product	Setup Fee	Per Well Fee	Minimum Total
7.5-Minute			
Overlay Maps and	N/A	N/A	\$40.00
Printouts			
Well Lists			
(Printout Only)			
Standard	\$10.00	\$0.03	\$15.00
Custom ¹	\$10.00	\$0.05	\$15.00
Diskettes $(3^{1/2} in.)$			
Standard	\$20.00	\$0.08	\$30.00
Custom ¹	\$20.00	\$0.15	\$35.00
¹ Includes choice of stratigraphic tops, calculated latitude and longitude, or sample catalog data.			

Coal Thickness and Quality Data

All orders are made through William Andrews at (606) 257-5500.

Duoduot	Satur Eag	Per Record	Minimum	
Product	Setup ree	Fee	Total	
KCRIS* Data				
One-line thickness printouts	\$10.00	\$0.05	\$10.05	
One-line full-quality printouts	\$10.00	\$0.05	\$10.05	
Thickness records on diskette	\$20.00	\$0.05	\$20.05	
Full-quality records on diskette	\$20.00	\$0.05	\$20.05	
7.5-minute overlay map	N/A	N/A	\$40.00	
Duoduot	Sotup Eco	Don Log Foo	Minimum	
Product	Setup ree	Per Log ree	Total	
CMASTER Borehole Data				
Catalog search	N/A	N/A	free	
Header and lithology printouts	N/A	\$2.00	\$2.00	
Graphic strip logs	N/A	\$5.00	\$5.00	
Logs on diskette	\$20.00	\$5.00	\$25.00	
Index map	N/A	N/A	\$40.00	
*Kentucky Coal Resources Information System				

Water Well and Spring Data

All orders are made through Bart Davidson or Kevin Wente at (606) 257-5500.

Product	Setup Fee	Per Well Fee	Minimum Total
Water Well Overlay Maps with			
Printout	N/A	N/A	\$40.00
Standard Listing of Water Data			
Summary Table	\$10.00	\$0.05 per record	\$10.05
8 ¹ / ₂ x 11 in. Report	\$10.00	\$0.25 per page	\$10.25
Custom Listing of Water Data			
Summary Table	\$20.00	\$0.05 per record	\$20.05
8 ¹ / ₂ x 11 in. Report	\$20.00	\$0.25 per page	\$20.25
Diskettes	\$20.00	\$0.05 per record	\$20.05

Conversion Routines

A diskette that performs conversions between latitude/longitude and the Carter coordinate system (Nuttall, B.C., 1988, Carter coordinate conversion to latitude and longitude routines: Kentucky Geological Survey Open-File Report OF-88-08, 1 floppy diskette) is available for **\$12.50**. A sample program on the diskette accepts data entered on the keyboard or from a file and generates data on the computer screen or a file. The source code in Pascal provides for customizing and including user programs. The program is provided on MS-DOS, formatted, high-density 3.5" diskettes with documentation and sample data file. Order by open-file report number.

GIS Coverages

Contact Dan Carey at (606) 257-5500 for information. Many coverages are also available for downloading on the KGS World Wide Web site at www.uky.edu/kgs/gis/kgs_gis.html.

Strong-Motion Records

Records from the Kentucky Seismic and Strong-Motion Network since 1990 are available on CD-ROM. Contact Publication Sales for price and ordering information.

Drillers' Logs and Other Mineral-Resource Records

The Kentucky Geological Survey is the repository for mineral resource records such as electrical and other geophysical logs, drillers' logs, location plats, plugging affidavits, etc. Page-size copies are available for 20¢ per page.

Important: Drillers' logs and other borehole data should be ordered through the Office of Geologic Information by county, farm name, well number, operator, and Carter coordinate location.

Log Length (feet)	Cost	
0–3	\$4.00	
4–11	\$6.50	
12–15	\$9.50	
16–20	\$12.50	
21–30	\$16.00	
Logs more than 30 feet long are \$16.00 plus \$0.32 per foot in excess of 30 feet.		

The Survey will also make copies of any materials up to 36 inches wide, including copies of out-of-print maps, cross sections, etc. Large-format copies on bond paper are \$1.00 per running foot. Copies may also be made on vellum (\$1.50 per running foot) or film (\$2.50 per running foot). Please inquire about log and large-format copies through the Office of Geologic Information, (606) 257-8238 or (606) 257-5500.

KGS–Earth Science Information Center (KGS-ESIC)

The Kentucky Geological Survey is a state affiliate of the Earth Science Information Center. KGS-ESIC provides information on maps, charts, aerial photography, satellite imagery, geodetic control, and other map products. For further information or ordering assistance contact:

KGS-ESIC 228 Mining and Mineral Resources Building University of Kentucky Lexington, KY 40506-0107 (606) 257-5500

Open-File Reports

★2-74	Simulated drawdown for selected well fields in the Ohio River alluvial aquifer,		central Kentucky, by T.W. Lambert, 1979, 81 p. \$4.25
	by H.F. Grubb, 38 p. \$4.00	79-834	Measured sections of Ordovician strata
★53-73	Ground water in the alluvium along the		in south-central Kentucky, by G.W. Weir,
	Green River between its mouth and		W.L. Peterson, and W C Swadley, 1979,
	Woodbury, Kentucky, by P.D. Ryder,		56 p. \$11.20
	1974, 2 plates \$1.25	79-835	Measured sections of Upper Ordovician
75-316	Graphic lithologic logs of four U.S.		strata in central Kentucky, G.W. Weir,
	Geological Survey cores of Carbonifer-		W.L. Peterson, and R.C. Kepferle, 1979,
	ous rocks, Lawrence County, Kentucky,		44 p. \$8.80
	by C.W. Connor, 1975, 15 p. \$3.00	79-850	Measured sections of Ordovician strata
★76-86	Water temperatures of Kentucky, by J.S.		in north-central Kentucky, by G.W. Weir,
	Zogorski and J.L. Kiesler, Jr.,		W C Swadley, and W.L. Peterson, 1979,
	1 plate \$1.25		123 p. \$24.60
≈77-123	Fluvial sediment study of Fishtrap and	79-1303	Chemical analysis and geochemical
	Dewey Lakes drainage basins, Kentucky-		associations in Devonian black shale
	Virginia, by W.F. Curtis, R.F. Flint, F.H.		core samples from Martin County,
	George, and J.F. Santos, 1978,		Kentucky; Carroll and Washington
	91 p. \$4.50		Counties, Ohio; Wise County, Virginia;
77-228	Bouguer gravity map of the northern		and Overton County, Tennessee, by J.S.
	Mississippi Embayment, parts of		Leventhal, 1979, 59 p. \$11.80
	Missouri, Arkansas, Tennessee, Ken-	☆ 79-1329	Preliminary hydrogeologic investigations
	tucky, and Illinois, by T.G. Hildenbrand,		of the Maxey Flats radioactive waste
	C.P. Ervin, John Hendricks, G.R. Keller,		burial site, Fleming County, Kentucky,
	L.D. McGinnis, and R.G. Stearns, 1977,		by H.H. Zehner, 1979, 66 p. \$4.50
	1 plate, scale 1:500,000 \$3.00	80-685	A compilation of ground water quality
77-229	Aeromagnetic map of the northern		data for Kentucky, by R.J. Faust, G.R.
	Mississippi Embayment, parts of		Banfield, and G.R. Willingers, 1980,
	Missouri, Arkansas, Tennessee, and		963 p. \$12.00
	Kentucky, by T.G. Hildenbrand and R.W.	★80-1225	Low flow characteristics of Kentucky
	Johnson, 1977, 1 plate, scale		streams, by J.N. Sullavan, 1980,
	1:500,000 \$3.00	00.1010	l plate \$1.25
77-230	Gravity station locations of the northern	80-1242	Field survey of intensity for the earth-
	Mississippi Embayment, parts of		quake of July 27, 1980, Sharpsburg,
	Missouri, Arkansas, Tennessee, Ken-		Kentucky, by M.G. Hopper and B.G.
	tucky, and Illinois, by T.G. Hildenbrand,	01 100	Reagor, 1980, 32 p. \$0.40
	C.P. Ervin, John Hendricks, G.R. Keller,	81-198	internetician for the Kontroluce and here here
	L.D. McGinnis, and R.G. Stearns, I		of July 27, 1080, by B.C. Beager, C.W.
1 70 05	plate, scale 1:500,000 \$3.00		of July 27, 1980, by B.G. Reagor, C.W. Stover and M.G. Honner 1081
★ 18-25	Potentiometric surface of the Mississip-		Slover, and W.G. Hopper, 1981, $72 \text{ p} = \$14.40$
	pian aquifer in parts of frigg, Lyon,	81 500	72 p. \$14.40 Geochemical analyses and summaries of
	Caldwell, and Christian Counties,	01-309	carbonate rocks from Kentucky by LI
	hu B O Blahuah 1085 2 platas \$2.00		Connor 1981 120 p $\$24.00$
79 706	Geologia names of Ordovisian rock	81-790	The Mauzy Formation a new strati-
/8-/90	stratigraphic units exposed in Kentucky	01 790	graphic unit of Permian age in western
	by G W Weir and F P. Cressman, 1079		Kentucky by T.M. Kehn I.G. Beard and
	250 p \$50 00		A.D. Williamson, 1981–18 n \$3.60
79-53	Water in the Elizabethtown areaA		
	study of limestone terrane in north-		

 $[\]star$ Prepared in cooperation with the Kentucky Geological Survey.

^{*}Prepared in cooperation with the U.S. Army Corps of Engineers.

 $[\]bigstar Prepared in cooperation with the U.S. Environmental Protection Agency.$

 $[\]star$ Prepared in cooperation with the Kentucky Geological Survey.

gomery, and Bath Counties, by C.E.

Holbrook, 1964, 82 p. **\$16.40**

25

81-1097	Geochemical analyses and summaries of shale from Kentucky, by J.J. Connor,	94-211	Petroleum exploration plays and resource estimates, 1989, onshore United States— Bogion & Eastern Interior, Bogion 0
81-1098	Geochemical analyses and summaries of Mississippian and Pennsylvanian		Atlantic Coast, ed. by R.B. Powers, 1994, 113 p. \$22.60
	sandstone from Kentucky, by J.J.	96-724	Overview of liquefaction evidence for strong earthquakes of Holocene and
81-1215	Effects of water quality of coal mining in the basin of the North Fork River, eastern Kentucky, by K.L. Dyer, 1983.		latest Pleistocene ages in southern Indiana and Illinois, by S.F. Obermeier, 1997, 38 p. \$7.60
82-219	94 p. \$4.50 Lithologic and stratigraphic descriptions	C-428	Reports and maps of the Geological Survey released only in open file, 1959, by B.A. Weld, E.S. Assalsting, and
	Devonian and Early Mississippian age in northeastern Kentucky, by R.C. Kepferle, J.G. Beard, and J.D. Pollock, 1981,	MF-914	Arthur Johnson, 1960, 11 p. \$2.20 Magnetic and gravity anomalies in the northeastern Mississippi Embayment and
82-509	89 p. \$17.80 U.S. Geological Survey research in radioactive waste disposal—Fiscal year 1980, by Robert Schneider and N.J.		their spacial relation to seismicity, by T.G. Hildenbrand, M.F. Kane, and W. Stauder, 1977, 2 plates, scale 1:1,000,000 \$8.00
♦ 83-4152	Trask, 1982, 110 p. \$22.00 Fluvial sedimentation in Kentucky, by	OF-31-01	The Cynthiana of the southwestern Blue Grass, by D.M. Young, 1931,
84-122	R.F. Flint, 1983, 75 p. \$4.25 Mineral surveys of southeastern National Forest roadless and wilderness areas, by D.R. Birch and F.G. Lesure, 1984,	OF-33-01	The stratigraphy of the McMillan Series on the eastern flank of the Cincinnati Arch in Kentucky, by R.S. Hicklin, 1933,
84-270	71 p. \$14.20 Conodonts, conodont biostratigraphy and correlation of the Moffett Road Section	OF-48-01	52 p., 1 plate \$14.40 The Seventy Six oil pool: Clinton County, Kentucky, by E.B. Wood, 1948, 8 p. \$1.60
	(Middle and Upper Ordovician), Kenton County, Kentucky, by W.C. Sweet, 1984, 20 p. \$4.00	OF-50-01	Boyle Limestone of the southeastern Knob Belt, by F.H. Walker, 1950,
85-145	Ohio Shale (Devonian), SDO-1 from Rowan County, Kentucky, by R.C. Kepferle, Wallace de Witt, Jr., and F.J. Flanagan, 1985, 15 p. \$3.00	OF-51-01	37 p. \$7.40 A faunal study of the McMillan Formation in the vicinity of Shelbyville, Shelby County, Kentucky, by Edmund
★85-4052	Calibration and verification of a stream flow simulation model for the Kentucky River near Lexington and Frankfort, Kentucky, by C.J. Sholar, 1985,	OF-53-01	Nosow, 1951, 134 p. \$27.40 Terminology for stratification and cross stratification in sedimentary rocks, by E.D. McKee and G.W. Weir, 1953, 9 p. \$1.80
★90-4191	Effects of oil production on water resources in the Kentucky River Basin, Kentucky, by R.P. Evaldi and J.A. Kipp, 58 p. \$10.00	OF-57-01	Mississippian subsurface stratigraphy in Clay, Harlan, and Leslie Counties, Kentucky, by R.E. Greenfield, 1957, 52 p. \$10.40
92-260	Catalog of pre-Cretaceous geologic drill- hole data from the Upper Mississippi Embayment: A revision and update of Open-File Report 90-260, by R.L. Dart, 1992 253 p. \$50.60	OF-62-04	Waterflood study: Ken-Brad Oil Company and Neil Oil Company properties, part of Big Sinking Pool, Powell County, Kentucky, by Y.M. Sahraie and M.F. Krieg, 19 p. \$3.80
93-596	Plays for assessment in Region VIII, Eastern, as of October 4, 1993–1995 National Assessment of Oil and Cas, by	OF-63-01	Gravity tables for Map GP-421, Simple Bouguer Gravity Map of Kentucky, by J.S. Watkins, 1963, 21 p. \$4.20
	D.L. Gautier and K.L. Varnes, 1993, 24 p. \$6.00	OF-63-03	Engineering study of the Hobbs area, Big Sinking Pool, Lee County, Kentucky, by M.F. Kreig, 1963, 8 p. \$1.60
◆Prepared in co	operation with the Kentucky Department of Natural	OF-64-01	Stratigraphic relationships of the Silurian and Devonian in Clark, Powell, Mont-

 $[\]blacklozenge$ Prepared in cooperation with the Kentucky Department of Natural Resources.

 $[\]star$ Prepared in cooperation with the Kentucky Geological Survey.

OF-64-02	Pumping test of an Eocene aquifer near		M.L. Ammerman, 1976, 35 p. \$7.00
	Mayfield, Kentucky, by J.H. Morgan,	OF-76-03	Gravity and tectonic study of the Rough
	1964, 26 p. \$5.20		Creek Fault Zone and related features, by
OF-66-03	Contributions to the geology of the Pine		R.K. Soderberg, 1976, 40 p. \$8.00
	Mountain Fault block, by E.N. Wilson,	OF-76-04	The stratigraphy, sedimentology, and
	1966, 17 p. \$3.40		conodont paleontology of the Floyds
OF-67-01	Stratigraphy of a Chester cycle in the		Knob Bed and Edwardsville Member of
	Kentucky part of the Eastern Interior		the Muldraugh Formation (Valmeveran).
	Basin, by R.H. Calvert, 1967, 63 p., 6		southern Indiana and north-central
	plates \$21.00		Kentucky, by N.H. Whitehead III.
OF-67-02	Regional tectonic study of the New		443 p \$88.60
01 07 02	Madrid earthquake zone by Washington	OF-76-05	Principal facts for gravity stations
	University 1967 2 p. 7 plates (various	01 /0 05	included on the eastern sheet of the
	scales) \$35.40		Bouquer Gravity Map of Kentucky, by
OF-68-01	Simpson County well sample descrip		M L Ammerman G R Keller and C R
01-08-01	tions by E.B. Branson, 1068		Austin 1076 14 n \$2.80
	$f_{2,n} = f_{12,40}$	OE 77 01	Austili, 1970, 14 p. \$2.00
OF (9.02	02 p. \$12.40	06-//-01	deologic conditions fended to the
OF-08-03	An annotated carbonate reading list, by $DE D = 1069 \cdot 21 = -46 \cdot 20$		planning of sanitary landing in Clark
05 70 02	P.E. Potter, 1968, 31 p. \$6.20		County, Kentucky, by George
OF-70-03	Logs of cores from drill holes in		Grabowski, 19/7, 1 plate,
	southeastern Kentucky, by D.C. Alvord,		scale 1:48,000 \$3.00
	1970, 1 p., 11 logs \$30.00	OF-79-01	Description of St. Joseph Lead Company
OF-72-01	Comparative study of results obtained		core hole "Cu 1," western Cumberland
	from well logs with core analyses and		County, Kentucky, by W.H. Anderson,
	formation samples—Midland Field,		1979, 29 p. \$5.80
	Kentucky, by A.G. Segovia Chica, 1972,	OF-79-02	Correlation of the coals of the Cumber-
	79 p. [Translated from the Spanish by		land Overthrust Sheet of Kentucky and
	Gail Gonzalez] \$15.80		parts of southwestern Virginia, by G.W.
OF-73-02	U.S. Steel No. 4 Bierer and Sons test		Harned, 1979, 62 p. \$12.40
	hole (Big Looney): Constructed driller's	OF-79-10	The nature of the Mississippian-
	log, by A.J. Froelich and B.D. Stone,		Pennsylvanian unconformity in eastern
	1973, 2 p. 40¢		Kentucky and vicinity, by E.N. Wilson,
OF-73-04	Energy systems in the tri-state: Interrela-		1979, 33 p. \$6.60
	tionships, competitiveness, and relative	OF-79-11	Nature and position of the Devonian–
	costs, by E.N. Wilson, 1973,		Mississippian boundary in eastern
	70 p. \$14.00		Kentucky and contiguous areas, by J.S.
OF-74-03	Ft. Payne production in the Cumberland		Zafar and E.N. Wilson, 26 p. \$5.20
	Saddle area of Kentucky and Tennessee.	OF-80-01	Description of St. Joseph Minerals
	by E.N. Wilson, 1974?, 31 p. \$6.20		Corporation core hole "Cu 3." northern
OF-74-04	Engineering study of the Stray Weir		Cumberland County, Kentucky, by W.H.
01 / 1 0 1	sand the First Weir sand and the Second		Anderson 1980 15 p \$3.00
	Weir sand reservoirs in the northwest	OF-80-02	Devonian black shale study of western
	portion of the Martha Field I awrence	01 00 02	Kentucky: Final status report by I.G.
	County Kentucky by P.O. Heas 1074		Relatively. That status report, by $\mathbf{J}.\mathbf{G}$.
	30 p \$7 80	OF-80-03	Guide and finding key to Eastern
OF 74 05	57 p. \$7.00 Engineering study of the Stray Weir	01-00-05	Kentucky Coal Field literature and
06-74-03	and the First Wair and and the Second		information by D.A. Drant Jonathan
	Sand, the First well sand, and the second		Information, by K.A. Drant, Jonathan
	weir sand reservoirs in the southeast		Konkler, and H.B. Morgan, 1980,
	portion of the Martha Field, Lawrence		119 p. \$23.00
	County, Kentucky, by R.O. Haas, 1974,	OF-80-05	Geologic data in the evaluation of mining
	28 p. \$5.60		potential of abandoned mine lands, by
OF-75-06	Determinations of zinc, lead, manganese		Kentucky Geological Survey, 1980,
	by atomic absorption in selected samples		[197] p. \$39.40
	and cores in southwestern Kentucky, by	OF-80-06	Modeling and data analysis of 50 to
	E.N. Wilson, 1975, 15 p. \$3.00		5,000 kHz radio wave propagation in
OF-76-01	A gravity and tectonic study of the Rome		coal mines, by R.L. Legace, A.G. Emslie,
	Trough, by M.L. Ammerman, 1976, 76		and M.A. Grossman, 1980,
	p., 1 plate \$18.50		113 p. \$22.60
OF-76-02	Kentucky gravity base station network,	OF-81-01	Description of the Ellis No. 1 Murley
	by G.R. Keller, R.K. Soderberg, and		Well, Cumberland County, Kentucky, by

	W.H. Anderson, 1981, 15 p. \$3.00	OF-82-05	Preliminary evaluations of miscellaneous
OF-81-02	Analytical data source map for the Upper		clay and shale deposits in Kentucky, by
	Elkhorn No. 3 coal bed, eastern		Preston McGrain and T.A. Kendall,
	Kentucky, by J.C. Currens, 1981, 1 sheet,		1982, 16 p. \$3.20
	scale 1:250,000 \$4.00	☎OF-83-01	Area requested for tight formation
O F-81-03	Ash distribution map in the Upper		designation in the Berea Sandstone. Pike
	Elkhorn No. 3 coal bed, eastern		County, Kentucky, by John Avila.
	Kentucky, by J.C. Currens, 1981, 1 sheet.		Chairman, Eastern Kentucky Tight
	scale 1:250 000 \$4 00		Formation Committee 1983
© OF-81-04	Caloric content (Btu) map in the Upper		104 p \$20.80
• 01 01 01	Flkhorn No. 3 coal bed eastern	20 F-83-02	Areas requested for tight formation
	Kentucky by IC Currens 1981 1 sheet	_ 01 05 02	designation of the Berea Sandstone in
	scale 1.250000 \$400		Lawrence County Kentucky by John
O OF-81-05	Sulfur distribution map in the Upper		Avila Chairman Eastern Kentucky Tight
W 01-01-05	Fikhorn No. 3 coal bed eastern		Formation Committee 53 p \$10.60
	Kantuaky by I.C. Currens, 1081, 1 shoot	OE 82 02	Source of the velocitie ash deposit (flint
	$\frac{1}{200} = \frac{1}{200} = \frac{1}$	01-03-03	source of the volcance ash deposit (finit
OF 91 12	Scale 1.250,000 \$4.00		Appeloshion Desin by D.B. Chesnut In
OF-81-12	Known calcareous coal ball occurrences		Appaiachian Basin, by D.K. Chesnut, Jr.,
	In eastern Kentucky, by D.K. Chesnut,	OF 92 04	1985, 50 p. 37.20
OF 93 01	Jr., 1981, 25 p. \$5.00	OF-85-04	A preliminary study of the Upper
OF-82-01	Description of Coastal Mining Company		Mississippian and Lower Pennsylvanian
	core D-11, Clinton County, Kentucky, by		rocks of eastern Kentucky and nearby
	W.H. Anderson, 1982, 10 p. \$2.00		areas, by D.R. Chesnut, Jr., 1983,
OF-82-02	Symposium on the Rough Creek Fault		56 p. \$11.20
	Zone, comp. by E.J. Combs, 1982,	☎OF-83-05	Areas requested for tight formation
	66 p. \$13.20		designation in the Big Lime in Harlan,
	a. The Rough Creek-Shawneetown		Leslie, Letcher, and Perry Counties,
	Fault Zone: A resume, by E.J.		Kentucky, by John Avila, Chairman,
	Combs, p. 1–8		Eastern Kentucky Tight Formation
	b. The Rough Creek Fault Zone, by		Committee, 1983, 42 p. \$10.50
	D.G. Sutton, p. 9-18	☎OF-83-06	Areas requested for tight formation
	c. Relationship of certain Pennsylva-		designation of the Corniferous-Big Six
	nian units to the Rough Creek Fault		and Clinton formations, Lawrence and
	Zone of western Kentucky, by J.G.		Johnson Counties, Kentucky, by John
	Beard and A.D. Williamson, p. 19-		Avila, Chairman, Eastern Kentucky Tight
	30		Formation Committee, 1983,
	d. A potential Ordovician stratigraphic		[67] p. \$16.75
	trap along the Rough Creek Fault,	OF-83-07	Acquisition, storage, and classification of
	western Kentucky, by Howard		engineering and geological data for
	Schwalb, p. 31-37		surface-mine design and reclamation, by
	e. Complexity of Rough Creek Fault		J.C. Cobb and K.F. Unrug, 1983,
	Zone, including thrust faulting.		170 p. \$34.00
	interpreted from subsurface data at	OF-83-08	Depositional environments and stratigra-
	Morganfield, Kentucky, by A.E.		phy of the Pennington Formation (Upper
	Smith. p. 38-54		Visean-Namurian A), east-central and
	f. Characteristics of the Rough Creek		eastern Kentucky, U.S.A., by F.R.
	Fault Zone near the Ohio River in		Ettensohn and D.R. Chesnut 1983
	northwestern Kentucky by IF		30 p \$6.00
	Palmer n 55-66	OF-83-09	Structural controls on environments of
OF-82-03	Correlation of lignite beds for fault	01-03-07	denosition coal quality and resources in
01-02-03	identification in the Mississippi		the Annalachian Basin in Kentucky, by
	Embayment area of western Kentucky		DC Hanay IC Cabb DD Chasnut
	Einol report by IC Cobb and D A		and LC Currents 21 n \$4.20
	Final report, by J.C. CODD and D.A. Williams $1082, 25 \text{ m} = \frac{67.00}{100}$		and J.C. Currens, 21 p. \$4.20
	williams, 1982, 35 p. \$7.00		

[♦]Allow extra time for large-format photocopying.

OF-83-10	Analytical data source map in the	OF-83-23	Strategic materials, by J.D. Morgan,
	Amburgy and Williamson coal beds,		1983, 17 p. \$3.40
	eastern Kentucky, by J.C. Currens, 1983,	OF-83-24	Discriminating relationships among basic
	1 sheet, scale 1:250,000 \$4.00		lithologies and engineering parameters
OF-83-11	Analytical data source map in the Fire		obtained from the point-load and slake
	Clay coal bed, eastern Kentucky, by J.C.		durability tests, by R.A. Smath, 1983,
	Currens, 1983, 1 sheet, scale		93 p. \$18.60
000 00 10	1:250,000 \$4.00	© OF-84-01	Analytical data source map in the
COF-83-12	Analytical data source map in the Lower		Manchester coal bed, eastern Kentucky,
	Elkhorn coal bed, eastern Kentucky, by		by J.C. Currens, 1984, 1 sheet, scale $1,500,000,000,000$
	J.C. Currens, 1983, 1 sneet, scale	A OE 94 02	1:500,000 \$3.00
COE 92 12	1:250,000 \$4.00 Ash distribution man (with ash softening	W OF-84-02	Asn distribution map (with asn-soltening
O UF-03-15	temperatures) in the Amburgy and		bed eastern Kentucky by I.C. Currens
	Williamson coal beds, eastern Kentucky		1984 1 sheet scale 1.500 000 \$3.00
	by IC Currens 1983 1 sheet scale	○ ○F-84-03	A comparison of compliance coal
	1.250 000 \$4 00	•01 04 05	resources in Kentucky and southeastern
OF-83-14	Ash distribution map (with ash-softening		Montana by I.C. Cobb and C.A. Stone
001 00 11	temperatures) in the Fire Clay coal bed.		1984. 6 p. \$1.20
	eastern Kentucky, by J.C. Currens, 1983,	OF-84-04	Caloric content (Btu) map (with total
	1 sheet, scale 1:250,000 \$4.00		moisture) in the Manchester coal bed,
OF-83-15	Ash distribution map (with ash-softening		eastern Kentucky, by J.C. Currens, 1984,
	temperatures) in the Lower Elkhorn coal		1 sheet, scale 1:500,000 \$3.00
	bed, eastern Kentucky, by J.C. Currens,	OF-84-07	Geology and ore deposits of the Tabb
	1983, 1 sheet, scale 1:250,000 \$4.00		area, Tabb Fault System, Crittenden and
OF-83-16	Caloric content (Btu) map (with total		Caldwell Counties, Kentucky, by R.D.
	moisture values) in the Amburgy and		Trace, 1984, \$17.60
	Williamson coal beds, eastern Kentucky,	OF-84-08	Comparison of lithologic characteristics
	by J.C. Currens, 1983, 1 sheet, scale		associated with point-load and slake-
• • • • • • • •	1:250,000 \$4.00		durability tests, by R.A. Smath, A.D.
© OF-83-17	Caloric content (Btu) map (with total		Smith, and J.C. Cobb, 1984,
	moisture) in the Fire Clay coal bed,	05.05.01	33 p. \$6.60
	eastern Kentucky, by J.C. Currens, 1983,	OF-85-01	Feasibility assessment of unconventional
AOE 92 19	1 sneet, scale 1:250,000 \$4.00		gas in Kentucky, phase II—western
W UF-85-18	moisture values) in the Lower Ellthorn		Relitucky coal-bed methane study, by
	coal bed eastern Kentucky by LC		and B W Fisher 1985 458 p $\\$91.60$
	Currens 1983 1 sheet	OF-86-01	Description of Cominco American Inc
	scale 1.250 000 \$4 00	01-00-01	core CA-57 Mason County Kentucky
OF-83-19	Total sulfur distribution map (with free-		by WH Anderson and LS Barron
• 01 05 17	swelling index) in the Amburgy and		1986. 13 p. \$2.60
	Williamson coal beds, eastern Kentucky.	OF-86-02	Coal-quality data for the Eastern
	by J.C. Currens, 1983, 1 sheet.		Kentucky Coal Field, by Kentucky
	scale 1:250,000 \$4.00		Geological Survey, 1986,
OF-83-20	Total sulfur distribution map (with free-		104 p. \$18.00
	swelling index) in the Fire Clay coal bed,	OF-86-03	Coal-quality data for the Western
	eastern Kentucky, by J.C. Currens, 1983,		Kentucky Coal Field, by Kentucky
	1 sheet, scale 1:250,000 \$4.00		Geological Survey, 1986, 40 p. \$8.50
OF-83-21	Total sulfur map (with total moisture) in	OF-86-04	Coal-thickness data for the Big Sandy
	the Lower Elkhorn coal bed, eastern		District, eastern Kentucky, by Kentucky
	Kentucky, by J.C. Currens, 1983, 1 sheet,		Geological Survey, 1986,
	scale 1:250,000 \$4.00		212 p. \$25.00
OF-83-22	Report and recommendations, by	OF-86-05	Coal-thickness data for the Hazard
	Kentucky Task Force on Earthquake		District, eastern Kentucky, by Kentucky
	Hazards and Safety, 1983,		Geological Survey, 1986,
	143 p. \$28.60		204 p. \$25.00

[♦] Allow extra time for large-format photocopying.

