EXTRACT FROM

THE GRAND CANON

A Worldwide Bibliography
of the
Grand Canyon *and* Lower Colorado River Regions in the United States and Mexico

16th to 21st Centuries

Volume 1, Part B: Bibliography

FIFTH EDITION

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BIBLIOGRAPHICAL AND HISTORICAL RESOURCES ON THE
GRAND CANYON AND LOWER COLORADO RIVER REGIONS OF THE
UNITED STATES AND MEXICO

THE GRAND CANON : A WORLDWIDE BIBLIOGRAPHY OF THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS IN THE UNITED STATES AND MEXICO, 16th TO 21st CENTURIES

Volume 1, Part B: Bibliography

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CATALOGERS NOTE
canon : *a standard or essential list of works*

The Grand Canon
not **The Grand Canyon**

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24

GEOLOGIC AND SPECIAL TOPOGRAPHIC MAPS IN THE GRAND CANYON REGION

WITH GUIDES TO USGS TOPOGRAPHIC QUADRANGLES

Separately published geologic, geodetic, and special topographic maps of the Grand Canyon region; with summary guides to U.S. Geological Survey topographical quadrangles in the region

Refer now to THE GRAND CANON **Volume 2, CARTOBIBLIOGRAPHY OF THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS, for guides to topographical quadrangles of the U.S. Geological Survey in the Grand Canyon region (see notes in the Appendix to Part 24 in the present volume)**

See PART 11, SECTION 2A for *separately published geologic* maps in the *lower Colorado River region.* Users who wish to examine all of these geological maps in context with all cartographical publications on the Grand Canyon–Lower Colorado River region should consult the *Cartobibliography* (see Part 25 in the present volume for more information).

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GO TO BIBLIOGRAPHY TABLE OF CONTENTS

OVERVIEW. This part of the bibliography lists only separately published maps, and selected atlas sheets. Regional maps that embrace the Grand Canyon area are included.

NOTES FOR PART 24

PART 24 is a contiguous listing of *separately published* geologic and special maps for the Grand Canyon region. Maps listed in Part 24 are also cited in Volume 2, *Cartobibliography of the Grand Canyon and Lower Colorado River Regions* (in Volume 1 refer to notes in Part 25). Users who wish to examine these geological maps in context with all cartographical publications on the Grand Canyon–Lower Colorado River region, or in chronological order, should consult the *Cartobibliography*.

Occasional geologic maps are from Utah, but which include a very narrow strip of Arizona along the southern margin of those quadrangles. They are listed both for that narrow strip and for the inclusion of very nearby lands, which thus may pertain to the geographical bounds of this bibliography. The Arizona portion on each map varies but is generally just a matter of yards due to the surveyed boundary not precisely following the 37th parallel (the southern boundary of the quadrangles in question).

Maps that are published as separate sheets within a monographic publication—for example, maps folded into pockets in those volumes, laid in loose, or included in separate volumes or boxes—are not generally cited separately in this bibliography but are considered part of the publications in which they appear, for which see in Part 21. For specific reasons, though, a few sheets in specialized atlases may be cited in within this part (Part 24).

Of note are comprehensive indices to all published geologic maps that do include those that were published as figures and sheets *within* publications—but to 1992 only. These are:

> Spamer, Earle E. 1990. Geology of the Grand Canyon: A guide and index to published graphic and tabular data (excluding paleontology). *Geological Society of America, Microform Publication 21*, 674 pp. [See pp. 124-213.]
>
> Spamer, Earle E. 1992. Geology of the Grand Canyon: A guide and index to published graphic and tabular data (excluding paleontology). G*eological Society of America, Microform Publication 22*, 125 pp. [See pp. 20-46.]
>
> [*NOTE*: These microform publications have since been made commercially available as PDFs online through https://pubs.geoscienceworld.org/books/ (note added May 2019).]

Clarence E. Dutton's Tertiary History of the Grand Cañon District (*U.S. Geological Survey Monograph 2*, 1881, 1885), with its great double-folio *Atlas* comprising 23 geologic maps and geologically significant scenic views by William Henry Holmes and Thomas Moran, is one of

the most-sought publications by afficionados of the American West—with prices attending to the demand. Many copies of the Atlas have been disbound over the years and its plates reused or made available separately.

With regard to river mileages as measured on the Colorado River, see note in Part 22 of this bibliography.

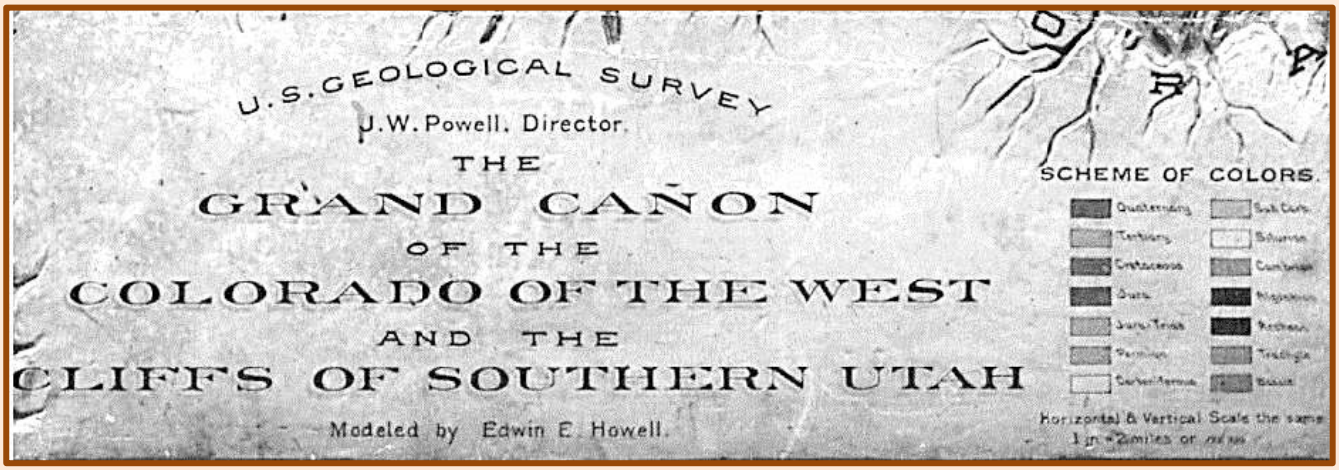
The following two facing pages reproduce
Edwin E. Howell's scarce, commerically produced geological relief map of the Grand Canyon region
(citations: Howell, NO DATE, ITEM NO. 24.309; 1931, ITEM NO. 24.783)

(Library of Congress)

Edwin E. Howell's scarce, commerically produced geological relief map of the Grand Canyon region (no date, ITEM NO. 24.309) [no place]: U.S. Geological Survey, 3-dimensional map, topography with colored time-stratigraphic outcrop markings, vertical and horizontal scales 1 inch = 2 miles (1:126,720). Originally produced in 1875, with different states at later dates. The two small insets at *lower right* depict in relief, to the same scale, "Yosemite Valley" *(left)* and "Niagara Falls and Cañon" *(right)* (see *next page* for detail view). The Library of Congress image is apparently a black-and-white photograph of the actual map, which measures 6 feet, 6 inches by 6 feet 7 inches.

