

Bibliography of North American Geology, 1967

GEOLOGICAL SURVEY BULLETIN 1267



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G E O L O G I C A L S U R V E Y B U L L E T I N 1 2 6 7



UNITED STATES DEPARTMENT OF THE INTERIOR

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GEOLOGICAL SURVEY

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BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY

1967

INTRODUCTION

The current annual volume of the "Bibliography of North American Geology" lists publications that appeared during 1967 concerning the geology of the North American continent, Greenland, the West Indies and adjacent islands, Hawaii, Guam, and other island possessions but not the trust territories of the United States. Articles by American authors published in foreign journals are cited if they deal with North American localities or are of a general nature, but not if they deal only with foreign areas. Articles on North America by foreign authors are included regardless of place of publication, while those of a general nature are included only if they appeared in North American journals.

The citations are listed alphabetically by author, with full title and publication data. There follows a subject index to the papers cited. Geologic names in the index are those used by the individual authors, and their listing here does not imply approval by the Geological Survey. The list of serial publications cited in the bibliography follows on p. VII.

The numbers assigned to the abstracts in this publication are for reference in using the index; they are not order numbers. Publications cited are available in most geological libraries or through interlibrary loan. A list of journals commonly cited in bibliographies of the Survey may be obtained by writing to the U. S. Geological Survey, Washington, D. C. 20242.

The principal contributors to this volume were James W. Clarke, Georgianna D. Conant, Howard R. Cramer, Bettie S. Hackman, Virginia M. Jussen, Elisabeth S. Loud, Mildred C. Mead, Virginia S. Neuschel, and Dorothy B. Vitaliano.

The "Bibliography of North American Geology" comprises the following bulletins: 746-747 (1785-1918), 823 (1919-28), 937 (1929-39), 1049 (1940-49), 1195 (1950-59), 1196 (1960), 1197 (1961), 1232 (1962), 1233 (1963), 1234 (1964), 1235 (1965), and 1266 (1966).

SERIAL LIST

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- Acad. Nat. Sci. Philadelphia Notulae Naturae** — Notulae Naturae of the Academy of Natural Sciences of Philadelphia. Philadelphia, Pa.
- Acad. Nat. Sci. Philadelphia Proc.** — Proceedings of the Academy of Natural Sciences of Philadelphia. Philadelphia, Pa.
- Acad. Sci. Comptes Rendus** — Comptes Rendus Hebdomadaires des Séances de l'Académie des Sciences. Paris, France.
- Acta Cryst.** — Acta Crystallographica. International Union of Crystallography. Copenhagen, Denmark.
- Acta Géog. Lovaniensia** — Acta Géographica Lovaniensia. Institut de Géographie, Université Catholique. Louvain, Belgium.
- Acta Geol. Lilloana** — Acta Geológica Lilloana. Universidad Nacional de Tucumán, Instituto Miguel Lillo. Tucumán, Argentina.
- Acta Geol. Polonica** — Acta Geologica Polonica. Polska Akademia Nauk Komitet Geologiczny. Państwowe Wydawnictwo Naukowe. Warsaw, Poland.
- Acta Zool. Fennica** — Acta Zoologica Fennica. Societas pro Fauna et Flora Fennica. Helsinki, Finland.
- Akad. Nauk SSSR Doklady** — Akademiya Nauk SSSR Doklady. Moscow, U.S.S.R.
- Akad. Nauk SSSR Geol. Inst. Trudy** — Akademiya Nauk SSSR, Trudy Geologicheskogo Instituta. Moscow, U.S.S.R.
- Akad. Nauk SSSR Izv. Fizika Zemli** — Akademiya Nauk SSSR Izvestiya Fizika Zemli [formerly Akad. Nauk SSSR Izv. Ser. Geofiz]. Moscow, U.S.S.R.
- Akad. Nauk SSSR Kom. Izucheniyeu Chetvertich. Perioda Byull.** — Akademiya Nauk SSSR, Byulleten' Komissii po Izucheniyeu Chetvertichnogo Perioda. Moscow, U.S.S.R.
- Alabama Acad. Sci. Jour.** — Journal of the Alabama Academy of Science. Auburn, Ala.
- Alabama Geol. Soc. Bull.** — Alabama Geological Society Bulletin. University, Ala.
- Alabama Geol. Survey Circ.** — Geological Survey of Alabama Circular. University, Ala.
- Alabama Geol. Survey Inf. Ser.** — Geological Survey of Alabama Information Series. University, Ala.
- Alabama Geol. Survey Map** — Geological Survey of Alabama Map. University, Ala.
- Alaska Div. Mines and Minerals Geochem. Rept.** — State of Alaska Department of Natural Resources, Division of Mines and Minerals Geochemical Report. Juneau, Alaska.

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- Albertan Geographer** — The Albertan Geographer. Publication of the Graduate Students, Department of Geography, University of Alberta. Edmonton, Alberta, Canada.
- Allg. Vermessungs-Nachr.** — Allgemeine Vermessungs-Nachrichten. Zeitschrift für alle Zweige des Vermessungs-, Karten- und Liegenschaftswesens sowie für Landesplanung und die Ermittlung von Grundstückswerten. Herbert Wichmann Verlag. Karlsruhe, Federal Republic of Germany.
- Am. Alpine Jour.** — American Alpine Journal. American Alpine Club. New York, N. Y.
- Am. Antiquity** — American Antiquity. Society for American Archeology. Washington, D. C.
- Am. Assoc. Adv. Sci. Pub.** — American Association for the Advancement of Science Publication. Washington, D. C.
- Am. Assoc. Petroleum Geologists Bull.** — Bulletin of the American Association of Petroleum Geologists. Tulsa, Okla.
- Am. Assoc. Petroleum Geologists Cross Sec. Pub.** — American Association of Petroleum Geologists Cross Section Publication. Tulsa, Okla.
- Am. Assoc. Petroleum Geologists Mem.** — Memoir of the American Association of Petroleum Geologists. Tulsa, Okla.
- Am. Assoc. Petroleum Geologists Pacific Sec. Correlation Sec.** — American Association of Petroleum Geologists, Pacific Section, Correlation Section. Los Angeles, Calif.
- Am. Ceramic Soc. Bull.** — American Ceramic Society Bulletin. Columbus, Ohio.
- Am. Ceramic Soc. Jour.** — Journal of the American Ceramic Society. Columbus, Ohio.
- Am. Geog. Soc. Spec. Pub.** — American Geographical Society Special Publication. New York, N. Y.
- Am. Geophys. Union Geophys. Mon. Ser.** — American Geophysical Union Geophysical Monograph Series. Washington, D. C.
- Am. Geophys. Union Trans.** — Transactions of the American Geophysical Union. Washington, D. C.
- Am. Jour. Botany** — American Journal of Botany. Botanical Society of America. Baltimore, Md.
- Am. Jour. Sci.** — American Journal of Science. New Haven, Conn.
- Am. Midland Naturalist** — American Midland Naturalist. University of Notre Dame. Notre Dame, Ind.
- Am. Mineralogist** — American Mineralogist. Mineralogical Society of America. Washington, D. C.
- Am. Mus. Nat. History Bull.** — Bulletin of the American Museum of Natural History. New York, N. Y.
- Am. Mus. Novitates** — American Museum Novitates. American Museum of Natural History. New York, N. Y.
- Am. Naturalist** — American Naturalist. Arizona State University. Tempe, Ariz.

SERIAL LIST

- Am. Philos. Soc. Proc.** — Proceedings of the American Philosophical Society. Philadelphia, Pa.
- Am. Scientist** — American Scientist. Society of the Sigma Xi. New Haven, Conn.
- Am. Soc. Civil Engineers Proc., Jour. Construction Div.** — American Society of Civil Engineers Proceedings, Journal of the Construction Division. New York, N. Y.
- Am. Soc. Civil Engineers Proc., Jour. Eng. Mechanics Div.** — Proceedings of the American Society of Civil Engineers, Journal of the Engineering Mechanics Division. New York, N. Y.
- Am. Soc. Civil Engineers Proc., Jour. Hydraulics Div.** — Proceedings of the American Society of Civil Engineers, Journal of the Hydraulics Division. New York, N. Y.
- Am. Soc. Civil Engineers Proc., Jour. Irrigation and Drainage Div.** — Proceedings of the American Society of Civil Engineers, Journal of the Irrigation and Drainage Division. New York, N. Y.
- Am. Soc. Civil Engineers Proc., Jour. Soil Mechanics and Found. Div.** — Proceedings of the American Society of Civil Engineers, Journal of the Soil Mechanics and Foundations Division. New York, N. Y.
- Am. Soc. Civil Engineers Proc., Jour. Urban Plan. and Devel. Div.** — American Society of Civil Engineers, Journal of the Urban Planning and Development Division. New York, N. Y.
- Am. Soc. Civil Engineers Proc., Jour. Waterways and Harbors Div.** — Proceedings of the American Society of Civil Engineers, Journal of the Waterways and Harbors Division. New York, N. Y.
- Am. Soc. Testing and Materials Spec. Tech. Pub.** — American Society for Testing and Materials Special Technical Publication. Philadelphia, Pa.
- Am. Water Resources Assoc. Proc. Ser.** — American Water Resources Association Proceedings Series. Urbana, Ill.
- Am. Water Works Assoc. Jour.** — Journal of the American Water Works Association. Lancaster, Pa.
- Anal. Chemistry** — Analytical Chemistry. American Chemical Society. Washington, D. C.
- Anal. Chim. Acta** — Analytica Chimica Acta. Elsevier Publishing Company. Amsterdam, Netherlands.
- Analecta Geol.** — *Analecta Geologica*. University of Copenhagen, Mineralogical and Geological Museum. Copenhagen, Denmark.
- Annales Géographie** — *Annales de Géographie*. Bulletin de la Société de Géographie. Paris, France.
- Annali Geofisica** — *Annali di Geofisica*. Revista dell'Istituto Nazionale de Geofisica. Rome, Italy.
- Appl. Spectroscopy** — Applied Spectroscopy. Bulletin of the Society of Applied Spectroscopy. Boston, Mass.
- Arctic** — Arctic. Arctic Institute of North America. Montreal, Quebec, Canada.
- Arctic Inst. North America Research Paper** — Arctic Institute of North America Research Paper. Montreal, Quebec, Canada.
- Arctic Inst. North America Tech. Paper** — Arctic Institute of North America Technical Paper. Montreal, Quebec, Canada.