[♦] Allow extra time for large-format photocopying.

OF-86-06	Paleoenvironmental investigation of the		1988, 17 p. \$3.40
	Hazard coal, Breathitt Formation	OF-88-11	Mine-related subsidence, by R.E.
	(Pennsylvanian), Eastern Kentucky Coal		Sergeant, R.A. Smath, and J.F. Stickney,
	Field, by O.B. Davidson, 1986, 103 p.,		1988, 4 p. pamphlet. 80¢
	1 plate \$22.00	OF-88-13	Preferred coal-bed names for the Eastern
OF-86-07	Coal-thickness data for the Licking River		Kentucky Coal Field, by D.R. Chesnut,
	District, eastern Kentucky, by Kentucky		Jr., 1988, 6 p. \$1.20
	Geological Survey, 1986, 72 p. \$10.00	OF-88-14	Stratigraphic analysis of the Carbonifer-
OF-86-08	Coal-thickness data for the Princess		ous rocks of the Central Appalachian
	District, eastern Kentucky, by Kentucky		Basin, by D.R. Chesnut, Jr., 1988.
	Geological Survey 1986 54 p \$7.50		152 p \$30.40
OF-86-09	Coal-thickness data for the Southwestern	OF-88-15	Hydrocarbon production from the sub-
01 00 07	District eastern Kentucky by Kentucky	01 00 15	Pennsylvanian naleovalleys of western
	Geological Survey 1986		Kentucky by S.F. Greb 1988
	154 p \$20 00		24 p \$4.80
OF-86-10	Coal-thickness data for the Upper	OF-89-01	The Kentucky Coal Resources Informa-
01-00-10	Cumberland District aastern Kantucky	01-07-01	tion System: A summary report by O B
	by Kaptucky Goological Survey, 1086		Devideon 1080 5 n \$1.00
	by Kennicky Geological Survey, 1980, $04 \text{ m} = \$15.00$	OE 80.02	Crustal structure beneath the Cincinneti
OF 96 11	94 p. \$15.00 Sedimentation notterms and testenic	OF-89-02	Arch in south control Kontuclin using
06-90-11	Sedmentation patients and tectome		Arch III south-central Kentucky using
	controls of Early to Middle Pennsylva-		magnetic, gravity, and seismic reflection
	nian rocks, south-central-eastern		data, by B.P. Ullom, 1989,
	Kentucky, by E.R. Slucher, 1986,	05.00.00	156 p. \$31.20
05.05.01	105 p. \$21.00	OF-90-02	Final report of the Hoskinston Quad-
OF-87-01	Milestones in Kentucky geology: Major		rangle coal availability study, by O.B.
	accomplishments of the Kentucky		Davidson, 1990, 43 p. \$8.60
	Geological Survey, by Preston McGrain,	OF-90-03	Comprehensive overview of earthquake
	1985, 21 p. \$4.20		hazard reduction in the central United
OF-87-06	A bibliography of the geology of		States, by Linda Huey, 1990,
	Kentucky coal: 1835–1985, by V.S. Hall,		433 p. \$86.60
	1987, 160 p. \$32.00	OF-91-01	Revisions to the stratigraphic code at the
OF-88-01	Reference list of published information		Kentucky Geological Survey, by B.C.
	on the geology of underground coal-mine		Nuttall and M.C. Noger, 1991,
	roof falls, by S.F. Greb, 1988,		42 p. \$8.40
	19 p. \$3.80	OF-91-02	Kentucky strong motion records, 1990-,
OF-88-02	Classification and modeling of roof-		by R. Street, 1991- (periodically
	control problems in an eastern Kentucky		updated) price fluctuates
	coal mine, by S.F. Greb and J.C. Cobb,	OF-92-02	Eustatic and tectonic control of deposi-
	1988, 37 p. \$7.40		tion of the Lower and Middle Pennsylva-
OF-88-03	Kettlebottoms, by S.F. Greb, 1988,		nian strata of the Central Appalachian
	16 p. \$3.20		Basin, by D.R. Chesnut, Jr., 1992,
OF-88-05	Final report of the Noble Quadrangle		58 p. \$11.60
	coal availability study, by R.E. Sergeant,	OF-93-01	New methods for calculating demon-
	J.C. Cobb, O.B. Davidson, W.H.		strated coal reserves: Application of coal
	Anderson, J.F. Stickney, D.R. Chesnut,		availability results to coal resources of
	Jr., R.A. Smath, J.K. Hiett, D.B. Perry,		the Eastern Kentucky Coal Field, by
	and M.A. Gauthier, 1988, 94 p. \$18.80		D.R. Chesnut, Jr., 1993, 37 p. \$9.25
OF-88-06	Low-sinuosity, bed-transport stream	OF-93-02	The Slade feature: Evidence for mid-
	deposits in a sub-Pennsylvanian.		Carboniferous karstic development, by
	rectangular valley system. Casevville		D.R. Chesnut, Jr., 1993, 21 p. \$5.25
	Formation, Eastern Interior Basin.	OF-93-04	Interim report on the occurrence of
	western Kentucky by S.F. Greb 1988	01 /0 01	pesticides nitrate and bacteria on
	20 p \$4 00		ground-water quality in a karst terrane
OF-88-07	Geology of roof falls in Kentucky coal		The Inner Blue Grass Region Woodford
00-07	mines by SF Greb 1988 25 p \$5.00		County Kentucky by D M Keagy IS
OF-88-08	Carter coordinate conversion to latitude		Dinger & W Fogle and I VA
JI-00-00	and longitude routines, by R.C. Nuttall		Sendlein 1003 31 n $\pounds A$
	1988 3 5" diskatta \$12 50	OF-03-05	Interim report on the occurrence of
OF-88-10	Δ review of the causes and controls of	01-75-05	necting report on the occurrence of
01-00-10	acid mine drainage by OR Davidson		the Inner Blue Grass Degion Bourbon
	actu mine uramage, by O.D. Daviuson,		are miler Drue Grass Region, Dourbon

	County, Kentucky, by D.M. Keagy, J.S. Dinger, S.K. Hampson, and L.V.A.	OF-94-11	Proceedings of the technical sessions, Kentucky Oil and Gas Association Forty-
	Sendlein, 1993, 22 p. \$4.60		Seventh Annual Meeting, June 1983, ed.
OF-93-06	Impact of agricultural practices at a site		by M.L. Smath, 1994, 24 p. \$9.20
	in the Jackson Purchase Region,		a. The Kentucky Geological Survey's
	Hickman County, Kentucky: Interim		computer system, by Steven
	findings, by P.G. Conrad, J.S. Dinger,		Cordiviola and B.C. Nuttall, p. 1-2.
	L.V.A. Sendlein, and J.B. Armstrong,		b. Evolution and hydrocarbon
	1993, 19 p. \$3.80		potential of the pre-Knox rocks of
OF-93-07	Characterization and quantification of		the Moorman Trough of western
	nonpoint-source pollutant loads in the		Kentucky, by N.C. Hester and P.R.
	Pleasant Grove Spring Basin, Logan		Kohl, p. 3–5.
	County, Kentucky: A conduit-flow-		c. The effect of regional and local
	dominated karst aquifer underlying an		structure on Devonian shale gas
	intensive-use agricultural region, by J.C.		production in eastern Kentucky, by
	Currens, 1993, 78 p. \$15.60		R.C. Shumaker, p. 6–24.
OF-94-01	Impact of agricultural practices at two	OF-94-12	Proceedings of the Illinois Basin Energy
	sites in Pleistocene lacustrine deposits.		and Mineral Resources Workshop, ed. by
	Daviess and Hopkins Counties, Ken-		LL Ridgley I.A. Drahovzal, B.D. Keith
	tucky: Interim findings, by P.G. Conrad.		and D.R. Kolata, 1994, 48 p. \$9.60
	L.S. Dinger, L.V.A. Sendlein, and Jeffrey		a A comprehensive core book of
	Snell, 1994, 28 n. \$5.60		Pennsylvanian rocks of the Illinois
OF-94-02	Atlas of major oil and gas plays of the		Basin: Its construction and its
01 91 02	Illinois and Michigan Basins by I A		applications by M I. Barnhill and
	Drahovzal BC Nuttall and LF		Huitang Zhou p_{1-2}
	Meglen 1994 16 n $\$3.20$		h Alteration of oils during migration
80F-94-03	Petrographic atlas of Precambrian		in the Illinois Basin: Geochemical
a01-74-05	hasement rocks in Ventuelay Indiana		constraints on paleohydrology by
	and Obio comp and ad by D.C. Harris		R C Burruss p 2-3
	and Onio, comp. and ed. by D.C. Harris,		c Coal resources of Daviess County
OF 04 00	85 p., 85 color plates \$95.00		Indiana: A GIS-based resource
OF-94-09	minagin Kantualau Pro mining condi		assessment by LG Callis and LA
	tioner Field dete her S. A. Minner, I.A.		Bupp p 3 4
	King DL Course LS Dingen and LVA		d A GIS approach to calculate
	Kipp, D.I. Carey, J.S. Dinger, and L. V.A. \mathbf{S}_{reg}		available coal resources in
OF 04 10	Sendiem, 1994, 224 p. \$30.00		Alfordsville 7.5-minute quadrangle
OF-94-10	Proceedings of the technical sessions,		Indiana by Haluk Catin Carol
	Si the American Gas Association Forty-		Copolly and LA Pupp p 4 5
	Sixth Annual Meeting, June 16–18,		The Illinois State Goological
	1982, ed. by M.L. Smath, 1994,		e. The fillions State Geological
	44 p. \$9.20		underground mines, by Cheri
	a. The geology of a Lower Mississip-		Chanayyath M II. Barah and Calin
	pian pay in the Berry School Field,		Travorav n 5
	Daviess County, Kentucky, by John		f Libraria and Manual Annual
	Beard, p. 1–3		1. Ichnology of Morrowan through
	b. Tectonics of western Kentucky and		Ladiana has LA Davana a (7
	adjacent areas, by E.G. Lidiak, p. 4		Indiana, by J.A. Devera, p. 6–7
	c. Polymers for enhanced oil recovery		g. Basin-floor fan complexes: A new
	in the Illinois Basin, by S.J.		exploration strategy for the Rough
	McClaine, p. 5–6		Creek Graben, by J.A. Drahovzal, p.
	d. An overview of naturally fractured		$/-\delta$
	reservoirs, by Wayne Narr, p. 7–18		n. Basin-wide paleofluid flow in
	e. Distribution, nature, and hydrocar-		Cambro-Ordovician siliciclastic
	bon occurrences of the Middle		rocks of the Illinois Basin: Diage-
	Silurian Big Six sandstone, eastern		netic and geochemical evidence
	Kentucky, by F.B. Zelt, p. 19–44		from the Mt. Simon and St. Peter
			Sandstones, by N.S. Fishman and
			J.K. Pitman, p. 8–9

i. Basement tectonics in the eastern Illinois Basin of Indiana, by L.C. Furer, p. 9–10

 $[\]mathbb{Z}$ Allow extra time for color photocopying.

- j. The Illinois Basin as a flow path for low temperature hydrothermal fluids, by M. Goldhaber, E. Rowan, J. Hatch, R. Zartman, J. Pitman, and R. Reynolds, p. 10–12
- k. Geology of the Elm Lick coal zone, Tradewater Formation—A lowsulfur coal in the Western Kentucky Coal Field, by S.F. Greb, D.A.
 Williams, C.F. Eble, W.J. Nelson, J.A. Devera, and W.A. DiMichele, p. 12–13
- Unexpected results from a geochemical approach to typing and correlation of Ordovician oils in the Illinois Basin, by J.M. Guthrie, p. 14
- m. Western Kentucky tar sands and Illinois Basin oil, by Terence Hamilton-Smith, p. 14–15
- Diagenesis and fluid flow in Lower Pennsylvanian rocks, Illinois Basin, by P.L. Hansley, p. 15–16
- Lithostratigraphy and hydrocarbon potential of the Cambrian (pre-Knox) interval in the Conoco No. 1 Turner well, Rough Creek Graben, western Kentucky, by D.C. Harris, p. 16–17
- p. Porosity loss in Mississippian oolitic grainstones, southern Illinois: Implications for hydrocarbon migration, by M.E. Henry, p. 17–18
- q. Geophysical setting of the northern Reelfoot Rift and southern Illinois Basin region, by T.G. Hildenbrand, V.E. Langenheim, and P.C. Heigold, p. 18–20
- r. History of the Illinois Basin: An overview, by D.R. Kolata, p. 20–21
- Waulsortian mounds and hydrocarbon-bearing facies in the Ullin ("Warsaw") Limestone of the Illinois Basin, by Zakaria Lasemi, J.D. Treworgy, R.D. Norby, and J.P. Grube, p. 21
- t. Seismic character analysis of a mixed siliciclastic-carbonate reservoir, by H.E. Leetaru, p. 22
- u. Tectonic history of the Wabash Valley Rift using seismic reflection and stress field effects, by J.J. Lewis, p. 22
- v. Subsurface geometry and petrography of clastic rocks of the Beech Creek ("Barlow") Limestone (Chesterian) to Springfield Coal (Desmoinesian) stratigraphic interval of part of the LaSalle

Anticlinorium, Lawrence County, Illinois, by D.K. Lumm, p. 23–24

- W. Hydrocarbon plays within the Illinois Basin Province for the National Petroleum Assessment, by D.L. Macke, p. 24–25
- x. Assessment of the 3,000 and 10,000 ppm total dissolved solids boundaries in the Mississippian and Pennsylvanian aquifers of southwestern Indiana using geophysical logs, by W.M. Mitchell, p. 25–27
- Preliminary identification of transgressive-regressive depositional cycles in the Chesterian Series in southern Illinois, by W.J. Nelson and J.D. Treworgy, p. 27
- Thermal history modeling in the Illinois Basin, by V.F. Nuccio, p. 28–29
- aa. A proposal for an atlas of the major oil and gas plays of the Illinois and Michigan Basins, by B.C. Nuttall and J.A. Drahovzal, p. 29–30
- bb. The Mid-West Region of the Petroleum Technology Transfer Council, by D.F. Oltz and L.D. Moore, p. 31
- cc. Data from Illinois Basin samples contained in the U.S. Geological Survey's new coal quality CD-ROM, by C.L. Oman, S.J. Tewalt, and L.J. Bragg, p. 32
- dd. Origin and timing of carbonate cements in the St. Peter Sandstone, Illinois Basin: Evidence for a genetic link to MVT-type mineralization, p. 32–33
- ee. The regional configuration of the Cambrian Reelfoot-Rough Creek Rome Rift System, by C.J. Potter and J.A. Drahovzal, p. 34–35
- ff. Structural and stratigraphic patterns on regional seismic data, southern Illinois Basin, by C.J. Potter, J.A. Drahovzal, Michael Sargent, and Jennifer Lewis, p. 35–36
- gg. Sedimentology and trace element and stable isotope geochemistry of the lower part of the Mississippian St. Louis Limestone in the Illinois Basin, by J.L. Ridgley, F.A. Hills, and C. Rice, p. 37–38
- hh. Character and depositional environments of potential source rocks in the lower part of the Mississippian St. Louis Limestone of the Illinois Basin, by J.L. Ridgley and V.F. Nuccio, p. 39–40
- ii. Biomarker and fluid inclusion

measurements as constraints on the time-temperature and fluid-flow history of the northern Illinois Basin and Upper Mississippi Valley Zinc District, by E.L. Rowan, M.B. Goldhaber, and J.R. Hatch, p. 40-41

- Diagenetic alteration and porosity jj. enhancement of two middle Mississippian sandstone reservoirs in the Illinois Basin, by Beverly Seyler and D.S. Beaty, p. 42
- kk. The possible role of thermal convection as a result of fracturing of radioactive basement rocks and implications for fluid flow, heat flow, and the genesis of the Upper Mississippi Valley zinc-lead ores, by C.S. Spirakis, p. 42-43
- ll. Geological constraints on the mining of coal in Illinois, by C.G. Treworgy, R.J. Jacobson, C.A. Chenoweth, and M.H. Bargh, p. 43-44

mm. Reservoir stimulation studies of Aux Vases and Cypress reservoirs in Illinois, by Emmanuel Udegbunam, p. 44-45

nn. Indiana coal mine information project, by Licia Weber, p. 45

by R.M. Cluff, 1994, 37 p. \$7.40

research at Robinson Forest, by D.R.

Wunsch, 1995, 89 p. \$17.80

Stress, seismicity, and structure of

L.V.A. Sendlein, J.S. Dinger, J.C.

Currens, and A.M. Sahba, 1995.

boom, by B.C. Nuttall, 1995,

Overview of the Edmonson County oil

Hydrologic impact of a longwall mine in

analysis—Field data, by S.A. Minns, J.A. Kipp, J.S. Dinger, L.V.A. Sendlein, and

eastern Kentucky: During-mining

D.I. Carey, 1996, 120 p. \$24.00

Review of Illinois State Geological

Survey study on Quaternary faulting in

Interim progress report on ground-water

shallow oil reservoirs in Clinton County,

oo. Seismotectonic maps of the New Madrid area—A model for maps of the lower Wabash Valley, by R.L.

OF-94-14

OF-95-01

OF-95-02

OF-95-04

OF-96-02

OF-97-01

Kentucky, by Terence Hamilton-Smith, 1995, 99 p. \$19.80 OF-95-03 Hydrogeology and ground-water monitoring of coal-ash disposal sites in a karst terrain, Burnside, south-central Kentucky-Data report, by S.A. Minns,

42 p. **\$8.40**

31 p. \$6.20

Wheeler and Susan Rhea, p. 45-46 New Albany Shale methane adsorption isotherms-Kentucky, Illinois, Indiana,

OF-97-03 OF-97-04 OF-97-05 OF-99-01 OF-99-02

OF-97-02

- Kentucky Coal Field," by S.F. Greb, J.K. Hiett, G.A. Weisenfluh, R.E. Andrews, and R.E. Sergeant, 1999, 15 plates \$3.00 OF-99-03 Maximum daily and annual nutrient and pesticide loads from turfgrass management areas, by R.M. Williams, J.S. Dinger, A.J. Powell, and D.R. Edwards, 20 p. \$4.00 **TVA-01** Relationships of earthquakes and geology in west Tennessee and adjacent areas, by R.G. Stearns and C.W. Wilson, Jr., 1972, 347 p., 7 plates \$83.40 Mineral resources of Beaver Creek USBM-01 Wilderness: McCreary County, Kentucky, by R.W. Hammack and R.B. Ross,
 - Jr., 1982, 36 p., 7 plates \$21.00 USGS-01 A primer on ground water, by H.L. Baldwin and C.L. McGuinness, 1963, 26 p. \$1.00 USGS-02 Preliminary map showing structural fabric of central Kentucky and part of Ohio, by D.F.B. Black, 1978, 1 plate, scale approximately 3 inches=25

southern Illinois and reconnaissance of

and western Kentucky, by J.D. Kiefer,

J.A. Drahovzal, J.C. Cobb, and D.A.

Geologic features relevant to ground-

Gaseous Diffusion Plant, by J.A.

water flow in the vicinity of the Paducah

Drahovzal and R.T. Hendricks, 1997, 33

Subsurface stratigraphy of the Mississip-

pian in eastern Kentucky, by D.C. Harris

and T.N. Sparks, 1997, 31/2-inch floppy

dominated karst aquifer, Logan County,

Kentucky, by J.C. Currens, 1997, 201

Geologic structure on base of Beech

Digital 1:500,000-scale map of Ken-

tucky, comp. by T. Hounshell, 1999,

Clay Coal in Part of the Eastern

Maps to accompany "Geology of the Fire

by A.E. Smith, 1997, scale 1:250,000 \$2.50

scale 1:500,000 \$30.00

Creek (Barlow) Limestone or equivalent,

Mass flux of agricultural nonpoint-

source pollutants in a conduit-flow-

Williams, 1997, 7 p. \$1.40

p., 5 plates \$30.00

diskette \$200.00

p. \$40.20

neotectonic structures of southern Illinois

miles \$3.00 USGS-03 Hydrologic problems as related to wilderness management at Mammoth Cave National Park, Kentucky, by R.V. Cushman, 1967, 17 p. \$3.40 USGS-04 The landslide at Cumberland, Harlan County, Kentucky, by W.E. Davies, 1973, 16 p. \$3.20

USGS-05	Floods of July 29 and 30, 1961, in eastern Kentucky, by C.H. Hannum,	USGS 20	sippi Embayment region—III, by R.H. Tschudy, 1966, 16 p. \$3.20 Palynological investigations in the Upper
USGS-06	Engineering geology of Lexington and Fayette County, Kentucky, and water	0303-20	Cretaceous and Tertiary of the Missis- sippi Embayment region—IV, by R.H.
	resources of the Fayette County area, Kentucky, by C.G. Johnson and H.T. Hopkins, 1966, 32 p., 5 plates \$21.40	USGS-21	Tschudy, 1967, 50 p. \$10.00 Palynological investigations in the Upper Cretaceous and Tertiary of the Missis-
USGS-07	Lithologic and radioactivity log of Belle Scott Quarry drill hole, Meade County,		sippi Embayment region—V, by R.H. Tschudy, 1968, 38 p. \$7.60
	Peterson, 1962, 49 p. \$9.80	0565-22	Cretaceous and Tertiary of the Missis-
USGS-08	Effects of Greensburg oilfield brines on the streams, wells, and springs of the		sippi Embayment region—VI, by R.H. Tschudy, 1970, 31 p. \$6.20
	upper Green River Basin, Kentucky, by R A Krieger 1960 47 p \$9.40	USGS-23	Bibliography of ground water reports published in open file, and in review by
USGS-09	Report to the Kentucky Geological		U.S. Geological Survey, 1958,
	Survey on chemical quality conditions of the Green Diver at Munfordville	USCS 24	9 p. \$1.80 Minor constituents in ground water
	Kentucky October 1956–September	0303-24	Inventory of data by U.S. Geological
	1960, by R.A. Krieger, 1961,		Survey, 1959, 15 p. \$3.00
	9 p. \$1.80	USGS-25	Big Pitman Creek area salinity survey,
USGS-10	Log of core from a drill hole in south-		February 16–18, 1960, by U.S. Geologi-
	eastern Kentucky, by R.G. Ping, 1975, 2		cal Survey, 1960, 7 p. \$1.40
11000 11	p., 6 logs \$17.50	USGS-26	Locality register and description of core
0505-11	Ground water in the alluvium along the Kentucky Piver between Carrollton and		Carbondala Formations, Western
	Frankfort, Kentucky, by PD, Ryder.		Kentucky Coal Field (set no. 1), by U.S.
	1975, 18 p., 1 plate \$5.60		Geological Survey, 1965, 2 p. 40ϕ
USGS-12	Ground water in the alluvium along the	USGS-27	Total estimated remaining coal resources
	Levisa Fork of the Big Sandy River		of the United States, Jan. 1, 1967, by
	between Louisa and Pikeville, Kentucky,		U.S. Geological Survey, 1968,
	by P.D. Ryder, 1975, 16 p.,	USCS 28	A aromagnetic man of the New Madrid
USGS-13	Ground water in the alluvium along the	0505-20	region. Missouri-Kentucky-Arkansas-
	Licking River between Covington and		Tennessee, by U.S. Geological Survey,
	Butler, Kentucky, by P.D. Ryder, 1975,		1974, 2 sheets, scale 1:125,000 \$5.00
	12 p., 1 plate \$4.40	USGS-29	Aeromagnetic maps and profiles
USGS-14	Derivation of homogenous streamflow		published or open-filed by the U.S.
	Records in the upper Kentucky River		Geological Survey, by U.S. Geological
	Shearman and R V Swisshelm Ir	USGS-30	Survey, 1981, 10 p. \$2.00 Spectrographic analyses of Paleozoic
	36 p. \$7.20	0505-50	black shale samples, by Vine, J.D., 1965.
USGS-15	Panther and Sutherland Quadrangles:		7 p., 4 plates \$17.40
	Well data from joint mapping program,	USGS-31	Gravity observations by the U.S.
	by A.E. Smith, 1969, 37 p.,		Geological Survey in Kentucky prior to
11000 16	1 plate \$9.40		October 1, 1961, by J.S. Watkins, 1962,
0868-16	streams by P.V. Swisshelm Ir. 1074 1	USCS 32	12 p. \$2.40 Massured sections of Ordovician strate
	plate, scale 1 inch=10 miles $$4.00$	0505-52	in Indiana and Ohio, by G.W. Weir, W.L.
USGS-17	Palynological investigations in the Upper		Peterson, and W C Swadley, 1979,
	Cretaceous and Tertiary of the Missis-		82 p. \$16.40
	sippi Embayment region—I, by R.H.	USGS-33	Measured sections of Ordovician strata
11000 10	Tschudy, 1965, 75 p. \$15.00		in northeast Kentucky, by G.W. Weir,
USGS-18	Palynological investigations in the Upper		w.L. Peterson, and W C Swadley, 1979, $32 \text{ p} = \$6.40$
	sinni Emhayment region—II by R H		52 p. 40.40
	Tschudy, 1965, 21 p. \$4.20		
USGS-19	Palynological investigations in the Upper		
	Cretaceous and Tertiary of the Missis-		

Guidebooks for Geology Field Trips

- A physiographic and stratigraphic profile in Kentucky— Lexington to the Mammoth Cave region (Roadlog for Southeastern Section, Geological Society of America 1960 field excursion), by Preston McGrain and T. J. Crawford, 1960, 39 p. **\$1.50**
- Geologic features of selected Pennsylvanian and Mississippian channel deposits along the eastern rim of the Western Kentucky Coal Basin (Roadlog for Geological Society of Kentucky 1966 field excursion), by W.E. Johnson Jr., and others, 1966, 34 p. **1.50**
- Some aspects of the stratigraphy of the Pine Mountain Front near Elkhorn City, Kentucky, with notes on pertinent structural features (Roadlog for Geological Society of Kentucky 1967 field excursion), by M.O. Smith and others, 1967, 24 p. **\$1.50**
- Geological aspects of the Maysville-Portsmouth region, southern Ohio and northeastern Kentucky (Roadlog for joint field conference of Ohio Geological Society and Geological Society of Kentucky), by W.L. Calvert and others, 1968, 87 p. \$2.50
- Middle and Upper Pennsylvanian strata in Hopkins and Webster Counties, Kentucky (Roadlog for Geological Society of Kentucky 1969 field excursion), by G.E. Smith and others, 1969, 80 p. **\$2.00**
- Geology of the Jackson Purchase Region, Kentucky (Roadlog for Geological Society of Kentucky 1972 field excursion), by W.W. Olive, 1972, 11 p. **\$2.00**
- Geologic features of the Rough Creek Fault, Grayson and Ohio Counties, Kentucky (Roadlog for Indiana-Kentucky Geological Society 1973 field conference), by R.N. Thomas and Howard Schwalb, 14 p. **\$1.50**
- Geologic guide to a portion of the fluorspar mining district in Livingston and Crittenden Counties, Kentucky (Roadlog for field trip held in conjunction with Ninth Forum on Geology of Industrial Minerals), by Preston McGrain and J.S. Tibbs, 1973, 12 p. **\$1.50**
- Late Cenozoic geologic features of the Middle Ohio River Valley (Roadlog for Geological Society of Kentucky 1974 field conference), by L.J. Campbell and others, 1974, 25 p. **\$2.00**
- Selected structural features and associated dolostone occurrences in the vicinity of the Kentucky River Fault System (Roadlog for Geological Society of Kentucky 1975 field conference), by D.F.B. Black and D.C. Haney, 1975, 27 p. **\$2.50**
- Stratigraphic evidence for Late Paleozoic tectonism in northeastern Kentucky (Guidebook and roadlog for field trip held in conjunction with the 5th Annual Meeting of the Eastern Section of the American Association of Petroleum Geologists and the 1977 field conference of the Geological Society of Kentucky), by G.R. Dever Jr., and others, 1977, 80 p. \$4.00
- Surface rocks in the western Lake Cumberland area, Clinton, Russell, and Wayne Counties, Kentucky (Guidebook and roadlog for Geological Society of Kentucky 1978 field conference), by R.Q. Lewis Sr. and P.E. Potter, 1978, 41 p. \$2.50
- Depositional environments of Pennsylvanian rocks in western Kentucky (Guidebook and roadlog for

Geological Society of Kentucky 1979 field conference), by P.W. Whaley and others, 1979, 48 p. **\$5.00**

- Stratigraphy, trace fossil associations, and depositional environments in the Borden Formation (Mississippian), northeastern Kentucky (Guidebook and roadlog for Geological Society of Kentucky 1980 field conference), by J.R. Chaplin, 1980, 114 p. **\$10.00**
- Coal and coal-bearing rocks of eastern Kentucky (Guidebook and roadlog for Coal Division of Geological Society of America field trip no. 14), by J.C. Cobb and others, 1981, 169 p. **\$18.00**
- Energy resources of Devonian–Mississippian shales of eastern Kentucky (Guidebook and roadlog for Geological Society of Kentucky 1981 field conference), by W.A. Pryor and others, 1981, 44 p. **\$6.00**
- Field trip guides for Geological Society of America Annual Meeting, Southeastern and North-Central Sections, Lexington, Kentucky, April 4–6, 1984, ed. by Nicholas Rast and H.B. Hay, 1984, 122 p. **\$7.50**
- Hydrogeology and environmental geology of the Inner Bluegrass karst region, Kentucky (Field guide for the annual meeting of the Southeastern and North-Central Sections, Geological Society of America, Lexington, Kentucky, April 4–6, 1984), by John Thrailkill, 1984, 31 p. \$4.00
- Teaching and field guide to alluvial processes and sedimentation of the Mississippi River, Fulton County, Kentucky, and Lake County, Tennessee (Guidebook and roadlog for Geological Society of Kentucky 1984 field conference), by P.E. Potter, W.A. Pryor, L.M. Smith, and David Rich, 1988, 46 p. \$6.00
- Stratigraphy along and adjacent to the Bluegrass Parkway (Guidebook and roadlog for Geological Society of Kentucky 1985 field conference), by M.C. Noger and R.C. Kepferle, 1985, 24 p. **\$4.00**
- Stratigraphy, structure, and mineral deposits of the Western Kentucky Fluorspar District and the Stevens Hill roadcut (Guidebook and roadlog for Geological Society of Kentucky 1986 field conference), by R.D. Trace, F.B. Moodie, and D.A. Williams, 1986, 12 p. \$2.00
- Stratigraphy, sedimentology, and paleontology (Upper Ordovician), and glacial and engineering geology of northern Kentucky and southern Ohio (Guidebook and roadlog for Geological Society of Kentucky 1987 field conference), by R.C. Kepferle, M.C. Noger, D.L. Meyer, and G.A. Schumacher, 1987, 18 p. \$4.00
- Structural geology of the Rough Creek-Shawneetown Fault System (Guidebook and roadlog for Geological Society of Kentucky 1988 field conference), ed. by A.L. Cowan and D.A. Williams, 1988, 16 p. \$2.50
- Geology of the Lower Pennsylvanian in Kentucky, Indiana, and Illinois (Guidebook and roadlog for Illinois Basin Consortium (1989) field conference for Geological Society of America), coordinated by J.C. Cobb, 1989, 107 p. **\$12.50**
- Cumberland Mountain: The inside story—The geology of Cumberland Gap as interpreted from the Federal Highway Administration pilot bore (Guidebook and roadlog for Geological Society of Kentucky 1989 field

conference), ed. by S.O. Moshier and C.S. Dean, 1989, 43 p. **\$6.00**

- Tectonic implications of depositional and erosional features in Carboniferous rocks of south-central Kentucky (Guidebook and roadlog for Geological Society of Kentucky 1990 field conference), by G.R. Dever Jr., S.F. Greb, J.R. Moody, D.R. Chesnut Jr., R.C. Kepferle, and R.E. Sergeant, 1990, 53 p. \$6.00
- Geology of the Alexandria-Ashland Highway (Kentucky Highway 546), Maysville to Garrison (Guidebook and roadlog for Geological Society of Kentucky 1991 field conference), by P.E. Potter, W.I. Ausich, J. Klee, L.A.