This copy (as illustrated above) in the Library of Congress is shown online in a photograph with notational date of January 22, 1916. (Geography and Map Division, call no. "G4332.G7 191–.G4 TIL".) Downloadable digital views accessible at http://hdl.loc.gov/loc.gmd/g4332g.np000097 (last accessed January 25, 2022).

Detail views of legend and insets from the map shown on preceding page



A

Akers, J. P.; Irwin, J. H.; Stephen, P. R.; AND McClymonds, N. E.

1962 24.1 Geology of the Cameron quadrangle, Arizona, with a section on uranium deposits, by W. L. Chenoweth. *U.S. Geological Survey, Geologic Quadrangle Map GQ-162*.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 44| |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Albin, Alton L.

1991 24.314 Geologic map of the Peacock Mountains and southern Grand Wash Cliffs; northwestern Arizona. *Arizona Geological Survey, Contributed Map CM 91-K*, 1 sheet.

American Association of Petroleum Geologists

NO DATE 24.2 *Geothermal gradient of Arizona and western New Mexico. (Portfolio map area no. 18.)* American Association of Petroleum Geologists, 1 sheet.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Arizona Geological Survey

1998 24.3 3-D stereo topographical map of Arizona. *Arizona Geological Survey, Map 32*, 1 sheet, scale 1:750,000, contour interval 100 feet. (Stereo contours produced by American Stereo Map Co., Salt Lake City.) [To be used with red/blue glasses.]

Asher and Adams [firm]

1873 24.847 *Asher & Adams' geological map. United States and territories. In: Asher & Adams' new commercial, topographical, and statistical atlas and gazetteer of the United States: with maps showing the Dominion of Canada, Europe and the World . . . Compiled, drawn, and engraved under the supervision of the publishers . . . .* New York: Asher and Adams, pp. 111/112. Scale 1 inch = 110 miles. [Hand-colored map. Not a separately published map as such, but cited here for its early portrayal of the Grand Canyon and lower Colorado River regions following on the 1861 portrayals by Newberry. In the Grand Canyon region it depicts only "Volcanic Rocks" and "Paleozoic. Including Silurian, Devonian and Permian." In the lower Colorado River region it depicts only areas marked as "Eozoic. Including Laurentian, Labradorian and Huronian." The base map depicts the Colorado River (not labeled) most irregularly throughout the region, with the Virgin, Little Colorado, and San Juan Rivers (not labeled) as tributaries. In western Grand Canyon, "Hualapais Vil." is noted as a place (*i.e.*, Peach Springs).]

B

Baars, Donald L.

1972 24.4 Devonian System. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 90-99.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Baillieu, Thomas A., AND Zollinger, Richard C.

1982 24.5 *Grand Canyon quadrangle, Arizona*. Grand Junction, Colorado: Bendix Field Engineering Corp., 36 pp., map scale 1:500,000, with microfiche. (National Uranium Resource Evaluation Program.)
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Barton, Kate E.; Howell, David G.; Vigil, José F.; Reed, John C., Jr.; AND Wheeler, John O.

2003 24.874 The North America Tapestry of Time and Terrain / Cobertura de Tiempo y Terrenos de Norte América / L'Amérique du Nord: un collage de terrains d'âges différents. (Tapestry compiled by Barton, Howell and Vigil; geology compiled by Reed and Wheeler. Prepared in cooperation with Geological Society of Canada and Mexico's Consejo Recursos de Minerales.) *U.S. Geological Survey, Geologic Investigations Series I-2781*, 1 sheet. Scale 1:8,000,000. [Chronostratigraphic map.]

Beard, L. Sue; Anderson, R. E.; Block, D. L.; Bohannon, R. G.; Brady, R. J.; Castor, S. B.; Duebendorfer, E. M.; Faulds, J. E.; Felger, T. J.; Howard, K. A.; Kuntz, M. A.; AND Williams, V. S.

2007 24.359 Preliminary geologic map of the Lake Mead 30′ × 60′ quadrangle, Clark County, Nevada, and Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 2007-1010*, scale 1:100,000, contour interval 50 m; text 84+ pp. (Digital database by Debra Block, Tracey Felger, Melissa Aldrich, Michelle Harr, Anita Kaye, and Sue Priest.)

Biek, Robert F.; Rowley, Peter D.; Hayden, Janice M.; Hacker, David B.; Willis, Grant C.; Hintze, Lehi F.; Anderson, R. Ernest; AND Brown, Kent D.

2010 24.369 Geologic map of the St. George and east part of the Clover Mountains 30′ × 60′ quadrangles, Washington and Iron Counties, Utah. *Utah Geological Survey, Map 242DM*, 1 sheet (scale 1:100,000), text 101 pp.

Billingsley, George H.

1987 24.6 Geologic map of the southwestern Moenkopi Plateau and southern Ward Terrace, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1793*, 1 sheet, scale 1:31,680.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

1990 24.7 Geologic map of the Jumpup Canyon and Big Springs quadrangles, Mohave and Coconino Counties, Arizona. *U.S. Geological Survey, Open-File Report 90-258*, 16 pp., 1 sheet, scale 1:62,500.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1990 24.8 Geologic map of the Purgatory Canyon quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 90-540*, 1 sheet, scale 1:24,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1990 24.9 Geologic map of the Wolf Hole Mountain West quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 90-541*, 1 sheet, scale 1:24,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1990 24.10 Geologic map of the Lizard Point quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 90-643*, 1 sheet, scale 1:24,000.
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1990 24.11 Geologic map of the Wolf Hole Mountain East quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 90-644*, 1 sheet, scale 1:24,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1991 24.12 Geologic map of the Sullivan Draw North quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 91-558*, 1 sheet, scale 1:24,000, text 10 pp.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1991 24.13 Geologic map of the Sullivan Draw South quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 91-559*, 1 sheet, scale 1:24,000, text 9 pp.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1991 24.14 Geologic map of the Mustang Knoll quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 91-560*, 1 sheet, scale 1:24,000, text 12 pp.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1991 24.15 Geologic map of the St. George Canyon quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 91-561*, 1 sheet, scale 1:24,000, text 11 pp.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1992 24.16 Geologic map of the Gyp Pocket quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 92-412*, 17 pp., 1 sheet, scale 1:24,000.

1992 24.17 Geologic map of the Hole-N-Wall Canyon quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 92-432*, 15 pp., 1 sheet, scale 1:24,000.

1992 24.18 Geologic map of the Yellowhorse Flat quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 92-442*, 17 pp., 1 sheet, scale 1:24,000.

1992 24.19 Geologic map of the Rock Canyon quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 92-449*, 17 pp., 1 sheet, scale 1:24,000.

1992 24.20 Geologic map of the Jumpup Canyon and Big Springs quadrangles, Mohave and Coconino Counties, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2290*, scale 1:62,500.

1993 24.21 Geologic map of the Lost Spring Mountain East quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 93-565*, 9 pp., 1 sheet, scale 1:24,000.

1993 24.22 Geologic map of the Lost Spring Mountain West quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 93-566*, 11 pp., 1 sheet, scale 1:24,000.

1993 24.23 Geologic map of the Dutchman Draw quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 93-587*, 12 pp., 1 sheet, scale 1:24,000.

1993 24.24 Geologic map of The Grandstand quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 93-588*, 15 pp., 1 sheet, scale 1:24,000.

1993 24.25 Geologic map of the Little Tanks quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 93-682*, 13 pp., 1 sheet, scale 1:24,000.