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- Arizona Highways** — Arizona Highways. Arizona Highway Department. Phoenix, Ariz.
- Arizona Land Dept. Water Resources Rept.** — Arizona State Land Department Water Resources Report. Phoenix, Ariz.
- Arkansas Geol. Comm. Inf. Circ.** — Arkansas Geological Commission Information Circular. Little Rock, Ark.
- Arkansas Univ. Water Resources Research Center Pub.** — University of Arkansas Water Resources Research Center Publication. Fayetteville, Ark.
- Arkiv Zoologi** — Arkiv för Zoologi. Kungliga Svenska Vetenskap Akademien. Stockholm, Sweden.
- Asoc. Venezolana Geología, Minería y Petróleo Bol. Inf.** — Asociación Venezolana Geología, Minería y Petróleo Boletín Informativo [formerly cited as Bol. Inf.]. Chacao, Venezuela.
- Assoc. Am. Geographers Annals** — Annals of the Association of American Geographers. Washington, D. C.
- Assoc. Am. Geographers Comm. Coll. Geography Pub.** — Association of American Geographers, Commission on College Geography Publication. Washington, D.C.
- Assoc. Canadienne-Française Av. Sci. Annales** — Association Canadienne-Française pour l'Avancement des Sciences Annales. Montreal, Quebec, Canada.
- Assoc. Française Étude Quaternaire Bull.** — Bulletin de l'Association Française pour l'Étude du Quaternaire. Publié avec le concours du Centre National de la Recherche Scientifique. Paris, France.
- Assoc. Pacific Coast Geographers Yearbook** — Yearbook of the Association of Pacific Coast Geographers. Oregon State University Press. Corvallis, Oreg.
- Auk** — Auk. American Ornithologists' Union. Cornell University. Ithaca, N. Y.
- Bernice P. Bishop Mus. Spec. Pub.** — Bernice P. Bishop Museum Special Publication. Honolulu, Hawaii.
- Biul. Peryglacjalny** — Biuletyn Peryglacjalny. Łódzkie Towarzystwo Naukowe. Łódź, Poland.
- Boll. Geofisica Teor. ed Appl.** — Bollettino di Geofisica Teorica ed Applicata. Osservatorio Geofisico Sperimentale. Trieste, Italy.
- Bot. Rev.** — Botanical Review. New York Botanical Garden. New York, N. Y.
- Breviora** — Breviora. Harvard University Museum of Comparative Zoology. Cambridge, Mass.
- Brigham Young Univ. Geology Studies** — Brigham Young University Geology Studies. Provo, Utah.
- British Columbia Dept. Mines and Petroleum Resources Ann. Rept.** — British Columbia Department of Mines and Petroleum Resources Annual Report. Victoria, British Columbia, Canada.
- British Columbia Dept. Mines and Petroleum Resources Bull.** — British Columbia Department of Mines and Petroleum Resources Bulletin. Victoria, British Columbia, Canada.

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- British Jour. Appl. Physics** — British Journal of Applied Physics. Institute of Physics. London, England.
- Bull. Canadian Petroleum Geology** — Bulletin of Canadian Petroleum Geology [formerly Alberta Society of Petroleum Geologists Journal]. Alberta Society of Petroleum Geologists. Calgary, Alberta, Canada.
- Bull. Marine Sci.** — Bulletin of Marine Science [formerly Bull. Marine Sci. Gulf and Caribbean]. University of Miami Press. Coral Gables, Fla.
- Bull. Volcanol.** — Bulletin Volcanologique. Association de Volcanologie de l'Union Géodésique et Géophysique International. Naples, Italy.
- Bulls. Am. Paleontology** — Bulletins of American Paleontology. Paleontological Research Institution. Ithaca, N. Y.
- Cahiers Géographie Québec** — Cahiers de Géographie de Québec. Université Laval. Quebec, Quebec, Canada.
- California Acad. Sci. Occasional Paper** — Occasional Papers of the California Academy of Sciences. San Francisco, Calif.
- California Acad. Sci. Proc.** — Proceedings of the California Academy of Sciences. San Francisco, Calif.
- California Dept. Water Resources Bull.** — California Department of Water Resources Bulletin. Sacramento, Calif.
- California Div. Mines and Geology Map Sheet** — State of California Department of Natural Resources, Division of Mines and Geology Map Sheet. San Francisco, Calif.
- California Div. Mines and Geology Mineral Inf. Service** — State of California Department of Natural Resources, Division of Mines and Geology Mineral Information Service. San Francisco, Calif.
- California Div. Mines and Geology Spec. Rept.** — State of California Department of Natural Resources, Division of Mines and Geology Special Report. San Francisco, Calif.
- California Div. Oil and Gas, California Oil Fields—Summ. Operations** — California Division of Oil and Gas, California Oil Fields—Summary of Operations. San Francisco, Calif.
- California Geographer** — California Geographer. California Council of Geography Teachers. Long Beach, Calif.
- California Univ. Pubs. Geol. Sci.** — University of California Publications in Geological Sciences. Berkeley, Calif.
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- Canada Defence Research Board, Directorate Sci. Inf. Services Rept.** — Canada Defence Research Board, Directorate Scientific Information Services Report. Ottawa, Ontario, Canada.
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- Canada Dept. Energy, Mines and Resources Mines Br. Tech. Bull.** — Canada Department of Energy, Mines and Resources, Mines Branch Technical Bulletin. Ottawa, Ontario, Canada.
- Canada Dept. Mines and Tech. Surveys Mines Br. Research Rept.** — Canada Department of Mines and Technical Surveys, Mines Branch Research Report. Ottawa, Ontario, Canada.
- Canada Geol. Survey Bull.** — Geological Survey of Canada Bulletin. Ottawa, Ontario, Canada.
- Canada Geol. Survey Econ. Geology Rept.** — Geological Survey of Canada Economic Geology Report. Ottawa, Ontario, Canada.
- Canada Geol. Survey Geophysics Paper** — Geological Survey of Canada Geophysics Paper. Ottawa, Ontario, Canada.
- Canada Geol. Survey Map** — Geological Survey of Canada Map. Ottawa, Ontario, Canada.
- Canada Geol. Survey Mem.** — Geological Survey of Canada Memoir. Ottawa, Ontario, Canada.
- Canada Geol. Survey Misc. Rept.** — Geological Survey of Canada Miscellaneous Report. Ottawa, Ontario, Canada.
- Canada Geol. Survey Paper** — Geological Survey of Canada Paper. Ottawa, Ontario, Canada.
- Canada Geol. Survey Prelim. Ser. Map** — Geological Survey of Canada Preliminary Series Map. Ottawa, Ontario, Canada.
- Canada Natl. Mus. Nat. History Paper** — National Museum of Canada Natural History Papers. Ottawa, Ontario, Canada.
- Canadian Alpine Jour.** — Canadian Alpine Journal. Alpine Club of Canada. Banff, Alberta, Canada.
- Canadian Geog. Jour.** — Canadian Geographical Journal. Royal Canadian Geographical Society. Ottawa, Ontario, Canada.
- Canadian Geographer** — The Canadian Geographer. Published for the Canadian Association of Geographers by the University of Toronto Press. Toronto, Ontario, Canada.
- Canadian Geotech. Jour.** — Canadian Geotechnical Journal. Revue Canadienne de Géotechnique. Associate Committee on Soil and Snow Mechanics, National Research Council, and the Geotechnical Engineering Division, Engineering Institute of Canada. Toronto, Ontario, Canada.
- Canadian Jour. Botany** — Canadian Journal of Botany. National Research Council of Canada. Ottawa, Ontario, Canada.

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- Canadian Jour. Earth Sci.** — Canadian Journal of Earth Sciences. National Research Council, Canada. Ottawa, Ontario, Canada.
- Canadian Jour. Physics** — Canadian Journal of Physics. National Research Council of Canada. Ottawa, Ontario, Canada.
- Canadian Jour. Zoology** — Canadian Journal of Zoology. National Research Council of Canada. Ottawa, Ontario, Canada.
- Canadian Mineralogist** — The Canadian Mineralogist. Journal of the Mineralogical Association of Canada. Ottawa, Ontario, Canada.
- Canadian Mining and Metall Bull.** — Canadian Mining and Metallurgical Bulletin. Canadian Institution of Mining and Metallurgy. Montreal, Quebec, Canada.
- Canadian Mining Jour.** — Canadian Mining Journal. National Business Publications Limited. Gardenvale, Quebec, Canada.
- Canadian Petroleum** — Canadian Petroleum [formerly Canadian Petro Eng.]. Southam Business Publications Limited. Don Mills, Ontario, Canada.
- Carnegie Inst. Washington Year Book** — Carnegie Institution of Washington Year Book. Washington, D. C.
- Carnegie Mus. Annals** — Annals of Carnegie Museum. Pittsburgh, Pa.
- Carolina Univ. Acta—Geographica** — Acta Universitatis Carolinae—Geographica. Universita Karlova. Prague, Czechoslovakia.
- Castanea** — Castanea. The journal of the Southern Appalachian Botanical Club. West Virginia University. Morgantown, W. Va.
- Caves and Karst** — Caves and Karst—Research in Speleology [formerly Cave Notes]. Cave Research Associates. Castro Valley, Calif.
- Centre Recherches Pau Bull.** — Bulletin du Centre de Recherches de Pau. Société Nationale des Pétroles d'Aquitaine. Pau, France.
- Československá Akad. Věd Geog. Ústavu Zprávy** — Zprávy Geografického Ústavu, Československá Akademie Věd. Opava, Czechoslovakia.
- Chem. and Eng. News** — Chemical and Engineering News. American Chemical Society. Washington, D.C.
- Chem. Geology** — Chemical Geology. Elsevier Publishing Company. Amsterdam, Netherlands.
- Clay Minerals** — Clay Minerals. Journal of the Clay Minerals Group of the Mineralogical Society [formerly Clay Minerals Bulletin]. Blackwell Scientific Publications. Oxford, England.
- Coal** — Coal. Business Press Incorporated. Bethesda, Md.
- Coastal Research Notes** — Coastal Research Notes. Florida State University. Tallahassee, Fla.
- Colorado School Mines Mineral Industries Bull.** — Colorado School of Mines Mineral Industries Bulletin. Golden, Colo.
- Colorado School Mines Quart.** — Quarterly of the Colorado School of Mines. Golden, Colo.

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- Colorado-Wyoming Acad. Sci. Jour.** — Journal of the Colorado-Wyoming Academy of Science. Colorado State University. Fort Collins, Colo.
- Compass** — The Compass of Sigma Gamma Epsilon. Provo, Utah.
- Condor** — Condor. Journal of the Cooper Ornithological Society. Berkeley, Calif.
- Connecticut Geol. and Nat. History Survey Quad. Rept.** — State Geological and Natural History Survey of Connecticut Quadrangle Report. Middletown, Conn.
- Connecticut Geol. and Nat. History Survey Rept. Inv.** — State Geological and Natural History Survey of Connecticut Report of Investigations. Middletown, Conn.
- Connecticut Geol. and Nat. History Survey Vegetation Connecticut Nat. Areas** — State Geological and Natural History Survey of Connecticut, The Vegetation of Connecticut Natural Areas. Hartford, Conn.
- Connecticut Water Resources Bull.** — Connecticut Water Resources Bulletin. Connecticut Water Resources Commission. Hartford, Conn.
- Conserv. Volunteer** — Conservation Volunteer. Minnesota Department of Conservation. St. Paul, Minn.
- Contr. Marine Sci.** — Contributions in Marine Science [formerly Inst. Marine Sci. Pub.]. The University of Texas, Marine Science Institute. Port Aransas, Tex.
- Contr. Mineralogy and Petrology** — Contributions to Mineralogy and Petrology. Beiträge für Mineralogie und Petrologie. Springer-Verlag. Berlin, Germany, and New York, N. Y.
- Copeia** — Copeia. American Society of Ichthyologists and Herpetologists. Northridge, Calif.
- Copenhagen Univ. Mineralog. and Geol. Mus. Contr. Mineralogy** — Mineralogical and Geological Museum of the University of Copenhagen, Contributions to Mineralogy. Copenhagen, Denmark.
- Copenhagen Univ. Mus. Minéralogie et Géologie Commun. Paléont.** — Muséum de Minéralogie et de Géologie de l'Université de Copenhague, Communications Paléontologiques. Copenhagen, Denmark.
- Costa Rica Inst. Geog. Inf. Semestral** — Instituto Geográfico de Costa Rica Informe Semestral. Ministerio de Obras Públicas. San José, Costa Rica.
- Cross Sec.** — The Cross Section. A monthly publication of High Plains Underground Water Conservation District No. 1. Lubbock, Tex.
- Cushman Found. Foram. Research Contr.** — Contributions from the Cushman Foundation for Foraminiferal Research. Ithaca, N. Y.
- [Czechoslovakia] Ústřed. Ústav. Geol. Vestník** — Vestník Ústředního Ústavu Geologického. Prague, Czechoslovakia.
- Dansk Geol. Foren. Medd.** — Meddelelse fra Dansk Geologisk Forening. Copenhagen, Denmark.
- Deep-Sea Research** — Deep-Sea Research. Pergamon Press. London, England.
- Delaware Geol. Survey Rept. Inv.** — Delaware Geological Survey Report of Investigations. Newark, Del.