Krissek, C.E. Mason, G.A. Schumacher, R.T. Wilson, and E.M. Wright, 1991, 64 p. **\$6.00**

- Geology of the Devonian strata of the Falls of the Ohio area, Kentucky-Indiana: Stratigraphy, sedimentology, paleontology, structure, and diagenesis (Guidebook and roadlog for Geological Society of Kentucky 1993 annual field conference), by R.T. Hendricks, F.R. Ettensohn, T.J. Stark, and S.F. Greb, 1994, 65 p. \$7.00
- Geology of the Pound Gap roadcut, Letcher County, Kentucky (Guidebook for 1998 annual field conference of the Kentucky Society of Professional Geologists), coordinated by D.R. Chesnut Jr., 1998, 169 p. **\$20.00**

Other Geologic Reports

- The citizen's guide to geologic hazards, prepared by the American Institute of Professional Geologists, 1993, 134 p. **\$19.95**
- Coal resources fact book, vol. 1 of the Illinois Basin Coal Planning Assistance Project, U.S. Geological Survey, 1983, 323 p. **\$10.00**
- Geology, by R.E. Boyer and P.B. Snyder, Hubbard Scientific, 1972, 48 p. **\$12.00**
- Geology and petroleum production of the Illinois Basin, volume 2, joint publication of the Illinois, Indiana, and Kentucky Geological Societies, 1988, 272 p. **\$15.00**
- #The hydrology of the Lexington and Fayette County, Kentucky, area, by D.S. Mull, 1968 (Lexington and Fayette County Planning Commission) \$5.75
- The information source book, vol. 4 of the Illinois Basin Coal Planning Assistance Project, U.S. Geological Survey, 1983, 185 p. **\$5.00**
- Kentucky atlas and gazetteer, DeLorme Publishing, 1997, 88 p. **\$16.95**
- Kentucky coal facts, 1991–92 pocket guide, prepared by the Governor's Office for Coal and Energy Policy and the Kentucky Coal Association, 1993, 45 p. **\$1.00**
- Limestone and dolomite availability in the Ohio River Valley for sulfur sorbent use, with observations on obtaining reliable chemical analyses, by D.A. Stith, T.M. Berg, C.H. Ault, G.R. Dever Jr., J.M. Masters, S.W.

Berkheiser Jr., C.M. Simard, and N.C. Hester, Ohio Division of Geological Survey Information Circular 59, 1997, 16 p. **\$2.00**

- The natural resources guide book, vol. 2 of the Illinois Basin Coal Planning Assistance Project, U.S. Geological Survey, 1983, 320 p. **\$10.00**
- The New Madrid earthquake (a scientific factual field account), by M.L. Fuller, 1912, 119 p. (reprint from U.S. Geological Survey Bulletin 494) **\$10.95**
- The New Madrid earthquakes [rev. ed.], by J.L. Penick, Jr., 1981, 176 p. **\$12.00**
- Reading maps, by P.A. Riffel, Hubbard Scientific, 1973, 72 p. **\$15.00**
- The socioeconomic resources guide book, vol. 3 of the Illinois Basin Coal Planning Assistance Project, U.S. Geological Survey, 1983, 231 p. **\$7.50**
- State of Kentucky's environment: A report of progress and problems, by Kentucky Environmental Quality Commission, 1992, 332 p. \$12.00
- The story of Big Bone Lick, by N.J. Blackmore, 1998, Thoroughbred Publishing, 72 p. **\$14.95**
- Synthetic fuels development: Earth-science considerations, ed. by D.A. Rickert and others, 1979 **\$7.50**
- Types of damage that could result from a great earthquake in the New Madrid Seismic Zone, by M.G. Hopper and S.T. Algermissen, 1984, USGS Map MF-1713, 1 sheet \$2.00
- Water resources development in Kentucky, 1981, by U.S. Army Corps of Engineers, 1982, 119 p. **no charge**

Accompanying poster available for \$5.

University of Kentucky Institute for Mining and Minerals Research Reports

Energy Resource Series

- Coal resources of the Big Sandy District, Kentucky, by R.A. Brant, D.R. Chesnut, W.T. Frankie, and E.R. Portig, 1983, 47 p. **\$5.00**
- Coal resources of the Hazard District, Kentucky, by R.A. Brant, D.R. Chesnut, W.T. Frankie, and E.R. Portig, 1983, 49 p. **\$5.00**
- Coal resources of the Licking River District, Kentucky, by R.A. Brant, D.R. Chesnut, W.T. Frankie, and E.R. Portig, 1983, 57 p. **\$10.00**

Coal resources of the Princess District, Kentucky, by R.A. Brant, 1983, 61 p. **\$10.00**

- Coal resources of the Southwestern District, Kentucky, by R.A. Brant, 1983, 89 p. **\$10.00**
- Coal resources of the Upper Cumberland District, Kentucky, by R.A. Brant, D.R. Chesnut, E.R. Portig, and R.A. Smath, 1983, 41 p. **\$5.00**
- Western Kentucky coal resources, by G.E. Smith and R.A. Brant, 1978, 148 p. **\$25.00**

Kentucky Geological Survey Publications for the Gas Research Institute

- Geologic and hydrocarbon report of Letcher County (part 1 of 5): Hydrocarbon production from the Devonian shale in Letcher, Knott, Floyd, Martin, and Pike Counties, eastern Kentucky, by W.T. Frankie, J.R. Moody, and J.R. Kemper, 1986, 59 p. **\$18.00**
- Geologic and hydrocarbon report of Knott County (part 2 of 5): Hydrocarbon production from the Devonian shale in Letcher, Knott, Floyd, Martin, and Pike Counties, eastern Kentucky, by W.T. Frankie, J.R. Moody, J.R. Kemper, and I.M. Johnston, 1986, 94 p. **\$27.50**
- Geologic and hydrocarbon report of Floyd County (part 3 of 5): Hydrocarbon production from the Devonian shale in Letcher, Knott, Floyd, Martin, and Pike Counties, eastern Kentucky, by W.T. Frankie, J.R. Moody, J.R. Kemper, and I.M. Johnston, 1986, 52 p. \$27.50
- Geologic and hydrocarbon report of Martin County (part 4 of 5): Hydrocarbon production from the Devonian shale in Letcher, Knott, Floyd, Martin, and Pike Counties, eastern Kentucky, by J.R. Moody, J.R. Kemper, I.M. Johnston, W.T. Frankie, and R.R. Elkin, 1987, 50 p. \$18.00

- Geologic and hydrocarbon report of Pike County (part 5 of 5): Hydrocarbon production from the Devonian shale in Letcher, Knott, Floyd, Martin, and Pike Counties, eastern Kentucky, by J.R. Moody, J.R. Kemper, I.M. Johnston, and R.R. Elkin, 1987, 51 p. **\$18.00**
- The geology and the drilling and production history of the Upper Devonian shale of Whitley, Knox, Bell, and Harlan Counties, southeastern Kentucky, by J.R. Moody, J.R. Kemper, I.M. Johnston, and R.R. Elkin, 1987, 30 p. \$20.00
- The geology and the drilling and production history of the Upper Devonian shale of Breathitt, Clay, Johnson, Leslie, Magoffin, Perry, and Wolfe Counties, eastcentral Kentucky, by J.R. Moody, J.R. Kemper, I.M. Johnston, R.R. Elkin, R.A. Smath, and W.T. Frankie, 1988, 50 p. **\$18.00**
- The geology and the drilling and production history of the Upper Devonian shale of Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Menifee, Morgan, and Rowan Counties, northeastern Kentucky, by J.R. Moody, J.R. Kemper, I.M. Johnston, R.R. Elkin, R.A. Smath, and W.T. Frankie, 1988, 37 p. (plus appendices and plates) \$18.00

Illinois Basin Consortium Reports

(Illinois, Indiana, and Kentucky Geological Surveys) Illinois Basin Studies

IBS 1. Geology of the Lower Pennsylvanian in Kentucky, Indiana, and Illinois, coord. J.C. Cobb, 1989, 107

р. **\$10.00**

IBS 2. Gas potential of the New Albany Shale (Devonian and Mississippian) in the Illinois Basin, ed. by N.R.

Hasenmueller and J.B. Comer, 1994, 83 p., 7 plates **\$15.00**

IBS 3. Corebook of Pennsylvanian rocks in the Illinois Basin, by M.L. Barnhill and Huitang Zhou, 1996(?), various pagination \$85.00

Appalachian Oil and Natural Gas Research Consortium Products

(Kentucky Geological Survey, Ohio Department of Natural Resources—Division of Geological Survey, Pennsylvania Bureau of Topographic and Geologic Survey, West Virginia Geological and Economic Survey, and West Virginia University)

The atlas of major Appalachian gas plays, ed. by J.B. Roen and B.J. Walker, 1996. 201 p. **\$75.00**

Reservoir data for "The Atlas of Major Appalachian Gas Plays," in ASCII or Excel®, on 1.44 mb, 3.5-in. diskettes **\$45.00**

U.S. Geological Survey Reports

Listed by commodity or subject. Most reports listed were prepared as a result of U.S. Geological Survey–Kentucky Geological Survey cooperative programs.

Clay

- Bulletin 1122-F. Geology and refractory clay deposits of the Haldeman and Wrigley (7.5-min.) Quadrangles, Kentucky (parts of Carter, Rowan, Elliott, and Morgan Cos.), by S.H. Patterson and J.W. Hosterman, 1962, 92 p.; Coal resources, by J.W. Huddle, 1962, 21 p. \$5.75
- Bulletin 1282. Stratigraphic and mineralogic relations and ceramic properties of clay deposits of Eocene age in the Jackson Purchase Region, Kentucky, and in adjacent parts of Tennessee, by W.W. Olive and W.I. Finch, 1969, 35 p. \$2.50
- Professional Paper 1298. Clay mineralogy of Devonian shales in the Appalachian Basin, by J.W. Hosterman and S.I. Whitlow, 1983, 31 p. \$3.75

Coal

- Bulletin 1020-A. Geology and coal resources of the Cannel City (7.5-min.) Quadrangle, Kentucky (parts of Morgan, Wolfe, and Magoffin Cos.), by K.J. Englund, 1955, 21 p. \$4.50
- Bulletin 1042-P. Geology and coal resources of the Tiptop (7.5-min.) Quadrangle, Kentucky (parts of Breathitt, Magoffin, and Knott Cos.), by S.W. Welch, 1958, 27 p. \$4.00
- Bulletin 1047-A. Coal geology of the White Oak (7.5-min.) Quadrangle, Magoffin and Morgan Counties, Kentucky, by W.L. Adkison, 1957, 23 p. **\$4.00**
- Bulletin 1047-B. Geology and coal resources of the Salyersville North (7.5-min.) Quadrangle, Magoffin, Morgan, and Johnson Counties, Kentucky, by W.L. Adkison and J.E. Johnston, 1963, 30 p. \$3.50
- Bulletin 1122-F. Geology and refractory clay deposits of the Haldeman and Wrigley (7.5-min.) Quadrangles, Kentucky (parts of Carter, Rowan, Elliott, and Morgan Cos.), by S.H. Patterson and J.W. Hosterman, 1962, 92 p.; Coal resources, by J.W. Huddle, 1962, 21 p. \$5.75
- Bulletin 1526. Coal geology of Adams, Blaine, Richardson, and Sitka Quadrangles, Kentucky, and Louisa Quadrangle, Kentucky-West Virginia, by P.T. Hayes and C.W. Connor, 1982, 68 p. \$5.50
- Miscellaneous Field Studies Map MF-2275. (Replaces Map MF-1175) Revised correlation chart of coal beds, coal zones, and key stratigraphic units, Pennsylvanian rocks of eastern Kentucky, by C.L. Rice and J.K. Hiett, 1994, 1 sheet \$3.00
- Professional Paper 507. Geology and coal reserves of the Kermit and Varney area, Kentucky (parts of Martin and Pike Cos.), by J.W. Huddle and K.J. Englund, 1966, 83 p. \$12.00

Engineering Geology

Bulletin 1258-A. Engineering geology of the Paducah East Quadrangle in Kentucky (McCracken and Livingston Cos.), by T.C. Nichols, Jr., 1969, 13 p. \$4.50

- Bulletin 1258-B. Engineering geology of the Paducah West and Metropolis Quadrangles in Kentucky (McCracken Co.), by W.I. Finch, 1968, 19 p. \$6.00
- Bulletin 2059-B. Landslides in colluvium: Landslides of the Cincinnati, Ohio, area, by R.W. Fleming and A.M. Johnson, 24 p., 1 plate \$5.00

Paleontology

- Bulletin 1244-F. Otter Creek Coral Bed and its fauna, eastcentral Kentucky, by G.C. Simmons and W.A. Oliver, Jr., 1967, 13 p. \$2.25
- Professional Paper 583-A. Some silicified Middle Ordovician brachiopods from Kentucky, by R.B. Neuman, 1967, 14 p. \$2.25
- Professional Paper 583-B. Calymenid and other Ordovician trilobites from Kentucky and Ohio, by R.J. Ross, Jr., 1967, 19 p. \$2.25
- Professional Paper 643-F. Two new pollen genera (Late Cretaceous and Paleocene) with possible affinity to the Illiciaceae, by R.H. Tschudy, 1970, 13 p. \$2.25
- Professional Paper 743-B. Stratigraphic distribution of significant Eocene palynomorphs of the Mississippi Embayment, by R.H. Tschudy, 1973, 24 p. **\$2.50**
- Professional Paper 743-C. *Complexiopollis* pollen lineage in Mississippi Embayment rocks, by R.H. Tschudy, 1973, 15 p. **\$2.50**
- Professional Paper 790. Stratigraphy, morphology, and paleoecology of a fossil peccary herd from western Kentucky, by W.I. Finch and others, 1972, 25 p. **\$2.25**
- Professional Paper 839. Palynological studies of the coals of the Princess Reserve District in northeastern Kentucky, by R.M. Kosanke, 1973, 22 p. \$2.25
- Professional Paper 865. *Normapolles* pollen from the Mississippi Embayment, by R.H. Tschudy, 1975, 42 p. **\$4.50**
- Professional Paper 1066-A–G. Contributions to the Ordovician paleontology of Kentucky and nearby states, ed. by John Pojeta, Jr., 1979, 139 p. \$6.00
- Professional Paper 1066-H. Paleocopid and podocopid ostracoda from the Lexington Limestone and Clays Ferry Formation (Middle and Upper Ordovician) of central Kentucky, by S.M. Warshauer and J.M. Berdan, 1982, 80 p. **\$7.50**
- Professional Paper 1066-I. Trepostome and cystoporate bryozoans from the Lexington Limestone and the Clays Ferry Formation (Middle and Upper Ordovician) of Kentucky, by O.L. Karklins, 1984, 105 p. **\$7.50**
- Professional Paper 1066-J. Leperditicopid ostracodes from Ordovician rocks of Kentucky and nearby states and characteristic features of the order Leperditicopida, by J.M. Berdan, 1984, 40 p. \$4.00
- Professional Paper 1066-K. Echinoderms from Middle and Upper Ordovician rocks of Kentucky, by R.L. Parsley, 1981, 9 p. **\$3.50**
- Professional Paper 1066-L. Some silicified strophomenacean brachiopods from the Ordovician of Kentucky, with

comments on the genus Pionomena, by K. Pope, 1982, 30 p. \$6.00

- Professional Paper 1066-M. The brachiopod genera Hebertella dalmanella and Heterothina from the Ordovician of Kentucky, by L.G. Walker, 1982, 17 p. \$4.50
- Professional Paper 1066-N. Middle and Late Ordovician solitary rugose corals of the Cincinnati Arch Region, by R.J. Elias, 1983, 13 p. \$4.00
- Professional Paper 1066-O. Middle and Upper Ordovician symmetrical univalved mollusks (Monoplacophora and Bellerophontina) of the Cincinnati Arch region, by John Pojeta, Jr., 303 p. \$22.50
- Professional Paper 1451. Fusilinid biostratigraphy and correlations between the Appalachian and Eastern Interior Basins, by R.C. Douglas, 1987, 137 p. \$4.00

Vein Minerals

Bulletin 1012-A-B. Fluorspar deposits in western Kentucky, part 1, 1955, 37 p. \$4.00

- a. Introduction, by J.S. Williams and Helen Duncan, p. 1-6
- b. Babb Fault System, Crittenden and Livingston Counties, by G.C. Hardin, Jr., p. 7-36
- Bulletin 1012-C-D. Fluorspar deposits in western Kentucky, part 2, 1954, 79 p. \$5.75
 - c. Central part of the Commodore Fault System, Crittenden County, by R.D. Trace, p. 1-57
 - Mineral Ridge area, Livingston and Crittenden Counties, by R.D. Trace, p. 58-79
- Bulletin 1012-E-F. Fluorspar deposits in western Kentucky, part 3, 1954, 130 p. \$7.25
 - e. Moore Hill Fault System, Crittenden and Livingston Counties, by W.R. Thurston and G.C. Hardin, Jr., p. 1–113
 - Senator-Schwenk area, Tabb Fault System, f. Caldwell County, by H.J. Klepser, p. 114-130
- Bulletin 1042-S. Geology and fluorspar deposits, Big Four Fault System, Crittenden County, Kentucky, by G.C. Hardin, Jr., and R.D. Trace, 1959, 25 p. \$2.25
- Bulletin 1122-E. Geology and fluorspar deposits of the Levias-Keystone and Dike-Eaton areas, Crittenden County, Kentucky, by R.D. Trace, 1962, 26 p. \$2.75
- Bulletin 1252-F. Mercury and other trace elements in sphalerite and wallrocks from central Kentucky,

Tennessee, and Appalachian zinc districts, by J.L. Jolly and A.V. Heyl, 1968, 29 p. \$2.25

Bulletin 2111. Industrial minerals of the Midcontinent: Proceedings of the Midcontinent Industrial Minerals Workshop, ed. and comp. by A.L. Bush and T.S. Hages, 1995, 126 p. **\$9.00**

Professional Paper 1151-D. Stratigraphy and structure of the Western Kentucky Fluorspar District, by R.D. Trace and D.H. Amos, 1984, 41 p. \$3.50

Water

- Professional Paper 427-A. Description of physical environment and of strip-mining operations in parts of Beaver Creek Basin, Kentucky (part of McCreary Co.), by J.J. Musser, 1963, 25 p. \$5.50
- Professional Paper 427-B. Influences of strip mining on the hydrologic environment of parts of Beaver Creek Basin, Kentucky (part of McCreary Co.), 1955-59, by C.R. Collier and others, 1964, 85 p. \$3.00

- Professional Paper 427-C. Influences of strip mining on the hydrologic environment of parts of Beaver Creek Basin, Kentucky, 1955-66, by C.R. Collier and others, 1970, 180 p. **\$2.75**
- Water Data Report KY-78-1. Water resources data for Kentucky, 1978, p. \$6.00
- Water Data Report KY-79-1. Water resources data for Kentucky, 1979, 582 p. **\$10.00** Water Data Report KY-80-1. Water resources data for
- Kentucky, 1980, 804 p. \$10.00
- Water Data Report KY-81-1. Water resources data for Kentucky, 1981, 675 p. **\$10.00**
- Water Data Report KY-82-1. Water resources data for Kentucky, 1982, 517 p. \$10.00
- Water Data Report KY-83-1. Water resources data for Kentucky, 1983, 517 p. **\$10.00**
- Water Data Report KY-85-1. Water resources data for Kentucky, 1985, 342 p. \$10.00
- Water Data Report KY-88-1. Water resources data for Kentucky, 1988, 569 p. \$10.00
- Water Data Report KY-89-1. Water resources data for Kentucky, 1989, 461 p. \$10.00
- Water Data Report KY-90-1. Water resources data for Kentucky, 1990, 425 p. \$10.00
- Water-Supply Paper 1257. Geology and ground-water resources of the Paintsville area, Kentucky (part of Johnson Co.), by J.A. Baker, 123 p. \$2.75
- Water-Supply Paper 1328. Ground-water resources of the Hopkinsville (7.5-min.) Quadrangle, Kentucky (part of Christian Co.), by E.H. Walker, 1956, 98 p. \$2.50
- Water-Supply Paper 1356. Geology and ground-water resources of the Henderson area, Kentucky (part of Henderson Co.), by E.J. Harvey, 1956, 227 p. \$5.00
- Water-Supply Paper 1359. Geology and ground-water resources of the Prestonsburg (7.5-min.) Quadrangle, Kentucky (parts of Floyd and Johnson Cos.), by W.E. Price, Jr., 1956, 140 p. **\$3.50**
- Water-Supply Paper 1360-B. Ground water in northeastern Louisville, Kentucky, by M.I. Rorabaugh, 1956, 169 p. **\$4.25**

Water-Supply Paper 1411. The deep channel and alluvial deposits of the Ohio Valley in Kentucky, by E.H. Walker, 1957, 25 p. \$3.00

Water-Supply Paper 1417. Geology and ground-water resources of the Paducah area, Kentucky (parts of McCracken, Graves, and Livingston Cos.), by H.L. Pree, Jr., and others, 1957, 214 p. \$6.00

Water-Supply Paper 1528. Geology and ground-water resources of the Scottsville area, Kentucky (parts of Allen and Barren Cos.), by W.B. Hopkins, 1963, 333 p. **\$7.25**

Water-Supply Paper 1533. Reconnaissance of ground-water resources in the Blue Grass Region, Kentucky, by W.N. Palmquist, Jr., and F.R. Hall, 1961, 39 p. \$2.75

- Water-Supply Paper 1579. Progress report on the ground water resources of the Louisville area, Kentucky, 1949-55, by E.A. Bell and others, 1963, 49 p. \$5.25
- Water-Supply Paper 1599. Reconnaissance of ground-water resources in the Western Coal Field region, Kentucky, by B.W. Maxwell and R.W. Devaul, 1962, 34 p. \$2.75
- Water-Supply Paper 1603. Reconnaissance of ground-water resources in the Mississippian Plateau region, Kentucky, by R.F. Brown and T.W. Lambert, 1963, 58 p. \$5.25

Water-Supply Paper 1607. Reconnaissance of ground-water resources in the Eastern Coal Field region, Kentucky, by W.E. Price, Jr., and others, 1962, 56 p. \$3.50

Water-Supply Paper 1652-A. Floods of January–February 1957 in southeastern Kentucky and adjacent areas, 1964, 58 p. \$2.25

Water-Supply Paper 1700. Geochemistry of natural waters of the Blue Grass Region, Kentucky, by G.E. Hendrickson and R.A. Krieger, 1964, 135 p. \$4.00

Water-Supply Paper 1798-G. Sedimentation in Plum Creek Subwatershed No. 4, Shelby County, north-central Kentucky, by P.W. Antilla, 1970, 54 p. \$2.25

Water-Supply Paper 1809-A. Ground-water resources of the Jenkins-Whitesburg area, Kentucky (parts of Letcher and Pike Cos.), by D.S. Mull, 1965, 36 p. \$3.50

Water-Supply Paper 1818. Hydrology of the alluvial deposits in the Ohio River Valley in Kentucky, by J.T. Gallaher and W.E. Price, Jr., 1966, 80 p. \$2.25

Water-Supply Paper 1819-C. Summary of hydrologic conditions of the Louisville area, Kentucky, by E.A. Bell, 1966, 36 p. \$2.75

Water-Supply Paper 1837. Hydrology of the cavernous limestones of the Mammoth Cave area, Kentucky, by R.F. Brown, 1966, 64 p. \$2.25

Water-Supply Paper 1867. Occurrence of fresh water in parts of Elliott, Johnson, Lawrence, Magoffin, and Morgan Counties, Eastern Coal Field region, Kentucky, by H.T. Hopkins, 1970, 44 p. \$2.50

Water-Supply Paper 1940. Effects of coal mining on the water resources of the Tradewater River Basin, Kentucky, by H.F. Grubb and P.D. Ryder, 1972, 83 p. \$7.25

Water-Supply Paper 1987. Subsurface geology and ground-water resources of the Jackson Purchase Region, Kentucky, by R.W. Davis and others, 1973, 66 p. \$15.00

Water-Supply Paper 2202. Chloroform contamination in part of the alluvial aquifer, southwest Louisville, Kentucky, by R.W. Davis and E.W. Matthews, 1994, 25 p.\$4.00

Water-Supply Paper 2220, Basic ground-water hydrology, by R.C. Heath, 1994, 84 p. **\$11.75**

Water-Supply Paper 2254. Study and interpretation of the chemical characteristics of natural water, by J.D. Hem, 1994, 263 p., 3 plates \$15.00

Earthquakes and Tectonics

This dynamic earth: The story of plate tectonics, by W.J. Kious and R.I. Tilling, 1996(?), 77 p. **\$6.50**

Professional Paper 1236. Investigations of the New Madrid, Missouri, earthquake region, ed. by F.A. McKeown and L.C. Pakiser, 1982, 201 p. \$10.00

- a. Overview and discussion, by F.A. McKeown, p. 1–14
 - b. Damaging earthquakes of the Central Mississippi Valley, by O.W. Nuttli, p. 15–20
 - c. Present-day seismicity and identification of active faults in the New Madrid Seismic Zone, by William Stauder, p. 21–30
- d. Microearthquakes and faulting in the area of New Madrid, Missouri-Reelfoot Lake, Tennessee, by D. O'Connor, C.G. Bufe, and M.D. Zoback, p. 31–38
- Magnetic basement in the upper Mississippi Embayment region—A preliminary report, by T.G. Hildenbrand, M.F. Kane, and J.D. Hendricks, p. 39–54

- f. Tectonic features of the New Madrid Seismic Zone from seismic reflection profiles, by R.M. Hamilton and M.D. Zoback, p. 55–82
- g. A crustal structure study of the Northern Mississippi Embayment, by C.B. Austin and G.R. Keller, p. 83–94
- h. Style and significance of surface deformation in the vicinity of New Madrid, Missouri, by D.P. Russ, p. 95–114
- Configuration and deformation of the Paleozoic bedrock surface in the New Madrid Seismic Zone, by A.J. Crone and S.R. Brockman, p. 115–136
- High resolution seismic reflection surveying on Reelfoot Scarp, northwestern Tennessee, by J.L. Sexton, L.H. Frey, and Dave Malicki, p. 137–150
- k. Stratigraphy and structure of sediments above the Newport Pluton of northeastern Arkansas, by E.E. Glick, p. 151–174
- The northeastern extension of the New Madrid Seismic Zone, by L.W. Braile, W.J. Hinze, G.R. Keller, and E.G. Lidiak, p. 175–184
- m. Heat flow in the upper Mississippi Embayment, by C.A. Swanberg, B.J. Mitchell, R.L. Lohse, and D.D. Blackwell, p. 184–190
- n. Radon emanation in the New Madrid Seismic Zone, by S.R. Steele, W.C. Hood, and J.L. Sexton, p. 191–201
- Professional Paper 1538-A–C. (A) Introduction—Investigations of the New Madrid Seismic Zone, by K.M.
 Shedlock and A.C. Johnson, 1994, 6 p. (B) Summary and discussion of crustal stress data in the region of the New Madrid zone, by W.L. Ellis, 1994, 13 p. (C)
 Preliminary seismic reflection study of Crowleys Ridge, northeast Arkanasas, by R.B. VanArsdale and others, 1994, 16 p. \$3.50
- Professional Paper 1538-D. Analysis of the origin of landslides in the New Madrid Seismic Zone, by K.M. Shedlock and A.C. Johnson, 1994, 23 p. \$3.50
- Professional Paper 1538-E. Geophysical setting of the Reelfoot Rift and relations between rift structures and the New Madrid Seismic Zone, by T.G. Hildenbrand and J.D. Hendricks, 1995, 30 p. \$4.00
- Professional Paper 1538-F–G. (F) Geodetically derived strain across the northern New Madrid Seismic Zone, by R.A. Shay and others, 1994, 6 p. (G) Seismic hazard mitigation in the central United States: The role of the states, by R.B. Olshansky, 1994, 16 p. \$3.50
- Professional Paper 1538-H. A search for paleoliquefaction and evidence bearing on recurrence behavior of the great 1811–12 New Madrid earthquakes, by S.G. Wesnovsky and L.M. Leffler, 1994, 42 p. \$3.50