1993 24.26 Geologic map of the Russell Spring quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 93-717*, 17 pp., 1 sheet, scale 1:24,000.

1993 24.27 Geologic map of the Wolf Hole Mountain and vicinity, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2296*, 1 sheet.

1994 24.28 Geologic map of the Formaster Well quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 94-243*, 1 sheet, text 10 pp.

1994 24.29 Geologic map of the White Pockets quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 94-244*, 1 sheet, text 11 pp.

1994 24.30 Geologic map of the Little Clayhole Valley quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 94-290*, 1 sheet, text 11 pp.

1994 24.31 Geologic map of the Antelope Knoll quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 94-449*, 1 sheet, text 18 pp.

1994 24.32 Geologic map of the Hat Knoll quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 94-554*, 1 sheet, text 14 pp.

1994 24.33 Geologic map of the Moriah Knoll quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 94-634*, 1 sheet, text 15 pp.

1997 24.34 Geologic map of the Mount Logan quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 97-426*, 1 sheet, text 21 pp.

1997 24.35 Geologic map of the Mount Trumbull NW quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 97-488*, 1 sheet, text 19 pp.

1997 24.36 Geologic map of the Poverty Spring quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 97-493*, 1 sheet, text 13 pp.

Billingsley, George H., AND Bohannon, R. G.

1995 24.37 Geologic map of the Elbow Canyon quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 95-560*, 1 sheet, text 17 pp.

Billingsley, George H., AND Breed, William J.

1986 24.38 *Geologic map of the Bright Angel Trail, Grand Canyon, Arizona*. Tulsa, Oklahoma: American Association of Petroleum Geologists, 1 sheet (2 sides); base map is topographic map by Washburn (1981), scale 1:4800, contour interval 25 feet); accompanied by text (Breed *et al.*, 1986, ITEM NO. 23.22).]

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Billingsley, George H., AND Dyer, Helen C.

2003 24.364 Geologic map of the upper Hurricane Wash and vicinity, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2410*, scale 1:31,680, text 23 pp.

Billingsley, George H., AND Graham, Scott E.

2003 24.365 Geologic map of the lower Hurricane Wash and vicinity, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2396*, scale 1:31,680, text 27 pp.

Billingsley, George H., AND Hampton, Haydee M.

1999 24.39 Physiographic rim of the Grand Canyon, Arizona. *U.S. Geological Survey, Open-File Report 99-30*, 1 sheet, scale 1:250,000, contour intervals 25 and 50 m. [Also downloadable GIS (Geographic Information System) data file in ARC/INFO format, "Physiographic rim of the Grand Canyon, Arizona: A digital database", with explanation, 10 pp. (https://pubs.usgs.gov/publication/ofr9930).]

2000 24.219 Geologic map of the Grand Canyon 30′ × 60′ quadrangle, Coconino and Mohave Counties, northwestern Arizona. *U.S. Geological Survey, Geologic Investigations Series, I-2688, Version 1.0*, 1 sheet, text 15 pp. [Poster style sheet, displaying map with supplementary images and key on three sides.]

2001 24.221 Geologic map of the House Rock Spring quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2367*, scale 1:24,000, text 17 pp.

Billingsley, George H., AND Huntoon, Peter W.

1983 24.40 *Geologic map of Vulcan's Throne and vicinity, western Grand Canyon, Arizona*. Grand Canyon Natural History Association, scale 1:48,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Billingsley, George H., AND Priest, Susan S.

2010 24.350 Geologic map of the House Rock Valley area, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3108*, 1 sheet, scale 1:50,000; pamphlet, 23 pp.

2013 24.370 Geologic map of the Glen Canyon Dam 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3268*, 41 pp., 3 sheets, scale 1:50,000.

Billingsley, George H., AND Wellmeyer, Jessica L.

2001 24.222 Geologic map of the Cane quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2366*, scale 1:24,000, text 7 pp.

2003 24.232 Geologic map of the Mount g′ × 60′ quadrangle, Mohave and Coconino Counties, northwestern Arizona. *U.S. Geological Survey, Geologic Investigations Series, I-2766*, scale 1:100,000, text 36 pp.

Billingsley, George H., AND Workman, Jeremiah B.

2000 24.216 Geologic map of the Littlefield 30′ × 60′ quadrangle, Mohave County, northwestern Arizona. *U.S. Geological Survey, Geologic Investigations Series, I-2628*, 1 sheet, scale 1:100,000, 25-page text.

Billingsley, George H.; Antweiler, John C.; Beard, L. Sue; Lucchitta, Ivo; AND Lane, M. E.

1986 24.41 Mineral resource potential map of the Pigeon Canyon, Nevershine Mesa, and Snap Point Wilderness Study Areas, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-1860-A*, 1 sheet with text, scale 1:50,000, and 10-pp. text in pamphlet.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Billingsley, George H.; Antweiler, John C.; AND Ellis, Clarence E.

1983 24.371 Mineral resource potential of the Kanab Creek Roadless Area, Coconino and Mohave Counties, Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-1627-A*, 1 sheet with text, 10 pp.

Billingsley, George H.; Barnes, Charles W.; AND Ulrich, G. E.

1985 24.42 Geologic map of the Coconino Point and Grandview Point quadrangles, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1644*, 1 sheet, scale 1:62,500.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"| FQ24/2:1205

Billingsley, George H.; Beard, L. Sue; Priest, Susan S.; Wellmeyer, Jessica L.; AND Block, Debra L.

2004 24.368 Geologic map of the lower Grand Wash Cliffs and vicinity, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2427*, scale 1:31,680, text 23 pp.

Billingsley, George H.; Block, Debra L.; AND Dyer, Helen C.

2006 24.271 Geologic map of the Peach Springs 30′ × 60′ quadrangle, Mohave and Coconino Counties, northwestern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2900*, 16 pp., 1 sheet, scale 1:100,000.

Billingsley, George H.; Felger, Tracey J.; AND Priest, Susan S.

2006 24.238 **Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona.** *U.S. Geological Survey, Scientific Investigations Map 2895*, 22 pp., 1 sheet, scale 1:100,000.

Also available only as downloads from U.S. Geological Survey publications website are geologic maps of the thirty-two 7.5′ quadrangles (scales 1:24,000) within the Valle 30′ × 60′ quadrangle, all of which can be accessed directly from this webpage: https://pubs.usgs.gov/sim/2006/2895/24k/images/ (accessed 10 July 2024). Quadrangles are as follows:

2006 24.239 **National Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.240 **Supai Camp quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.241 **Hualapai Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.242 **Baldy Basin quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.243 **Box K Ranch quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.244 **Metzger Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.245 **Tusayan West quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.246 **Tusayan East quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.247 **Dike Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.248 **Supai Camp SE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.249 **Hazen Hole Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.250 **Rosebud Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.251 **Little Harpo Canyon quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.252 **Howard Hill quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.253 **Red Butte SW quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.254 **Red Butte quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.255 **Rose Well Camp West quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.256 **Rose Well Camp East quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.257 **Black Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.258 **Tin House quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.259 **Markham Dam quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.260 **Miller Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.261 **Valle Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.262 **Molly Ann Draw quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.263 **Rhodes Canyon quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.264 **Big Bud Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.265 **Bishop Lake quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.266 **Howard Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.267 **Red Hill Ranch quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.268 **Mixon Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.269 **Howard Lake quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

2006 24.270 **Hobble Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Valle 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2895*. [7.5′ quadrangle, scale 1:24,000.]