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- Desert** — Desert. Magazine of the Outdoor Southwest. Charles Shelton. Palm Desert, Calif.
- Deutsch. Geol. Gesell. Zeitschr.** — Zeitschrift der Deutschen Geologischen Gesellschaft. Hannover, Federal Republic of Germany.
- Dissert. Abs.** — Dissertation Abstracts. University Microfilms. Ann Arbor, Mich.
- Dominion Observatory Ottawa Contr.** — Contributions from the Dominion Observatory. Ottawa. Canada Department of Mines and Technical Surveys, Dominion Observatories. Ottawa, Ontario, Canada.
- Dominion Observatory Ottawa Pubs.** — Publications of the Dominion Observatory, Ottawa. Canada Department of Mines and Technical Surveys, Dominion Observatories. Ottawa, Ontario, Canada.
- Dominion Observatory Seismol. Ser.** — Seismological Series of the Dominion Observatory. Canada Department of Energy, Mines and Resources, Observatories Branch. Ottawa, Ontario, Canada.
- Earth and Mineral Sci.** — Earth and Mineral Sciences [formerly Mineral Industries]. The Pennsylvania State University, College of Earth and Mineral Sciences. University Park, Pa.
- Earth and Planetary Sci. Letters** — Earth and Planetary Science Letters. A letter journal devoted to the development in time of the Earth and planetary system. Elsevier Publishing Company. Amsterdam, Netherlands.
- Earth Sci.** — Earth Science. Earth Science Publishing Company. Chicago, Ill.
- Earthquake Inf. Bull.** — Earthquake Information Bulletin. ESSA National Earthquake Information Center, United States Coast and Geodetic Survey. Rockville, Md.
- Earthquake Notes** — Earthquake Notes. Eastern Section, Seismological Society of America. Washington, D. C.
- Earth-Sci. Rev.** — Earth-Science Reviews. Elsevier Publishing Company. Amsterdam, Netherlands.
- Ecology** — Ecology. Ecological Society of America. Durham, N. C.
- Econ. Geology** — Economic Geology and the Bulletin of the Society of Economic Geologists. The Economic Geology Publishing Company. Blacksburg, Va.
- Econ. Geology Mon.** — Economic Geology Monograph. The Economic Geology Publishing Company. Blacksburg, Va.
- Eiszeitalter u. Gegenwart** — Eiszeitalter und Gegenwart. Jahrbuch der Deutschen Quartärvereinigung. Verlag Hohenlohe'sche Buchhandlung Ferd. Rau. Ohringen, Federal Republic of Germany.
- Elisha Mitchell Sci. Soc. Jour.** — Journal of the Elisha Mitchell Scientific Society. University of North Carolina. Chapel Hill, N. C.
- Empire State Geogram** — The Empire State Geogram. The Geological Survey, New York State Museum and Science Service. Albany, N. Y.
- Eng. and Mining Jour.** — Engineering and Mining Journal. McGraw-Hill Publishing Co. New York, N. Y.
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- Estudios Geol.** — Estudios Geológicos. Instituto de Investigaciones Geológicas "Lucas Mallada". Madrid, Spain.
- Evolution** — Evolution. International journal of organic evolution. Society for the Study of Evolution. Lancaster, Pa.
- Experientia** — Experientia. Monthly journal of pure and applied science. Birkhauser Verlag. Basel, Switzerland.
- Explorer** — The Explorer. A magazine of the natural sciences. Cleveland Museum of Natural History. Cleveland, Ohio.
- Explorers Jour.** — Explorers Journal. Official Journal of the Explorers Club. New York, N.Y.
- Felsmechanik u. Ingenieurgeologie** — Felsmechanik und Ingenieurgeologie. Journal of the International Society of Rock Mechanics. Springer-Verlag. Vienna, Austria.
- Fieldiana—Geology** — Fieldiana—Geology. Chicago Natural History Museum. Chicago, Ill.
- Fieldiana—Geology Mem.** — Fieldiana—Geology Memoirs. Chicago Natural History Museum. Chicago, Ill.
- Finlande Comm. Géol. Bull.** — Bulletin de la Commission Géologique de Finlande (Geologinen Tutkimuslaitos). Helsinki, Finland.
- Florida Acad. Sci. Quart. Jour.** — Quarterly Journal of the Florida Academy of Sciences. Gainesville, Fla.
- Florida Div. Geology Geol. Bull.** — Florida Division of Geology Geological Bulletin. State of Florida, State Board of Conservation, Division of Geology Geological Bulletin. Tallahassee, Fla.
- Florida Div. Geology Map Ser.** — State of Florida, State Board of Conservation, Division of Geology Map Series [formerly Florida Geol. Survey Map Series]. Tallahassee, Fla.
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- Florida Geol. Survey Inf. Circ.** — Florida Geological Survey Information Circular. Tallahassee, Fla.
- Florida Geol. Survey Rept. Inv.** — Florida Geological Survey Report of Investigations. Tallahassee, Fla.
- Florida State Mus. Bull. Biol. Sci.** — Bulletin of the Florida State Museum, Biological Sciences. Gainesville, Fla.
- Florida State Univ. Sedimentol. Research Lab. Contr.** — Florida State University, Department of Geology, Sedimentological Research Laboratory Contribution. Tallahassee, Fla.
- Florida Univ. Eng. and Indus. Expt. Sta. Leaflet** — Florida Engineering and Industrial Experiment Station, College of Engineering, University of Florida. Gainesville, Fla.

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- Fortschr. Mineralogie** — Fortschritte der Mineralogie. Herausgegeben von der Deutschen Mineralogischen Gesellschaft. E. Schweizerbart'sche Verlagsbuchhandlung. Stuttgart, Federal Republic of Germany.
- [France] Bur. Recherches Géol. et Minières Bull.** — Bulletin du Bureau de Recherches Géologiques et Minières. Paris, France.
- [France] Centre Natl. Recherche Sci. Colloques Internat.** — Colloques Internationaux du Centre National de la Recherche Scientifique. Paris, France.
- Gems and Gemology** — Gems and Gemology. Gemological Institute of America. Los Angeles, Calif.
- Gems and Minerals** — Gems and Minerals. Don MacLachlan. Mentone, Calif.
- Geochem. Jour.** — Geochemical Journal. Geochemical Society of Japan. Nagoya, Japan.
- Geochim. et Cosmochim. Acta** — Geochimica et Cosmochimica Acta. Pergamon Press. London, England.
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California, San Diego County: Forman, S. A. 04275

Coal

Montana: Gilmour, Ernest H. 06536

Data

Geikielite, Quebec, Wakefield area: Hounslow, A. W. 04221

Rammelsbergite, pararammelsbergite: Radcliffe, Dennis. 04217

Diabase

Missouri, southeastern: Desborough, George A. 04144

Diorite

Quebec, Ivry: Philpotts, A. R. 02713

Dolomite

Ohio, chemical and spectrochemical: Ingamells, C. O. 02494

Emerald

Synthetic: Flanigen, E. M. 03098

Euxenite

Heterogeneity, zoning: Rimsaite, J. 03851

Feldspar

Heterogeneity, zoning: Rimsaite, J. 03851

Fossil plants

Carbohydrates: Swain, Frederick M. 04914

Glaucinite

Weathering effects: Wolff, R. G. 04173

Granite

California, Sierra Nevada, fused and nonfused: Al-Rawi, Yehya. 07229

Graywacke

Wyoming, spectroscopic: Condie, Kent C. 05896

Ground water

Alabama, Butler County: Reed, P. C., Jr. 08270

Alabama, Geneva County: Scott, J. C. 08269

Major-element analyses—Continued*Ground water—Continued*

- Alabama, Houston County: Scott, J. C. 08271
 Arizona, Grand Canyon Natl. Park, North Rim: Beck, George L. 02087
 California, San Joaquin Valley: California Dept. Water Resources. 06894
 Connecticut, Shetucket River basin: Thomas, Chester E., Jr. 05344
 Kentucky, Melber quadrangle: Davis, R. W. 00146
 Michigan, Marquette Iron Range area: Wiitala, S. W. 01801
 Minnesota, northwestern, Two Rivers watershed: Maclay, R. W. 02920
 Mississippi, Hancock County, Mississippi Test Facility: Newcome, Roy, Jr. 00338
 Montana, Cut Bank area: Zimmerman, Everett A. 01777
 Nevada, Warm Springs-Lemmon Valley area: Rush, F. Eugene. 07115
 Nevada, Washoe Valley: Rush, F. Eugene. 05369
 Nevada-Utah, Snake Valley area: Hood, James W. 08560
 New Mexico, Jicarilla Apache Indian Reservation: Baltz, Elmer H. 04410
 North Dakota, Divide County: Armstrong, C. A. 01744
 North Dakota, Richland County: Baker, Claud H., Jr. 01745
 Oklahoma, Texas County: Wood, P. R. 01254
 Oregon, Eola-Amity Hills area: Price, Don. 05391
 Oregon, French Prairie area: Price, Don. 01802
 Pennsylvania, Swatara Creek basin: Stuart, Wilbur T. 05290
 South Dakota, Clay County: Christensen, Cleo M. 08360
 South Dakota, Sanborn County: Steece, Fred V. 08581
 Tennessee, Cumberland County, Fe, Mn contents: Wilson, John M. 07911
 Texas, Archer County: Morris, Donald E. 01979
 Texas, Brazos River flood-plain alluvium: Cronin, James G. 00518
 Texas, Brooks County: Myers, B. N. 03490
 Texas, Coleman County: Walker, Loyd E. 02756
 Texas, Colorado River basin: Mount, J. Russell. 01973
 Texas, Crockett County: Iglehart, Hilary H. 01280
 Texas, east basin: Parker, John William. 03596
 Texas, Ellis County: Thompson, Gerald L. 03431
 Texas, Jasper and Newton Counties: Wesselman, J. B. 03000
 Texas, Kendall County: Reeves, Richard D. 03898
 Texas, Mitchell and western Nolan Counties: Shamburger, Victor M., Jr. 01795
 Texas, Montague County: Bayha, David C. 02925
 Utah, Cedar Valley: Feltis, R. D. 01746
 Utah, western: Waddell, K. M. 03349
 West Virginia, Monongahela River basin: Friel, E. A. 07763
 Wyoming, Laramie County: Lowry, Marlin E. 01781
- Groutite, antimonian*
 New Jersey, Franklin: Klein, Cornelis, Jr. 03638