Professional Paper 1538-J. Shallow deformation along the Crittenden County Fault Zone near the southeastern margin of the Reelfoot Rift, northeastern Arkansas, by E.A. Luzietti and others, 1995, 23 p. \$3.50

Professional Paper 1538-M. Elements of infrastructure and seismic hazard in the central United States, by R.C. Wheeler and others, 1994, 18 p., 3 plates \$2.50

Stratigraphy

Bulletin 1224-B. Clays Ferry Formation (Ordovician)—A new map unit in south-central Kentucky, by G.W. Weir and R.C. Green, 1965, 18 p. \$2.25

- Bulletin 1224-C. The Lexington Limestone (Middle Ordovician) of central Kentucky, by D.F.B. Black and others, 1965, 29 p. \$2.25
- Bulletin 1224-D. Calloway Creek Limestone and Ashlock and Drakes Formations (Upper Ordovician) in southcentral Kentucky, by G.W. Weir and others, 1965, 36 p. \$2.25
- Bulletin 1224-F. Borden Formation (Mississippian) in southand southeast-central Kentucky, by G.W. Weir and others, 1966, 38 p. \$2.25
- Bulletin 1224-I. Harrodsburg Limestone in Kentucky, by E.G. Sable and others, 1966, 12 p. **\$2.25**
- Bulletin 1244-B. Upper Ordovician formations in the Maysville area, Kentucky, by J.H. Peck, 1966, 30 p. \$2.25
- Bulletin 1324-E. The Monteagle Limestone of south-central Kentucky, by R.Q. Lewis, Sr., 1971, 10 p. **\$2.25**
- Bulletin 1354-B. Members of the Borden Formation (Mississippian) in north-central Kentucky, by R.C. Kepferle, 1971, 18 p. \$2.25
- Bulletin 1372-C. Strodes Creek Member (Upper Ordovician)—A new map unit in the Lexington Limestone of north-central Kentucky, by D.F.B. Black and N.P. Cuppels, 1973, 16 p. \$2.25
- Bulletin 1394-B. Sturgis Formation (Upper Pennsylvanian), a new map unit in the Western Kentucky Coal Field, by T.M. Kehn, 1973, 24 p. \$2.25
- Bulletin 1435-D. The Science Hill Sandstone Member of the Warsaw Formation and its relation to other clastic units in south-central Kentucky, by R.Q. Lewis, Sr., and A.R. Taylor, 1979, 15 p. **\$2.50**
- Bulletin 1605-B. Slade and Paragon Formations—New stratigraphic nomenclature for Mississippian rocks along the Cumberland Escarpment in Kentucky, by F.R. Ettensohn and others, 1984, 37 p. **\$2.75**
- Miscellaneous Investigations Series Map I-1155. Lithofacies and stratigraphic nomenclature of part of the Upper Ordovician section of Kentucky, by G.W. Weir, W.L. Peterson, and W C Swadley, 1979, 1 sheet **\$4.00**
- Professional Paper 768. Lithostratigraphy and depositional environments of the Lexington Limestone (Ordovician) of central Kentucky, by E.R. Cressman, 1973, 61 p. **\$17.50**
- Professional Paper 1007. Stratigraphy, petrology, and depositional environment of the Kenwood Siltstone Member, Borden Formation (Mississippian), Kentucky and Indiana, by R.C. Kepferle, 1977, 49 p. \$4.50
- Professional Paper 1126-A–J. Shorter contributions to stratigraphy and structural geology, 1979, various paging \$7.50
 - Origin of river anticlines, central Grand Canyon, Arizona, by P.W. Huntoon and D.P. Elston, p. A1–A9.
 - Bock control and tectonism—Their importance in shaping the Appalachian Highlands, by J.T. Hack, p. B1–B17.
 - c. The Upper Ordovician and Silurian Hanson Creek Formation of central Nevada, by R.J. Ross, T.B. Nolan, Jr., and A.G. Harris, p. C1– C22.
 - d. The Marble Hill Bed: An offshore bar-tidal channel complex in the Upper Ordovician Drakes Formation of Kentucky, by W C Swadley, p. D1–D8.
 - e. Paleogene sedimentary and volcanogenic rocks from Adak Island, central Aleutian Islands,

Alaska, by J.R. Hein and H. McLean, p. E1–E16.

- f. The Livengood Dome Chert, a new Ordovician formation in central Alaska, and its relevance to displacement on the Tintina Fault, by R.N. Chapman, F.R. Webber, M. Churkin, Jr., and C. Carter, p. F1–F13.
- g. Intertonguing between Starpoint Sandstone and the coal-bearing Blackhawk Formation requires revision of some coal-bed correlations in the southern Wasatch Plateau, Utah, by R.M. Flores, P.T. Hayes, W.E. Marley, III, and J.D. Sanchez, p. G1–G6.
- h. New evidence supporting Nebraskan age for origin of Ohio River in north-central Kentucky, by W C Swadley, p. H1–H7.
- i. Reconnaissance geologic study of the Vazante Zinc District, Minas, Gerais, Brazil, by C.T. Thorman and S. Nahass, p. 11–112.
- j. Constraints on the latest movements on the Melones Fault Zone, Sierra Nevada Foothills, California, by J.A. Bartow, p. J1–J4.
- Professional Paper 1151-A. The relation of dolomite associated with faults to the stratigraphy and structure of central Kentucky, by D.F.B. Black and others, 1981, 19 p. \$3.00
- Professional Paper 1151-C. Lithostratigraphy of the Silurian rocks exposed on the west side of the Cincinnati Arch in Kentucky, by W.L. Peterson, 1981, 29 p. \$5.50
- Professional Paper 1151-E. Lithostratigraphy of Upper Ordovician strata exposed in Kentucky, by G.W. Weir, W.L. Peterson, and W C Swadley, With a section on biostratigraphy, by John Pojeta, Jr., 1984, 121 p. \$5.75
- Professional Paper 1151-F. Stratigraphy of the Silurian outcrop belt on the east side of the Cincinnati Arch in Kentucky, with revisions in the nomenclature, by R.C. McDowell, 1983, 27 p. \$3.00
- Professional Paper 1151-G. Sandstone units of the Lee Formation and related strata in eastern Kentucky, by C.L. Rice, With a section on Lee and Breathitt Formations along the northwestern part of the Eastern Kentucky Coal Field, by C.L. Rice and G.W. Weir, 1984, 53 p. \$3.25
- Professional Paper 1503. Mississippian rocks in Kentucky, by E.G. Sable and G.R. Dever, Jr., 1990, 125 p. \$11.50

General

- Bulletin 1142-B. Geology of the Ewing Quadrangle, Kentucky and Virginia, by K.J. Englund and others, 1963, 23 p. \$2.75
- Circular 801. Geologic mapping of Kentucky—A history and evaluation of the Kentucky Geological Survey-U.S. Geological Survey Mapping Program, 1960–1978, by E.R. Cressman and M.C. Noger, 1981, 22 p. **\$1.50**
- Miscellaneous Field Studies Map MF-1291. Correlation chart for units on the geologic map of Kentucky, by R.C. McDowell, 1981, 1 sheet \$2.00
- Miscellaneous Investigations Map I-2206. Landforms of the conterminous United States: A digital shaded relief portrayal, by G.P. Thelin and R.J. Pike, 1991, scale 1:3,500,000 (55" X 35½") with 16 p. of text **\$6.00**
- Professional Paper 488. Geomorphology and Quaternary geology of the Owensboro Quadrangle, Indiana and Kentucky, by L.L. Ray, 1965, 72 p. **\$3.00**

- Professional Paper 1151-B. Surface geology of the Jeptha Knob cryptoexplosive structure, Shelby County, Kentucky, by E.R. Cressman, 1981, 16 p. **\$5.50**
- Professional Paper 1151-H. The geology of Kentucky—A text to accompany the Geologic Map of Kentucky, ed. by R.C. McDowell, 1986, 76 p. **\$7.50**

Posters

- The dynamic planet—World map of volcanoes, earthquakes, plate tectonics, by Tom Simkin and others, 1989, scale 1:30,000,000 (58" X 41") **\$4.00**
- Central United States earthquakes, 1974–1991: Base satellite image in color that illustrates the earthquake epicenters recorded in a region that encompasses parts of eight states (Ind., Ill., Ky., Tenn., Ala., Miss., Ark., Mo.), by St. Louis University and Memphis State University, 1993, scale 1:1,000,000 (26" X 32½") \$3.50

Author Index

Key to Abbreviations

KGS Publications		USGS Publi	USGS Publications		Other Abbreviations	
В	Bulletin	USGS B	Bulletin	AONGRC	Appalac	
CR	County Report	USGS HA	Hydrologic Atlas		Natural	
IC	Information Circular	USGS I	Miscellaneous Investiga-		Consorti	
MCS	Map and Chart Series		tions Series	GB	Guidebo	
R	Reprint	USGS MF	Miscellaneous Field Study	GRI	Gas Res	
RI	Report of Investigations	USGS PP	Professional Paper	IBS	Illinois H	
SP	Special Publication	USGS WSP	Water-Supply Paper	IMMR	UK Insti	
TS	Thesis Series				Minerals	
				OFR	Open-Fi	

Roman numerals in parentheses indicate KGS series.

A

Adams, D.C., MCS 7 (XI) Adkison, W.L., Structural and areal map, USGS B 1047-A, USGS B 1047-B Alexander, J.D., SP 8 (X) Algermissen, S.T., General Ky. map, Misc. map, OGR, USGS MF-1712 Alvord, D.C., OFR OF-70-03 Amaral, E.J., IC 25 (XI), RI 8 (XI) American Geological Institute, IC 11 (XI), SP 19 (X) **American Institute of Professional** Geologists, OGR Ammerman, M.L, OFR OF-76-01, OFR OF-76-02, OFR OF-76-05 Amos, D.H., USGS PP 1151-D Anderson, W.H., B 1 (XI), Cross sections, IC 51 (XI), IC 53 (XI), MCS 21 (XI), OFR OF-79-01, OFR OF-80-01, OFR OF-81-01, OFR OF-82-01, OFR OF-86-01, OFR OF-88-05, RI 4 (XI), RI 8 (XI), SP 20 (XI) Andrews, R.E., IC 47 (XI) Andrews, W.M., Jr., MCS 20 (XI), RI 14 (XI) Antilla, P.W., USGS WSP 1798-G Archer, A.W., R 42 (XI) Armstrong, J.B., OFR OF-93-06 Ault, C.H., OGR Ausburn, B.E., SP 5 (XI) Ausich, W.I., GB 1991, MCS 12 (XI) Austin, C.B., OFR OF-76-05, USGS PP 1236 Avila, John, OFR OF-83-01, OFR OF-83-02, OFR OF-83-05, OFR OF-83-06, SP 14 (X), SP 3 (XI) B

Baird, Donald, R 41 (XI) Baker, A.A., SP 8 (X)

Baker, J.A., USGS WSP 1257 Baldridge, H.L., SP 21 (X) Baldwin, H.L., OFR USGS-01 Ball, T.E., Bedrock topography map Banfield, G.R., OFR 80-685 Baranoski, M.T., IC 58 (XI), SP 18 (XI) Barfield, B.J., IC 46 (XI) Bargh, M.H., OFR OF-94-12 Barnhill, M.L., IBS 3, OFR OF-94-12 Barr, T.C., Jr., SP 12 (XI) Barron, L.S., IC 34 (XI), IC 53 (XI), OFR OF-86-01, R 28 (XI) Bartow, J.A., USGS PP 1126-A-J Bashe, R.W., SP 14 (X) Bassett, J.L., Isopach and structure map Bateman, S.J., SP 17 (X) Beard, J.G., IC 1 (XI), OFR 81-790, OFR 82-219, OFR OF-80-02, OFR OF-82-02 Beard, John, OFR OF-94-10 Beasley, C.A., SP 5 (XI) Beaty, D.S., OFR OF-94-12 Becker, L.E., SP 3 (XI) Bell, E.A., IC 10 (X), USGS WSP 1579, **USGS WSP 1819-C** Benson, D.C., SP 1 (X) Berdan, J.M., USGS PP 1066-H, USGS PP 1066-J Berg, T.M., OGR Bergeron, R.R., IC 12 (XI) Bergin, M.J., Structural and areal map Berkheiser, S.W., Jr., OGR Berube, S.C., SP 21 (X) Birch, D.R., OFR 84-122 Birch, Michael, SP 7 (XI) Black, D.F.B., GB 1975, Gravity and magnetic map, OFR USGS-02, USGS B 1224-C, USGS B 1372-C, USGS PP 1151-A Blackmore, N.J., OGR

Blackwell, D.D., USGS PP 1236 Bland, A.E., RI 5 (XI) Blevins, R.L., IC 46 (XI) Bolivar, S.L., TS 2 (XI) Bond, D.C., R 26 (X), SP 15 (X) Boyd, W.T., R 47 (X), R 6 (XI), R 9 (XI) Boyer, R.E., OGR Bradford, B.B., SP 15 (X) Bragg, L.J., IC 18 (XI), IC 19 (XI), IC 20 (XI), IC 21 (XI), IC 22 (XI), IC 23 (XI), OFR OF-94-12 Braile, L.W., USGS PP 1236 Branson, E.R., CR 1 (X), CR 3 (X), OFR OF-68-01 Brant, R.A., IMMR, OFR OF-80-03, R 7 (XI), R 20 (XI) Briggs, R.P., USGS MAP C-42 Bristol, H.M., SP 2 (XI) Brockman, S.R., USGS PP 1236 Brown, J.A., SP 10 (X) Brown, R.F., USGS HA-32, USGS HA-33, USGS HA-34, USGS HA-35, USGS WSP 1603, USGS WSP 1837 Browning, I.B., Structural and areal map Bufe, C.G., USGS PP 1236 Burruss, R.C., OFR OF-94-12 Bush, A.L., USGS B 2111

Appalachian Oil and Natural Gas Research

Gas Research Institute

UK Institute for Mining and

Illinois Basin Study

Minerals Research

Open-File Report

Other geologic report

Consortium Guidebook

С

OGR

Callis, J.G., OFR OF-94-12 Calvert, R.H., OFR OF-67-01 Calvert, W.L., GB 1968 Campbell, L.J., GB 1974 Carey, D.I., IC 37 (XI), IC 44 (XI), IC 46 (XI), IC 52 (XI), IC 60 (XI), IC 1 (XII), MCS 9 (XI), MCS 11 (XI), OFR OF-94-09, OFR OF-96-02, RI 10 (XI) Carpenter, G.L., Bedrock topography

map, R 17 (X), R 35 (X), R 44 (X), R

- 4 (XI), R 16 (XI), R 18 (XI), R 21 (XI)
- Carter, C., USGS PP 1126-A-J
- Caserotti, P.M., SP 7 (XI)
- Cecil, J.A., IC 40 (XI)
- Cetin, Haluk, OFR OF-94-12
- Chaplin, J.R., GB 1980
- Chapman, R.N., USGS PP 1126-A–J Chellgren, W.E., SP 1 (X), SP 4 (X)
- **Cheney, T.A.,** SP 1 (X)
- Chenoweth, C.A., OFR OF-94-12
- Chenoweth, Cheri, OFR OF-94-12
- Chesnut, D.R., Jr., B 3 (XI), GB 1990, GB 1998, IC 36 (XI), IMMR, MCS 2 (XI), MCS 3 (XI), MCS 4 (XI), OFR OF-81-12, OFR OF-83-03, OFR OF-83-04, OFR OF-83-08, OFR OF-83-09, OFR OF-88-05, OFR OF-88-13, OFR OF-88-14, OFR OF-92-02, OFR OF-93-01, OFR OF-93-02, R 40 (XI), R 41 (XI), SP 19 (XI)
- Churkin, M., Jr., USGS PP 1126-A–J Clark, R.E., SP 4 (X)
- Clark, R.E., SI $4(\Lambda)$
- Cluff, R.M., OFR OF-94-14, SP 7 (XI) Cobb, J.C., GB 1981, GB 1989, IBS 1, IC 9 (XI), IC 12 (XI), IC 29 (XI), IC 38 (XI), IC 40 (XI), IC 48 (XI), IC 49 (XI), IC 59 (XI), OFR OF-82-03, OFR OF-83-07, OFR OF-83-09, OFR OF-84-03, OFR OF-84-08, OFR OF-85-01, OFR OF-88-02, OFR OF-88-05, OFR OF-97-01, R 20 (XI), R 40 (XI)
- Collier, C.R., USGS PP 427-B, USGS PP 427-C
- Combs, E.J., OFR OF-82-02
- Comer, J.B., IBS 2
- Connor, C.W., OFR 75-316, USGS B 1526
- Connor, J.J., OFR 81-509, OFR 81-1097, OFR 81-1098
- Conolly, Carol, OFR OF-94-12
- **Conrad, P.G.,** IC 60 (XI), IC 1 (XII), OFR OF-93-06, OFR OF-94-01
- **Cook, R.B., Jr.,** IC 5 (XI)
- Cordiviola, Steven, OFR OF-94-11 Coskren, T.D., Isopach and structure
- map Cowan, A.L., GB 1988
- **Crawford, T.J.,** GB 1960, IC 1 (X), IC 2 (X), RI 1 (X), SP 1 (X), SP 4 (X), Structural and areal map
- Cressman, E.R., OFR 78-796, RI 18 (X), USGS C 801, USGS PP 768, USGS PP 1151-B
- Crone, A.J., USGS PP 1236
- Cuppels, N.P., USGS B 1372-C
- Currens, J.C., IC 23 (X), IC 18 (XI), IC 19 (XI), IC 20 (XI), IC 21 (XI), IC 22 (XI), IC 23 (XI), IC 29 (XI), MCS 10 (XI), MCS 16 (XI), MCS 17 (XI),

MCS 18 (XI), MCS 19 (XI), OFR OF-81-02, OFR OF-81-03, OFR OF-81-04, OFR OF-81-05, OFR OF-83-09, OFR OF-83-10, OFR OF-83-11, OFR OF-83-12, OFR OF-83-13, OFR OF-83-14, OFR OF-83-15, OFR OF-83-16, OFR OF-83-17, OFR OF-83-18, OFR OF-83-19, OFR OF-83-20, OFR OF-83-21, OFR OF-84-01, OFR OF-84-02, OFR OF-84-04, OFR OF-93-07, OFR OF-95-03, OFR OF-97-04, R 20 (XI), RI 7 (XI), RI 11 (XI), SP 25 (X), SP 23 (X), SP 1 (XI) Currie, M.T., SP 11 (XI) Curtis, W.F., OFR 77-123 Cushman, R.V., OFR USGS-03

D

- Dart, R.L., OFR 92-260
- Davidson, O.B., IC 51 (XI), OFR OF-86-06, OFR OF-88-05, OFR OF-88-10, OFR OF-89-01, OFR OF-90-02
- Davies, W.E., OFR USGS-04
- Davis, B.H., SP 9 (XI)
- Davis, J.A., SP 5 (XI)
- Davis, R.W., RI 15 (X), SP 20 (X), USGS HA-93, USGS HA-112, USGS HA-157, USGS HA-164, USGS HA-166, USGS HA-169, USGS HA-172, USGS HA-174, USGS HA-179, USGS HA-183, USGS Map MF-865-E, USGS Map MF-865-F, USGS Map MF-865-H, USGS WSP 1987, USGS WSP 2202
- Dawson, T.A., SP 18 (X)
- DeWitt, Wallace, Jr., OFR 85-145
- Dean, C.S., GB 1989
- Dennison, J.M., SP 11 (XI)
- **Devaul, R.W.,** USGS HA-26, USGS HA-27, USGS HA-28, USGS HA-29, USGS HA-30, USGS WSP 1599
- Dever, G.R., Jr., B 4 (X), B 5 (X), B 5 (XI), GB 1977, GB 1990, IC 22 (X), IC 4 (XI), IC 25 (XI), IC 31 (XI), IC 34 (XI), IC 41 (XI), IC 49 (XI), IC 51 (XI), IC 59 (XI), MCS 21 (XI), OGR, R 39 (X), R 49 (X), R 22 (XI), R 23 (XI), R 24 (XI), R 27 (XI), R 28 (XI), R 32 (XI), R 33 (XI), R 35 (XI), R 37 (XI), R 43 (XI), RI 8 (X), SP 2 (XI), Structural and areal map, TS 1 (XI), USGS PP 1503

Devera, J.A., OFR OF-94-12

Dickinson, L.E., SP 7 (XI)

Dillman, S.B., Isopach and structure map **DiMichele, W.A.,** OFR OF-94-12

Dinger, J.S., IC 60 (XI), OFR OF-93-04, OFR OF-93-05, OFR OF-93-06, OFR OF-94-01, OFR OF-94-09, OFR OF-95-03, OFR OF-96-02, OFR OF-99-03, R 29 (XI), R 30 (XI), RI 6 (XI), RI 10 (XI), RI 11 (XI)

- Dobrovolny, Ernest, Misc. map
- Dougherty, P.H., SP 12 (XI)
- Douglas, R.C., USGS PP 1451
- Drahovzal, J.A., IC 33 (XI), IC 54 (XI), MCS 8 (XI), OFR OF-94-02, OFR OF-94-12, OFR OF-97-01, OFR OF-97-02, R 44 (XI), SP 18 (XI)
- **Duchscherer, W.M., Jr.,** SP 10 (X)
- Duchscherer, William, Jr., SP 2 (XI)
- Duncan, Helen, USGS B 1012-A-B
- Dyas, Mike, SP 12 (XI)
- Dyer, K.L., OFR 81-1215
- **Dyer, R.M.,** SP 6 (XI)

E

Eakle, Hunter, SP 8 (X) Eble, C.F., IC 38 (XI), IC 48 (XI), OFR OF-94-12, RI 14 (XI) Eckard, W.E., SP 15 (X) Edwards, D.R., OFR OF-99-03 Elias, R.J., USGS PP 1066-N Elkin, R.R., GRI Ellis, W.L., USGS PP 1538-A-C Elston, D.P., USGS PP 1126-A-J Emslie, A.G., OFR OF-80-06 Englund, K.J., Cross section, USGS B 1020-A, USGS B 1142-B, USGS MF-1348-A, USGS MF-1348-D, USGS PP 507 Ervin, C.P., OFR 77-228, OFR 77-230 Ettensohn, F.R., GB 1994, Isopach and structure map

- **Evaldi, R.P.,** OFR 90-4191 **Evangelou, V.P.,** IC 46 (XI)
- Ewers, R.O., SP 12 (XI)

F

- Faust, R.J., OFR 80-685 Fenstermaker, C.D., SP 17 (X) Ferm, J.C., IC 59 (XI) Field, T.P., SP 15 (XI) Fiene, F.L., RI 5 (XI) Finch, W.I., IC 16 (X), USGS B 1258-B, USGS B 1282, USGS PP 790 Fish, S.E., SP 18 (X) Fisher, B.W., OFR OF-85-01 Fisher, R.S., IC 1 (XI) Fishman, N.S., OFR OF-94-12 Flanagan, F.J., OFR 85-145 Fleming, R.W., USGS B 2059-B Flint, R.F., OFR 83-4152 Flores, R.M., USGS PP 1126-A-J Fogle, A.W., IC 46 (XI), OFR OF-93-04, RI 13 (XI) Fons, Lloyd, SP 4 (X) Fox, J.V., SP 3 (XI) Francis, H.E., IC 51 (XI)
- Frankie, W.T., GRI, IMMR

Franzoni, R.A., SP 17 (X) Frey, L.H., R 45 (X), USGS PP 1236 Friberg, J.F., SP 18 (X) Friedman, S.A., R 34 (X) Froelich, A.J., OFR OF-73-02, RI 14 (X) Fuller, M.L., OGR Fulton, L.P., Isopach and structure map Furer, L.C., OFR OF-94-12, SP 18 (XI)

G

Gallaher, J.T., USGS HA-72, USGS HA-74, USGS HA-91, USGS HA-95, USGS HA-96, USGS HA-110, USGS HA-129, USGS WSP 1818 Gathwright, T.M., SP 7 (XI) Gauthier, M.A., OFR OF-88-05 Gautier, D.L., OFR 93-596 Gehr, J.B., SP 8 (X) George, A.I., SP 12 (XI) George, F.H., OFR 77-123 George, J.V., SP 8 (X) Gilbert, R.C., R 16 (XI), R 18 (XI), R 21 (XI)Gilreath, J.A., MCS 1 (XI) Glick, E.E., USGS PP 1236 Goldhaber, M., OFR OF-94-12 Gonzalez, Gail, OFR OF-72-01 Gooding, P.J., IC 3 (XI), IC 33 (XI), TS 4 (XI) Gopman, H.Z., SP 11 (XI) Governor's Office for Coal and Energy Policy, OGR Grabowski, George, OFR OF-77-01 Graham, C.D.R., RI 7 (XI), RI 10 (XI) Greb, S.F., B 2 (XI), GB 1990, GB 1994, Misc. KGS repts., OFR OF-88-01, OFR OF-88-02, OFR OF-88-03, OFR OF-88-07, OFR OF-88-06, OFR OF-88-15, OFR OF-94-12, R 40 (XI), R 42 (XI), SP 13 (XI), SP 19 (XI) Green, J.E., SP 17 (X) Green, R.C., USGS B 1224-B Greenfield, R.E., OFR OF-57-01 Griffith, H.D., SP 18 (X) Grogan, R.M., SP 22 (X) Grossman, M.A., OFR OF-80-06 Grosz, A.E., USGS MF-1348-B, USGS MF-1348-D Grubb, H.F., OFR 2-74, USGS WSP 1940 Grube, J.P., OFR OF-94-12 Guthrie, J.M., OFR OF-94-12 Gwinn, J.E., SP 8 (X) Η

Haas, R.O., OFR OF-74-04, OFR OF-74-05 Hack, J.T., USGS PP 1126-A-J Hagan, W.W., SP 4 (X) Hages, T.S., USGS B 2111

Hall, F.R., USGS HA-15, USGS HA-16, USGS HA-17, USGS HA-18, USGS HA-19, USGS HA-20, USGS HA-21, USGS HA-22, USGS HA-23, USGS HA-24, USGS HA-25, USGS WSP 1533 Hall, V.S., OFR OF-87-06 Halloran, Thomas, SP 15 (X) Hamilton, D.K., USGS hydrologic atlas Hamilton, R.M., USGS PP 1236 Hamilton-Smith, Terence, B 4 (XI), IC 33 (XI), OFR OF-94-12, OFR OF-95-02, R 38 (XI) Hamlin, H.P., RI 3 (X) Hammack, R.W., OFR USBM-01, USGS MF-1348-D Hampson, S.K., OFR OF-93-05 Haney, D.C., GB 1975, OFR OF-83-09, SP 16 (XI), SP 17 (XI) Haney, Gene, SP 15 (X) Hannum, C.H., Flood map, OFR USGS-05 Hansen, A.J., Jr., USGS HA-167, USGS HA-170, USGS HA-171, USGS HA-175, USGS HA-176, USGS HA-180, USGS HA-182, USGS HA-184, USGS HA-186 Hansley, P.L., OFR OF-94-12 Hardin, G.C., Jr., USGS B 1012-A-B, USGS B 1012-E-F, USGS B 1042-S Harmon, B.G., SP 4 (X) Harned, G.W., OFR OF-79-02 Harris, A.G., USGS PP 1126-A-J Harris, D.C., IC 54 (XI), OFR OF-94-03, OFR OF-94-12, OFR OF-97-03, SP 18 (XI) Harris, J.B., R 39 (XI), TS 7 (XI), R 1 (XII) Harris, L.D., SP 14 (X) Harrison, D.K., R 10 (XI), R 12 (XI), R 15 (XI), R 17 (XI), R 19 (XI), R 23 (XI), R 24 (XI) Harvey, E.J., USGS WSP 1356 Hasenmueller, N.R., IBS 2, Isopach and structure map Hatch, J., OFR OF-94-12 Hatch, J.R., OFR OF-94-12 Hav, H.B., GB 1984 Haves, P.T., USGS B 1526, USGS PP 1126-A-J Heath, R.C., USGS WSP 2220 Heigold, P.C., OFR OF-94-12 Hein, J.R., USGS PP 1126-A-J Helfrich, C.T., RI 5 (XI) Helton, W.L., TS 2 (X) Hem, J.D., USGS WSP 2254 Hendricks, J.D., USGS PP 1236, USGS PP 1538-E