Billingsley, George H.; Hamblin, W. Kenneth; Wellmeyer, Jessica L.; Block, Debra; AND Dudash, Stephanie

2001 24.223 Geologic map of part of the Uinkaret Volcanic Field, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2368*, scale 1:31,680. [Mount Trumbull-Toroweap Valley area.]

Billingsley, George H.; Harr, Michelle; AND Wellmeyer, Jessica L.

2000 24.224 Geologic map of the upper Parashant Canyon and vicinity, northern Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2343*, scale 1:31,680, text 27 pp. [Upper Parashant Canyon-Grassy Mountain area.]

Billingsley, George H.; Priest, Susan S.; AND Dudash, Stephanie L.

2002 24.366 Geologic map of the Clayhole Wash and vicinity, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2394*, scale 1:31,680, text 20 pp.

Billingsley, George H.; Priest, Susan S.; AND Felger, Tracey J.

2004 24.360 Geologic map of Pipe Spring National Monument and the western Kaibab-Paiute Indian Reservation, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2863*, scale 1:31,680, 1 sheet.

2007 24.274 **Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona.** *U.S. Geological Survey, Scientific Investigations Map 2977*, scale 1:100,000, 1 sheet, 33 pp.

Also available only as downloads from U.S. Geological Survey publications website are geologic maps of the thirty-two 7.5' quadrangles (scales 1:24,000) within the Cameron 30' × 60' quadrangle, all of which can be accessed directly from this webpage: https://pubs.usgs.gov/sim/2007/2977/24k/images/ (accessed 10 July 2024). Quadrangles are as follows:

2007 24.275 **Grandview Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.276 **Grandview Point NE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.277 **Hellhole Bend quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.278 **Coconino Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.279 **Cameron North quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.280 **Cameron NE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.281 **Goldtooth Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.282 **Appoloosa Ridge quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30' × 60' quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5' quadrangle, scale 1:24,000.]

2007 24.283 **Harbison Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.284 **Peterson Flat quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.285 **Willows Camp quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.286 **Coconino Point SE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.287 **Cameron South quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.288 **Cameron SE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.289 **The Landmark quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.290 **Gold Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.291 **Dog Knobs quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.292 **Lockwood Canyon quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.293 **Campbell Francis Wash quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.294 **Gray Mountain.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.295 **Wupatki NE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.296 **Badger Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.297 **Rock Head quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.298 **Ebert Mountain quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.299 **Chapel Mountain quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.300 **SP Mountain quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.301 **East of SP Mountain quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.302 **Wupatki SW quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.303 **Wupatki SE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.304 **Standing Rocks.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.305 **White Water Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2007 24.306 **Wupatki NE quadrangle.** [As part of 1:100,000 scale] Geologic map of the Cameron 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 2977*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.316 **Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona.** *U.S. Geological Survey, Scientific Investigations Map 3035*, scale 1:100,000, 1 sheet, 23 pp.

Also available only as downloads from U.S. Geological Survey publications website are geologic maps of the thirty-two 7.5′ quadrangles (scales 1:24,000) within the Fredonia 30′ × 60′ quadrangle, all of which can be accessed directly from this webpage: https://pubs.usgs.gov/sim/3035/24k/images/ (accessed 10 July 2024). Quadrangles are as follows:

2008 24.317 **Colorado City quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.318 **Moccasin quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.319 **Kaibab quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.320 **Fredonia quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.321 **Shinarump Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.322 **Muggins Flat quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.323 **Buck Pasture Canyon quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.324 **Coyote Buttes quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.325 **Maroney Well quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.326 **Pipe Valley quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.327 **Pipe Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.328 **Clear Water Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona.

U.S. Geological Survey, Scientific Investigations Map 3035. [7.5′ quadrangle, scale 1:24,000.]

2008 24.329 **White Sage Flat quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.330 **Le Fevre Ridge quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.331 **Cooper Ridge quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.332 **House Rock Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.333 **Wild Band Pockets quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.334 **Sunshine Ridge quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.335 **Findaly Tank quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.336 **Gunsight Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.337 **Toothpick Ridge quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.338 **Warm Springs Canyon quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.339 **Jacob Lake quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.340 **House Rock quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.341 **Heaton Knolls quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.342 **Robinson Canyon quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.343 **Grama Spring quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.344 **Jumpup Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.345 **Sowats Point quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.346 **Big Springs quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.347 **Telephone Hill quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

2008 24.348 **Cane quadrangle.** [As part of 1:100,000 scale] Geologic map of the Fredonia 30′ × 60′ quadrangle, Mohave and Coconino Counties, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3035*. [7.5′ quadrangle, scale 1:24,000.]

Billingsley, George H.; Stoffer, Philip W.; AND Priest, Susan S.

2012 24.361 Geologic map of the Tuba City 30′ × 60′ quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Scientific Investigations Map 3227*, 31 pp., 3 sheets.

Billingsley, George H.; Ulrich, George E.; AND Barnes, C. W.

1983 24.43 Preliminary geologic map of the Coconino Point and Grandview Point quadrangles, Coconino County, Arizona. *U.S. Geological Survey, Open-File Report 83-731*, 1 sheet, 8 pp.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Billingsley, George H.; Wellmeyer, Jessica L.; AND Block, Debra

2001 24.225 Geologic map of the House Rock quadrangle, Coconino County, northern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2364*, scale 1:24,000, text 8 pp.

Billingsley, George H.; Wellmeyer, Jessica L.; Harr, Michelle; AND Priest, Susan S.

2002 24.367 Geologic map of the Hidden Hills and vicinity, Mohave County, northwestern Arizona. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2387*, scale 1:31,680, text 23 pp.

Billingsley, George H.; Wenrich, Karen J.; AND Huntoon, Peter W.

1986 24.44 Breccia pipe and geologic map of the southeastern Hualapai Indian Reservation and vicinity, Arizona. *U.S. Geological Survey, Open-File Report 86-458-B*, 26 pp., 2 sheets, scale 1:48,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

2000 24.217 Breccia-pipe and geologic map of the southeastern part of the Hualapai Indian Reservation and vicinity, Arizona. *U.S. Geological Survey, Geologic Investigations Series, I-2643*, 2 sheets, text 18 pp; scale 1:48,000.

Billingsley, George H.; Wenrich, Karen J.; Huntoon, Peter W.; AND Young, Richard A.