Major-element analyses—Continued*Ground water—Continued*

- Grunerite*: Klein, Cornelis, Jr. 02891
Hornblende
 California, Guadalupe igneous complex: Best, Myron G. 01352
Igneous rocks
 California, Rattlesnake Mtn. pluton: Baird, A. K. 00208
 Montana, Stillwater complex: Mowatt, Thomas Charles. 03594
 Nevada, Schell Creek Range, Egan Range: Drewes, Harald. 02766
 Nevada, Steamboat Springs, hydrothermally altered: Schoen, Robert. 01749
 New Mexico, Questa area: Ishihara, Shunso. 02970
 Ontario, nepheline-bearing: Gittins, J. 08383
Ilmenite
 California, Guadalupe igneous complex: Best, Myron G. 01352
 Infrared absorption data: Liese, H. C. 04164
Impactite glass
 Arizona, metallic spherules: Brett, Robin. 03033
Inert gases
 Spectroscopy and gas chromatography: Cook, Gerhard A. 08982
Iron
 North Carolina, biotite, wall rock: Fullagar, Paul D. 04154
 Valence state: Albee, Arden L. 07904
Iron ore
 Missouri, southeastern, Precambrian province: Kisvarsanyi, Geza. 01413
Limestone
 Kansas, eastern, Oread Limestone members: Galle, O. Karmie. 02953
 Ohio, chemical and spectrochemical: Ingamells, C. O. 02494
Madocite
 Ontario, Madoc area, lead sulfantimonides, new: Jambor, J. L. 04206
Mafic rocks
 Maine, Greenville quadrangle: Espenshade, G. H. 02763
Magnesiowustite: Nafziger, R. H. 07027
Magnesium-aluminum carbonate hydroxide
 Synthetic mineral, cf. manasseite, hydrotalcite: Ross, G. J. 04272
Magnetite
 Infrared absorption data: Liese, H. C. 04164
Manganese
 Valence state: Albee, Arden L. 07904
Marine sediments
 Caribbean Sea, carbonate: Yalkovsky, Ralph. 08925
Melanochalcite
 Michigan, Ontonagon County: Wilson, C. H. 07423
Metamorphic rocks
 Canada, Precambrian rocks, composite samples: Shaw, D. M. 03113
Metasediments
 Albite, jadeite, microprobe: Newton, R. C. 01735
Meteorites
 Activation analysis, thermal and fast neutrons: Fisher, D. E. 08436
 Allegan, Bur-Gheluai, Cynthiana: Mason, Brian. 05362
 Shaw: Fredriksson, Kurt. 05952

Major-element analysis — Continued*Mica*

- Colorado, Gunnison County, Brown Derby No. 1 pegmatite: Heinrich, E. William. 04274
 Ontario, Blue Mountain, and Quebec, Oka area: Rimsaite, J. 07167

Microcline

- Colorado, Eldora stock, contact aureole: Wright, Thomas L. 00732

Olivine: Nafziger, R. H. 07027

- Hawaii, Makaopuhi lava lake tholeiite: Moore, James G. 02980

Orthoclase

- Colorado, Eldora stock, contact aureole: Wright, Thomas L. 00732

Orthopyroxene

- Spectroscopic, Mossbauer technique: Evans, B. J. 01697

Perrierite

- Synthetic material: Ito, Jun. 04189

Phlogopite

- Heterogeneity, zoning: Rimsaite, J. 03851

Pickeringite

- Oklahoma, Cimarron County: Kerns, Raymond L., Jr. 01736

Plagioclase

- California, Little Chief granite porphyry stock: McDowell, Stewart Douglas. 04776

Precambrian rocks

- Ontario, Red Lake-Lansdowne House area: Reilly, G. A. 09100

Pyrite

- New Brunswick, various localities: Sutherland, J. K. 04223

Pyroxene: Nafziger, R. H. 07027

- California, Guadalupe igneous complex: Best, Myron G. 01352
 California, omphacite: Essene, E. J. 02673
 Composition, in kimberlite, electron probe: Boyd, F. R. 03314

Pyrrhotite

- Low-temperature natural phases: Arnold, R. G. 04205

Rhyolite

- Quebec, Noranda area: Ryznar, G. 04148

Rock-forming minerals

- Montana, alkalic-ultramafic, Rainy Creek complex: Boettcher, A. L. 05745

Rocks

- Coexisting minerals, composition, zoning: Albee, Arden L. 07904

Rosenhahnite

- California, Mendocino County: Pabst, A. 01229

Salic volcanic rocks

- Iron-titanium oxides, ferromagnesian silicates: Carmichael, Ian S. E. 08036

Sanadine

- California, Little Chief Granite porphyry stock: McDowell, Stewart Douglas. 04776

Scapolite

- Evaluation: Ingamells, C. O. 07220

Sedimentary rocks

- Nevada, Taylor mining district: Drewes, Harald. 02766

Sediments

- Pacific Ocean, northern: Swanson, Vernon E. 01034

Serpentine minerals

- California, New Idria: Page, Norman J. 01040

Major-element analyses — Continued*Serpentine reaction zones*

- United States, Pacific coast, chemical, spectrographic: Coleman, Robert G. 04271

Shale

- Idaho-Wyoming, Meade Peak phosphatic: Pampeyan, Earl H. 02896

Shattuckite

- Arizona, Ajo area: Vlissidis, Angelina C. 03635

Silicate rocks

- Atomic absorption: Belt, Charles Banks, Jr. 07919

- Standard samples: Flanagan, Francis J. 01658

Silver-manganese minerals

- Nevada, electron probe: Radtke, Arthur S. 00792

Spherules

- Arctic, Antarctic ice deposits, electron probe: Hodge, Paul W. 00776

Surface water

- California, San Joaquin Valley: California Dept. Water Resources. 06894

Tektites

- Martha's Vineyard, Georgia: Cuttitta, Frank. 08042

Tridymite

- Oregon, Mule Springs area: Grant, Raymond W. 01246

Ultramafic rocks

- Alaska, southeastern: Taylor, Hugh P., Jr. 05327
 California, Burro Mountain complex, olivines and enstatites: Page, Norman J. 02359

- Montana, Libby area, alkalic-ultramafic complex: Boettcher, A. L. 05745

- Na abundance: Stueber, Alan M. 00221

Veenite

- Ontario, Madoc area, lead sulfantimonides, new: Jambor, J. L. 04206

Vermiculite

- Montana, Libby area: Boss, B. D. 00724
 Texas, Llano County: Kerns, Raymond L., Jr. 06109

Volcanics

- Mexico, Clarion Island, alkalic basalt, trachyte: Bryan, Wilfred B. 06677

- Nevada, Nevada Test Site, zeolitic tuffs: Riecker, Robert E. 04162

- Nevada, southern, silicic glass: Noble, Donald C. 00709

- Wyoming, Leucite Hills, wyomingite, orendite, madupite: Carmichael, Ian S. E. 02664

Voltzite

- New Jersey, Sterling Hill: Frondel, Clifford. 03093

Water

- Texas, Sabine, San Augustine Counties: Anders, Robert B. 00048

- Thermal and mineral, in mercury and base-metal deposits: White, Donald E. 04647

Winona meteorite

- Arizona: Mason, Brian. 02056

Yttrium rare-earth iron arsenate

- Nevada, Hamilton area, new(?): Radtke, Arthur S. 01041

Malacostraca*Caryocaris*

- Silurian, Oklahoma, Henryhouse Shale, discredited: Branson, Carl C. 00500

Palinuridae

- Mesozoic-Recent, evolution, morphology, habitat trends: George, R. W. 05307

Malacostraca—Continued

Panulirus

Pleistocene, speciation, relation to glaciations:
George, R. W. 05307

Strygonectes

Recent, United States, eastern, subterranean:
Holsinger, John R. 02829

Mammalia

Adjidauno quartzii, n.sp.

Tertiary, Oregon, late: Shotwell, J. Arnold.
04752

Alces

Pleistocene, Alaska, fossil preservation: Guthrie,
R. D. 00310

Amynodontopsis bodei

Eocene, South Dakota, Slim Buttes Formation,
Harding County: Bjork, Philip R. 00536

Aphelops kimballensis, n.sp.

Pliocene, Nebraska, Kimball Formation:
Tanner, Lloyd G. 08135

Apterodon

Tertiary, morphology, hyaenodontid and
mesonychid affinities: Szalay, Frederick S.
04625

Arctodus pristinus

Pleistocene, United States, eastern, morphology:
Kurten, Bjorn. 03123

Arctodus simus

Pleistocene, North America, range, morphology:
Kurten, Bjorn. 03123

Artiodactyla

Miocene, Florida, Thomas Farm, selenodonts,
revision: Patton, Thomas H. 03423

Miocene, Texas, Gulf Coastal Plain, reevaluation:
Patton, Thomas H. 03047

Texas, coastal plain: Patton, Thomas Hudson, Jr.
09103

Australocamelus, n.gen.

Texas, coastal plain: Patton, Thomas Hudson, Jr.
09103

Bison

Pleistocene, Alaska, fossil preservation: Guthrie,
R. D. 00310

Bison occidentalis

Quaternary?, South Dakota, Herreid area, horns
and skull: Galbreath, Edwin C. 05670

Brachyrhynchocyon sesnoni, n.sp.

Oligocene, South Dakota, Brule Formation:
Macdonald, J. R. 06837

Canis latrans

Pleistocene, Mexico, Valsequillo depression:
Kurten, Bjorn. 08501

Carnivora

Oligocene, Nebraska, Chadron Formation,
coprolites: Vogeltanz, Rudolf. 02050

Carpolestes cygneus, sp.

Paleocene, Alberta, Swan Hills area, teeth frag-
ments: Russell, Loris S. 09055

Castor canadensis

Quaternary, Ohio, buried bog, Columbus area,
tooth marks on wood: Garrison, Gail C. 03428

Castoroides ohioensis

Pleistocene, Illinois, Sangamon County: Par-
malee, Paul W. 01838

Cenozoic

Marine forms, migrations, possible transarctic:
Scheffer, Victor B. 02422

Cervalces

Pleistocene, Illinois, Sangamon County: Par-
malee, Paul W. 01838

Cetacea

Tertiary, Eocene rib, histology: Gibson, M. A.
07600

Mammalia—Continued

Citellus (Buiscitellus) dotti, n. subgen.

Pliocene, Oklahoma, Ogallala Fm., osteology,
relationships: Stevens, Margaret Skeels.
09236

Citellus kimballensis, n.sp.