Hendricks, John, OFR 77-228, OFR 77-230

Hendricks, R.T., GB 1994, OFR OF-97-02, SP 19 (XI) Hendrickson, G.E., RI 2 (X), USGS WSP 1700 Hennessy, G.J., SP 1 (X), SP 8 (X) Henry, M.E., OFR OF-94-12 Hester, N.C., OFR OF-94-11, OGR, R 7 (XI) Heyl, A.V., SP 22 (X), USGS B 1252-F Hicklin, R.S., OFR OF-33-01 Hiett, J.K., IC 40 (XI), IC 47 (XI), OFR OF-88-05, USGS MF-2275 Hildenbrand, T.G., OFR 77-228, OFR 77-229, OFR 77-230, OFR OF-94-12, USGS MF-914, USGS PP 1236, **USGS PP 1538-E** Hills. F.A., OFR OF-94-12 Hine, G.T., TS 3 (X) Hinze, W.J., USGS PP 1236 Holbrook, C.E., OFR OF-64-01 Hollenbeck, R.P., RI 7 (X) Hood, W.C., USGS PP 1236 Hook, J.W., SP 22 (X) Hopkins, H.T., IC 4 (X), OFR USGS-06, RI 4 (X), USGS hydrologic atlas, USGS WSP 1867 Hopkins, H.T., Jr., SP 17 (X) Hopkins, W.B., USGS WSP 1528 Hopper, M.G., Misc. map, OFR 80-1242, OFR 81-198, OGR, USGS MF-1712 Horton, A.I., SP 11 (XI) Hosterman, J.W., R 5 (X), USGS B 1122-F, USGS MF-261, USGS PP 1298 Howard, James, SP 6 (XI) Howard, R.H., SP 2 (XI) Howell, Paul, SP 8 (X) Hower, J.C., IC 18 (XI), IC 19 (XI), IC 20 (XI), IC 21 (XI), IC 22 (XI), IC 23 (XI), RI 5 (XI), RI 14 (XI) Huddle, J.W., USGS B 1122-F, USGS PP 507 Hudnall, J.S., Structural and areal map Hudock, Kevin, SP 11 (XI) Huev, Linda, OFR OF-90-03 Humphreys, Matthew, IC 57 (XI) Hunt, A.E., SP 5 (XI) Hunter, C.D., SP 8 (X) Huntoon, P.W., USGS PP 1126-A-J Hutcheson, D.W., SP 21 (X), SP 22 (X) Hutcheson, S.M., see also Minns, S.A., RI 11 (XI) Ι

Inamdar, S.P., IC 46 (XI) Indiana University, RI 11 (X), RI 13 (X)

J

Jacobson, R.J., OFR OF-94-12

Jenkins, E.B., SP 10 (X) Jennings, A.R., Jr., SP 18 (X) Jennings, J.R., RI 3 (XI) Johnson, A.C., SP 21 (X), USGS PP 1538-A-C, USGS PP 1538-D Johnson, A.M., USGS B 2059-B Johnson, Arthur, OFR C-428 Johnson, C.G., OFR USGS-06 Johnson, P.L., USGS MF-1348-D Johnson, R.W., OFR 77-229 Johnson, R.W., Jr., Gravity and magnetic map Johnson, W.E., Jr., GB 1966 Johnston, I.M., GRI Johnston, J.E., USGS B 1047-B, USGS MAP C-22 Jolly, J.L., USGS B 1252-F

Κ

Kane, M.F., USGS MF-914, USGS PP 1236 Karklins, O.L., USGS PP 1066-I Keagy, D.M., OFR OF-93-04, OFR OF-93-05 Kehn, T.M., OFR 81-790, USGS B 1394-B Keith, B.D., OFR OF-94-12 Keith, Brian, SP 18 (XI) Keller, G.R., Gravity and magnetic map, OFR 77-228, OFR 77-230, OFR OF-76-02, OFR OF-76-05, SP 3 (XI), USGS PP 1236 Keller, Randy, MCS 7 (XI) Keller, S.J., SP 3 (XI) Kemper, J.R., GRI Kendall, T.A., OFR OF-82-05, RI 12 (X) Kentucky Coal Association, OGR Kentucky Department for **Environmental Protection, Division** of Water, Groundwater Branch, Misc. map Kentucky Department of Commerce, Misc. map **Kentucky Environmental Quality** Commission, OGR Kentucky Geological Survey, Misc. KGS repts., OFR OF-80-05, OFR OF-86-02, OFR OF-86-03, OFR OF-86-04, OFR OF-86-05, OFR OF-86-07, OFR OF-86-08, OFR OF-86-09, OFR OF-86-10, SP 1 (X), SP 4 (X), SP 8 (X), SP 10 (X), SP 14 (X), SP 15 (X), SP 17 (X), SP 18 (X), SP 21 (X), SP 10 (XI) Kentucky Task Force on Earthquake Hazards and Safety, OFR OF-83-22 Kentucky Transportation Cabinet, Department of Highways, Misc. map

Kepferle, R.C., GB 1985, GB 1987, GB 1990, OFR 79-835, OFR 82-219, OFR

85-145, OFR USGS-07, SP 9 (XI), USGS B 1354-B, USGS PP 1007 Kiefer, J.D., OFR OF-97-01 Kiesler, J.L., Jr., OFR 76-86 Kilburn, Chabot, USGS HA-38 Kious, W.J., USGS rept. Kipp, J.A., OFR 90-4191, OFR OF-94-09, OFR OF-96-02, R 30 (XI), RI 12 (XI) Kirkpatrick, G.A., RI 5 (X) Klee, John, GB 1991 Klepser, H.J., USGS B 1012-E-F Kohl, P.R., OFR OF-94-11 Kohut, J.J., R 29 (X) Kolata, D.R., OFR OF-94-12 Konkler, Jonathan, OFR OF-80-03 Koppenaal, D.W., RI 5 (XI) Korst, I.M., SP 4 (X) Kosanke, R.M., USGS PP 839 Kreig, M.F., OFR OF-62-04, OFR OF-63-03 Krieger, R.A., OFR USGS-08, OFR USGS-09, RI 2 (X), SP 16 (X), USGS WSP 1700 Krissek, L.A., GB 1991 Kulp, W.K., IC 4 (X)

L

Lambert, T.W., OFR 79-53, RI 17 (X), USGS HA-13, USGS HA-32, USGS HA-33, USGS HA-34, USGS HA-35, USGS HA-118, USGS HA-125, USGS HA-156, USGS HA-160, USGS HA-162, USGS HA-165, USGS HA-168, USGS HA-173, USGS HA-177, USGS HA-178, USGS HA-181, USGS HA-185, USGS WSP 1603 Langenheim, V.E., OFR OF-94-12 Lasemi, Z., cross section, OFR OF-94-12 Lauffer, J.B., SP 8 (X) Lee, Ron, SP 6 (XI) Leetaru, H.E., OFR OF-94-12 Leffler, L.M., USGS PP 1538-H Legace, R.L., OFR OF-80-06 Leslie, S.A., MCS 12 (XI) Lesure, F.G., OFR 84-122 Leventhal, J.S., OFR 79-1303 Lewis, J.J., OFR OF-94-12 Lewis, Jennifer, OFR OF-94-12 Lewis, R.Q., Sr., GB 1978, R 41 (XI), USGS B 1324-E, USGS B 1435-D Lewis, Tom, SP 1 (X) Lidiak, E.G., OFR OF-94-10, USGS PP 1236 Lieberman, N.I., SP 21 (X) Lohse, R.L., USGS PP 1236 Losonsky, George, MCS 1 (XI) Lumm, D.K., OFR OF-94-12

Luther, M.K., see also Smath, M.L., SP 2 (XI), SP 3 (XI), SP 5 (XI), SP 6 (XI), SP 7 (XI), SP 9 (XI), SP 11 (XI) Luzietti, E.A., USGS PP 1538-J

Μ

MacCary, L.M., USGS HA-13, USGS HA-114, USGS HA-115, USGS HA-124, USGS HA-159, USGS HA-166 Macke, D.L., OFR OF-94-12 MacQuown, W.C., SP 9 (XI), SP 11 (XI) Madison, C.E., IC 46 (XI) Malicki, Dave, USGS PP 1236 Mallette, R.E., IC 5 (XI) Malone, W.T., SP 3 (XI) Malott, C.A., RI 20 (X) Marley, W.E., III, USGS PP 1126-A-J Mason, C.E., GB 1991 Mason, J.E., SP 22 (X) Masters, J.M., OGR Mather, W.W., R 25 (XI) Matthews, E.W., USGS WSP 2202 Maxwell, B.W., USGS HA-26, USGS HA-27, USGS HA-28, USGS HA-29, USGS HA-30, USGS WSP 1599 McCabe, J.A., IC 9 (X) McClaine, S.J., OFR OF-94-10 McCourt, M.J., IC 60 (XI), IC 1 (XII) McDowell, R.C., USGS MF-1291, USGS PP 1151-F, USGS PP 1151-H McGinnis, L.D., OFR 77-228, OFR 77-230 McGrain, Preston, B 3 (X), B 4 (X), B 5 (X), CR 2 (X), CR 4 (X), CR 5 (X), CR 6 (X), CR 7 (X), CR 1 (XI), CR 2 (XI), GB 1960, GB 1973, IC 1 (X), IC 2 (X), IC 5 (X), IC 14 (X), IC 6 (XI), IC 14 (XI), OFR OF-82-05, OFR OF-87-01, R 3 (X), R 16 (X), R 18 (X), R 21 (X), R 22 (X), R 24 (X), R 27 (X), R 31 (X), R 32 (X), R 34 (X), R 37 (X), R 39 (X), R 40 (X), R 43 (X), R 45 (X), R 47 (X), R 3 (XI), R 6 (XI), R 9 (XI), R 10 (XI), R 11 (XI), R 12 (XI), R 13 (XI), R 15 (XI), R 17 (XI), RI 3 (X), RI 8 (X), RI 12 (X), RI 19 (X), RI 20 (X), RI 1 (XI), SP 1 (X), SP 4 (X), SP 6 (X), SP 8 (X), SP 11 (X), SP 12 (X), SP 13 (X), SP 14 (X), SP 22 (X), SP 23 (X), SP 24 (X), SP 25 (X), SP 1 (XI), SP 8 (XI) McGuinness, C.L., OFR USGS-01 McGuire, W.H., SP 8 (X), SP 10 (X), SP 15 (X) McIntyre, J., R 1 (XII) McKee, E.D., OFR OF-53-01 McKeown, F.A., USGS PP 1236 McLean, H., USGS PP 1126-A-J Meglen, J.F., OFR OF-94-02

Memphis State University, USGS poster Meyer, D.L., GB 1987, MCS 12 (XI) Miles, P.M., SP 21 (X) Milhous, H.C., R 19 (X), SP 1 (X) Milici, R.C., SP 7 (XI) Minns, S.A., see also Hutcheson, S.M., OFR OF-94-09, OFR OF-95-03, OFR OF-96-02, RI 9 (XI), TS 6 (XI) Mitchell, B.J., USGS PP 1236 Mitchell, W.M., OFR OF-94-12 Montgomery, Gill, SP 22 (X) Moodie, F.B., GB 1986 Moodie, F.B., III, SP 22 (X) Moody, J.R., GB 1990, GRI, IC 34 (XI), R 22 (XI) Moore, L.D., OFR OF-94-12 Morgan, H.B., OFR OF-80-03 Morgan, H.M., SP 11 (XI) Morgan, J.D., OFR OF-83-23 Morgan, J.H., IC 15 (X), OFR OF-64-02, USGS HA-92, USGS HA-113, USGS HA-116, USGS HA-117, USGS HA-155, USGS HA-158, USGS HA-161, USGS HA-163 Morris, L.G., MCS 11 (XI) Morris, R.H., Misc. map Moshier, S.O., GB 1989 Mull, D.S., IC 20 (X), RI 9 (X), USGS WSP 1809-A Mull, D.S., OGR Mullins, A.T., IC 11 (X), SP 15 (X) Murphy, J.H., SP 2 (XI) Musser, J.J., USGS PP 427-A Mylroie, John, SP 12 (XI)

N

Nabors, W.M., SP 1 (X) Nahass, S., USGS PP 1126-A-J Narr, Wayne, OFR OF-94-10 Nelson, W.J., OFR OF-94-12 Neuman, R.B., USGS PP 583-A Newman, F.C., SP 1 (X) Nichols, E.S., IC 6 (X), IC 7 (X) Nichols, T.C., Jr., USGS B 1258-A Noger, M.C., Cross section, CR 2 (XI), GB 1985, GB 1987, MCS 8 (XI), Misc. map, OFR OF-91-01, RI 18 (X), SP 16 (XI), SP 17 (XI), USGS C 801 Nolan, T.B., Jr., USGS PP 1126-A-J Norby, R.D., OFR OF-94-12 Norris, R.L., Bedrock topography map, SP 8 (X) Norris, Ronald, Cross section, Isopach and structure map Norris, Sam, SP 3 (XI) Nosow, Edmund, OFR OF-51-01, R 2 (X), R 6 (X), R 8 (X), R 10 (X), R 12 (X), R 14 (X), R 23 (X), R 46 (X), R 8 (XI), SP 1 (X), SP 4 (X) Nuccio, V.F., OFR OF-94-12

Nuttall, B.C., IC 17 (XI), IC 24 (XI), IC 26 (XI), IC 27 (XI), IC 28 (XI), IC 30 (XI), IC 33 (XI), IC 35 (XI), IC 39 (XI), IC 45 (XI), IC 50 (XI), IC 55 (XI), IC 56 (XI), MCS 9 (XI), MCS 11 (XI), MCS 13 (XI), MCS 14 (XI), MCS 15 (XI), MCS 22, (XI), OFR OF-88-04, OFR OF-91-01, OFR OF-94-02, OFR OF-94-11, OFR OF-94-12, OFR OF-95-04 Nuttall, B.D., SP 8 (X) Nuttli, O.W., USGS PP 1236 Nuttli, Otto, SP 14 (XI)

0

Obermeier, S.F., OFR 96-724
O'Cana, Dan, IC 40 (XI)
O'Connell, E.M., USGS hydrologic atlas
O'Connor, D., USGS PP 1236
Olive, W.W., GB 1972, General Ky. map, USGS B 1282
Oliver, W.A., Jr., USGS B 1244-F
Olshansky, R.B., USGS PP 1538-F-G
Oltz, D.F., OFR OF-94-12
Oman, C.L., OFR OF-94-12
Overbey, W.K., Jr., SP 5 (XI)

Р

Pakiser, L.C., USGS PP 1236 Palmer, A.N., SP 12 (XI) Palmer, J.E., OFR OF-82-02, SP 3 (XI) Palmquist, W.N., Jr., USGS HA-15, USGS HA-16, USGS HA-17, USGS HA-18, USGS HA-19, USGS HA-20, USGS HA-21, USGS HA-22, USGS HA-23, USGS HA-24, USGS HA-25, USGS WSP 1533 Parsley, R.L., USGS PP 1066-K Pasini, Joseph, III, SP 17 (X) Patchen, D.G., SP 17 (X) Patterson, S.H., R 5 (X), USGS B 1122-F Patton, J.B., SP 18 (X) Peck, J.H., USGS B 1244-B Peddycoart, Dick, SP 9 (XI) Penick, J.L., Jr., OGR Perkins, Hunt, SP 15 (X) Perkins, J.H., SP 21 (X) Perry, D.B., OFR OF-88-05 Peterson, W.L., OFR 79-834, OFR 79-835, OFR 79-850, OFR USGS-07, OFR USGS-32, OFR USGS-33, USGS I-1155, USGS PP 1151-C, USGS PP 1151-E Phalan, J.H., SP 1 (X) Pickard, G.W., SP 22 (X) Pickering, R.J., RI 9 (X) Pike, R.J., USGS I-2206 Ping, R.G., OFR USGS-10 Pitman, J., OFR OF-94-12

Poettmann, F.H., SP 3 (XI) Pojeta, John, Jr., USGS PP 1066-A-G, USGS PP 1066-O, USGS PP 1151-E Pollock, J.D., OFR 82-219 Ponsetto, L.R., R 11 (XI), R 16 (XI) Pope, K., USGS PP 1066-L Portig, E.R., IMMR Potter, C.J., OFR OF-94-12 Potter, P.E., GB 1978, GB 1984, GB 1991, Isopach and structure map, MCS 1 (XI), MCS 5 (XI), MCS 12 (XI), OFR OF-68-03, RI 2 (XI), SP 22 (XI) Pounder, J.A., SP 14 (X) Powell, A.J., OFR OF-99-03 Powers, R.B., OFR 94-211 Pree, H.L., Jr., USGS WSP 1417 Price, M.L., SP 3 (XI) Price, Peter, RI 4 (XI) Price, R.C., Structural and areal map Price, W.E., USGS HA-36 Price, W.E., Jr., USGS HA-37, USGS HA-73, USGS HA-75, USGS HA-94, USGS HA-97, USGS HA-98, USGS HA-111, USGS HA-130, USGS WSP 1359, USGS WSP 1607, USGS WSP 1818 Prosser, L.J., Jr., R 26 (XI), R 27 (XI), R 32 (XI), R 33 (XI), R 35 (XI), R 37

Pitman, J.K., OFR OF-94-12

Plebuch, R.O., OFR 78-25

(XI), R 43 (XI) **Pryor, W.A.**, GB 1981, GB 1984 **Putnam, G.B.**, SP 18 (X)

R

Rast, Nicholas, GB 1984 Ray, E.O., SP 4 (X), SP 15 (X), SP 21 (X) Ray, J.A., MCS 10 (XI), MCS 16 (XI), MCS 17 (XI), MCS 18 (XI), MCS 19 (XI)Ray, L.L., Structural and areal map, USGS PP 488 Reagor, B.G., General Ky. map, OFR 80-1242, OFR 81-198 Rebmann, J.R., R 29 (XI) Reed, A.H., R 1 (X), R 4 (X), R 7 (X), R 9 (X) Rehn, E.E., SP 15 (X) Rexroad, C.B., B 2 (X) Reynolds, D.W., SP 14 (X), SP 6 (XI) Reynolds, R., OFR OF-94-12 Rhea, Susan, OFR OF-94-12 Rice, C., OFR OF-94-12, USGS I-1727-A Rice, C.L., Isopach and structure map, R 5 (XI), USGS MF-2275, USGS PP 1151-G Rich, David, GB 1984

Rickert, D.A., OGR

Ridgley, J.L., OFR OF-94-12 Riffel, P.A., OGR **Riley, C.S.,** SP 15 (X) Riley, H.L., R 11 (X), R 13 (X), R 16 (X), R 18 (X), R 22 (X), R 24 (X), R 27 (X), R 32 (X), R 37 (X), R 40 (X), R 43 (X) Robl, T.L., IC 34 (XI), R 22 (XI), R 28 (XI) Rodermund, C.G., SP 4 (X) Roen, J.B., AONGRC Rorabaugh, M.I., USGS WSP 1360-B Rose, W.D., B 1 (X), SP 10 (X), SP 14 (X), SP 15 (X), SP 17 (X), SP 18 (X), Structural and areal map Ross, R.B., Jr., OFR USBM-01, USGS MF-1348-D Ross, R.J., USGS PP 1126-A-J Ross. R.J., Jr., USGS PP 583-B Rowan, E., OFR OF-94-12 Rowan, E.L., OFR OF-94-12 Rupp, J.A., OFR OF-94-12 Russ, D.P., USGS PP 1236 Ruthven, C.L., IC 59 (XI) Ryder, P.D., IC 18 (X), OFR 53-73, OFR USGS-11, OFR USGS-12, OFR USGS-13, USGS WSP 1940 S Sable, E.G., USGS B 1224-I, USGS PP 1503 Sahba, A.M., OFR OF-95-03, RI 11 (XI)

Sahraie, Y.M., OFR OF-62-04 Sanchez, J.D., USGS PP 1126-A-J Sanders, M.P., SP 11 (XI) Santos, J.F., OFR 77-123 Sargent, M.L., Cross section Sargent, Michael, OFR OF-94-12 Satoskar, V.J., SP 2 (XI) Saunders, J.W., SP 12 (XI) Schneider, Robert, OFR 82-509 Schreiber, Jack, SP 6 (XI) Schumacher, G.A., GB 1987, GB 1991 Schwalb, H.R., GB 1973, IC 17 (X), IC 19 (X), IC 2 (XI), Isopach and structure map, Oil and natural gas map, RI 10 (X), RI 16 (X), SP 17 (X), SP 2 (XI), SP 5 (XI) Schwalb, Howard, Cross section, Isopach and structure map, OFR OF-82-02, SP 21 (X), SP 7 (XI) Seale, G.L., TS 3 (XI) Sedimentation Seminar, RI 11 (X), RI 13 (X), RI 21 (X) Seeger, C.R., R 28 (X) Segovia Chica, A.G., OFR OF-72-01 Seifert, W.F., SP 10 (X) Sendlein, L.V.A., OFR OF-93-04, OFR

endlein, L.V.A., OFR OF-93-04, OFR OF-93-05, OFR OF-93-06, OFR OF-

94-01, OFR OF-94-09, OFR OF-95-03, OFR OF-96-02, RI 11 (XI) Sergeant, R.E., Bedrock topography map, GB 1990, IC 47 (XI), OFR OF-88-05, OFR OF-88-11, R 34 (XI) Settle, H.W., Structural and areal map Sexton, J.L., USGS PP 1236 Seyler, Beverly, OFR OF-94-12 Shay, R.A., USGS PP 1538-F-G Shearman, J.O., OFR USGS-14 Shedlock, K.M., USGS PP 1538-A-C, USGS PP 1538-D Sholar, C.J., OFR 85-4052 Shumaker, R.C., OFR OF-94-11 Sides, S.D., SP 12 (XI) Siems, D.F., USGS MF-1348-B, USGS MF-1341-B Sigleo, W.R., USGS MF-1341-C Silberman, J.D., SP 21 (X), SP 3 (XI) Simard, C.M., OGR Simkin, Tom, USGS poster Simmons, G.C., USGS B 1244-F Skelton, Homer, SP 11 (XI) Slucher, E.R., IC 12 (XI), OFR OF-86-11 Smath, M.L., see also Luther, M.K., OFR OF-94-10, OFR OF-94-11 Smath, R.A., GRI, IC 12 (XI), IMMR, OFR OF-83-24, OFR OF-84-08, OFR OF-85-01, OFR OF-88-05, OFR OF-88-11 Smith, A.D., OFR OF-84-08 Smith, A.E., OFR OF-82-02, OFR OF-97-05, OFR USGS-15, SP 3 (XI), Structural and areal map Smith, G.E., GB 1969, IC 23 (X), IMMR, RI 6 (X) Smith, J.G., IC 19 (X) Smith, J.H., R 41 (XI) Smith, L.M., GB 1984 Smith, M.O., GB 1967, TS 1 (X) **Smith, W.W.,** SP 15 (X) Snell, Jeffrey, OFR OF-94-01 Snyder, P.B., OGR Soderberg, R.K., OFR OF-76-02, OFR OF-76-03 Sparks, T.N., OFR OF-97-03 Spirakis, C.S., OFR OF-94-12 Spurgeon, P.A., RI 3 (XI) St. Louis University, USGS poster Stack, Wavne, SP 10 (X) Stanonis, F.L., SP 15 (X) Stark, T.J., GB 1994 Statler, A.T., R 41 (X), R 48 (X) Stauder, W., USGS MF-914 Stauder, William, USGS PP 1236 Stearns, R.G., OFR 77-228, OFR 77-230, OFR TVA-01

Steele, S.R., USGS PP 1236 **Stevenson, D.L.,** SP 5 (XI) Stickney, J.F., OFR OF-88-05, OFR OF-88-11 Stith, D.A., OGR Stone, B.D., OFR OF-73-02 Stone, C.A., OFR OF-84-03 Stover, C.W., General Ky. map, OFR 81-198 Street, R., OFR OF-91-02, SP 14 (XI) Street, R.L., R 39 (XI), R 1 (XII) Sublett, R.B., SP 14 (X) Sullavan, J.N., OFR 80-1225 Sullivan, D.M., SP 7 (XI) Surkalo, Harry, SP 6 (XI) Sutton, A.H., USGS MF-2 Sutton, D.G., CR 6 (X), OFR OF-82-02, Oil and natural gas map Sutton, E.M., SP 3 (XI) Swadlev, W C, OFR 79-834, OFR 79-850, OFR USGS-32, OFR USGS-33, USGS I-1155, USGS PP 1126-A-J, USGS PP 1151-E Swanberg, C.A., USGS PP 1236 Sweet, W.C., OFR 84-270, R 29 (X) Swisshelm, R.V., Jr., OFR USGS-14, OFR USGS-16

Т

Taylor, A.R., USGS B 1435-D Taylor, P.B., RI 6 (XI), RI 10 (XI) Teaford, N.K., USGS MF-1348-A Teoh, K.W., IC 29 (XI) Tewalt, S.J., OFR OF-94-12 Thacker, E.E., MCS 20 (XI) Thelin, G.P., USGS I-2206 Thies, J.L., MCS 12 (XI) Thomas, G.R., SP 8 (X) Thomas, R.N., GB 1973 Thompson, M.F., IC 51 (XI) Thorman, C.T., USGS PP 1126-A-J Thrailkill, John, GB 1984, SP 12 (XI) Thurston, W.R., USGS B 1012-E-F Tibbs, J.S., GB 1973, SP 22 (X) Tierney, John, SP 12 (XI) Tilling, R.I., USGS report Townsend, P.S., SP 10 (X) Trace, R.D., GB 1986, IC 14 (XI), Misc. KGS repts., OFR OF-84-07, SP 22 (X), USGS B 1012-C-D, USGS B 1042-S, USGS B 1122-E, USGS PP 1151-D Trask, N.J., OFR 82-509 Treworgy, C.G., OFR OF-94-12 Treworgy, J.D., Cross sections, OFR OF-94-12 Tschudy, R.H., USGS PP 643-F, USGS PP 743-B, USGS PP 743-C, USGS PP 865 Tschudy, R.H., OFR USGS-17, OFR

USGS-18, OFR USGS-19, OFR

USGS-20, OFR USGS-21, OFR USGS-22

U

- **Udegbunam, Emmanuel,** OFR OF-94-12
- **Ullom, B.P.,** OFR OF-89-02 **University of Cincinnati,** RI 13 (X), RI
- 11 (XI)
- Unrug, K.F., OFR OF-83-07
- U.S. Army Corps of Engineers, OGR U.S. Geological Survey, OFR USGS-23, OFR USGS-24, OFR USGS-25, OFR USGS-26, OFR USGS-27, OFR USGS-28, OFR USGS-29, OGR

V

Van Couvering, J.A., IC 8 (X), IC 12 (X)
Van Den Berg, Jacob, R 25 (X), R 30 (X), R 33 (X), R 42 (X), R 14 (XI), R 16 (XI), R 18 (XI), R 21 (XI)
VanArsdale, R.B., R 34 (XI), USGS PP 1538-A-C
Varnes, K.L., OFR 93-596
Vincent, J.K., SP 14 (X)
Vincent, J.W., TS 4 (X)
Vine, J.D., OFR USGS-30

W

Walker, B.J., AONGRC
Walker, Dan, IC 33 (XI), MCS 6 (XI), SP 18 (XI)
Walker, E.H., USGS WSP 1328, USGS WSP 1411
Walker, F.H., OFR OF-50-01, Oil and natural gas map, R 18 (XI), R 21 (XI), SP 4 (X), SP 10 (X), SP 15 (X)
Walker, L.G., USGS PP 1066-M
Wang, Z., R 39 (XI), R 1 (XII)
Warshauer, S.M., USGS 1066-H

Washington University, OFR OF-67-02 Watkins, J.S., Gravity and magnetic map, OFR OF-63-01, OFR USGS-31 Watson, A.E., IC 57 (XI), MCS 11 (XI) Watson, P.J., SP 12 (XI) Watson, W.A., Jr., SP 7 (XI) Webb, E.J., SP 18 (X), SP 21 (X), SP 2 (XI) Webb, J.S., IC 60 (XI), IC 1 (XII) Webber, F.R., USGS PP 1126-A-J Weber, Licia, OFR OF-94-12 Weir, G.W., General Ky. map, OFR 78-796, OFR 79-834, OFR 79-835, OFR 79-850, OFR OF-53-01, OFR USGS-32, OFR USGS-33, USGS B 1224-B, USGS B 1224-D, USGS B 1224-F, USGS I-1155, USGS PP 1151-E, USGS PP 1151-G Weisenfluh, G.A., IC 40 (XI), IC 42 (XI), IC 43 (XI), IC 47 (XI), IC 59 (XI), MCS 20 (XI) Welch, S.W., Structural and areal map, USGS B 1042-P Weld, B.A., OFR C-428 Weller, Stuart, Structural and areal map, USGS MF-2 Wellman, Paul, SP 3 (XI) Wesnovsky, S.G., USGS PP 1538-H Whaley, P.W., GB 1979 Wheeler, R.C., USGS PP 1538-M Wheeler, R.L., OFR OF-94-12 Whieldon, C.E., SP 1 (X) Whitaker, S.T., Cross section Whitehead, N.H., III, OFR OF-76-04 Whitesides, D.V., IC 6 (X), IC 7 (X), IC 18 (X), IC 21 (X) Whitlow, S.I., USGS PP 1298 Wickstrom, L.H., SP 18 (XI)

Wieland, D.R., SP 21 (X), SP 2 (XI)

- Williams, D.A., B 2 (XI), GB 1986, GB 1988, OFR OF-94-12, IC 7 (XI), IC 8 (XI), IC 13 (XI), OFR OF-82-03, OFR OF-85-01, OFR OF-97-01, RI 5 (XI)
- Williams, J.S., USGS B 1012-A-B
- Williams, R.M., OFR OF-99-03
- Williamson, A.D., B 2 (XI), IC 1 (XI), OFR 81-790, OFR OF-82-02, R 20 (XI)
- Willingers, G.R., OFR 80-685
- Wilson, C.W., Jr., OFR TVA-01
- Wilson, E.N., IC 12 (X), OFR OF-66-03, OFR OF-73-04, OFR OF-74-03, OFR OF-75-06, OFR OF-79-10, OFR OF-79-11, Oil and natural gas map, RI 2 (XI), SP 10 (X), SP 14 (X), SP 15 (X)
- Wilson, J.L., SP 21 (X)
- Wilson, R.C., SP 12 (XI)
- Wilson, R.T., GB 1991
- Wong, A.S., R 36 (XI) Wood, E.B., OFR OF-48-01
- Woolery, E.W., R 39 (XI), R 1 (XII)
- Worl, R.G., SP 22 (X)
- Wright, E.M., GB 1991
- Wunsch, D.R., OFR OF-95-01, R 31 (XI), RI 6 (XI), RI 10 (XI), TS 5 (XI)