1990 24.45 Breccia pipe and geologic map of the southwestern Hualapai Indian Reservation and vicinity, Arizona. *U.S. Geological Survey, Open-File Report 86-458-D*, 33 pp., 2 sheets, scale 1:48,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

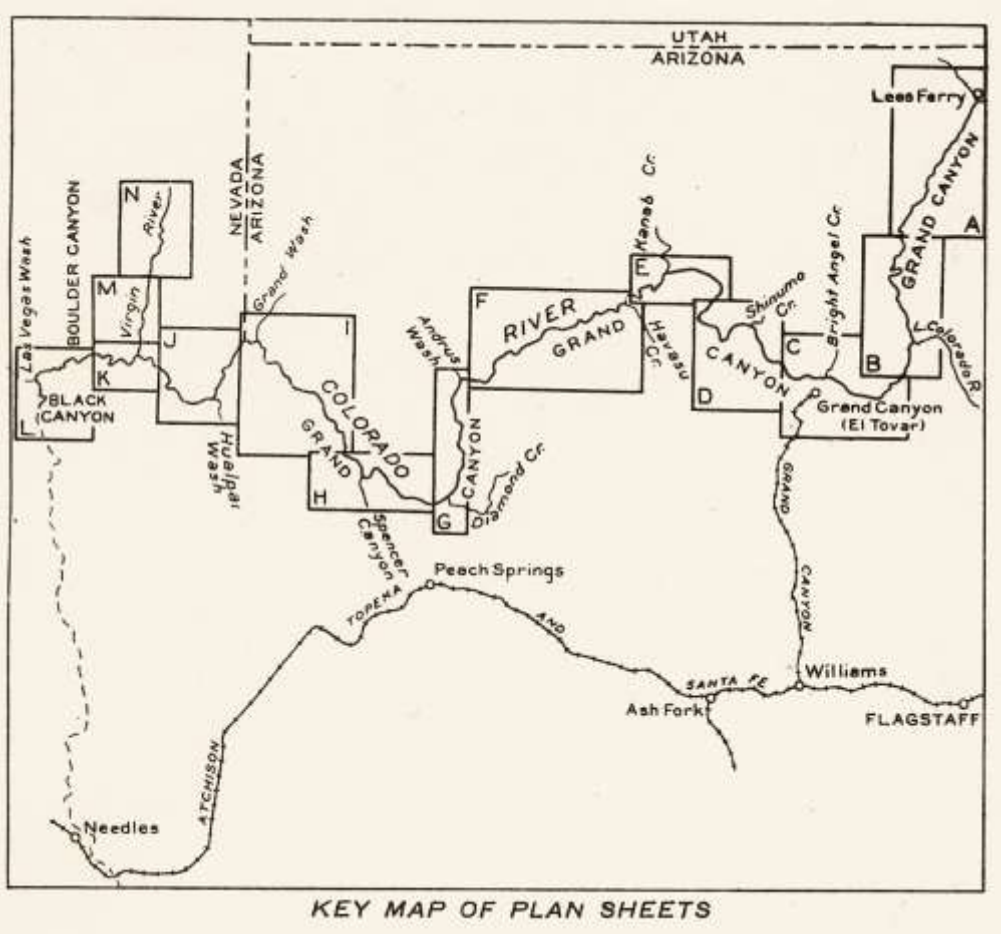
1999 24.214 Breccia-pipe and geologic map of the southwestern part of the Hualapai Indian Reservation and vicinity, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Series, I-2554*, 2 sheets, with text 50 pp.

Birdseye, Claude H.

NO DATE 24.220 *Plan and profile of Colorado River from Lees Ferry, Ariz., to Black Canyon, Ariz.-Nev., and Virgin River, Nev.* Oakland, California: American River Touring Association, 1 map and 1 profile on 8 sheets, and mileage schedule sheet; scale [*ca.* 1:63,360]. [1966?] [Reproduction from Birdseye (1924) at about one-half original size but without correcting the stated 1:31,680 scale.]

1924 24.46 *Plan and profile of Colorado River from Lees Ferry, Ariz., to Black Canyon, Ariz.-Nev., and Virgin River, Nev.* (Topography by R. W. Burchard and C. H. Birdseye.) U.S. Geological Survey, 21 sheets consisting of 14 plans (maps, sheets A-N, scale 1:31,680, contour interval 50 feet, contour interval on river surface 5 feet; *see key below*) and 7 profiles (sheets O-U, scale 1:81:680, vertical scale 1 inch = 20 feet). [Virgin River, between Colorado River and Muddy Creek, plans on sheets K, M, N.] [Full set displays Colorado River Miles 0-356, and Virgin River Miles 0-28. "Mileage [on Colorado River] is measured [downstream] from U. S. G. S. concrete gage well opposite mouth of Paria River".] [*NOTE*: For continuation of series from Black Canyon to the southern international boundary, see U.S. Geological Survey (1927, ITEM NO. 11.18458) in Part 11/Section 2A.] [Regarding Mile 0, see in notes to Part 22 herein.]

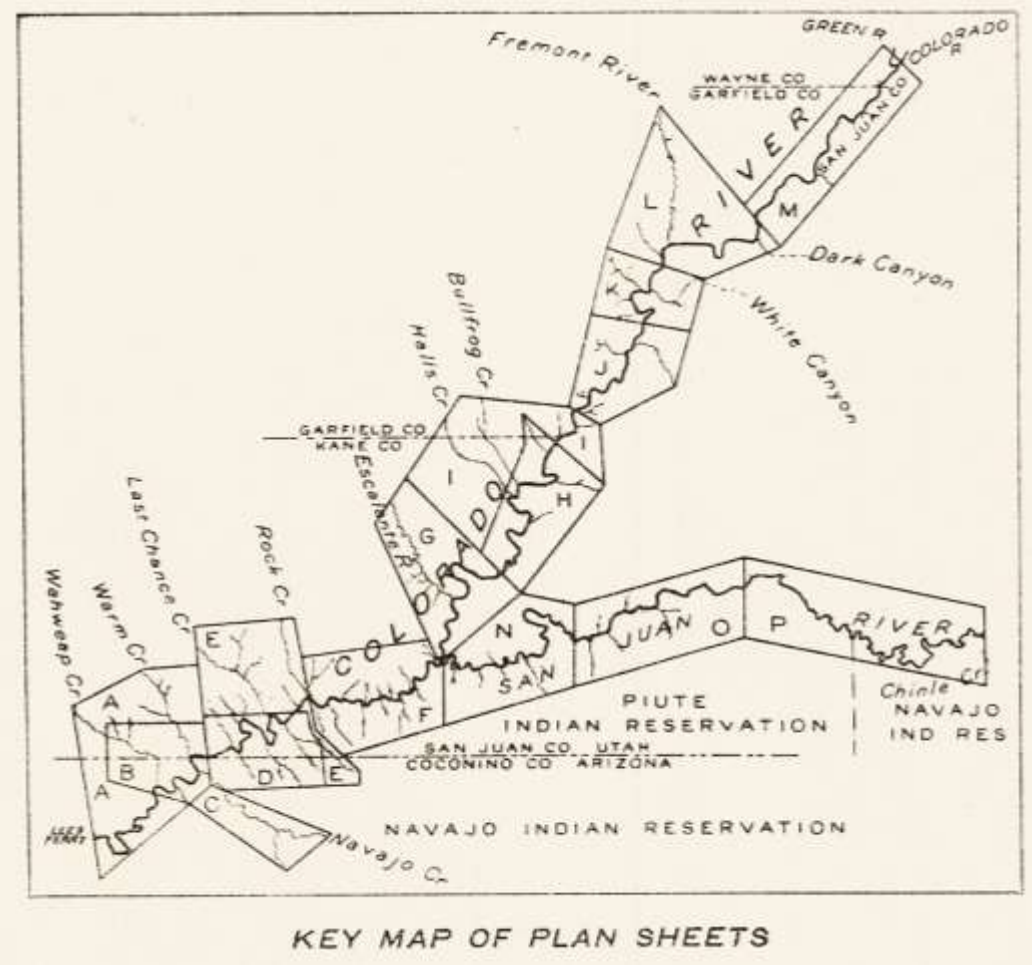
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: pages 46, 80| |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"| FQ15:669 FQ21:432 [Sheets A-N], 424 [Sheets O-U]



1943 24.829 *Plan and profile of Colorado River from Lees Ferry, Ariz., to Black Canyon, Ariz.-Nev., and Virgin River, Nev.* (Topography by R. W. Burchard and C. H. Birdseye.) U.S. Geological Survey, 21 sheets. [Reprint of Birdseye (1924) but also noting, "Printed 1924".]