Pliocene, Nebraska, Kimball Formation: Kent,
Douglas C. 03137

Colodon? cingulatus

Eocene, South Dakota, Slim Buttes Formation,
Harding County: Bjork, Philip R. 00536

Cricetidae

Cenozoic, Kansas, Rexroad and Crooked Creek
Formations: Hibbard, Claude W. 04868

Cynomys vetus

Pleistocene, Texas, Lubbock County, Slaton
quarry: Dalquest, Walter W. 00782

Desmodus stocki

Pleistocene, California, Potter Creek Cave,
Shasta County: Hutchison, J. Howard. 07561

Didelphis marsupialis

Pleistocene, Mexico, Aguascalientes: Alvarez S.,
Ticul. 03046

Edentata

Pleistocene, West Indies, taxonomy: Couto, Car-
los de Paula. 07497

Elephantidae

Quaternary, North America, latest survival,
popular account: Craw, Julia. 07616

Elephantoidea

Pleistocene, Atlantic continental shelf, teeth,
distribution: Whitmore, F. C., Jr. 08148

Epihippys intermedius

Eocene, South Dakota, Slim Buttes Formation,
Harding County: Bjork, Philip R. 00536

Eptesicus grandis

Pleistocene, United States, equals *E. fulvus*:
Guilday, John E. 04926

Equus

Pleistocene, Alaska, fossil preservation: Guthrie,
R. D. 00310

Pleistocene, Texas, Lubbock County, Slaton
quarry: Dalquest, Walter W. 00782

Equus conversidens

Pleistocene, Wyoming, Little Box Elder Cave:
Anderson, Elaine. 07910

"*Eucastor*" cf. *curtis*

Miocene, South Dakota, Bijou Hills, teeth:
Stout, Thompson M. 03892

Eurylambda

Jurassic, North America, molar pattern, cf.
Welsh pantotheres: Crompton, A. W. 00475

Evolution

Major changes, relation to habit: Carter, G. S.
05840

Floridatragulinae, n. subfam.

Miocene, Florida, Thomas Farm fauna: Patton,
Thomas H. 03423

Franiyns lysitensis, n.sp.

Eocene, Wyoming, Lysite Member, type area:
Guthrie, Daniel A. 05856

Geographic distribution

Atlantic continental shelf, Pleistocene low sea
level, elephants: Whitmore, F. C., Jr. 08148

Cenozoic, marine forms, transarctic: Scheffer,
Victor B. 02422

Quaternary, Bering Sea area, dispersions, cor-
relations: Repenning, Charles A. 02458

Soricidae, Cenozoic, Americas and Europe:
Repenning, Charles A. 02432

Geomyidae

Tertiary, Kansas, Rexroad Formation: Hibbard,
Claude W. 04868

Mammalia—Continued*Geomys*

Tertiary, Oregon, late, new: Shotwell, J. Arnold.
04752

Gregorymys

Tertiary, South Dakota, Rosebud Formation,
skeleton, relation to heteromyids: Galbreath,
Edwin C. 04215

Helaletidae

Taxonomy, revised to include Hyrachyidae:
Radinsky, Leonard B. 07496

Hippodon speciosus

Tertiary, South Dakota, Bijou Hills type species:
Skinner, Morris F. 03242

Hydrodamalis gigas

Pleistocene, California, Monterey Bay, skull:
Jones, Robert E. 03798

Hyrachyidae

Taxonomy, referred to Helaletidae: Radinsky,
Leonard B. 07496

Hyrachyus

Eocene, Wyoming, Bridger Formation, taxono-
my: Radinsky, Leonard B. 07496

Hyracodontidae

Tertiary, taxonomy review and evolution: Radin-
sky, Leonard B. 03305

Icaronycteris index

Tertiary, Wyoming, Green River Formation:
Jepsen, Glenn L. 01933

Insectivora

Paleocene, United States, western, new: Van-
Valen, Leigh. 07948

Lagomorpha

Cenozoic, fossil record, evolution, use in cor-
relation: Dawson, Mary R. 02283

Lambdoceras hessei, n.gen. n.sp.

Miocene, South Dakota, Flint Hill: Stirton, R. A.
05134

Leptarctus primus

Tertiary, South Dakota, Bijou Hills type species:
Skinner, Morris F. 03242

Mammuthus (Paraelephas) washingtonii

Pleistocene, Washington, Touchet Formation,
Walla Walla area: Scott, W. Frank. 00493

Marmosa

Pleistocene, Mexico, Jalisco, Zacoalco area: Al-
varez S., Ticul. 03046

Mastodon

Quaternary, Ontario, age and extinction:
Dreimanis, A. 02168

Meniscoessus conquistus

Cretaceous, South Dakota, Hell Creek Forma-
tion, Harding County: VanValen, Leigh.
03237

Merychippus

Miocene, Florida, Jefferson County, teeth, age:
Olson, Norman K. 08962

Merychippus insignis

Tertiary, South Dakota, Bijou Hills type species:
Skinner, Morris F. 03242

Merychyus

Miocene, California, Tick Canyon Formation:
Whistler, David P. 07559

Merycodus necatus

Tertiary, South Dakota, Bijou Hills type species:
Skinner, Morris F. 03242

Mesohippus

Tertiary, South Dakota, Chadron Formation:
Clark, John. 06718

Miacis jepseni, n.sp.

Eocene, Wyoming, Lysite Member, type area:
Guthrie, Daniel A. 05856

Mammalia—Continued*Morphology*

Deltatheridae, hyaenodontid and mesonychid
skull: Szalay, Frederick S. 04625

Pseudochrysochloris, burrowing stroke, cf.
chrysochlorids, notoryctids: Turnbull, William
D. 01693

Multituberculata

Cretaceous-Tertiary, extinction, competitive in-
feriority: Hopson, James A. 04870

Tertiary, extinction theories: Landry, Stuart O.,
Jr. 02116

Mylagaulus sp.

Miocene, South Dakota, Bijou Hills, teeth:
Stout, Thompson M. 03892

Neofiber leonardi

Pleistocene, Texas, Lubbock County, Slaton
quarry: Dalquest, Walter W. 00782

Notholophopus, n.gen.

Texas, coastal plain: Patton, Thomas Hudson, Jr.
09103

Ogmodontomys

Cenozoic, Kansas-Nebraska, Rexroad and Bal-
lard Formations, evolutionary trends: Zakr-
zewski, Richard J. 04869

Ophiomys

Cenozoic, Idaho, Glens Ferry Formation,
phyletic trends: Hibbard, Claude W. 03256

Ovibos

Pleistocene, Alaska, fossil preservation: Guthrie,
R. D. 00310

Oxydactylus benedentatus, new cob.

Miocene, Texas, Gulf Coastal Plain: Patton,
Thomas H. 03047

Paeneprolimnocyon amissadomus, n.gen., n.sp.

Eocene, Wyoming, Wind River Formation,
Natrona County: Guthrie, Daniel A. 04445

Palaeonodon woodi, n.sp.

Eocene, Wyoming, Lysite Member, type area:
Guthrie, Daniel A. 05856

Panthera atrox

Pleistocene, Alaska, Lost Chicken Creek, jaw:
Whitmore, Frank C., Jr. 00311

Parapliosacomys oregonensis, n.gen. n.sp.

Tertiary, Oregon, late: Shotwell, J. Arnold.
04752

Peromyscus

Tertiary, Oregon, diversity in late: Shotwell, J.
Arnold. 02895

Peromyscus (Copenmys) sp.

Miocene, South Dakota, Bijou Hills, teeth:
Stout, Thompson M. 03892

Peromyscus cumberlandensis, n.sp.

Pleistocene, Maryland, Cumberland Cave: Guil-
day, John E. 04925

Peromyscus pagei, n.sp.

Tertiary, Oregon, late: Shotwell, J. Arnold.
02895

Peromyscus valensis, n.sp.

Tertiary, Oregon, late: Shotwell, J. Arnold.
02895

Pinnipedia

Origin, monophyletic, karyogram evidence: Fay,
F. H. 07601

Recent, cytogenetic comparison, monophyletic
origin: Fay, F. H. 07601

Primates

Evolution, dating methods: Simons, E. L. 04823

Prolimnocyon iudei, n.sp.

Eocene, Wyoming, Lysite Member, type area:
Guthrie, Daniel A. 05856

Mammalia—Continued*Prosimii*

Cretaceous-Holocene, taxonomy, range:
McKenna, M. C. 09180

Prosynthetoceras texanus, new comb.

Miocene, Texas, Gulf Coastal Plain: Patton,
Thomas H. 03047

Pseudochrysochloris yoderensis, n.gen., n.sp.

Oligocene, Wyoming, Yoder Formation, bur-
rower, morphology, relationships: Turnbull,
William D. 01693

Pseudotheridomys pagei, n.sp.

Tertiary, Oregon, late: Shotwell, J. Arnold.
04752

Quaternary

Alaska, pre-Wisconsin, list: Péwé, T. L. 02459
California, La Brea tar pits, popular account:
Traywick, Ben. 07620

California, Maricopa Brea, late Pleistocene,
popular account: Macdonald, J. R. 04860

California, Pleistocene, La Brea tar pits, col-
lagen in bones, fine structure: Doberenz,
Alexander R. 07909

Extinction, major episodes, climatic cause: Axel-
rod, Daniel I. 07289

Georgia, Ladds area, Pleistocene, assemblage:
Ray, Clayton E. 02362

Idaho, Lemhi County, Jaguar Cave, Pleistocene
fauna: Guilday, John E. 04704

Kansas, Pleistocene, Meade County: Schultz,
Gerald E. 06736

Kentucky, Big Bone Lick, zones: Schultz, C.
Bertrand. 07741

Mexico, alluvial material, association with Man:
Irwin-Williams, Cynthia. 06734

Mexico, Valsequillo depression, Pleistocene fau-
na: Guenther, Ekke W. 09227

Missouri, Pleistocene bone deposit, Jefferson
County, Crankshaft Pit: Oesch, Ronald D.
05948

Montana, Wyoming, Eocene, ecology: Black,
Craig C. 01314

North America, migrations, Bering land bridge:
Repenning, Charles A. 02458

North America, migrations, Bering land bridge:
Vangengeim, E. A. 02421

North America, northern, Asian source: Flerow,
C. C. 02460

North America, size diminution, extinctions: Ed-
wards, William Ellis. 06741

Pennsylvania, Hosterman's Pit local fauna: Guil-
day, John E. 07087

Pleistocene, evolution, review: Murphy, C. T. L.
07700

Texas, central, changes: Lundelius, Ernest L., Jr.
06735

Texas, Fort Hancock and Camp Rice Forma-
tions, Pleistocene: Strain, William Samuel.
09174

Texas, Pleistocene, Lubbock County, Slaton
local fauna: Dalquest, Walter W. 00782

Virginia, Saltville, Pleistocene, large herbivores:
Ray, Clayton E. 01710

Wyoming, Horned Owl Cave, Pleistocene fauna:
Guilday, John E. 07022

Range

Stratigraphic, documentation: Butler, P. M.
07055

Rangifer

Pleistocene, Alaska, fossil preservation: Guthrie,
R. D. 00310

Mammalia—Continued*Scapanus latimanus*

Pleistocene moles, cf. Holocene, California,
Samwel Cave: Graham, Sylvia F. 06775

Smilodon, undet. sp.

Pleistocene, Mexico, Valsequillo depression:
Kurten, Bjorn. 08501

Sorex

Quaternary, Arctic, Bering Strait area, zoogeog-
raphy: Hoffmann, Robert S. 02126

Soricidae

Cenozoic, subfamilies, distribution in time and
place: Repenning, Charles A. 02432

Sunkahetanka sheffleri, n.sp.

Oligocene, South Dakota, Brule Formation:
Macdonald, J. R. 06838

Taxonomy

Copemys, *Democricetodon*, Tertiary: Fahlbusch,
Volker. 07994

Creodonta, limnocyonids, Wyoming: Guthrie,
Daniel A. 04445

Definition of class, exclusion of quasi-mammals:
MacIntyre, Giles T. 05312

Edentates, Pleistocene, West Indies: Couto, Car-
los de Paula. 07497

Muridae, North America: Alker, Julius. 04616

Mustelidae, *Canimartes*?, assigned to *Trigonic-*
tis: Zakrzewski, Richard J. 04880

Paleocene, insectivores: VanValen, Leigh.
07948

Protoceratidae, Tertiary, United States, western:
Stirton, R. A. 05134

Revision, artiodactyls, new subfamily: Patton,
Thomas H. 03423

Tertiary, South Dakota, Bijou Hills: Skinner,
Morris F. 03242

Teleodus thyboi n. sp.