Y

Yost, A.B., II, SP 6 (XI) Young, D.M., OFR OF-31-01 Young, R.N., SP 21 (X)

Z

Zafar, J.S., OFR OF-79-11, RI 2 (XI) Zartman, R., OFR OF-94-12 Zehner, H.H., OFR 79-1329 Zelt, F.B., OFR OF-94-10 Zhou, Huitang, IBS 3, OFR OF-94-12 Zoback, M.D., USGS PP 1236 Zogorski, J.S., OFR 76-86

map, USGS HA-20

Geographic Index

A

- Adair County, SP 21 (X), SP 3 (XI), Structural and areal map, USGS HA-35 Adams 7.5-min. quadrangle, USGS B 1526 Adolphus 15-min. quadrangle, Topographic map Alabama, SP 2 (XI), USGS poster Alaska, USGS PP 1126-A-J Alexandria 15-min. quadrangle, Topographic map Alexandria-Ashland Highway, GB 1991 Allen County, CR 1 (X), USGS HA-32, USGS WSP 1528 Alton 15-min. quadrangle, Topographic map Anderson County, Gravity and magnetic map, USGS HA-24 Appalachia, AONGRC, SP 4 (X), SP 8 (X), USGS B 1252-F, USGS PP 1126-A–J Appalachian Basin, B 3 (XI), IC 55 (XI), IC 57 (XI), OFR OF-83-03, OFR OF-83-09, OFR OF-88-14, OFR OF-92-02, R 38 (XI), R 40 (XI), SP 18 (X), SP 9 (XI), USGS PP 1298, USGS PP 1451 Appalachian Plateau, R 30 (XI), SP 2 (XI) Arizona, USGS PP 1126-A-J Arkansas, Misc. map, OFR 77-228, OFR 77-229, OFR 77-230, OFR USGS-28, USGS poster, USGS PP 1236, USGS PP 1538-A-C, USGS PP 1538-J Arlington 7.5-min. quadrangle, USGS HA-183 Ballard County, USGS HA-13, USGS HA-129, USGS HA-168, USGS HA-172, USGS HA-173, USGS HA-176, USGS HA-184, USGS HA-185, USGS
- HA-186 Bandana 7.5-min. quadrangle, USGS HA-176
- Barkley Lake, IC 14 (X)

B

- Barlow 7.5-min. quadrangle, USGS HA-186
- Barren County, USGS HA-32, USGS WSP 1528
- Barthell 15-min. quadrangle, Topographic map Bath County, OFR OF-64-01, USGS
- HA-18
- Bayouville 15-min. quadrangle,

Topographic map Beattyville 15-min. quadrangle, Topographic map Beaver Creek Basin, USGS PP 427-A, USGS PP 427-B, USGS PP 427-C Beaver Creek Wilderness Area, OFR USBM-01, USGS MF-1348-A, USGS MF-1348-B, USGS MF-1348-D Beaver Dam 30 X 60 min. quadrangle. MCS 19 (XI), Topographic map Beckley 30 X 60 min. quadrangle, Topographic map Beech Grove 7.5-min. quadrangle, Bedrock topography map Bell County, Cross section, GRI, IC 5 (XI), USGS HA-38 Benton 15-min. quadrangle, Topographic map Berea, Structural and areal map Bernheim Forest, SP 13 (X) Big Bone Lick, OGR Big Pitman Creek, OFR USGS-25 **Big Pitman Creek Basin, RI 4 (X)** Big Sandy District, IMMR, IX 20 (XI), OFR OF-86-04 **Birmingham Point 7.5-min.** quadrangle, USGS HA-159 Blaine 7.5-min. quadrangle, USGS B 1526 Blandville 7.5-min. quadrangle, USGS HA-184 Blue Grass Parkway, GB 1985 Blue Grass Region, GB 1984, Misc. map, OFR OF-31-01, OFR OF-93-04, OFR OF-93-05, OFR OF-99-03, R 29 (XI), RI 13 (XI), SP 12 (XI), TS 1 (X), USGS hydrologic atlas, USGS WSP 1533, USGS WSP 1700 Bluefield 30 X 60 min. quadrangle, Topographic map Bondurant 7.5-min. quadrangle, USGS HA-178 Boone County, IC 22 (X), RI 8 (XI), topographic map, USGS HA-15, USGS HA-98 Booneville 7.5-min. quadrangle, IC 42 (XI) Bourbon County, Gravity and magnetic map, OFR OF-93-05, USGS HA-25, USGS hydrologic atlas Bowling Green, RI 17 (X) Bowling Green 30 X 60 min. quadrangle, Topographic map Boyd County, GRI, SP 7 (XI), USGS HA-37, USGS HA-75 Boyle County, Gravity and magnetic

Bracken County, USGS HA-16, USGS HA-94 Brazil, USGS PP 1126-A-J **Breathitt County,** GRI, SP 1 (X), Structural and areal map, USGS B 1042-P, USGS MAP C-42, USGS HA-36 Breckinridge County, Structural and areal map, USGS HA-33, USGS HA-72 Briensburg 7.5-min. quadrangle, USGS HA-114 Bristol 30 X 60 min. quadrangle, Topographic map Bryantsville 7.5-min. quadrangle, TS 3 (\mathbf{X}) Bullitt County, Structural and areal map, USGS HA-22 Burnside, OFR OF-95-03, RI 11 (XI) Burtonville 7.5-min. quadrangle, Misc. map Butler, OFR USGS-13 Butler County, IC 11 (X), IC 7 (XI), RI 16 (X), SP 8 (X), SP 21 (X), USGS HA-26 С Caborn 7.5-min. quadrangle, Bedrock topography map Cairo 7.5-min. quadrangle, USGS HA-186 Caldwell County, Misc. KGS repts., OFR 78-25, OFR OF-84-07, Structural and areal map, USGS B 1012-E-F, USGS HA-34 Calhoun 7.5-min. quadrangle, Bedrock topography map California, USGS PP 1126-A-J Calloway County, CR 2 (X), IC 2 (X), USGS HA-13, USGS HA-93, USGS HA-112, USGS HA-113, USGS HA-115, USGS HA-116, USGS HA-118, USGS HA-124, USGS HA-158, USGS HA-160, USGS HA-165 Calvert City 7.5-min. quadrangle, IC 16 (X), USGS HA-155 Camp Nelson, MCS 1 (XI) Campbell County, Topographic map, USGS HA-15, USGS HA-94, USGS HA-98 Campbellsville 30 X 60 min. quadrangle, MCS 17 (XI), Topographic map Campton 7.5-min. quadrangle, USGS **MAP C-42**

Canada, SP 14 (X) Cannel City 7.5-min. quadrangle, USGS B 1020-A Cape Girardeau 30 X 60 min. quadrangle, Topographic map Carlisle County, IC 2 (X), USGS HA-13, USGS HA-169, USGS HA-172, USGS HA-179, USGS HA-183, USGS HA-184, USGS HA-185 Carroll, RI 8 (XI) Carroll County, RI 8 (XI), USGS HA-23, USGS HA-97 Carrollton, OFR USGS-11 Carter Cave, SP 12 (X) Carter Caves State Park, SP 12 (XI) Carter County, GRI, USGS B 1122-F, USGS HA-37 Cascade Cave, SP 12 (X) Casey County, USGS HA-35 Catlettsburg, MCS 4 (XI) Cave in Rock 15-min. quadrangle, Structural and areal map, Topographic map Cayce 7.5-min. quadrangle, USGS HA-180 Central Mississippi Valley, USGS PP 1236 Christian County, OFR 78-25, Structural and areal map, USGS HA-34, USGS WSP 1328 Cincinnati, SP 22 (XI), USGS B 2059-B Cincinnati 30 X 60 min. quadrangle, Topographic map Cincinnati Arch Province, SP 18 (X) Cincinnati Arch region, USGS PP 1066-N, USGS PP 1066-O Clark County, Gravity and magnetic map, OFR OF-64-01, OFR OF-77-01, SP 8 (X), USGS HA-19 Clay County, GRI, OFR OF-57-01, RI 3 (XI), USGS HA-38 Clinton 7.5-min. quadrangle, USGS HA-175 Clinton County, GB 1978, IC 33 (XI), OFR OF-48-01, OFR OF-82-01, OFR OF-95-02, USGS HA-35 Conway, MCS 3 (XI) Corbin 30 X 60 min. quadrangle, General Ky. map. Linear features map. MCS 22 (XI), Topographic map Cornettsville 15-min. quadrangle, USGS MAP C-22 Covington, OFR USGS-13 Crittenden County, GB 1973, OFR OF-84-07, SP 22 (X), Structural and areal map, USGS B 1012-A-B, USGS B 1012-C-D, USGS B 1012-E-F, USGS B 1042-S, USGS B 1122-E, USGS HA-34, USGS HA-129

Crowleys Ridge, USGS PP 1538-A-C

Crutchfield 7.5-min. quadrangle, USGS HA-167 Cuba 7.5-min. quadrangle, USGS HA-161 Cumberland County, MCS 12 (XI), OFR OF-79-01, OFR OF-80-01, OFR OF-81-01, USGS HA-35 Cumberland Escarpment, SP 12 (XI), USGS B 1605-B Cumberland Falls State Park, SP 11 (X) Cumberland Gap, Cross section, GB 1989 Cumberland Mountain, GB 1989, RI 14 (\mathbf{X}) Cumberland Saddle, OFR OF-74-03 Cumberland Valley, B 5 (X) Curdsville 7.5-min. quadrangle, Bedrock topography map D

Daniel Boone National Forest, IC 12 (XI), USGS MF-1348-A, USGS MF-1348-B, USGS MF-1348-D Daviess County, OFR OF-94-01, OFR

OF-94-10, SP 4 (X), SP 8 (X), USGS HA-27, USGS HA-74, USGS HA-96, USGS HA-110

Delaware 7.5-min. quadrangle, Bedrock topography map

Dexter 7.5-min. quadrangle, USGS HA-93

Dike, USGS B 1122-E

Dublin 7.5-min. quadrangle, USGS HA-170

Dyersburg 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map

Ε

East Fork 7.5-min. quadrangle, Structural and areal map Eastern Interior Basin. See Illinois Basin

Eastern Kentucky Coal Field, IC 13 (XI), IC 36 (XI), OFR OF-80-03, OFR OF-86-02, OFR OF-86-06, OFR OF-88-13, OFR OF-93-01, R 42 (XI), TS 5 (XI), TS 6 (XI), USGS PP 1151-G, USGS WSP 1607, USGS WSP 1867 Eaton, USGS B 1122-E

Edmonson County, IC 11 (X), IC 7 (XI), OFR OF-95-04, RI 21 (X), USGS HA-32

Ekron 15-min. quadrangle, Topographic map

Elizabethtown, OFR 79-53

Elizabethtown 30 X 60 min.

quadrangle, Topographic map **Elkhorn City,** GB 1967, IC 1 (X) Elkton 7.5-min. quadrangle, Structural and areal map

Elliott County, GRI, Structural and areal map, TS 2 (XI), USGS B 1122-F, USGS HA-37, USGS WSP 1867

Elva 7.5-min. quadrangle, USGS HA-117

Estill County, Gravity and magnetic map, SP 8 (X), Structural and areal map, USGS HA-19

Evansville 30 X 60 min. quadrangle, General Ky. map, Linear features map, MCS 14 (XI), Topographic map

Evansville South 7.5-min. quadrangle, Bedrock topography map Ewing 7.5-min. quadrangle, USGS B

1142-B

F

Fairdealing 7.5-min. quadrangle, USGS HA-156 Falls of the Ohio, GB 1994, SP 19 (XI)

Falmouth 30 X 60 min. quadrangle, Topographic map

Fancy Farm 7.5-min. quadrangle, USGS HA-169

Farmers, MCS 4 (XI)

Farmington 7.5-min. quadrangle, USGS HA-92

Fayette County, Gravity and magnetic map, IC 4 (XI), OFR USGS-06, OGR, USGS HA-25, USGS hydrologic atlas

Fleming County, Misc. map, OFR 79-1329, USGS HA-18

Floyd County, GRI, Structural and areal map, USGS HA-36, USGS WSP 1359

Fort Knox, Structural and areal map
 Frankfort, OFR 85-4052, OFR USGS-11
 Franklin County, Gravity and magnetic
 map, USGS HA-24

Fulton 7.5-min. quadrangle, USGS HA-167

Fulton County, GB 1984, USGS HA-13, USGS HA-162, USGS HA-178, USGS HA-180, USGS HA-181, USGS HA-182

G

Gallatin County, RI 8 (XI), USGS HA-23, USGS HA-97, USGS HA-98

Garrard County, Gravity and magnetic map, USGS HA-20

Garrison, GB 1991

Glenville 7.5-min. quadrangle, Bedrock topography map

Golconda 15-min. quadrangle, Structural and areal map, Topographic map

Goose Creek, RI 3 (XI)

Grand Canyon, USGS PP 1126-A-J

53

Grannies Branch, RI 3 (XI)

- Grant County, USGS HA-15
- Graves County, USGS HA-13, USGS HA-92, USGS HA-112, USGS HA-113, USGS HA-116, USGS HA-117, USGS HA-125, USGS HA-157, USGS HA-161, USGS HA-162, USGS HA-163, USGS HA-164, USGS HA-166, USGS HA-169, USGS HA-170, USGS HA-172, USGS HA-174, USGS WSP 1417
- Grayson County, GB 1973, IC 11 (X), IC 7 (XI), USGS HA-33
- Green County, SP 3 (XI), Structural and areal map, USGS HA-32
- Green River, OFR 53-73, OFR USGS-09
- Green River Basin, OFR USGS-08, RI 2 (X)
- Greenup County, GRI, USGS HA-37, USGS HA-73, USGS HA-75
- Greenville 7.5-min. quadrangle, Structural and areal map

Grove Center 7.5-min. quadrangle, Bedrock topography map

H

- Haldeman 7.5-min. quadrangle, USGS B 1122-F
- Halls Gap 7.5-min. quadrangle, Structural and areal map
- Hamlin 7.5-min. quadrangle, USGS HA-165
- Hancock County, CR 4 (X), USGS HA-27, USGS HA-72, USGS HA-74
- Handshoe 7.5-min. quadrangle, IC 43 (XI)
- Hanson 7.5-min. quadrangle, Structural and areal map
- Hardin 7.5-min. quadrangle, USGS HA-115
- Hardin County, Structural and areal map, USGS HA-33, USGS HA-95
- Harlan County, GRI, OFR OF-57-01, OFR OF-83-05, OFR USGS-04, USGS HA-36, USGS MAP C-22
- Harrison County, USGS HA-16
- Harrodsburg 30 X 60 min. quadrangle, MCS 16 (XI), Topographic map
- Hart County, IC 5 (X), RI 21 (X), USGS HA-32

Hazard, MCS 2 (XI)

- Hazard 30 X 60 min. quadrangle, MCS 15 (XI), Topographic map, USGS I-1727-A
- Hazard District, IC 19 (XI), IMMR, OFR OF-86-05
- Hazard South 7.5-min. quadrangle, USGS MAP C-22
- Hazel 7.5-min. quadrangle, USGS HA-124

- Heath 7.5-min. quadrangle, USGS HA-168
- Henderson, USGS WSP 1356
- Henderson 7.5-min. quadrangle, Bedrock topography map
- Henderson County, IC 1 (XI), USGS HA-28, USGS HA-91, USGS HA-96, USGS HA-129, USGS WSP 1356
- Henry County, USGS HA-23 Hickman 15-min. quadrangle,
- Topographic map Hickman 7.5-min. quadrangle, USGS HA-181
- Hickman County, OFR OF-93-06, USGS HA-13, USGS HA-162, USGS HA-167, USGS HA-169, USGS HA-170, USGS HA-175, USGS HA-179, USGS HA-180, USGS HA-182, USGS HA-183
- Hickory 7.5-min. quadrangle, USGS HA-163
- Hico 7.5-min. quadrangle, USGS HA-158
- Hobbs, OFR OF-63-03
- Hopkins County, GB 1969, OFR OF-94-01, SP 1 (X), SP 8 (X), Structural and areal map, USGS HA-30
- Hopkinsville 30 X 60 min. quadrangle, Topographic map
- Hopkinsville 7.5-min. quadrangle, Structural and areal map, USGS WSP 1328
- Hopkinsville West 15-min. quadrangle, Topographic map
- Hoskinston 7.5-min. quadrangle, OFR OF-90-02
- Hubbard Lake 7.5-min. quadrangle, USGS HA-178
- Huntington 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map

I

- Illinois, Cross section, GB 1989, IBS 1, Misc. map, OFR 77-228, OFR 77-230, OFR OF-94-12, OFR OF-94-14, OFR OF-97-01, SP 7 (XI), TS 4 (X), USGS HA-177, USGS poster
- Illinois Basin, IBS 2, IBS 3, IC 14 (XI), OFR OF-67-01, OFR OF-88-06, OFR OF-94-02, OFR OF-94-10, OFR OF-94-12, OGR, R 26 (X), SP 14 (X), SP 2 (XI), SP 3 (XI), SP 5 (XI), SP 6 (XI), SP 9 (XI), SP 11 (XI), TS 3 (XI), USGS PP 1451
- Illinois-Kentucky Fluorspar District, SP 22 (X)
- Indiana, GB 1989, GB 1994, IBS 1, MCS 5 (XI), Misc. map, OFR OF-76-04, OFR OF-94-03, OFR OF-94-12,

- OFR OF-94-14, OFR USGS-32, RI 11 (X), SP 18 (X), SP 3 (XI), SP 7 (XI), SP 11 (XI), Structural and areal map, TS 4 (X), USGS poster, USGS PP 488, USGS PP 1007
- Interstate Highway 64, MCS 4 (XI)
- Interstate Highway 65, SP 17 (XI)
- Interstate Highway 71, SP 17 (XI)
- Interstate Highway 75, MCS 3 (XI), SP 16 (XI)
- Ironton 30 X 60 min. quadrangle, Topographic map
- Irvine, Structural and areal map
- Irvine 30 X 60 min. quadrangle, Topographic map

J

- Jackson County, Structural and areal map, USGS HA-38
- Jackson Purchase Region, B 3 (X), GB 1972, General Ky. map, OFR OF-93-06, RI 10 (X), SP 20 (X), USGS B 1282, USGS WSP 1987
- Jasper 30 X 60 min. quadrangle, Topographic map
- Jefferson County, IC 6 (X), Topographic map, USGS HA-22, USGS HA-111, USGS HA-130
- Jenkins, USGS WSP 1809-A
- Jenkins 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map
- Jessamine County, Gravity and magnetic map, OFR OF-99-03, RI 7 (XI), USGS HA-25, USGS hydrologic atlas
- Johnson City 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map
- Johnson County, GRI, OFR OF-83-06, Structural and areal map, USGS B 1047-B, USGS HA-37, USGS WSP 1257, USGS WSP 1359, USGS WSP 1867
- Joppa 7.5-min. quadrangle, USGS HA-171

K

Kenton County, OFR 84-270, Topographic map, USGS HA-98 Kenton County, USGS HA-15

Kentucky

- central, Gravity and magnetic map, IC 4 (XI), IC 51 (XI), Isopach and structure map, OFR 79-835, OFR USGS-02, RI 18 (X), RI 12 (XI), RI 13 (XI), TS 3 (X), USGS B 1224-C, USGS B 1252-F, USGS PP 768, USGS PP 1066-H, USGS PP 1151-A
- east-central, B 2 (X), B 5 (XI), GRI,

OFR OF-83-08, Oil and natural gas map, R 34 (XI), SP 3 (XI), TS 1 (XI), USGS B 1244-F eastern, B 4 (X), GB 1981, Gravity and magnetic map, IC 12 (XI), IC 29 (XI), Isopach and structure map, MCS 8 (XI), MCS 20 (XI), OFR 81-1215, OFR OF-79-10, OFR OF-79-11, OFR OF-81-02, OFR OF-81-03, OFR OF-81-04, OFR OF-81-05, OFR OF-81-12, OFR OF-83-04, OFR OF-83-08, OFR OF-83-10, OFR OF-83-11, OFR OF-83-12, OFR OF-83-13, OFR OF-83-14, OFR OF-83-15, OFR OF-83-16, OFR OF-83-17, OFR OF-83-18, OFR OF-83-19, OFR OF-83-20, OFR OF-83-21, OFR OF-84-01. OFR OF-84-02. OFR OF-84-04, OFR OF-86-04, OFR OF-86-05, OFR OF-86-07, OFR OF-86-08, OFR OF-86-09, OFR OF-86-10, OFR OF-88-02, OFR OF-94-10, OFR OF-94-11, OFR OF-96-02, OFR OF-97-03, OFR USGS-05, Oil and natural gas map, R 31 (XI), RI 5 (X), RI 3 (XI), RI 6 (XI), RI 10 (XI), RI 14 (XI), SP 8 (X), SP 15 (X), SP 18 (X), SP 21 (X), SP 3 (XI), SP 9 (XI), SP 11 (XI), USGS MF-2275, USGS PP 1151-G north-central, IC 53 (XI), OFR 79-53, OFR 79-850, OFR OF-76-04, USGS B 1354-B, USGS B 1372-C, USGS PP 1126-A-J, USGS WSP 1798-G northeastern, GB 1968, GB 1977, GB 1980, GRI, OFR 82-219, OFR USGS-33, SP 10 (X), SP 2 (XI), SP 12 (XI), TS 1 (XI), USGS MF-261, USGS PP 839 northern, GB 1987, MCS 5 (XI), SP 22 (XI) northwestern, OFR OF-82-02 south-central, B 5 (XI), GB 1990, OFR 79-834, OFR OF-95-03, R 41 (XI), RI 13 (X), RI 4 (XI), RI 11 (XI), SP 21 (X), TS 4 (XI), USGS B 1224-B, USGS B 1224-D, USGS B 1224-F, USGS B 1324-E, USGS B 1435-D south-central-eastern, OFR OF-86-11

southeast-central, USGS B 1224-F southeastern, GRI, IC 41 (XI), OFR OF-70-03, OFR USGS-10, OFR USGS-14, RI 14 (X), R 22 (XI), SP 21 (X), SP 12 (XI), SP 2 (XI), USGS WSP 1652-A southwestern, OFR OF-75-06

west-central, Oil and natural gas map

western, B 5 (X), Cross section, GB 1979, GB 1989, Gravity and magnetic map, IC 17 (X), IC 7 (XI), IMMR, Isopach and structure map, OFR 81-790, OFR OF-80-02, OFR OF-82-02, OFR OF-82-03, OFR OF-85-01, OFR OF-88-06, OFR OF-88-15, OFR OF-94-10, OFR OF-94-11, OFR OF-94-12, OFR OF-97-01, Oil and natural gas map, R 39 (X), R 11 (XI), R 44 (XI), RI 6 (X), RI 11 (X), RI 5 (XI), SP 1 (X), SP 10 (X), SP 14 (X), SP 15 (X), SP 17 (X), SP 18 (X), SP 6 (XI), SP 11 (XI), SP 7 (XI), SP 12 (XI), TS 3 (XI), USGS B 1012-A-B. USGS B 1012-C-D. USGS B 1012-E-F, USGS PP 790 Kentucky Highway 546, GB 1991

- Kentucky Highway 61, MCS 12 (XI)
- Kentucky Highway 80, MCS 2 (XI) Kentucky River, OFR 85-4052, OFR
- USGS-11
- Kentucky River Area Development District, USGS MF-865-E, USGS MF-865-F, USGS MF-865-H
- Kentucky River Basin, IC 37 (XI), IC 52 (XI), OFR 90-4191, OFR USGS-14
- Kermit, USGS PP 507
- Keystone, USGS B 1122-E
- Kirksey 7.5-min. quadrangle, USGS HA-113
- Knott County, GRI, IC 43 (XI), Structural and areal map, USGS B 1042-P, USGS MAP C-22, USGS HA-36

Knox County, GRI, USGS HA-38 Kosmosdale 15-min. quadrangle, Topographic map

- L
- La Center 7.5-min. quadrangle, USGS HA-173
- Lake Cumberland, GB 1978
- Larue County, USGS HA-33
- Laurel County, USGS HA-38
- Lawrence County, GRI, OFR 75-316, OFR OF-74-04, OFR OF-74-05, OFR OF-83-02, OFR OF-83-06, Structural and areal map, USGS HA-37, USGS WSP 1867

Leatherwood 7.5-min. quadrangle, USGS MAP C-22

Lee County, OFR OF-63-03, SP 10 (X), Structural and areal map, USGS MAP C-42, USGS HA-37

Leslie County, GRI, OFR OF-57-01, OFR OF-83-05, RI 9 (XI), SP 7 (XI), USGS MAP C-22, USGS HA-38 Letcher County, GRI, IC 41 (XI), OFR

HA-36, USGS WSP 1809-A Levias, USGS B 1122-E Levisa Fork of the Big Sandy River, Flood map, OFR USGS-12 Lewis County, GRI, Misc. map, USGS HA-17, USGS HA-73, USGS HA-94 Lexington, Misc. map, OFR 85-4052, OFR USGS-06, OGR, R 29 (XI) Lexington 30 X 60 min. quadrangle, MCS 10 (XI), Topographic map Licking River, Flood map, OFR USGS-13 Licking River District, IC 23 (XI), IMMR, OFR OF-86-07 Lincoln County, CR 1 (XI), Gravity and magnetic map, Structural and areal map, USGS HA-20 Little Cypress 7.5-min. quadrangle, USGS HA-155 Livermore 7.5-min. quadrangle, Bedrock topography map Livingston County, GB 1973, IC 16 (X), SP 22 (X), Structural and areal map, USGS B 1012-A-B, USGS B 1012-C-D, USGS B 1012-E-F, USGS B 1258-A, USGS HA-34, USGS HA-114, USGS HA-129, USGS HA-159, USGS WSP 1417 Logan County, IC 7 (XI), OFR OF-93-07, SP 21 (X), USGS HA-32 Louisa, OFR USGS-12 Louisa 7.5-min. quadrangle, USGS B 1526 Louisville, IC 10 (X), USGS WSP 1360-B, USGS WSP 1579, USGS WSP 1819-C, USGS WSP 2202 Louisville 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map Lovelaceville 7.5-min. quadrangle, USGS HA-172 Lynn Grove 7.5-min. quadrangle, USGS HA-112 Lynnville 7.5-min. quadrangle, USGS HA-125 Lyon County, OFR 78-25, USGS HA-34, USGS HA-156, USGS HA-159 Μ Madison 30 X 60 min. quadrangle, Topographic map Madison County, Gravity and magnetic map, IC 51 (XI), Structural and areal map, USGS HA-19

OF-83-05, USGS MAP C-22, USGS

Madisonville 30 X 60 min. quadrangle, Topographic map

Madisonville West 7.5-min.

quadrangle, Structural and areal map Magoffin County, GRI, IC 47 (XI), SP 1 (X), Structural and areal map, USGS B 1020-A, USGS B 1042-P, USGS B 1047-A, USGS B 1047-B, USGS HA-36, USGS WSP 1867

- Mammoth Cave 15-min. quadrangle, Topographic map
- Mammoth Cave area, USGS WSP 1837
- Mammoth Cave National Park, OFR USGS-03
- Marion County, Gravity and magnetic map, USGS HA-21

Marshall County, CR 5 (X), IC 16 (X), USGS HA-13, USGS HA-93, USGS HA-113, USGS HA-114, USGS HA-115, USGS HA-116, USGS HA-117, USGS HA-129, USGS HA-155, USGS HA-156, USGS HA-158, USGS HA-159, USGS HA-160

- Martin County, GRI, OFR 79-1303, USGS HA-36, USGS PP 507
- Mason County, IC 53 (XI), OFR OF-86-01, USGS HA-16, USGS HA-94
- Maxey Flats, OFR 79-1329
- Mayfield, IC 15 (X), OFR OF-64-02 Mayfield 7.5-min. quadrangle, USGS HA-164
- Maysville, GB 1968, GB 1991, USGS B 1244-B
- Maysville 30 X 60 min. quadrangle, Topographic map

McCracken County, CR 7 (X), Topographic map, USGS B 1258-A, USGS B 1258-B, USGS HA-13, USGS HA-117, USGS HA-129, USGS HA-155, USGS HA-157, USGS HA-168, USGS HA-171, USGS HA-172, USGS HA-173, USGS HA-174, USGS HA-176, USGS HA-177, USGS WSP 1417

McCreary County, OFR USBM-01, USGS HA-38, USGS MF-1341-B, USGS MF-1341-C, USGS MF-1348-A, USGS MF-1348-B, USGS MF-1348-D, USGS PP 427-A, USGS PP 427-B, USGS PP 427-C

McLean County, USGS HA-29

- Meade County, OFR USGS-07, Structural and areal map, USGS HA-33, USGS HA-95
- Melber 7.5-min. quadrangle, USGS HA-174
- Menifee County, GRI, USGS HA-37 Mercer County, Gravity and magnetic
- map, USGS HA-20 Metcalfe County, Structural and areal
- map, USGS HA-32 Metropolis 7.5-min. quadrangle, USGS