Birdseye, Claude H., AND Gerdine, T. G.

1922 24.816 *Plan and profile of Colorado River from Lees Ferry, Ariz[.], to mouth of Green River, Utah; San Juan River to mouth of Chinle Creek, Utah; and certain tributaries.* (Topography by A. T. Fowler and V. E. Leech.) U.S. Geological Survey, 22 sheets consisting of 16 plans (maps, sheets A-P, scale 1:31,680; *see key below*) and 6 profiles (sheets Q-V). [Within the geographical bounds of this bibliography, see plan from Lees Ferry to Mile –15 on sheets A and B (contour interval 20 feet, contour interval on river surface 5 feet); corresponding profile on sheet Q, vertical scale 1 inch = 20 feet). C. H. Birdseye, Chief Topographic Engineer; T. G. Gerdine, Division Topographic Engineer; topography by A. T. Fowler and V. E. Leech; surveyed 1921.] [Full set displays Colorado River Miles 0 to –216, and San Juan River Miles 0-133. Mileage on Colorado River measured upstream from USGS concrete gage well opposite mouth of Paria River; usually by convention indicated as negative numbers.] [Regarding Mile 0, see in notes to Part 22 herein.]



Blair, J. Luke; Hanks, Thomas C.; AND Young, Richard A.

2010 24.356 Maps for the workshop [ABSTRACT]. *In: CR_Evolution_2: Origin and Evolution of the Colorado River System II Workshop: May 24-26, 2010, Flagstaff, Arizona*, 1 p.

[Shaded-relief and color-coded digital topographic maps. The maps were presented as posters at the workshop and were posted online at https://sites.google.com/site/crevolution2/home/files (accessed 8 January 2011; reaccessed 9 December 2015).]

Blank, H. R., AND Kucks, R. P.

1989 24.901 Preliminary aeromagnetic, gravity, and generalized geologic maps of the USGS Basin and Range-Colorado Plateau transition zone study area in southwestern Utah, southeastern Nevada, and northwestern Arizona. *U.S. Geological Survey, Open-File Report 89-432*, 16 pp., maps 1:250,000. [Preliminary.] [BARCO study project.] [Bounding meridians are 112°, 115° W; 36°30′, 38° N.]

Bohannon, Robert G.

1978 24.47 Preliminary geologic map of the Las Vegas 1° × 2° quadrangle, Nevada, Arizona, and California. *U.S. Geological Survey, Open-File Report 78-670*, 12 pp., 1 sheet, scale 1:250,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 47| |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

1991 24.898 Geologic map of the Jacobs Well and southern part of the Elbow Canyon quadrangles, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2167*, scale 1:24,000.

1992 24.899 Geologic map of the Red Pockets quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2288*, scale 1:24,000.

Bohannon, Robert G., AND Lucchitta, Ivo

1991 24.896 Geologic map of the Mount Bangs quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2166*, scale 1:24,000.

Bohannon, Robert G.; Lucchitta, Ivo; AND Anderson, R. Ernest

1991 24.897 Geologic map of the Mountain Sheep Springs quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2165*, scale 1:24,000.

Brabb, Earl E.; Colgan, Joseph P.; AND Best, Timothy C.

1999 24.373 Map showing inventory and regional susceptibility for Holocene debris flows and related fast-moving landslides in the conterminous United States. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2329*, 2 sheets, scale 1:2,500,000, text 42 pp.

Brown, Kristin M., AND Billingsley, George H.

2010 24.351 Map showing geologic structure, cultural and geographic features, and geologic cross sections of northwestern Arizona. *In:* Alpine, Andrea E. (ed.), Hydrological, geological, and biological site characterization of breccia pipe uranium deposits in

northern Arizona. *U.S. Geological Survey, Scientific Investigations Report 2010-5025*, Plate 1 (in pocket), scale 1:375.000.

Bush, Alfred Lerner

1983 24.310 Geologic map of the Vermilion Cliffs-Paria Canyon Instant Study Area and adjacent wilderness study areas, Coconino County, Arizona, and Kane County, Utah. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-1475-A*.

Bush, Alfred Lerner, AND Lane, M. E.

1982 24.379 Mineral resource potential of the Vermilion Cliffs-Paria Canyon Instant Study Area, Coconino County, Arizona, and Kane County, Utah. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-1475-D*, scale 1:62: 500, text 11 pp.

1983 24.48 Geochemical data and sample locality map of the Vermilion Cliffs-Paria Canyon Instant Study Areas and adjacent Wilderness Study Areas, Coconino County, Arizona, and Kane County, Utah. *U.S. Geological Survey Miscellaneous Field Studies Map MF-1475-B*, scale 1:62,500.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Butler, Arthur P., Jr.

1972 24.49 Uranium. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 315-317.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

C

Carlson, J. E., AND Willden, R.

1968 24.50 Transcontinental geophysical survey (35°-39° N) geologic map from 112° W longitude to the coast of California. *U.S. Geological Survey, Miscellaneous Investigations Map I-532-C*, scale 1:1,000,000.

1968 24.51 Transcontinental geophysical survey (35°-39° N) geologic map from 100° to 112° W. *U.S. Geological Survey, Miscellaneous Investigations Map I-533-C*, scale 1:1,000,000.

Cooley, M. E.

1960 24.53 *Physiographic map of the San Francisco plateau-lower Little Colorado River area, Arizona*. Arizona State University, Geochronology Laboratory, pp. 19-30.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 50| |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

1967 24.54 *Arizona highway geologic map*. Arizona Geological Society, scale 1:1,000,000, 1 sheet. (Text on verso, "The geologic history of Arizona"; also "Physiographic map of Arizona" [with scenic sketches and accompanying text to sketches by J. F. Lance] and "Maps showing stages of the geological evolution in Arizona through time".)

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

Cooper, J. R.; Cone, G. C.; AND Peirce, H. W.

NO DATE 24.55 *Geologic map and cross-sections of Arizona*. Arizona Bureau of Geology and Mineral Technology, 1 sheet (loose-leaf format), explanation 2 pp.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–1"|

Craig, Lawrence C.

1972 24.56 (COMPILER) Mississippian System. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 100-110. (Compiled from maps and manuscripts provided by Ross B. Johnson, William W. Mallory, Edwin D. McKee, Albert E. Roberts, and Richard P. Sheldon.)

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 3–Special Section 2–1 to 2|

Currey, J. L.

1972 24.57 *Pictorial color map of Grand Canyon : geology, history, points of interest, river and rapids*. Salt Lake City, Utah: Paragon Press, 32 pp.; includes generalized colored geologic map, scale 1:87,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: pages 51, 108| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"| FQ17:598 FQ18:81

D

Darton, N. H. [Darton, Nelson Horatio]

1923 24.861 *Topographic map of the State of Arizona.* Arizona Bureau of Mines, *in cooperation with* U.S. Geological Survey, scale 1:500,000. [Also revised 1933.]