Eocene, South Dakota, Slim Buttes Formation,
Harding County: Bjork, Philip R. 00536

Tertiary

Mexico, El Gramal local fauna, Miocene addi-
tions: Wilson, John A. 09250

North America, faunas, use in correlation,
criteria: Wilson, Robert W. 02274

North America, western, Paleocene localities,
faunal lists: Russell, Donald E. 07957

South Dakota, Brule Formation, paleoecology:
Clark, John. 06720

Texas, Big Bend National Park, teeth, systematic
descriptions: Maxwell, Ross A. 02908

Texas, Paleocene-Eocene, Big Bend area, faunal
assemblage: Wilson, John A. 02911

Wyoming, Lysite fauna, Eocene, type area:
Guthrie, Daniel A. 05856

Wyoming, Wind River Formation, creodonts:
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Leucophanite

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Lithiophorite

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Lizardite

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Marialite

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Mckelveyite

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Meionite

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Melanotekite

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Montbrayite

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Structure, 3 T form, cf. 2 M₁, Washington: Guven, Necip. 05993

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Hilaire: Chao, G. Y. 07313

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Paramammelsbergite

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Perovskite

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Perrierite

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Petzite

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Phillipsite

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Phlogopite

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Polybasite-arsenopolybasite series

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Synthetic: Barnard, Walther M. 00402

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Pyrope

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- Composition, formula, Arizona, Ajo area: Vlissidis, Angelina C. 03635

Sheridanite

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- Wichita Mountains, Raggedy Mtn. Gabbro Group, layered and intrusive, zones: Hunter, Hugh E. 08533

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- Arkansas River water, clay mineral suites, variability: Weaver, Charles E. 02859
- Arkoma basin, Spiro sands, depositional environment: Potts, Raymond H. 07940

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- Bryan County, soils: Taylor, Raymond John, Jr. 04562
- Chester oolite, porosity, relict primary: Lucia, F. Jerry. 06437
- Moorefield Formation, Lindsey Bridge Member, crossbedding: Swinchatt, Jonathan P. 06409
- North-central, Foraker Formation, carbonate rocks: Mogharabi, Ataollah. 02571
- Ouachita Mountains, turbidites, paleocurrents, provenance: Briggs, Garrett. 05750
- Seminole and Pontotoc Counties, Ada Formation, provenance, depositional environment: Iranpanah, Assad. 00260
- Stephens County, Hoxbar Group, depositional environment: Graham, David Wilson. 00247
- Washita River basin, sediment transport, variations: Allen, Paul B. 08608
- Wichita Mountains, Teepee Creek Formation, zeolitized arkose: Bellis, William H. 06202

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- Cambrian-Ordovician, Arbuckle Group: Chenoweth, Philip A. 06896
- Devonian, correlation, with Kansas, paleogeography: Hilpman, Paul L. 07272
- Devonian, Haragan Formation, south-central: Lundin, Robert F. 07277
- Devonian, Woodford-Chattanooga Shale: Amsden, Thomas W. 07266
- McIntosh County, sections: Koontz, Terry. 02133
- Mississippian-Pennsylvanian, Ouachita Mts.: Briggs, Garrett. 05750
- Mississippian-Pennsylvanian, Spiro sands, Arkoma basin: Potts, Raymond H. 07940
- Ordovician, Fernvale and Viola Formations, Arbuckle Mts.: Alberstadt, Leonard Philip. 06799
- Paleozoic, eastern, correlation, lithofacies: Edwards, A. R. 07811
- Pennsylvanian, Altamont Limestone, cyclothems: Schenk, Paul E. 06005
- Pennsylvanian, Atoka Formation, McAlester basin: Koinm, David N. 01162
- Pennsylvanian, Cherokee Group, Creek County, subsurface: Hanke, Harold W. 00993
- Pennsylvanian, Coffeyville Formation, Tulsa County, coal correlation: Uphaw, Charles F. 01270
- Pennsylvanian, Henryetta and Croweburg coals, correlation: Meyers, W. C. 00504
- Pennsylvanian, Marmaton Group, northeastern: Cole, J. Glenn. 00712
- Pennsylvanian, McIntosh County, sections: Oakes, Malcolm C. 02131
- Pennsylvanian, Red Fork sand, northwestern: Withrow, Phil C. 08151
- Pennsylvanian, Red Fork Sandstone, Wakita Trend: Withrow, Phil C. 02373
- Permian, lithofacies: MacLachlan, Marjorie E. 03727
- Permian, lithofacies, Panhandle: Dixon, George H. 03726
- Pleistocene, Beaver and Harper Counties, lake deposits, sections: Schemel, Mart P. 00503
- Pliocene, Laverne Formation, Beaver and Harper Counties, sections: Schemel, Mart P. 00503
- Pliocene, Laverne Formation, earliest reference incorrect: Schemel, Mart P. 00090
- Silurian, Chimneyhill Formation, south-central, revision: Amsden, Thomas W. 01626

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- Silurian, Henryhouse Formation, biostratigraphy: Campbell, K. S. W. 07270
 Silurian, Henryhouse Formation, south-central: Lundin, Robert F. 07277
 Silurian, Hunton Group: Amsden, Thomas W. 07266
 Silurian-Devonian, Hunton Group, petroleum reservoirs: Logsdon, Truman. 05172
 Silurian-Devonian, Ouachita Mountains: Sellers, Robert T., Jr. 07268
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- Arbuckle Mountains, wrench fault: Tanner, J. Henry, 3d. 00062
 Dalhart basin, general: Dobervich, George. 08047
 Hugoton embayment area, pre-Morrowan surface, trend-surface analysis: Schramm, M. W., Jr. 03761
 Hunton anticline, unconformity analysis, geochronology: Chenoweth, Philip A. 00058
 McAlester basin, growth faults: Koim, David N. 01162
 North Gotebo area, subsurface, natural gas trap: Takken, Suzanne. 00713
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- Carbonate complexes, K-Ar: Gittins, J. 02166
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 Granitic rocks, Rb/Sr, Sudbury area: Hart, S. R. 00614
 Grenville Front area, metamorphic episodes, Precambrian: Brooks, Elwood R. 05845
 Grenville Province, dates, summary: Wynne-Edwards, H. R. 08379
 Grenville Province, pegmatites, metamorphics: Macintyre, Robert Mitchell. 05963
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 Lake Superior region, interpretation, glacial events: Zoltai, S. C. 01433
 Madoc-Bancroft area, K-Ar cf. Rb-Sr, U-Pb: Macintyre, R. M. 08168
 Magmatism, alkaline and carbonatite: Gittins, J. 08588
 Manitouwadge area, sphene, Pb-Pb: Tilton, G. R. 07889
 Meach Lake area, carbonate intrusive, K-Ar: Hogarth, D. D. 03841
 Ottawa area, buried soil profile, C-14: Eden, W. J. 05064
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- Abram Lake area, western: Johnston, F. J. 02542
 Bancroft area, field trip guide: Card, K. D. 07961
 Bay of Islands area: Card, K. D. 06054
 Bee Lake area: Shklanka, R. 01334
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- Cirrus Lake-Bamoos Lake area, Thunder Bay District: Milne, V. G. 00973
 Cobalt area, field trip guide: Card, K. D. 07961
 Dayohessarah Lake area, Algoma District: Fenwick, K. G. 00974
 Eastern, guidebook: Geological Association of Canada. 08378
 Errington-Ashmore Townships, MacLeod Mosher gold mines: Ferguson, S. A. 06087
 Feaver Lake area: Fenwick, K. G. 00934
 Field work, 1967, Geological Branch, summary: Pye, E. G. 05959
 Fraleck township, Sudbury District: Meyn, H. D. 04090
 French Narrows area: Davies, J. C. 00941
 Glasgow township, District of Algoma: Riley, R. A. 00937
 Grenville Province, field trip guide: Wynne-Edwards, H. R. 09248
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 Hutton township, District of Sudbury: Meyn, H. D. 00921
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 Kingston area, surficial, field trip guide: Miryneck, E. 08398
 Lac des Mille Lacs area, Thunder Bay District: Kaye, L. 00981
 Leitch Gold Mines property, eastern: Ferguson, S. A. 07348
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 Meath township, District of Algoma: Riley, R. A. 00925
 Northbrook-Ompah area: Moore, J. M., Jr. 08384
 Obonga Lake area, eastern: Kustra, C. R. 00907
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 Operation Kapuskasing area: George, P. T. 06093
 Parkin township, District of Sudbury: Meyn, H. D. 00920
 Penhorwood township, Sudbury District: Milne, V. G. 02549
 Reeves township, Sudbury District: Milne, V. G. 02548
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 South Trout Lake area: Ayres, L. D. 02550
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 Sudbury area: Card, K. D. 08388
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 Vermilion Lake area, North Pines sheet: Johnston, F. J. 00885
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 Whitemud Lake area: Fenwick, K. G. 00936
- Economic geology*
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- Diamonds, James Bay lowland, possibilities: Brown, D. D. 02381
- Gold, Birch-Uchi Lakes area, occurrence, genesis: Goodwin, A. M. 00883
- Gold, Leitch Gold Mines property, eastern: Ferguson, S. A. 07348
- Industrial minerals, Kapuskasing-Moosonee area, occurrence, potential: Guillet, G. R. 02371
- Iron, Steep Rock Range, genesis: Symons, D. T. A. 00768
- Lead, Manitouwadge area, geochemistry: Ostic, R. G. 00888
- Lead-zinc, Bruce Peninsula, Niagara escarpment, occurrence: Guillet, G. R. 02906
- Metals, Cobalt area: Petruk, W. 08389
- Metals, Kenora area, exploration: Gleeson, C. F. 05120
- Metals, Matachewan area, occurrence, exploration: Lovell, H. L. 01295
- Mineral resources, Bancroft-Madoc area: Lumbers, S. B. 08382
- Mineral resources, Kapuskasing area, exploration, potential: George, P. T. 02901
- Mineral resources, Kenora-Fort Frances area, production: Davies, J. C. 04079
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- Nickel, Puddy Lake area, serpentinites, distribution: Simpson, P. R. 03352
- Nickel, Sudbury district, exploration, mining methods: Boldt, Joseph R., Jr. 06321
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- Ni-Cu ores, Sudbury area, experimental studies, genesis: Craig, J. R. 02644
- Pegmatite, resources: Hewitt, D. F. 09099
- Petroleum, Lake Huron-Lake Erie area, exploration, carbonate reefs: Hill, J. V. 03486
- Phosphate, apatite deposits, types, production: Hewitt, D. F. 04403
- Polymetallic ores, genesis, diabase-sulfide relations: Mookherjee, A. 07164
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- Pyrite, resources, production, inventory of deposits: Hewitt, D. F. 02354
- Silver, Miller Lake, Gowganda area, occurrence, paragenesis: Hester, B. W. 04549
- Silver, Thunder Bay area, exploration: Oja, R. V. 05090
- Uranium, Blind River area, Elliot Group: Pienaar, P. J. 08519
- Uranium, Elliot Lake-Blind River area, occurrence, genesis: Robertson, James A. 02261
- Uranium, Elliott Lake district and Bancroft area, production, history: Griffith, J. W. 06293
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- Clays, Leda, absorption coefficient: Quigley, R. M. 03778
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- Clays, New Liskeard area, varved, foundation performance: Stermac, A. G. 02762