B 1258-B, USGS HA-171

- Mexico, SP 22 (X)
- Michigan Basin, OFR OF-94-02, OFR

OF-94-12

- Midcontinent, USGS B 2111
- Middlesboro, RI 9 (X)
- Middlesboro 30 X 60 min. quadrangle, MCS 11 (XI), Topographic map Milburn 7.5-min. quadrangle, USGS
- HA-179 Mississippi, Misc. map, USGS poster
- **Mississippi Embayment,** OFR 77-228, OFR 77-229, OFR 77-230, OFR 92-260, OFR MF-914, OFR OF-82-03
- Mississippi River, GB 1984
- Mississippi Valley, SP 22 (X), SP 14 (XI)
- Mississippian Plateau, OFR 78-25, USGS WSP 1603
- Missouri, Cross section, Misc. map, OFR 77-228, OFR 77-229, OFR 77-230, OFR USGS-28, USGS HA-181, USGS poster, USGS PP 1236
- Monroe County, SP 15 (X), USGS HA-32
- Montana, OFR OF-84-03
- Montgomery County, OFR OF-64-01, USGS HA-18
- Morehead, Flood map
- Morehead 30 X 60 min. quadrangle, Topographic map
- Morgan County, GRI, Structural and areal map, USGS B 1020-A, USGS B 1047-A, USGS B 1047-B, USGS B 1122-F, USGS HA-37, USGS WSP 1867
- Morganfield, OFR OF-82-02
- Mount Vernon 7.5-min. quadrangle, Bedrock topography map
- **Muhlenberg County,** B 1 (X), IC 11 (X), IC 12 (X), Structural and areal map, USGS HA-29
- Munfordville, OFR USGS-09 Murray 30 X 60 min. quadrangle, Topographic map

Ν

- Nashville 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map
 Nelson County, USGS HA-21
 Newada, USGS PP 1126-A–J
 New Concord 15-min. quadrangle, Topographic map
 New Concord 7.5-min. quadrangle, USGS HA-118
 New Madrid Southeast 7.5-min. quadrangle, USGS HA-178
 Newburgh 7.5-min. quadrangle, Bedrock topography map
- Nicholas County, USGS HA-16
- Noble 7.5-min. quadrangle, OFR OF-88-05

North Fork River, OFR 81-1215 Nortonville 7.5-min. quadrangle, Structural and areal map

0

- Oak Level 7.5-min. quadrangle, USGS HA-116 Oakton 7.5-min. quadrangle, USGS HA-182 Ohio, B 2 (X) Cincinnati, R 29 (X), GB 1968, GB 1987, MCS 5 (XI), OFR 79-1303, OFR OF-94-03, OFR USGS-02,
- OFR USGS-32, USGS PP 583-B Ohio County, GB 1973, IC 11 (X),
- USGS HA-26 Ohio River, OFR 2-74, OFR OF-82-02, USGS PP 1126-A–J
- Ohio Valley, B 5 (X), GB 1974, IC 18 (X), IC 49 (XI), OGR, R 49 (X), RI 8 (XI), SP 21 (XI), USGS WSP 1411, USGS WSP 1818
- Oldham County, USGS HA-22, USGS HA-97
- Olive Hill, R 5 (X)
- **Olmstead 7.5-min. quadrangle,** USGS HA-176
- Owensboro 7.5-min. quadrangle, USGS PP 488
- Owensboro West 7.5-min. quadrangle, Bedrock topography map Owsley County, IC 42 (XI), USGS HA-
- 38

Р

Paducah, TS 7 (XI), USGS WSP 1417 Paducah 30 X 60 min. quadrangle, General Ky. map, Linear features map, Topographic map Paducah East 7.5-min. quadrangle, USGS B 1258-A, USGS HA-177 Paducah West 7.5-min. quadrangle, USGS B 1258-B, USGS HA-177 Paintsville, Flood map, USGS WSP 1257 Panther 7.5-min. quadrangle, Bedrock topography map, OFR USGS-15 Paris Landing 7.5-min. quadrangle, USGS HA-165 Pembroke 7.5-min. quadrangle, Structural and areal map Pendleton County, USGS HA-15, USGS HA-94 Pennyroyal Plateau, SP 12 (XI) Perry County, GRI, OFR OF-83-05, USGS MAP C-22, USGS HA-36 Pike County, GRI, OFR OF-83-01, RI 7 (X), SP 8 (X), USGS HA-36, USGS PP 507, USGS WSP 1809-A Pikeville, OFR USGS-12

Pikeville 30 X 60 min. quadrangle, MCS 6 (XI), Topographic map Pine Mountain, IC 1 (X), IC 34 (XI), IC 41 (XI), RI 14 (X), SP 24 (X), SP 12 (XI) Pleasant Grove Spring Basin, OFR OF-93-07 Plum Creek, USGS WSP 1798-G Powell County, OFR OF-62-04, OFR OF-64-01, USGS HA-19 Prestonsburg, MCS 2 (XI) Prestonsburg 7.5-min. quadrangle, USGS WSP 1359 Princess District, IC 18 (XI), IMMR, OFR OF-86-08, USGS PP 839, Pulaski County, RI 20 (X), TS 2 (X), USGS HA-35

R

Reed 7.5-min. quadrangle, Bedrock topography map
Robertson County, USGS HA-16
Robinson Forest, OFR OF-95-01
Rockcastle County, Structural and areal map, USGS HA-38
Rocky Branch, RI 3 (XI)
Rowan County, CR 2 (XI), GRI, OFR 85-145, USGS B 1122-F, USGS HA-17
Rushing Creek 7.5-min. quadrangle, USGS HA-160
Russell County, GB 1978, USGS HA-35

S

Sacramento 7.5-min. quadrangle, Bedrock topography map Salversville, Flood map Salyersville North 7.5-min. quadrangle, USGS B 1047-B Salversville South 7.5-min. quadrangle, IC 47 (XI) Schwenk, USGS B 1012-E-F Scott County, USGS HA-25, USGS hydrologic atlas Scottsville, USGS WSP 1528 Seitz 7.5-min. quadrangle, Structural and areal map Senator, USGS B 1012-E-F Sharpsburg, OFR 80-1242 Shawneetown 7.5-min. quadrangle, Bedrock topography map Shelby County, Gravity and magnetic map, OFR OF-51-01, USGS HA-24, USGS PP 1151-B, USGS WSP 1798-G Shelbyville, OFR OF-51-01 Shepherdsville 15-min. quadrangle, Topographic map

Sikeston 30 X 60 min. quadrangle, Topographic map

Simpson County, CR 3 (X), OFR OF-68-01, USGS HA-32 Sinking Creek, OFR OF-99-03, RI 7 (XI) Sitka 7.5-min. quadrangle, USGS B 1526 Slade, OFR OF-93-02 Slaughters 7.5-min. quadrangle, Structural and areal map Sloans Valley, RI 20 (X) Smith Mills 7.5-min. quadrangle, Bedrock topography map Somerset, RI 8 (X) Somerset 30 x 60 min. quadrangle, MCS 18 (XI) Southwestern District, IC 21 (XI), IMMR. OFR OF-86-09 Spencer County, USGS HA-24 Spottsville 7.5-min. quadrangle, Bedrock topography map Stevens Hill, GB 1986, Misc. KGS rept. Sulphur Lick, SP 15 (X) Sulphur Well 7.5-min. quadrangle, Structural and areal map Sutherland 7.5-min. quadrangle, Bedrock topography map, OFR USGS-15 Symsonia 7.5-min. quadrangle, USGS

HA-157

Т

Taylor County, USGS HA-35

- **Tell City 30 X 60 min. quadrangle,** Topographic map
- Tennessee, Cross section, GB 1984, MCS 3 (XI), Misc. map, OFR 77-228, OFR 77-229, OFR 77-230, OFR 79-1303, OFR OF-74-03, OFR TVA-01, OFR USGS-28, RI 2 (XI), SP 1 (X), SP 21 (X), SP 7 (XI), USGS B 1252-F, USGS B 1282, USGS HA-124, USGS HA-125, USGS HA-161, USGS HA-162, USGS HA-167, USGS HA-178, USGS HA-180, USGS HA-181, USGS poster, USGS PP 1236
- **Tennessee Valley,** B 5 (X)
- Tilford 7.5-min. quadrangle, USGS MAP C-22
- Tiptop 7.5-min. quadrangle, Structural and areal map, USGS B 1042-P

Todd County, Structural and areal map, USGS HA-34

- Tompkinsville, SP 15 (X)
- **Tompkinsville 30 x 60 minute quadrangle,** MCS 13 (XI), Topographic map
- **Tradewater River Basin,** USGS WSP 1940
- Trigg County, OFR 78-25, USGS HA-34, USGS HA-156, USGS HA-160

Trimble County, USGS HA-23, USGS HA-97 Triplett Creek, Flood map Troublesome Roadless Area, USGS MF-1341-B, USGS MF-1341-C

U

U.S. Highway 27, MCS 1 (XI) Union County, SP 10 (X), USGS HA-28, USGS HA-129 Uniontown 7.5-min. quadrangle, Bedrock topography map United Kingdom, SP 22 (X) United States Atlantic coast, OFR 94-211 central, OFR OF-90-03, USGS PP 1538-F-G, USGS PP 1538-M east-central, USGS MF-1712 southeastern, OFR 84-122 western, SP 22 (X) Upper Cumberland District, IC 22 (XI), IMMR, OFR OF-86-10 Upper Mississippi Valley, OFR OF-94-12 Utah, USGS PP 1126-A-J

V

Valley and Ridge Province, SP 7 (XI) Varney, USGS PP 507 Vicco 7.5-min. quadrangle, USGS MAP C-22 Vincinnes 30 X 60 min. quadrangle, Topographic map Vine Grove 15-min. quadrangle, Topographic map Virginia, OFR 77-123, OFR 79-1303, OFR OF-79-02, RI 2 (XI), SP 14 (X), SP 7 (XI), USGS B 1142-B W Wabash Island 7.5-min. quadrangle, Bedrock topography map Wabash Valley, OFR OF-94-12 Warren County, CR 6 (X), IC 11 (X), IC 7 (XI), RI 17 (X), USGS HA-32 Washington County, Gravity and magnetic map, USGS HA-21 Water Valley 7.5-min. quadrangle,

- USGS HA-162 Wayne County, GB 1978, USGS HA-35
- Webster County, GB 1969, IC 1 (XI), Structural and areal map, USGS HA-30
- West Frankfort 30 X 60 min. quadrangle, Topographic map West Franklin 7.5-min. quadrangle, Bedrock topography map
- West Virginia, SP 15 (X), SP 17 (X), USGS B 1526
- Western Kentucky Coal Field, B 2 (XI),

GB 1966, IC 8 (XI), OFR OF-86-03, OFR OF-94-12, OFR USGS-26, RI 15 (X), USGS B 1394-B, USGS WSP 1599

- Western Kentucky Fluorspar District, GB 1973, GB 1986, USGS MF-2, USGS PP 1151-D
- Westplains 7.5-min. quadrangle, USGS HA-166
- White Oak 7.5-min. quadrangle, Structural and areal map, USGS B 1047-A

Whitesburg, USGS WSP 1809-A

Whitley County, GRI, USGS HA-38 Wickliffe 7.5-min. quadrangle, USGS HA-185

Wickliffe Northwest 7.5-min. quadrangle, USGS HA-185 Wickliffe Southwest 7.5-min.

quadrangle, USGS HA-183

Williamson 30 X 60 min. quadrangle, Topographic map

Wilson 7.5-min. quadrangle, Bedrock topography map

Winchester 30 X 60 min. quadrangle,

General Ky. map, Linear features map, Topographic map

- Wolfe County, GRI, Structural and areal map, USGS B 1020-A, USGS MAP C-42, USGS HA-37
- Wolfe Island 7.5-min. quadrangle, USGS HA-182

Woodbury, OFR 53-73

- Woodford County, Gravity and magnetic map, OFR OF-93-04, RI 7 (XI), RI 13 (XI), USGS HA-24
- Wrigley 7.5-min. quadrangle, USGS B 1122-F

Y

Yankeetown 7.5-min. quadrangle, Bedrock topography map

Subject Index

A

Abandoned mine lands, OFR OF-80-05 Acadian Orogeny, R 38 (XI) Acid mine drainage, OFR OF-88-10 Acidizing, SP 21 (X) Aerial photography, SP 1 (X) Aeromagnetic intensity, Gravity and magnetic map, OFR 77-229, OFR USGS-28, OFR USGS-29 Agricultural practices, OFR OF-93-06, OFR OF-93-07, OFR OF-94-01 Alluvium, OFR USGS-11, OFR USGS-12, OFR USGS-13, USGS WSP 1411, **USGS WSP 1818** Amburgy coal, OFR OF-83-10, OFR OF-83-13, OFR OF-83-16, OFR OF-83-19 American Association of Petroleum Geologists, GB 1977 Amos coal, RI 5 (XI) Anticlines, USGS PP 1126-A-J Archeology, SP 12 (XI) Ash, OFR OF-81-03, OFR OF-83-03, OFR OF-83-13, OFR OF-83-14, OFR OF-83-15, OFR OF-84-02, OFR OF-95-03, RI 5 (XI) Ashlock Formation, USGS B 1224-D

B

Babb Fault System, USGS B 1012-A-B Barite, OFR OF-84-07 Barium, R 31 (XI) Barlow Limestone, OFR OF-94-12 Basin-floor fans, OFR OF-94-12 Bedrock conditions, Misc. map Beech Creek Limestone, OFR OF-94-12, OF-97-05, Structural and areal man Belle Scott Quarry, OFR USGS-07 Berea Sandstone, OFR OF-83-01, OFR OF-83-02, SP 8 (X) Berry School Field, OFR OF-94-10 Bethel Channel, SP 14 (X) Bethel Sandstone, RI 11 (X), SP 18 (X) Bibliographies, IC 2 (XI), IC 11 (XI), OFR C-428, OFR OF-68-03, OFR OF-80-03, OFR OF-87-06, OFR OF-88-01, OFR USGS-23, SP 19 (X), SP 23 (X), SP 1 (XI) Big Clifty Sandstone, IC 7 (XI) Big Four Fault System, USGS B 1042-S Big Lime formation, OFR OF-83-05, SP 2 (XI), SP 7 (XI), SP 9 (XI) **Big Sinking Field,** SP 10 (X) Big Sinking Pool, OFR OF-62-04, OFR OF-63-03

Big Six formation, OFR OF-83-06, OFR OF-94-10 Biostratigraphy, OFR 84-270, USGS PP 1451 Black River Group, MCS 5 (XI) Black shale, General Ky. map, GRI, Isopach and structure map, OFR 79-1303, OFR OF-80-02, OFR OF-94-11, OFR USGS-30, RI 2 (XI), SP 8 (X), SP 3 (XI), SP 5 (XI), SP 6 (XI), SP 9 (XI), SP 11 (XI) Black Warrior Basin, SP 2 (XI) Blackhawk Formation, USGS PP 1126-A–J Blocher Member, Isopach and structure map Bon Harbor Pool, SP 8 (X) Borden Formation, GB 1980, USGS B 1224-F, USGS B 1354-B, USGS PP 1007 Bouguer gravity, Gravity and magnetic map, OFR OF-63-01, OFR OF-76-05 Boyle Limestone, OFR OF-50-01 Brachiopods, USGS PP 1066-L, USGS PP 1066-M, USGS PP 583-A Breathitt Formation, OFR OF-86-06, RI 3 (XI), USGS PP 1151-G Brine, OFR USGS-08, RI 2 (X), RI 4 (X) Brown shale, SP 21 (X) Brownsville Paleovalley, RI 21 (X) Bryozoans, USGS 1066-I Btu, OFR OF-81-04, OFR OF-83-16, OFR OF-83-17, OFR OF-83-18, OFR OF-84-04 С

Calcium, B 5 (X), General Ky. map, IC 14 (X), IC 34 (XI), IC 41 (XI), IC 53 (XI), R 39 (X)

Calloway Creek Limestone, USGS B 1224-D

Cambrian Period, IC 54 (XI), OFR OF-94-12, Oil and natural gas map, R 44 (XI), RI 4 (XI), RI 12 (XI), SP 14 (X), SP 15 (X), SP 17 (X), SP 18 (X), SP 21 (X), SP 3 (XI), TS 4 (XI)

Camp Nelson Limestone, IC 51 (XI)

Cane Valley Limestone, RI 13 (X)

Carbonates, IC 22 (X), IC 4 (XI), IC 53 (XI), IC 55 (XI), OFR 81-509, OFR OF-68-03, OFR OF-94-12, R 28 (XI), RI 18 (X), SP 21 (X)

Carbondale Formation, OFR USGS-26, RI 6 (X)

1990, OFR 75-316, OFR OF-88-14, OFR OF-93-02, R 5 (XI) Carter coordinate map, General Ky. map Carter coordinate system, General Ky. Map, OF-88-04 Cartography, SP 17 (X) Caseyville Formation, OFR OF-88-06 Caves, SP 12 (XI) Cement slurries, SP 15 (X) Cenozoic Era, GB 1974 Ceramic clays, USGS B 1282 Chaetetella, IC 14 (XI) Chattanooga Shale, Isopach and structure map, Structural and areal map Chesterian Series, B 5 (XI), Misc. KGS Rept., OFR OF-67-01, OFR OF-94-12, SP 2 (XI) Chromatography, SP 6 (XI) Cincinnati Arch, OFR OF-33-01, OFR OF 89-02, USGS PP 1151-C, USGS PP 1151-F Clastics, OFR OF-94-12 Clay, IC 5 (X), OFR OF-82-05, R 3 (X), R 5 (X), RI 3 (X), RI 12 (X), USGS B 1122-F, USGS B 1282, USGS MF-261, USGS PP 1298 Clays Ferry Formation, USGS B 1066-H, USGS B 1224-B, USGS PP 1066-I Clean Air Act Amendments of 1990, IC 38 (XI), SP 21 (XI) Cleveland Shale Member, Isopach and structure map Clinometric map, Topographic map Clinton Field, SP 7 (XI) Clinton formation, OFR OF-83-06 Coal, IC 59 (XI) Availability, OFR OF-88-05, OFR OF-90-02 Balls, OFR OF-81-12 Compliance, OFR OF-84-03, GB 1981, IC 11 (X), IC 23 (X), IC 8 (XI), IC 9 (XI), IC 12 (XI), IC 13 (XI), IC 18 (XI), IC 19 (XI), IC 20 (XI), IC 21 (XI), IC 22 (XI), IC 23 (XI), IC 29 (XI), IC 38 (XI), IC 40 (XI), IC 42 (XI), IC 43 (XI), IC 47 (XI), IC 48 (XI), IMMR Liquefaction, SP 3 (XI), SP 9 (XI), OFR 81-1215, OFR OF-79-02, OFR OF-81-02, OFR OF-81-03, OFR OF-81-04, OFR OF-81-05, OFR OF-83-10, OFR OF-83-11, OFR OF-83-12, OFR OF-83-13,

Carboniferous Period, B 3 (XI), GB

OFR OF-83-14, OFR OF-83-15, OFR OF-83-16, OFR OF-83-17, OFR OF-83-18, OFR OF-83-19, OFR OF-83-20, OFR OF-83-21, OFR OF-84-01, OFR OF-84-02, OFR OF-84-04, OFR OF-84-02, OFR OF-84-04, OFR OF-88-06, OFR OF-87-06, OFR OF-88-01, OFR OF-88-02, OFR OF-88-07, OFR OF-88-13, OFR OF-93-01, OFR OF-94-12, OFR USGS-27, OGR

Mines, OFR OF-80-06, OFR OF-88-01, OFR OF-88-02, OFR OF-88-07, OFR OF-94-09, OFR OF-96-02 Mining, OFR OF-94-12

- Quality, OFR OF-83-09, OFR OF-86-02, OFR OF-86-03, R 7 (XI), R 20 (XI), R 22 (XI), R 36 (XI), RI 14 (XI)
- **Resources**, OFR OF-83-09, RI 1 (X), RI 6 (X), SP 1 (X), SP 18 (X), SP 19 (X), SP 5 (XI), SP 21 (XI)
- Thickness, MCS 20 (XI), OFR OF-86-04, OFR OF-86-05, OFR OF-86-07, OFR OF-86-08, OFR OF-86-09, OFR OF-86-10, USGS B 1020-A, USGS B 1042-P, USGS B 1047-A, USGS B 1047-B, USGS B 1122-F, USGS B 1526, USGS MAP C-22, USGS MAP C-42, USGS MF-2275, USGS PP 1126-A–J, USGS PP 507, USGS PP 839
- Coalbed methane, OFR OF-85-01
- Commodore Fault System, USGS B 1012-C–D
- Completion practices, SP 8 (X), SP 14 (X)
- Complexiopollis, USGS PP 743-C
- **Computers,** OFR OF-94-11, SP 15 (X), SP 18 (X)
- Conglomerate, IC 1 (X)
- **Conoco No. 1 Turner well,** OFR OF-94-12
- **Conodonts,** OFR 84-270, OFR OF-76-04, R 29 (X)
- Corals, USGS PP 1066-N
- Core, IC 19 (X), IC 3 (XI), OFR 82-219, OFR 92-260, OFR OF-70-03, OFR OF-79-01, OFR OF-80-01, OFR OF-82-01, OFR OF-86-01
- Core descriptions, OFR 75-316, OFR OF-73-02, OFR USGS-10, OFR USGS-26
- **Corniferous formation,** OFR OF-83-06, SP 21 (X), SP 11 (XI)
- Cretaceous Period, OFR 92-260, OFR USGS-17, OFR USGS-18, OFR USGS-19, OFR USGS-20, OFR USGS-21, OFR USGS-22, USGS PP 643-F

Crittenden County Fault Zone, USGS PP 1538-J

Cumberland Overthrust, OFR OF-79-02, R 22 (XI)

D

Depositional environments, B 5 (XI), GB 1980, GB 1990, OFR OF-83-08, OFR OF-83-09, OFR OF-88-06, OFR OF-92-02, OFR OF-94-12, SP 22 (X), USGS PP 768, USGS PP 1007

Derbyshire fluorspar deposits, SP 22 (X)

Desmoinesian Series, OFR OF-94-12 **Detergents**, SP 15 (X)

- Devonian Period, B 4 (XI), GB 1981, GB 1994, General Ky. map, GRI, IBS 2, IC 17 (X), Isopach and structure map, OFR 79-1303, OFR 82-219, OFR 85-145, OFR OF-64-01, OFR OF-79-11, OFR OF-80-02, OFR OF-94-11, RI 2 (XI), SP 8 (X), SP 6 (XI), SP 9 (XI), SP 11 (XI), TS 2 (X), USGS PP 1298
- Dewey Lake, OFR 77-123
- Diagenesis, GB 1994, OFR OF-94-12
- Diamond Caverns, SP 6 (X)
- Dolomite, GB 1975, General Ky. map, IC 31 (XI), OGR, USGS PP 1151-A Drakes Formation, USGS B 1224-D,
- USGS PP 1126-A–J Drilling, SP 10 (X)
- **Deep,** SP 4 (X), SP 15 (X), SP 18 (X) **Dyers Hill Mine,** SP 22 (X)

Е

- Earth science, OGR Earthquakes, Misc. map, OFR 80-1242, OFR 81-198, OFR OF-83-22, OFR OF-90-03, OFR TVA-01, OGR, SP 14 (XI), USGS MF-1712, USGS poster, USGS PP 1236
- **East Continent Rift Basin,** SP 18 (XI) **Eastern Kentucky Tight Formation**
- Committee, OFR OF-83-01, OFR OF-83-02, OFR OF-83-05, OFR OF-83-06 Echinoderms, USGS PP 1066-K
- Economic geology, CR 1 (X), CR 2 (X), CR 3 (X), CR 4 (X), CR 5 (X), CR 6 (X), CR 7 (X), CR 1 (XI), CR 2 (XI), Misc. KGS Rept.
- **Edwardsville Member of the Muldraugh Formation,** OFR OF-76-04
- Electric transmission, Misc. map Elm Lick coal zone, OFR OF-94-12
- Energy, OFR OF-73-04
- Engineering geology, GB 1987, IC 16 (X), OFR OF-63-03, OFR OF-83-07, OFR OF-83-24, OFR OF-84-08, OFR

USGS-06, USGS B 1258-A, USGS B 1258-B, USGS B 2059-B

- Enhanced recovery, OFR OF-94-10, OFR OF-94-12, SP 1 (X), SP 8 (X), SP 10 (X), SP 2 (XI), SP 3 (XI), SP 6 (XI), SP 9 (XI), SP 11 (XI)
- Environmental geology, GB 1984, Misc. KGS Rept., OFR OF-86-06, OGR
- Eocene Epoch, IC 15 (X), OFR OF-64-02, USGS B 1282, USGS PP 743-B Erosion, GB 1990

F

Financing, SP 1 (X) Fire Clay coal, OFR OF-83-03, OFR OF-83-11, OFR OF-83-14, OFR OF-83-17, OFR OF-83-20, RI 14 (XI), Structural and areal map First Weir sand, OFR OF-74-04, OFR OF-74-05 Fishtrap Lake, OFR 77-123 Flint clay, OFR OF-83-03 Floods, IC 9 (X), OFR USGS-05, RI 7 (XI), USGS WSP 1652-A Floyds Knob Bed, OFR OF-76-04 Fluid flow, OFR OF-94-12 Fluorine, R 36 (XI), SP 22 (X) Fluorite, SP 22 (X) Fluorspar, GB 1973, OFR OF-84-07, SP 22 (X), USGS B 1012-A-B, USGS B 1012-C-D, USGS B 1012-E-F, USGS B 1042-S, USGS B 1122-E, USGS MF-2 Fort Payne Formation, MCS 12 (XI) Forum on Geology of Industrial Minerals, GB 1973, SP 22 (X) Fossils, SP 19 (XI) Trace, GB 1980 Foster coal, RI 5 (XI) Fracturing, OFR OF-94-10, SP 8 (X), SP 18 (X), SP 21 (X), SP 3 (XI), SP 6 (XI), SP 11 (XI) Fresh-saline water interface, USGS hydrologic atlas Ft. Payne formation, OFR OF-74-03 Fuel resources, MCS 21 (XI) Fuller's earth, B 3 (X) Fusulinids, USGS PP 1451

G

- Gas transmission, Misc. map Geochemistry, IC 51 (XI), OFR 79-1303, OFR 81-1097, OFR 81-1098, OFR 81-509, OFR OF-94-12, OFR OGR, USGS-09, RI 10 (XI), RI 14 (XI), SP 21 (X), TS 5 (XI), USGS MF-1341-B, USGS MF-1348-B, USGS WSP 1700, USGS WSP 2254 Geodetics, USGS PP 1538-F–G
- Geography, SP 12 (XI)

Geologic hazards, OGR, USGS PP 1538-F-G, USGS PP 1538-M

Geologic map, General Ky. map, Index map, Misc. KGS Rept., SP 14 (X), USGS C 801, USGS PP 1151-H

- Geological Society of America, GB 1981, GB 1984, GB 1989
- Geological Society of Kentucky, GB 1966, GB 1967, GB 1968, GB 1969, GB 1972, GB 1974, GB 1975, GB 1977, GB 1978, GB 1979, GB 1980, GB 1981, GB 1984, GB 1985, GB 1986, GB 1987, GB 1988, GB 1989, GB 1991, GB 1994
- Geological surveys, R 3 (X)
- Geomorphology, R 3 (XI), USGS PP 488
- Geophysical logs, IC 12 (X), OFR OF-94-12
- Geophysics, OFR OF-94-12, SP 15 (X), SP 2 (XI), SP 3 (XI), SP 5 (XI), SP 7 (XI), USGS PP 1538-E
- **GIS, OFR OF-94-12**
- Golconda Formation, IC 7 (XI)
- Gradyville East Field, SP 21 (X) Grassy Creek Member, Isopach and structure map
- Gravel, RI 1 (XI), RI 8 (XI)
- Gravity, Bouguer, MCS 7 (XI), OFR 77-228, OFR 77-230, OFR MF-914, OFR OF-63-01, OFR OF-76-01, OFR OF-76-02, OFR OF-76-03, OFR OF-76-05, OFR USGS-31, SP 10 (X) Greensburg Oil Field, RI 2 (X)

Η

Handyville Pool, SP 4 (X) Haney Limestone, TS 4 (X) Hanson Creek Formation, USGS PP 1126-A-J Hanson Pool, SP 8 (X) Harrodsburg Limestone, USGS B 1224-I Hazard coal, OFR OF-86-06 Hazel Patch Sandstone, R 42 (XI) Heat flow, USGS PP 1236 Hebertella dalmanella, USGS PP 1066-Μ Heterothina, USGS PP 1066-M High Bridge Group, IC 22 (X), IC 4 (XI), IC 53 (XI), MCS 5 (XI), RI 18 (X) Highway map, General Ky. map, Misc. map Holocene Epoch, OFR 96-724

- Huron Shale Member of the Ohio
- Shale, Isopach and structure map
- Hyden West Pool, SP 7 (XI) Hydrogeology, GB 1984, RI 11 (XI)
- Hydrology, RI 15 (X), USGS WSP 2220

I

Ichnology, OFR OF-94-12 Illinois Basin Coal Planning, Assistance Project, OGR

- Illinois Basin Consortium, Cross section. GB 1989
- **Illinois Basin Energy and Mineral Resources Workshop, OFR OF-94-12**
- **Illinois State Geological Survey, OFR** OF-94-12, OFR OF-97-01
- Indiana-Kentucky Geological Society, GB 1973
- Industrial minerals, General Ky. map, IC 25 (XI), IC 6 (XI), R 1 (X), R 4 (X), R 7 (X), R 9 (X), R 11 (X), R 13 (X), R 16 (X), R 18 (X), R 21 (X), R 22 (X), R 24 (X), R 27 (X), R 32 (X), R 34 (X), R 37 (X), R 40 (X), R 43 (X), R 45 (X), R 47 (X), R 6 (XI), R 9 (XI), R 10 (XI) R 12 (XI), R 13 (XI), R 15 (XI), R 17 (XI), R 19 (XI), R 23 (XI), R 24 (XI), R 26 (XI), R 27 (XI), R 32 (XI), R 33 (XI), R 35 (XI), R 37 (XI), R 43 (XI), SP 23 (X)

J

- Java Formation, Isopach and structure map
- Jeptha Knob, R 28 (X), USGS PP 1151-B, USGS PP 1151-C

Κ

Karst, GB 1984, MCS 10 (XI), MCS 16 (XI), MCS 17 (XI), MCS 18 (XI), MCS 19 (XI), OFR OF-93-02, OFR OF-93-04, OFR OF-93-05, OFR OF-93-07, OFR OF-95-03, OFR OF-97-04, R 3 (XI), R 29 (XI), RI 7 (XI), RI 11 (XI), RI 13 (XI), SP 1 (XI), SP 12 (XI), USGS WSP 1837

Kentucky Coal Resources Information System, OFR OF-89-01

Kentucky Geological Survey, Misc. KGS Rept.