Darton, Nelson Horatio, *et al.*

1924 24.58 *Geological map of the State of Arizona*. U.S. Geological Survey, for Arizona Bureau of Mines, scale 1:500,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 52| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Doelling, Hellmut H.

1987 24.806 Geologic map of the Elephant Butte quadrangle, Kane County, Utah[,] and Mohave County, Arizona. *Utah Geological Survey, Open-File Report 113*, 13 pp., 7 figures. [For later map see Sable and Doelling (1990, ITEM NO. 24.812).]

1999 24.807 (COMPILER) Interim geologic map of the Kanab 30′ × 60′ quadrangle, Kane and Washington Counties, Utah, and Coconino and Mohave Counties, Arizona. *Utah Geological Survey, Open-File Report 366*, 1 sheet [cross-section], text [12] pp. with maps as text-figures. [For later map see Doelling (2008, ITEM NO. 24.814).]

2008 24.814 (COMPILER) Geologic map of the Kanab 30′ × 60′ quadrangle, Kane and Washington Counties, Utah, and Coconino and Mohave Counties, Arizona. *Utah Geological Survey, Miscellaneous Publication 08-2DM*, 1 sheet (scale 1:100,000).

DuBois, Susan M.; Nowak, Thaddeus A.; Smith, Ann W.; AND Nye, Nan K.

1982 24.60 *Historical epicenters in Arizona 1830-1980*. Arizona Bureau of Geology and Mineral Technology, 1 sheet, base map scale 1:1,000,000. [Map. Accompanies text by DuBois *et al.* (1982, ITEM NO. 21.889), Arizona Bureau of Geology and Mineral Technology, Bulletin 193.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Dutton, Clarence Edward

NO DATE 24.789 [Map of Kaibab Plateau and surrounding country.] [New York]: Globe Stationery and Printing Co., 1 sheet. [1880s?] [Notice by John Ward, Manager, Globe Stationery and Printing Co.; square brackets are part of the quotation: "This Map is copied from Powell's Geological Survey [Tertiary History of the Grand Cañon District, by Clarence E. Dutton, U. S. A.] The Geological contours being followed exactly, only Topographical Map lines are inserted instead of the Geological lines, to show more clearly the elevations, depressions, natural boundaries and sub-divisions."] [General boundaries of quadrangle: White Cliffs, Utah, on the north; Lees Ferry on the east; Kanab Cañon on the west; the Colorado River on the south.]

1882 24.61 The Tertiary history of the Grand Cañon district; with atlas. *U.S. Geological Survey, Monograph 2*, 264 pp. [quarto]; Atlas, 23 sheets [double folio]. [Itemization of geological maps by Atlas sheet number: ***II***: **Geological Map of the Western Part of the Plateau Province** [scale nearly 1:1,000,000; colored] ["The topography of the colored portion is compiled by J. H. Renshawe, from data and surveys by the U.S. Geographical and Geological Survey of the Rocky Mountain Region, J. W. Powell in charge, and by the United States Geological Survey, Clarence King, Director. The topography of the uncolored portion is compiled largely from surveys under the direction of Capt. George M. Wheeler, U.S. Engineers. Geology by C. E. Dutton" (*from* Sheet I, "List of Atlas Sheets")]. ***III***: **Sketch Map of the Western Part of the Plateau Province Showing Faults of the Grand Cañon District and High Plateaus** [scale *ca.* 1:1,000,000] ["The topography is the same as that of the preceding sheet." (*from* Sheet I)]. ***VII–VIII*** (halves of one map): **Map of the Uinkaret Plateau North Half** [scale 1:63,360; colored] [topography by J. H. Renshawe, geology by C. E. Dutton]; **Map of the Uinkaret Plateau South Half** [scale 1:63,360; colored] [topography by J. H. Renshawe, geology by C. E. Dutton]. ***XII–XIV*** (quadrants of one map): **Geologic Map of the Southern Part of the Kaibab Plateau (Part I. North-Western Sheet.)** [scale 1:63,360;

colored] [topography by Sumner H. Bodfish, geology by C. E. Dutton]; **Geologic Map of the Southern Part of the Kaibab Plateau (Part II. North-Eastern Sheet.)** [scale 1:63,360; colored] [topography by Sumner H. Bodfish; geology by C. E. Dutton]; **Geologic Map of the Southern Part of the Kaibab Plateau (Part III. South-Western Sheet.)** [scale 1:63,360; colored] [topography by Sumner H. Bodfish, geology by C. E. Dutton]; **Geologic Map of the Southern Part of the Kaibab Plateau (Part IV. South-Eastern Sheet.)** [scale 1:63,360; colored] [topography by Sumner H. Bodfish, geology by C. E. Dutton]. ***XX–XXIV*** (quadrants of one map; XX/XXI abut East-West; XXI/XXIV abut North-South): **Geologic Map Showing the South-Western Portion of the Mesozoic Terraces and the Vicinity of the Hurricane Fault** [scale 1:250,000; colored] [geology by C. E. Dutton]; **Geologic Map of the Mesozoic Terraces of the Grand Cañon District and the Southern Portion of the High Plateaus** [scale 1:250,000; colored] [geology by C. E. Dutton]; **Geologic Map Showing the Kanab, Kaibab, Paria and Marble Cañon Platforms** [scale 1:250,000; colored] [geology by C. E. Dutton]; **Geologic Map of the Colorado Plateau and San Francisco Mountains** [scale 1:250,000; colored] [geology by C. E. Dutton].

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

1885 24.856 Tertiary history of the Grand Cañon district : with atlas. *48th U.S. Congress, 2nd Session, House of Representatives Miscellaneous Document 35*, 264 pp. [text, quarto]; *Atlas*, 24 sheets [folded, laid loose in three-quarter leather folder with cloth ties affixed to boards on three open edges, and spine labels affixed; quarto]. (House series title-page accompanies text volume: *The Miscellaneous Documents of the House of Representatives for the Second Session of the Forty-eighth Congress, 1884-'85. In seventeen volumes. Volume 11.—No. 35. Washington: Government Printing Office. 1885.*) (SPINE TITLE FOR TEXT VOLUME: [top] "HOUSE MISCELLANEOUS DOCUMENTS 2D SESS., 48TH CONG. 1884-'85 VOL. 11"; [bottom] "DUTTON [rule] TERTIARY HISTORY OF THE GRAND CANON DISTRICT [rule] WITH ATLAS". SPINE TITLE FOR ATLAS: [top] "HOUSE MISCELLANEOUS DOCUMENTS 2d SESS., 48th CONG. 1884-'85 VOL. 11"; [bottom] "ATLAS".) • [A re-release of Dutton (1882, ITEM NO. 24.61, *which see for an itemization of the geological maps*). Re-release was a part of the collated series of House Miscellaneous Documents for 1884-1885, not mentioned by Farquhar or in earlier editions of this bibliography. Text and Atlas title-pages are the same as for Dutton (1882), retaining date, but text volume adds the House Miscellaneous Documents series title-page (1885) cited above; atlas does not include a separate House Miscellaneous Documents title-page although it is identifiable from its spine labels. Atlas Sheets differ from 1882 publication in that the double-folio sheets are vertically and horizontally folded to accommodate quarto format (vertical fold in center as in original double-folio state, then folded horizontally to achieve quarto size). Quarto format also corroborated in *Checklist of Public Documents, Second Edition* (U.S. Government Printing Office, Superintendent of Documents, 1895, ITEM NO. 2.27756), p. 76. *Folded* Atlas Sheets each are also stamped with a numeral on the exterior (sheet verso) corner, enumerated 0 to 23, to facilitate identification of Atlas Sheets without having to unfold them: "0" is the title-page, "1" is the "List of Atlas Sheets" (equivalent to Atlas Sheet I), followed by 2-23 (Atlas Sheets II-XXIII, comprising tinted and chromo-lithographic maps and scenic views). Atlas title-page: "Department of the Interior United States Geological Survey J.W.Powell Director Atlas to Accompany the Monograph on the Tertiary History of the Grand Cañon District by Capt. Clarence E. Dutton U.S.A. [vignette] Washington 1882 Julius Bien and Co. Lith. New York".)] [Points relating to physical arrangement are provided with the assistance of Daniel F. Cassidy and Richard D. Quartaroli.] [*NOTE*: Sets of loose Atlas sheets, not folded and not stamped with external numbers on verso, are known..]