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- Landslides, Ottawa area, age from buried soil: Eden, W. J. 05064
- Permafrost, sporadic, Ottawa, effect of surface conditions: Gold, L. W. 00896
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- Waste disposal, radioactive, Chalk River area, movement rates: Merritt, W. F. 08305
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- Blue Mountain, nepheline syenite, K-Rb ratios: Payne, J. G. 05336
- Cobalt area, Silverfields mine, silver-antimony phases, composition: Halls, C. 00928
- Cobalt, geochemical prospecting: Boyle, R. W. 00797
- Fernleigh area, element distribution, Grenville mica schists: Hounslow, A. W. 00910
- Kenora area, metals in peats, geochemical prospecting: Gleeson, C. F. 05120
- Prairie River and Manitouwadge, geochemical prospecting: Morris, H. C. 05104
- Puddy Lake area, serpentinites, nickel distribution: Simpson, P. R. 03352
- Red Lake-Lansdowne House area, Precambrian rocks, element abundance: Reilly, G. A. 09100
- Southeastern, trace elements in rain and snow: Rutherford, G. K. 05348

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- Great Lakes region, shore features, tilting: Tovell, Walter M. 03945
- Kingston-Cobourg-Tweed area, Pleistocene history: Miryneck, E. 08393
- Middle Humber River basin, terraces, Lake Ontario levels: Roberts, Michael C. 05076
- Pelee Island, Lake Erie, evolution, processes: McCutcheon, Richard. 05871
- Saint Clair River, sediment transport, channel stability: Duane, David B. 07363

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- Algoma-Sudbury-Timiskaming area, crustal structure, seismic: West, G. F. 07875
- Briarcliffe Lake magnetite deposit, magnetic: Hood, P. J. 00780
- Elliott Lake area, Quirk Lake syncline, heat flow, radioactivity: Sass, J. H. 07974
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- London area, anomalous heat flow: Judge, A. S. 05703

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- Guelph drumlin field, Galt and Paris moraines, reinterpretation: Harris, Stuart A. 01587
- Kingston-Cobourg-Tweed area: Miryneck, E. 08393
- Kingston-Prescott area: Henderson, E. P. 08394
- Lake Agassiz, eastern outlets, changes in level: Zoltai, Stephen C. 06820
- Lake Superior region, north-central, features, history: Zoltai, S. C. 01433
- Southern, glacial lakes: Terasmae, J. 06926
- Toronto area, Bloor-Danforth Subway area: Lajtai, Emery Zoltan. 01414
- Zorra area, till correlation: Westgate, J. A. 05341

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- Guelph area, watershed research: Ayers, H. D. 09229
- Saint Lawrence Lowlands region, ground-water resources: Scott, J. S. 07508

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Southern, Canadian Shield region, ground water resources: Charron, J. E. 07509

Southern, soils, effects on streamflow and ground-water recharge: Ayers, H. D. 00892

Water resources, adequacy: Watt, A. K. 02369

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Ahmabel Lake area: Canada Geological Survey. 05497

Awagakama River area: Canada Geological Survey. 03649

Berry Point area: Canada Geological Survey. 01081

Caddy Lake (Manitoba) area: Canada Geological Survey. 01083

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Cochrane District, Sheet 42 J/4: Canada Geological Survey. 03645

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Commission Lake (Manitoba) area: Canada Geological Survey. 08034

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Dog Lake area: Canada Geological Survey. 05487

Ellard Lake area: Canada Geological Survey. 01096

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Little Sachigo Lake area: Canada Geological Survey. 01088

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- Makoop Lake area: Canada Geological Survey. 03699
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- Norran Island area: Canada Geological Survey. 03664
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- Pledger Lake area: Canada Geological Survey. 03648
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- Rapson Bay area: Canada Geological Survey. 01089
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- Stull Lake (Manitoba) area: Canada Geological Survey. 03703
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- Thorne River area: Canada Geological Survey. 03702
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- Abram Lake area, western: Johnston, F. J. 02542
- Agonzon Lake sheet: Milne, V. G. 08364
- Bamoos Lake sheet, Thunder Bay District: Milne, V. G. 00973
- Barehead Lake sheet: Milne, V. G. 08363
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- Bee Lake area: Shklanka, R. 01334
- Blackbear River sheet: Bennett, G. 06084
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- Blind River-Elliott Lake sheet: Giblin, P. E. 03297
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- Brampton area, east sheet: Hewitt, D. F. 00851
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- Chapleau-Foley sheet: Carlson, H. D. 00909
- Cirrus Lake sheet, Thunder Bay District: Milne, V. G. 00973
- Dayohessarah Lake area, Algoma District: Fenwick, K. G. 00974
- Deloro township, Cochrane District: Carlson, H. D. 03799
- Errington-Ashmore Townships, MacLeod Mosher gold mines, surficial: Ferguson, S. A. 06087
- Feaver Lake area: Fenwick, K. G. 00934
- Fraclek township, Sudbury District: Meyn, H. D. 04090
- French Narrows area: Davies, J. C. 00941
- Glasgow township, District of Algoma: Riley, R. A. 00937
- Hearst sheet: Bennett, G. 00916
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- Hutton township, District of Sudbury: Meyn, H. D. 00921
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- Kagiano Lake sheet: Coates, M. E. 08361
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- Leitch Gold Mines property, eastern: Ferguson, S. A. 07348
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- Little Long Rapids sheet: Bennett, G. 00944
- Maisonville township, District of Timiskaming: Lovell, H. L. 00891
- Matachewan area: Lovell, H. L. 01295
- Max Lake sheet: Pye, E. G. 01604
- McGregor Bay sheets: Card, K. D. 06092
- Meath township, District of Algoma: Riley, R. A. 00925
- Obonga Lake area, eastern: Kustra, C. R. 00907
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- Ogden township, Cochrane District: Carlson, H. D. 03418
- Operation Kapuskasing area: George, P. T. 06093
- Parkin township, District of Sudbury: Meyn, H. D. 00920
- Parry Sound-Huntsville area: Hewitt, D. F. 01156
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- Penhorwood township, Sudbury District: Milne, V. G. 02549
- Pivabiska River sheet: Bennett, G. 00943
- Portage Bay sheet, Thunder Bay District: Kaye, L. 00981
- Reeves township, Sudbury District: Milne, V. G. 02548
- Rennie township, Sudbury District: Riley, R. A. 00926
- Roadhouse and Willet Townships, Timiskaming District: MacKean, B. E. 07784
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- Sault Sainte Marie-Elliott Lake sheet: Giblin, P. E. 01963

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- Scarborough area, east and west sheets,
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Swan Lake sheet: Bennett, G. 06083
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Westport area: Wynne-Edwards, H. R. 04068
Westree sheet: Card, K. D. 06091
Whitemud Lake area: Fenwick, K. G. 00936
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- Briarcliffe Lake magnetite deposit, in situ strip
results: Hood, P. J. 00780

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- Brampton area, east sheet, industrial minerals:
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Brampton area, west sheet, industrial minerals:
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Sudbury mining area: Card, K. D. 00849

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- Lebel, Gauthier, Boston, McElroy Townships,
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- Westport area: Wynne-Edwards, H. R. 04068

Mineralogy

- Biotite, Blue Mountain nepheline deposit,
weathering: Rimsaite, J. 06191
Chlorapatite, Bob's Lake, description: Chao, G.
Y. 07200
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sis: Sadler, A. G. 08988
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- Petrology, Mexico, Nuevo León, Sierra de Píachos: Bishop, Bobby Arnold. 00174
- Petrology, Montana, Alaska Bench Formation: Gilmour, Ernest Henry. 05612
- Petrology, Pennsylvania, Axemann Formation: Lees, John A. 07137
- Petrology, R-mode factor analysis, Ohio, Cincinnati Series: Osborne, Robert H. 02145
- Petrology, Saskatchewan, southeastern, Frohisher-Alida beds, core description: Fuzesy, L. M. 01561
- Petrology, techniques, analysis: Wolf, K. H. 02182
- Petrology, Texas, Stephens-Palo Pinto Counties, Canyon Group: Bretsky, Peter, Jr. 09016
- Petrology, United States, eastern interior, Paleozoic microfacies: Carozzi, Albert V. 02967
- Physical properties, chemical analyses, uses: Siegel, Frederic R. 02177
- Physical properties, correlation: VonGonten, W. Douglas. 03303
- Physical properties, Illinois, thermal expansion: Harvey, Richard D. 03222

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- Physical properties, oil accumulation, source beds: Hunt, John M. 02183
- Physical properties, permeability, nonreef stratigraphic traps: Illing, L. V. 06399
- Physical properties, porosity, genesis and distribution: Lucia, F. Jerry. 06437
- Physical properties, porosity history, determination: Murray, Raymond C. 06014
- Physical properties, porosity, permeability, U.S., midcontinent: Harris, John F. 08013
- Physical properties, strength: Mogi, Kiyoo. 03642
- Physical properties, strength, experimental study: Handin, John. 00699
- Porosity and permeability, petroleum reservoirs: Harbaugh, John W. 03396

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- Revelation of geologic history, Huxley's exposition: Huxley, Thomas Henry. 00871

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- General description, Tennessee, Monteagle Limestone: Ferguson, Carl C. 09012
- Geochemistry, oxygen isotopes, North America: Perry, Eugene C., Jr. 05728
- Physical properties, α -quartz cell parameters, variation with heat: Wilband, John T. 02957
- Sedimentation rate: Mutch, Thomas A. 06501
- Textures, Ohio, electron surface morphologies, aggregate solubility: Kneller, William A. 02958

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- Algal limestones: Aitken, J. D. 06499
- Carbonate rocks of marine origin: Sander, N. J. 00366
- Limestone, sparite complex: Nichols, R. A. H. 06494
- Rocky Mountains, Great Plains, northern, chemical: Hill, Thelma P. 01964
- Rocky Mountains, Great Plains, northern, chemical: Rubey, William W. 02046
- Sandstone, numerical method: Boggis, Sam, Jr. 02023
- Subsurface bodies of fragmented rock, nomenclature: Howard, J. H. 01627

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- General description, Eocene series, California: Stauffer, Peter H. 00643
- Petrology, Ellensburg Formation, lahars, Washington: Schmincke, Hans-Ulrich. 02028
- Petrology, Ontario, Kirkland Lake area: Cooke, David Lawrence. 01406
- Petrology, provenance, Fond du Lac Formation, Minnesota: Morey, G. B. 03747
- Petrology, provenance, Montana, Kootenai, Morrison Formations: Suttner, Lee Joseph. 04789
- Provenance, indicators, trace elements in quartz: Dennen, W. H. 00057
- Provenance, Pennsylvania, Trimmers Rock Member of Fort Littleton Formation: Frakes, Lawrence A. 02882
- Provenance, petrology, Oklahoma, Ada Formation: Iranpanah, Assad. 00260