- Kentucky Oil and Gas Association, OFR OF-94-10, OFR OF-94-11, SP 1 (X), SP 4 (X), SP 8 (X), SP 10 (X), SP 14 (X), SP 15 (X), SP 17 (X), SP 18 (X), SP 21 (X), SP 3 (XI), SP 5 (XI), SP 6 (XI), SP 7 (XI), SP 9 (XI), SP 11 (XI)
- Kentucky Oil and Gas Association technical sessions proceedings, OFR OF-94-10, OFR OF-94-11, SP 1 (X), SP 4 (X), SP 8 (X), SP 10 (X), SP 14 (X), SP 15 (X), SP 17 (X), SP 18 (X), SP 21 (X), SP 3 (XI), SP 5 (XI), SP 6 (XI), SP 7 (XI), SP 9 (XI), SP 11 (XI)
- **Kentucky Oil and Gas Conservation** Act of 1960, SP 4 (X)

Kentucky River Fault System, GB 1975, MCS 1 (XI), R 34 (XI) Kenwood Siltstone Member, USGS PP 1007 Kettlebottoms, OFR OF-88-03 Kimberlites, TS 2 (XI) Kinkaid Limestone, IC 14 (XI) Knifley Sandstone, RI 13 (X) Knox Dolomite, SP 21 (X), SP 5 (XI) Knox Group, RI 4 (XI), RI 12 (XI), SP 10 (X), SP 5 (XI), TS 4 (XI) Kyrock Sandstone, RI 21 (X)

L

Lacustrine deposits, OFR OF-94-01 Landfills, Misc. map, OFR OF-77-01 Landslides, OFR USGS-04, USGS B 2059-B, USGS PP 1538-D Lapies-type features, R 3 (XI) LaSalle Anticlinorium, OFR OF-94-12 Latitude, OF-88-04 Laws, R 29 (XI), SP 10 (X), SP 7 (XI), SP 11 (XI) Lead, OFR OF-75-06, OFR OF-84-07, OFR OF-94-12 Lee Formation, R 40 (XI), R 41 (XI), SP 21 (X), USGS PP 1151-G Lexington and Fayette County Planning Commission, OGR Lexington Limestone, USGS B 1066-H, USGS B 1224-C, USGS B 1372-C, USGS PP 768, USGS PP 1066-I Lignite, OFR OF-82-03 Lime, IC 31 (XI), IC 49 (XI) Limestone, B 4 (X), B 5 (X), General Ky. map, IC 14 (X), IC 31 (XI), IC 49 (XI), OFR 79-53, OGR, R 39 (X), R 49 (X), R 22 (XI), RI 8 (X), RI 17 (X) Lithology, OFR 82-219, OFR OF-83-24, OFR OF-84-08, OFR USGS-07 Lithostratigraphy, OFR OF-94-12 Livengood Dome Chert, USGS PP 1126-A-J Logging, OFR OF-81-01, SP 4 (X), SP 8 (X), SP 10 (X) Longitude, OF-88-04 Lost River Chert, R 31 (X) Lower Elkhorn coal, MCS 20 (XI), OFR OF-83-12, OFR OF-83-15, OFR OF-83-18, OFR OF-83-21 Lower Huron Shale, Isopach and structure map Μ Magnesium, B 5 (X)

Magnetics, OFR MF-914 Magoffin Limestone, Structural and areal map Mammoth Cave, SP 12 (XI)

- Manchester coal, OFR OF-84-01, OFR OF-84-02, OFR OF-84-04 Manganese, OFR OF-75-06 Maquoketa Group, Isopach and structure map Marble Hill Bed, USGS PP 1126-A-J Martha Field, OFR OF-74-04, OFR OF-74-05 Mascot Dolomite, RI 4 (XI) Mauzy Formation, OFR 81-790 McMillan Formation, OFR OF-51-01 McMillan Series, OFR OF-33-01 Melones Fault Zone, USGS PP 1126-A-J Meramecian series, B 5 (XI) Mercury, USGS B 1252-F Metallic minerals, IC 25 (XI), SP 23 (X) Methane, OFR OF-94-14 Microearthquakes, USGS PP 1236 **Midcontinent Industrial Minerals** Workshop, USGS B 2111 Middle Huron Shale Member, Isopach and structure map Middlesboro Syncline, RI 2 (XI) Midland Field, OFR OF-72-01 Mine design, surface, OFR OF-83-07 Mineral resources, General Ky. map, MCS 21 (XI), USGS MF-1341-C, USGS MF-1348-D Mineralization, RI 4 (XI) Mineralogy, USGS B 1282, USGS PP 1298 Mine-related subsidence, OFR OF-88-11 Mines Underground, OFR OF-94-12 Surface, USGS PP 427-A, USGS PP 427-B, USGS PP 427-C Mississippi Embayment, OFR USGS-17, OFR USGS-18, OFR USGS-19, OFR USGS-20, OFR USGS-21, OFR USGS-22, USGS PP 743-B, USGS PP 743-C, USGS PP 865, USGS PP 1236 Mississippian Period, GB 1980, GB 1981, IBS 2, IC 7 (XI), IC 14 (XI), IC 41 (XI), Isopach and structure map, MCS 12 (XI), OFR 78-25, OFR 81-1098, OFR 82-219, OFR OF-57-01, OFR OF-79-10. OFR OF-79-11. OFR OF-83-04, OFR OF-94-10, OFR OF-94-12, OFR OF-97-03, R 5 (XI), R 22 (XI), RI 11 (X), RI 13 (X), RI 2 (XI), SP 18 (X), SP 21 (X), SP 2 (XI), SP 7 (XI), SP 9 (XI), TS 4 (X), TS 1 (XI), USGS B 1224-F, USGS B 1354-B, USGS B 1605-B, USGS PP 1007, **USGS PP 1503** Mississippi Valley-type deposits, OFR
- OF-94-12 Mollucks USCS PD 1066 O
- Mollusks, USGS PP 1066-O

Monteagle Limestone, USGS B 1324-E Moore Hill Fault System, USGS B 1012-E–F Moorman Trough, OFR OF-94-11 Morphology, USGS PP 790 Morrowan Series, OFR OF-94-12

Morrowan Series, OFR OF-94-12 Mt. Simon Sandstone, OFR OF-94-12

Ν

National Petroleum Assessment, OFR OF-94-12

Natural gas, AONGRC, B 1 (X), B 4 (XI), General Ky. map, GRI, IBS 2, IC 17 (X), IC 10 (XI), IC 15 (XI), IC 16 (XI), IC 17 (XI), IC 24 (XI), IC 26 (XI), IC 27 (XI), IC 28 (XI), IC 30 (XI), IC 35 (XI), IC 39 (XI), IC 45 (XI), IC 50 (XI), IC 54 (XI), IC 56 (XI), IC 57 (XI), Isopach and structure map, MCS 6 (XI), MCS 9 (XI), MCS 11 (XI), MCS 13 (XI), MCS 14 (XI), MCS 15 (XI), MCS 22 (XI), OFR 93-596, OFR 94-211, OFR OF-48-01, OFR OF-74-04, OFR OF-74-05, OFR OF-88-15, OFR OF-94-02, OFR OF-94-10, OFR OF-94-12, OFR OF-95-04, Oil and natural gas map, OGR, R 2 (X), R 6 (X), R 8 (X), R 10 (X), R 12 (X), R 14 (X), R 17 (X), R 19 (X), R 23 (X), R 25 (X), R 26 (X), R 30 (X), R 33 (X), R 35 (X), R 41 (X), R 42 (X), R 44 (X), R 46 (X), R 48 (X), R 4 (XI), R 8 (XI), R 14 (XI), R 16 (XI), R 18 (XI), R 21 (XI), RI 1 (X), RI 10 (X), RI 14 (X), RI 16 (X), RI 4 (XI), SP 1 (X), SP 8 (X), SP 10 (X), SP 14 (X), SP 15 (X), SP 18 (X), SP 21 (X), SP 2 (XI), SP 5 (XI), SP 7 (XI), SP 9 (XI), SP 11 (XI), Structural and areal map

- Natural Gas Policy Act of 1978, SP 7 (XI)
- Natural resources, OGR
- Nebraskan Series, USGS PP 1126-A–J
- New Albany Shale, IBS 2, Isopach and structure map, OFR OF-94-014, SP 7 (XI), Structural and areal map
- New Cypress Pool, IC 12 (X)
- New Madrid earthquakes, OGR, USGS PP 1538-H
- New Madrid Fault Zone, Misc. map, OFR OF-67-02, OFR OF-94-12, OFR USGS-28, USGS PP 1538-D
- New Madrid Seismic Zone, OGR, R 39 (XI), R 1 (XII), USGS MF-1712, USGS PP 1236, USGS PP 1538-A–C, USGS PP 1538-E, USGS PP 1538-F– G
- Newburg sand, SP 17 (X)

Newman Limestone, IC 41 (XI), R 22 (XI), SP 2 (XI), SP 7 (XI), TS 1 (XI) Newport Pluton, USGS PP 1236 Nitrate, IC 60 (XI), OFR OF-93-04 Nomenclature, OFR OF-88-13 *Normapolles*, USGS PP 865

0

Oak Hill West Pool, SP 1 (X) Ohio Geological Society, GB 1968 Ohio Shale, Isopach and structure map, OFR 85-145

- Oil, B 1 (X), General Ky. map, GRI, IC 17 (X), IC 10 (XI), IC 15 (XI), IC 16 (XI), IC 17 (XI), IC 24 (XI), IC 26 (XI), IC 27 (XI), IC 28 (XI), IC 30 (XI), IC 33 (XI), IC 35 (XI), IC 39 (XI), IC 45 (XI), IC 50 (XI), IC 54 (XI), IC 56 (XI), MCS 6 (XI), MCS 9 (XI), MCS 11 (XI), MCS 13 (XI), MCS 14 (XI), MCS 15 (XI), MCS 22 (XI), OFR 90-4191, OFR 93-596, OFR 94-211, OFR OF-48-01, OFR OF-74-04, OFR OF-74-05, OFR OF-88-15, OFR OF-94-02, OFR OF-94-10, OFR OF-94-12, OFR OF 95-02, OFR OF-95-04
- **Oil Springs Pool,** SP 1 (X), SP 8 (X) **Olentangy Shale,** Isopach and structure map
- Olive Hill Clay Bed, USGS MF-261
- Ordovician Period, GB 1987, General Ky. map, IC 22 (X), IC 4 (XI), IC 51 (XI), IC 53 (XI), IC 55 (XI), IC 57 (XI), Isopach and structure map, MCS 5 (XI), OFR 78-796, OFR 79-834, OFR 79-835, OFR 79-850, OFR 84-270, OFR OF-82-02, OFR OF-94-12, OFR USGS-32, OFR USGS-33, R 29 (X), RI 18 (X), RI 4 (XI), RI 12 (XI), SP 14 (X), SP 15 (X), SP 17 (X), SP 21 (X), SP 2 (XI), SP 3 (XI), TS 4 (XI), USGS B 1066-H, USGS B 1012-C-D, USGS B 1224-B, USGS B 1224-C, USGS B 1224-D, USGS B 1244-B, USGS B 1372, USGS I-1155, USGS PP 583-A, USGS PP 768, USGS PP 583-B, USGS PP 1066-A-G, USGS PP 1066-I, USGS PP 1066-J, USGS PP 1066-K, USGP 1066-L, USGS PP 1066-M, USGS PP 1066-N, USGS PP 1066-O, USGS PP 1126-A-J, USGS PP 1151-E
- Ostracod, USGS PP 1066-H, USGS PP 1066-J
- Otter Creek Coral Bed, USGS B 1244-F

Р

Paducah Gaseous Diffusion Plant, OFR OF-97-02 Paint Creek Formation, Structural and areal map Paint Creek Uplift, Structural and areal map Paleocene Epoch, USGS PP 643-F Paleoecology, RI 14 (XI), USGS PP 790 Paleontology, GB 1987, GB 1994, IC 36 (XI), Misc. KGS Rept., OFR 84-270, OFR OF-51-01, OFR OF-76-04, OGR, R 41 (XI), SP 12 (XI), SP 13 (XI), SP 19 (XI), USGS PP 1066-A-G, USGS PP 1066-J, USGS PP 1066-K, USGS PP 1066-L, USGS PP 1066-O, USGS PP 583-A, USGS PP 583-B, USGS 643-F, USGS PP 743-B, USGS 743-C, USGS PP 865 Paleozoic Era, GB 1977, OFR USGS-30, RI 10 (X), TS 3 (XI), USGS PP 1236 Palvnology, OFR USGS-17. OFR USGS-18, OFR USGS-19, OFR USGS-20, OFR USGS-21, OFR USGS-22, RI 3 (XI), RI 14 (XI), USGS PP 839 Palynomorphs, USGS PP 743-B Paragon Formation, USGS B 1605-B Peccaries, USGS PP 790 Pennington Formation, OFR OF-83-08 Pennsylvanian Period, GB 1966, GB 1969, GB 1989, IBS 1, IBS 3, IC 1 (XI), IC 36 (XI), Isopach and structure map, OFR 81-1098, OFR OF-79-10, OFR OF-82-02, OFR OF-83-04, OFR OF-86-06, OFR OF-86-11, OFR OF-88-06, OFR OF-88-15, OFR OF-92-02, OFR OF-94-12, R 5 (XI), R 40 (XI), R 41 (XI), R 42 (XI), RI 6 (X), RI 15 (X), RI 21 (X), RI 3 (XI), SP 15 (X), SP 2 (XI), USGS B 1394-B, USGS MF-2275, USGS MF-2275 Permeability, SP 15 (X) Permian Period, OFR 81-790 Pesticides, OFR OF-93-04, OFR OF-93-05 Petrography, OFR OF-94-03, OFR OF-94-12, RI 14 (XI) **Petroleum Technology Transfer** Council, OFR OF-94-12 Petrology, USGS PP 1007 Phanerozoic Era, Cross sections Physiography. General Ky. map Pickett Chapel-Exie South Field, SP 3 (XI)Pine Mountain Fault, OFR OF-66-03 Pine Mountain Front, GB 1967 Pionomena, USGS PP 1066-L Pleistocene Epoch, OFR 96-724, OFR OF-94-01 Pliocene Epoch, R 34 (XI) Pollen, USGS PP 643-F, USGS PP 743-C, USGS PP 865

Pollution, OFR OF-93-07, SP 1 (X), SP 21 (XI), USGS WSP 2202
Nonpoint-source, OFR OF-99-03, RI 13 (XI)
Polymers, OFR OF-94-10
Porosity, OFR OF-94-12, SP 10 (X), SP 7 (XI)
Potentiometric surface, OFR 78-25
Precambrian Era, MCS 8 (XI), OFR OF-94-03, R 44 (XI)
Proterozoic Eon, R 44 (XI)
Proton-induced gamma-ray emission analysis, R 36 (XI)
Public service, R 3 (X), SP 1 (X)

Q

Quaternary Period, OFR OF-97-01, USGS PP 488

R

Radio, OFR OF-80-06 Radioactive waste, OFR 79-1329, OFR 82-509 Radioactivity logging, OFR USGS-07 Radon, USGS PP 1236 Reclamation, OFR OF-83-07 Reefs. SP 3 (XI). TS 3 (XI) Reelfoot Rift, , OFR OF-94-12, USGS PP 1538-E, USGS PP 1538-J Reelfoot Scarp, USGS PP 1236 **Reelfoot-Rough Creek-Rome Rift** System, OFR OF-94-12 Reservoir data, AONGRC Rhinestreet Shale, Isopach and structure map Rome Trough, IC 54 (XI), OFR OF-76-01. SP 21 (X). SP 3 (XI) Rough Creek Fault, GB 1973 Rough Creek Fault Zone, Cross section, OFR OF-76-03, OFR OF-82-02, SP 15 (X), SP 3 (XI) Rough Creek Graben, Cross section, OFR OF-94-12 **Rough Creek-Shawneetown Fault** System, GB 1988 Salinity, OFR USGS-25 Saltpeter, SP 12 (XI) Sand, IC 2 (X), RI 7 (X), RI 1 (XI), RI 8 (XI)

Sandstone, IC 1 (X), OFR 81-1098, OFR OF-94-12

Satellite imagery, USGS poster Scenic geology, SP 6 (X), SP 11 (X), SP 12 (X), SP 13 (X), SP 24 (X), SP 8 (XI)

Science Hill Sandstone Member, USGS B 1435-D, SP 3 (XI)

OF-74-05 Sedimentation, USGS WSP 1798-G Sedimentology, GB 1984, GB 1987, GB 1994, OFR 83-4152, OFR OF-53-01, OFR OF-76-04, OFR OF-86-11, OFR OF-94-12, R 42 (XI), RI 11 (X), RI 13 (X), RI 21 (X) Seismic reflection, OFR OF-94-12, USGS PP 1236, USGS PP 1538-A-C Seismicity, General Ky. map, Misc. map, OFR OF-95-02, OFR 96-724, OFR MF-914, OFR OF-94-12, R 44 (XI), TS 7 (XI), USGS MF-1712, USGS PP 1236 Seismology, OFR OF-94-12, R 39 (XI), USGS PP 1538-A-C Seventy Six oil pool, OFR OF-48-01 SH waves, R 39 (XI) Shaded relief map, General Ky. map, **USGS I-2206** Shale, OFR 81-1097, OFR OF-82-05, RI 3 (X), SP 15 (X), USGS PP 298 Shales, OFR 82-219, RI 12 (X) Shawneetown Fault Zone, OFR OF-82-02 Silica, IC 1 (X), IC 2 (X), IC 4 (XI), IC 34 (XI), IC 41 (XI), IC 53 (XI) Siliciclastics, OFR OF-94-12 Silurian Period, B 2 (X), OFR OF-64-01, OFR OF-94-10, SP 11 (XI), SP 3 (XI), TS 2 (X), TS 3 (XI), USGS PP 1126-A-J, USGS PP 1151-C, USGS PP 1151-F Sinkholes, R 29 (XI) Slade Formation, USGS B 1605-B Slope map, Topographic map Socioeconomics, OGR Source rocks, OFR OF-94-12 Spectrographic analysis, OFR USGS-30 Sphalerite, USGS B 1252-F Spring Grove Pool, SP 10 (X) Springfield coal, OFR OF-94-12 Springs, IC 8 (X) St. Louis Limestone, OFR OF-94-12 St. Peter Sandstone, IC 57 (XI), OFR OF-94-12, 38, SP 8 (X), SP 3 (XI) Star Fire Mine, RI 6 (XI), RI 10 (XI) Starpoint Sandstone, USGS PP 1126-A-Strategic materials, OFR OF-83-23 Stratigraphy, B 2 (XI), B 3 (XI), B 5 (XI), GB 1967, GB 1977, GB 1980, GB 1985, GB 1986, GB 1987, GB 1994, General Ky. map, IC 8 (XI), IC 14 (XI), MCS 2 (XI), MCS 3 (XI), MCS 4 (XI), OFR 78-796, OFR 79-834, OFR 79-835, OFR 79-850, OFR 81-790, OFR 82-219, OFR OF-33-01, OFR OF-57-01, OFR OF-64-01, OFR

Second Weir sand, OFR OF-74-04, OFR

OF-67-01, OFR OF-76-04, OFR OF-79-02, OFR OF-79-11, OFR OF-82-02, OFR OF-82-03, OFR OF-83-08, OFR OF-88-14, OFR OF-91-01, OFR OF-94-12, OFR OF-97-03, OFR USGS-32, OFR USGS-33, R 31 (X), R 38 (XI), SP 21 (X), SP 5 (XI), SP 9 (XI), SP 11 (XI), TS 2 (X), TS 4 (X), TS 1 (XI), TS 3 (XI), USGS B 1224-B, USGS B 1224-C, USGS B 1224-D, USGS B 1224-F, USGS B 1224-I, USGS B 1244-B, USGS B 1282, USGS B 1324-E, USGS B 1354-B, USGS B 1372-C, USGS B 1394-B, USGS B 1435-D, USGS B 1605-B, USGS I-1155, USGS MF-2275, USGS MF-1291, USGS MF-2275, USGS PP 743-B, USGS PP 768, USGS PP 790, USGS PP 1007. USGS PP 1126-A-J. USGS PP 1126-A-J, USGS PP 1151-A, USGS PP 1151-C, USGS PP 1151-D, USGS PP 1151-E, USGS PP 1151-F, USGS PP 1151-G, USGS PP 1236, **USGS PP 1503**

- Stray Weir sand, OFR OF-74-04, OFR OF-74-05
- Strodes Creek Member, USGS B 1372-C

Strong motion records, OFR OF-91-02

Structural geology, B 3 (XI), B 5 (XI), GB 1967, GB 1975, GB 1986, GB 1988, GB 1994, Gravity and magnetic map, Isopach and structure map, MCS 1 (XI), MCS 5 (XI), MCS 8 (XI), OFR OF-82-02, OFR OF-83-09, OFR OF-89-02, OFR OF-94-11, OFR OF-94-12, OFR OF-95-02, OFR OF-97-01, OF-97-05, OFR USGS-02, R 28 (X), R 34 (XI), R 44 (XI), RI 2 (XI), R 1 (XII), SP 15 (X), SP 21 (X), SP 22 (X), SP 2 (XI), SP 7 (XI), SP 18 (XI)

- Structural and areal map, TS 3 (XI), USGS MAP C-22, USGS PP 1126-A– J, USGS PP 1151-A, USGS PP 1151-B, USGS PP 1151-C, USGS PP 1151-D, USGS PP 1236, USGS PP 1538-J
- Sturgis Formation, USGS B 1394-B
- Sulfate, USGS MF-865-F
- Sulfur, IC 29 (XI), IC 31 (XI), IC 38 (XI), OFR OF-81-05, OFR OF-83-19, OFR OF-83-20, OFR OF-83-21, OFR OF-94-12, R 28 (XI), RI 5 (XI)
- Surface management map, Topographic map
- Sweetland Creek Member, Isopach and structure map
- Synthetic fuels, OGR

Т

Tabb Fault System, OFR OF-84-07

Tar sands, IC 7 (XI), OFR OF-94-12, R 11 (XI), RI 19 (X)

- Taxes, SP 1 (X), SP 4 (X), SP 10 (X)
- Tectonics, B 5 (XI), GB 1977, GB 1990, OFR OF-67-02, OFR OF-76-01, OFR OF-76-03, OFR OF-86-11, OFR OF-92-02, OFR OF-94-10, OFR OF-94-12, R 1 (XII), SP 2 (XI), SP 3 (XI), USGS poster, USGS PP 1126-A–J, USGS PP 1236
- Tertiary Period, OFR USGS-17, OFR USGS-18, OFR USGS-19, OFR USGS-20, OFR USGS-21, OFR USGS-22
- Thermal maturation, OFR OF-94-12 Three Lick Bed, Isopach and structure map
- Tintina Fault, USGS PP 1126-A-J

Topographic map, General Ky. map, Index map, Topographic map

- Topography, RI 13 (XI), SP 25 (X)
- Total dissolved solids, OFR OF-94-12
- **Trace elements,** IC 48 (XI), OFR OF-94-12, USGS B 1252-F
- Trace fossils, R 41 (XI)

Tradewater Formation, OFR OF-94-12, OFR USGS-26 Trempealeauan Stage, SP 14 (X)

Trilobites, USGS B 583-B Turfgrass, OFR OF-99-03

U

- U.S. Environmental Protection Agency, IC 29 (XI)
- U.S. Geological Survey-Kentucky Geological Survey Geologic Mapping Program, SP 4 (X), SP 14 (X), SP 17 (X), USGS C 801 Ullin Limestone, OFR OF-94-12
- Unconventional gas, OFR OF-85-01
- **Underground storage,** SP 10 (X)
- University of Kentucky Institute for Mining and Minerals Research, IMMR, SP 9 (XI)
- Upper Elkhorn No. 3 coal, OFR OF-81-02, OFR OF-81-03, OFR OF-81-04, OFR OF-81-05
- Upper Huron Shale Member, Isopach and structure map
- Upper Mississippi Valley Zinc District, OFR OF-94-12

Upper Olentangy Shale, Isopach and structure map

V

Vienna Limestone, Structural and areal map Volcanoes, USGS poster W

Wabash Valley Fault System, SP 7 (XI) Wabash Valley Rift, OFR OF-94-12 Warsaw Formation, USGS B 1435-D Warsaw Limestone, OFR OF-94-12 Water, GB 1984, IC 4 (X), IC 6 (X), IC 7 (X), IC 10 (X), IC 12 (X), IC 15 (X), IC 18 (X), IC 20 (X), IC 21 (X), IC 37 (XI), IC 44 (XI), IC 52 (XI), MCS 10 (XI), Misc. map, OF 2-74, OFR 53-73, OFR 76-86, OFR 78-25, OFR 79-53, OFR 79-1329, OFR 80-685, OFR 81-1215, OFR OF-64-02, OFR 90-4191, OFR OF-93-04, OFR OF-93-06, OFR OF-93-07, OFR OF-94-01, OFR OF-94-09, OFR OF-94-12, OFR OF-95-01, OFR OF-95-03, OFR OF-96-02, OFR OF-97-04, OFR USGS-03, OFR USGS-05, OFR USGS-06, OFR USGS-08, OFR OF-97-02, OFR USGS-01, OFR USGS-11, OFR USGS-12, OFR USGS-13, OFR USGS-23, OFR USGS-24, OGR, R 30 (XI), R 31 (XI), RI 4 (X), RI 6 (XI), TS 3 (X), TS 5 (XI), TS 6 (XI), USGS HA-13, USGS HA-15, USGS HA-16, USGS HA-17, USGS HA-18, USGS HA-19, USGS HA-20, USGS HA-21, USGS HA-22, USGS HA-23, USGS HA-24, USGS HA-25, USGS HA-26, USGS HA-27, USGS HA-28, USGS HA-29, USGS HA-30, USGS HA-32, USGS HA-33, USGS HA-34, USGS HA-35, USGS HA-36, USGS HA-37, USGS HA-38, USGS HA-72, USGS HA-73, USGS HA-74, USGS HA-75, USGS HA-91, USGS HA-92, USGS HA-93, USGS HA-94, USGS HA-95, USGS HA-96, USGS HA-97, USGS HA-98, USGS HA-110, USGS HA-111, USGS HA-112, USGS HA-113, USGS HA-114, USGS HA-115, USGS HA-116, USGS HA-117, USGS HA-118, USGS HA-124, USGS HA-125, USGS HA-129, USGS HA-130, USGS HA-155, USGS HA-156, USGS HA-157, USGS HA-158, USGS HA-159, USGS HA-160, USGS HA-161, USGS HA-162, USGS HA-163, USGS HA-164, USGS HA-165, USGS HA-166, USGS HA-167, USGS HA-168, USGS HA-169, USGS HA-170, USGS HA-171, USGS HA-172, USGS HA-173, USGS HA-174, USGS HA-175, USGS HA-176, USGS HA-177, USGS HA-178, USGS HA-179, USGS HA-180, USGS HA-181, USGS HA-182, USGS HA-183, USGS HA-184, USGS HA-185, USGS HA-186, USGS WSP

1257, USGS WSP 1328, USGS WSP 1356, USGS WSP 1359, USGS WSP 1360-B, USGS WSP 1417, USGS WSP 1528, USGS WSP 1533, USGS WSP 1579, USGS WSP 1599, USGS WSP 1603, USGS WSP 1607, USGS WSP 1809-A, USGS WSP 1987, USGS WSP 2220

Ground, IC 60 (XI), IC 1 (XII), MCS 10 (XI), MCS 16 (XI), MCS 17 (XI), MCS 18 (XI), MCS 19 (XI), RI 11 (XI), RI 12 (XI), USGS MF-865-E

Quality, IC 60 (XI), IC 1 (XII), OFR

OF-93-04, OFR OF-99-03, RI 2 (X), RI 5 (X), RI 9 (X), RI 15 (X), RI 17 (X), RI 9 (XI), RI 10 (XI), SP 16 (X), SP 20 (X), USGS MF-865-E

Surface, IC 5 (XI), IC 46 (XI), OFR 80-1225, OFR 85-4052, OFR USGS-14, OFR USGS-16, OFR USGS-25, USGS hydrologic atlas, USGS MF-865-F, USGS MF-865-H, USGS PP 427-A, USGS PP 427-B, USGS PP 427-C, USGS WDR KY-78-1, USGS WDR KY-80-1, USGS WDR KY-81-1, USGS WDR KY-82-1, USGS WDR KY-83-1, USGS WDR KY-85-1, USGS WDR KY-88-15USGS WDR KY-89-1, USGS WDR KY-90-1, USGS WSP 1652-A, USGS WSP 1700, USGS WSP 1818, USGS WSP 1819-C, USGS WSP 1837, USGS WSP 1867, USGS WSP 1940, USGS WSP 2254

Waterflooding, OFR OF-62-04, SP 10 (X), SP 5 (XI)

Waulsortian mounds, OFR OF-94-12

Well data, OFR USGS-15

Well descriptions, OFR OF-68-01 West Falls Formation, Isopach and structure map

Williamson coal, OFR OF-83-10, OFR OF-83-13, OFR OF-83-16, OFR OF-83-19

\mathbf{Z}

Zinc, OFR OF-75-06, OFR OF-84-07, OFR OF-94-12, USGS PP 1126-A–J