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- Clay minerals, significance in petroleum genesis: Weaver, Charles E. 02773
- Heavy mineral suites, Paso Robles Formation, California: Galchouse, Jon S. 04143
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- New York, Hudson Valley, Helderberg formations: Borst, Roger Lee. 04334
- Northwest Territories, Prince of Wales and Somerset Islands, Paleozoic: Christie, R. L. 01984
- Rocky Mountains, Great Plains, northern, chemical: Hill, Thelma P. 01964
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- Alteration, Virginia, clay minerals from different rock types: Barnhisel, R. I. 03824
- General description, Oregon, Lime area, Triassic-Jurassic boundary: Brooks, Howard C. 03399
- Heavy minerals, Minnesota, Fond du Lac Formation: Morey, G. B. 03747
- Ontario, Blind River area, Elliot Group, uranium: Pienaar, P. J. 08519
- Petrology, New Jersey, Trenton area, Triassic basin: Park, Yong Ahn. 06150
- Provenance, petrology, Appalachians, Pottsville Formation, Olean Conglomerate: Meckel, Lawrence D. 00209
- Textures, tabular elements, origin from mudcrusts: Fagerstrom, J. A. 00285

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- Alteration, dedolomitization, experimental: deGroot, K. 06497
- Alteration, hydrothermal, experimental: Day, John J. 04005
- Classification: Friedman, Gerald M. 03395
- Diagenesis, Alberta, Turner Valley Formation: Murray, R. C. 00281
- Distribution: Friedman, Gerald M. 03395
- Genesis: Friedman, Gerald M. 03395
- Geochemistry, isotopic composition, Oregon, offshore: Russell, K. L. 00359
- Geochemistry of formation: Hsu, K. Jinghwa. 02385
- Geochemistry, Ohio, analyses: Ingamells, C. O. 02494
- Geochemistry, strontium, manganese content: Atwood, D. K. 06578
- Geochemistry, Texas, Edwards Limestone, diagenesis: Fisher, W. L. 02951
- Petrology, North Dakota-Montana, Duperow Formation: Wilson, James Lee. 05836
- Physical properties, Pennsylvania, Gatesburg Formation, porosity: Smith, Richard E. 03265
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- Dedolomitization: deGroot, K. 06497

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- Diagenesis, effect on porosity and permeability, Williston basin: Miller, D. N., Jr. 06015
- General description, Northwest Territories, barren grounds: Wright, G. M. 08312
- General description, Nova Scotia, Hopewell map-area: Benson, D. G. 08200
- General description, Ontario, Kapuskasing-Mooseonee area: Bennett, G. 02383
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- Petrology, Colorado Plateau, Morrison Formation: Cadigan, Robert A. 01281
- Petrology, provenance, California, Cretaceous formations, Fresno-Kings Counties: Tamesis, Emmanuel Valerio. 04234

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Petrology, Colorado, San Juan Mts.: Girdley, William Arch. 06807

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Petrology, North Carolina, Durham basin: Custer, Richard L. P. 04506

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Physical properties, strain hardening, Cordova Cream limestone: Cheatham, J. B., Jr. 02851

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Alabama, Mississippian strata: Thomas, William A. 07092

Alabama, Tennessee Valley, Mississippian, stratigraphy: Thomas, William A. 09032

Alabama-Mississippi, Jurassic sequence: Oxley, Marvin L. 05829

Alaska, east-central, Cambrian-Ordovician: Brabb, Earl E. 00343

Alberta, Fairholme Group, carbonate-shale transition: Dooce, Jasper. 07949

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- Kansas, Paleozoic, stratigraphic cross section, central: Brandt, E. O. 07812
- Maryland, New Market Limestone: Matter, Albert. 02141
- Mexico, Yucatan, Alacranes reef complex, Pleistocene cf. Holocene: Bonet, Federico. 09001
- Missouri, central, Middle Devonian: Sleeman, Lyle. 06684
- Missouri, central, northeastern, Cedar City Formation: Fraunfelder, George H. 00190
- Missouri, western, Cherokee and Marmaton groups: Gentile, Richard Joseph. 01409
- Montana, Kibbey Formation, Ray Member: Rawson, Richard Ray. 04864
- Nebraska, Paleozoic, central: Smith, Russell. 07813
- New Brunswick-Nova Scotia, Macumber carbonates: Schenk, Paul E. 07459
- New Mexico, north-central, Arroyo Penasco Formation: Armstrong, Augustus K. 07001
- New Mexico, southern, Holder Formation, shelf and basin cycles: Wilson, James Lee. 02489
- New York, Manlius Formation: Laporte, Leo F. 00060
- Newfoundland, central west, Cambrian-Ordovician strata: Lilly, Hugh D. 07409
- North Dakota, Paleozoic, western: Carlson, C. G. 08931
- Northwest Territories, Prince of Wales and Somerset Islands, Paleozoic: Christie, R. L. 01984
- Nova Scotia, Mississippian, Windsor Group, upper limestone units: Moore, R. G. 07460
- Ohio, Hamilton County, Cincinnati Series: Ford, J. P. 01635
- Oklahoma, Hoxbar Group, Pennsylvanian: Graham, David Wilson. 00247
- Oklahoma, Moorefield Formation, Lindsey Bridge Member: Swinchatt, Jonathan P. 06409
- Oklahoma, northeastern: Cole, J. Glenn. 00712
- Oklahoma, Paleozoic, eastern: Edwards, A. R. 07811
- Ontario, Tilbury gas field, carbonate-evaporite facies: Quillian, R. G. 00714
- Pennsylvania, Mahantango Formation: Sevon, W. D. 08241
- Pennsylvania, Mauch Chunk Formation: Hoque, Mominul. 00259
- Petroleum exploration, importance: Gould, Howard R. 08006
- Quebec, Duquet-McOuatt area, Mistassini dolomitic units: Deland, A. N. 01333
- Saskatchewan, Paleozoic, southern: Hutch, G. F. 08460
- South Dakota, Big Badlands, Chadron Formation: Clark, John. 06718
- South Dakota, Big Badlands, Scenic Member of Brule Formation: Clark, John. 06719
- South Dakota, Paleozoic, western: Schoon, R. A. 08458
- Tennessee, Rogersville-Kingsport areas, Conasauga Group: Helton, Walter Lee. 04770
- Tennessee, southern, Mississippian, Upper: Ferguson, Carl C. 09042
- Texas, Franklin Mountains, El Paso Group: LeMonc, David V. 07945
- Texas, Possum Kingdom area, Missourian Series: Wermund, E. G. 08943
- Texas, Simsboro Formation: Kohls, Donald W. 00291

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- Texas, Stephens-Palo Pinto Counties, Pennsylvanian, upper Canyon Group: Bretsky, Peter, Jr. 09016
- Texas, Wilcox Group: Fisher, W. L. 07996
- Trinidad, Cretaceous, near open sea stages: Kugler, H. G. 06996
- Washington, Grays Harbor basin, Lincoln Creek Formation: Beikman, Helen M. 01276
- West Virginia, Greenbrier Group, reservoir rocks: Overbey, William K., Jr. 03623
- Wyoming, Minnelusa Formation, sonic log data: Allen, Albert E., Jr. 05990
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- General: Stauffer, Peter H. 02027

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- Carbonate rocks, examination and analysis, techniques: Wolf, K. H. 02182
- Chemical analysis, textural relations, need for more data: Beckmann, D. D. 03275
- Core cutting, electro-osmotic technique: Chmelik, Frank B. 04010
- Electron microscopy, carbonates, negative replica preparation: Frost, Jack G. 02149
- Environmental analysis, sandstones: Shelton, John W. 05278
- Factor analysis of data, computer program, Canada Geol. Survey: Cameron, E. M. 01983
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- Grain-size measurement, field, pocket microscope: Muller, German. 02151
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- Qualitative data, cluster analysis, Q-mode, FORTRAN IV program: Bonham-Carter, G. F. 08068
- Statistical analysis, lithologic gradients: Dahlberg, E. C. 06374
- Statistical, limestone classification: Bonham-Carter, G. F. 06400
- Statistical, multivariate analysis for sedimentation: Dahlberg, E. C. 05444
- X-ray radiography, exposure charts: Hamblin, W. Kenneth. 07034
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- Geochemistry, Montana, Sun River area, natural licks: Knight, Richard R. 05637
- Provenance, Alberta, Watt Mountain Formation: Kramers, J. W. 05883

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- Lead-zinc, carbonate rocks, genesis: Beales, F. W. 03111
- Lead-zinc, carbonate rocks, genesis: Davidson, C. F. 03110
- Lead-zinc, diagenesis in carbonate rock: Jackson, S. A. 06610
- Lead-zinc, Mississippi Valley, origin: Douglas, Richard Franklin. 01214
- Lithofacies, Michigan: Hamilton, Stanley K. 04729
- Massive pyritic ores, genesis: Skripchenko, N. S. 01159

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- General description: McKelvey, V. E. 03388

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- Mineral composition, provenance, North Carolina: Rooney, Thomas P. 02231

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- Petrology, continental margin off Baja California: d'Anglejan, B. F. 02015
 Petrology, North Carolina and Virginia, Miocene strata: Gibson, Thomas G. 01492

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- Analyses, 1948-60, U.S. Geol. Survey, Hydrologic Lab.: Morris, D. A. 00353
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 Mass, gravimetric effects: McCulloh, Thane H. 01794
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- Indicators, trace elements in quartz grains: Dennen, W. H. 00057
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- Alteration, Baja California, cf. Colorado, hematite origin: Walker, Theodore R. 00437

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- Sedimentation rate: Mutch, Thomas A. 06501

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- Alteration, diagenetic, biogenic phosphate replacement: Horowitz, Daniel. 06498
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- Physical properties, permeability, non-uniformities: Polasek, Theo L. 06436
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- Alteration, Montana-Idaho, Belt Series, illite polymorphs: Maxwell, Dwight T. 04085
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- Textures, relation to magnetic fields, Wyoming: Rees, Anthony I. 02137

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- Fabric, flow features, Hatch Formation, New York: Walker, Roger G. 05747
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- Alteration, postdepositional, Pennsylvania: Jaron, Michael G. 02868

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- Classification and interpretation: Aitken, J. D. 06499

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- California, Paleocene submarine, genesis: Dickas, A. B. 01633
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- California, Coast Ranges, Stanford University area, Cenozoic: Page, Benjamin M. 00066

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- Alabama, Parkwood Formation: Whisonant, Robert C. 04082
 California, Oceano area, coastal dunes: Matthews, Jerry Lee. 02613
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- Sandstones, effect on fluid flow: Rutledge, J. Raymond. 00656

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- Alabama, Red Mountain Formation, Bucksville area: Hooks, W. Gary. 07305
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- Alberta, Athabasca oil sands: Carrigy, Maurice A. 07019
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 Minnesota, Rove Formation, interpretation: Morey, G. B. 06534
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- Deposition, turbidity currents, experimental: Middleton, Gerard V. 01431
 Utah, Precambrian subgraywackes: Condie, Kent C. 05982

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- Stratameter, plane and vector measurement: Armstrong, G. C. 05752

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- Appalachians, Pottsville Formation, Olean Conglomerate: Meckel, Lawrence D. 00209
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- California, Eocene strata: Stauffer, Peter H. 02027

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- Algal binding, flotation: Fagerstrom, J. A. 00285

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- Autochthonous and allochthonous, distinction, criteria, Illinois: Lacey, J. E. 07399
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- Cuba, cave types, Caguanes Peninsula and Cueva del Amistad: Gradzinski, Ryszard. 04820

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- Genesis, beachrock of tropical areas: McLean, Roger F. 04213

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