≡ CROSS-LISTINGS FARQUHAR (Fretwater Press 2003 reprinting only, *endnote 26* [*i.e.*, Farquhar, 2003, ITEM NO. 1.218; endnote by Daniel F. Cassidy])

1977 24.62 *Tertiary history of the Grand Cañon district : with atlas.* (Introduction by Wallace Stegner.) Santa Barbara, California, and Salt Lake City: Peregrine Smith, Inc., 264 pp. [text]; Atlas, 23 sheets [folded, laid in]. [Facsimile reprint of Dutton (1882, *U.S. Geological Survey Monograph 2*; ITEM NO. 21.918. Edition of 1,500 sets, boxed.] [See Dutton (1882, ITEM NO. 24.61) for an itemization of the geological maps.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

E

Eardley, A. J.

1949 24.63 Paleotectonic and paleogeologic maps of central and western North America. *American Association of Petroleum Geologists, Bulletin*, 33: 655-682.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 53| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Eastman, Steven A.

2007 24.352 Arizona physiographic areas. *Arizona Geological Survey, Digital Information DI-10*, 1 sheet.

Edwards, Kathleen, AND Batson, R. M.

1990 24.64 Experimental digital shaded-relief maps of Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1821*, 2 sheets, scale 1:1,000,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

1990 24.65 Experimental digital shaded-relief maps of southwestern United States. *U.S. Geological Survey, Miscellaneous Investigations Map I-1850*, 2 sheets, scale 1:2,000,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

Emslie, John

1850 24.878 Geological map of the world. ("Drawn & Engraved by John Emslie", "Published by James Reynolds, 174 Strand London.") *In: Introduction to natural philosophy, comprising a popular acount of the properties of bodies; mechanical powers; motion and machinery. The sciences of hydrostatics; hydraulics; pneumatics; acoustics; optics; electricity; magnetism; and chemistry. A companion to Reynolds's series of popular diagrams of natural philosophy, comprising two hundred and fifty illustrations.* London: James Reynolds, 24 pp., 37 plates. [Very generalized. In the southwestern part of North America, a single river (the Colorado, not labeled) follows an effectively straight course from the north-northeast to enter the head of the Gulf of California

(not labeled). The geology in its lower course is mapped as "Alluvium sand, gravel"; in its upper course, "Secondary Lower Coal, Limestone, Devonian".]

F

Farrar, C. D.

1978 24.66 Map showing ground-water conditions in the Kaibito and Tuba City area, Coconino and Navajo Counties, Arizona. *U.S. Geological Survey, Water-Resources Investigations map WRI 79-58* [open-file].

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 54| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

1980 24.67 Maps showing ground-water conditions in the Hopi area, Coconino and Navajo Counties, Arizona, 1977. *U.S. Geological Survey, Open-File Report 80-3*, 4 sheets, scale 1:63,360.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 54| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Finch, Warren I.

1955 24.69 (COMPILER) Preliminary geologic map showing the distribution of uranium deposits and principle ore-bearing formations of the Colorado Plateau region. *U.S. Geological Survey, Mineral Investigations Field Studies Map MF-16*, scale 1:500,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 54| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

1991 24.70 Maps showing distribution of uranium deposits in the Colorado Plateau uranium province—a cluster analysis. *U.S. Geological Survey, Miscellaneous Field Studies Map MF-2080*, scale 1:2,500,000.

Finch, Warren I.; Molina, P.; Naumov, S. S.; Ruzicka, V.; Barthel, F.; Thoste, V.; Müller-Kahle, E.; AND Tauchid, M.

1995 24.71 *World distribution of uranium deposits : first edition.* Vienna, Austria: International Atomic Energy Agency STI/PUB/995, scale 1:30,000,000.

Fonseca Martínez, Arlin Brighith; Mexia Durán, Kevin; Ramírez Salamanca, Gustavo Adolfo; AND Iriondo, Alexander

2021 24.858 Generalized digital lithological map of northern Mexico and southwestern United States of America. Mapa digital litológico generalizado del norte de México y suroeste de Estados Unidos de América. *Terra Digitalis* (Universidad Nacional Autónoma de México, *a través del* Instituto de Geografía, Circuito de la Investigación Científica s/n, Ciudad de México), 5(1): 1-8 (https://doi.org/10.22201/igg.25940694e.2021.1.85) +

Static map (https://doi.org/10.22201/igg.25940694e.2021.1.85.177) and Interactive map (https://doi.org/10.22201/igg.25940694e.2021.1.85.178) + Supplemental Material online (https://doi.org/10.22201/igg.25940694e.2021.1.85.180) [51] pp. Scale 1:1,000,000. [Text in English; bilingual title and abstract.] [The northern boundary of the map is at the parallel along the northern boundaries of Arizona and New Mexico; eastern boundary embraces most of Texas; western boundary is in the Pacific Ocean, with ocean floor topography shown; southern boundary is at the parallel of Mazatlán, Sinaloa.]

Four Corners Geological Society

1952 24.72 Geologic map; Four Corners area *In: Geological symposium of the Four Corners region*. [Durango, Colorado]: Four Corners Geological Society, fold-out plate.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

Freytag & Berndt [firm]

1926 24.867 *Übersicht von Nord_Amerika nach den geologischen Vermessungen von Canada, der Vereinigten Staaten und anderen Quellen.* (Caption: "Nord_Amerika".) ("Berghaus' Physikal. Atlas Nº 13.") ("Entw. v. Herm. Berghaus 1886, Ausg. 1887.") ("Nebenkarten gez. v. M. Risch.") [Geological map. The main map restricts labeling principally to large-scale geographical features and does not label rivers; in the area of interest here only "Colorado Plat." appears across the Grand Canyon area. An inset map, "*Cañons des Colorado 1:5000 000*" provides some rather antiquated labeling: "Grand Cañon" appears in the western Grand Canyon, while "Marble Cañon" is in the area between the confluences of "Colorado Chiquito" and "Kanab Cañ." Most physiographic features and the course of "Rio Colorado" are correct but while "Cataract Cr." is correctly delineated, "Parke" Cr." parallels it just to the east, passing around the west side of "Red Butte" before turning northeastward to reach the Colorado.] [In German.]

G

G. Freytag und Berndt A. G. [firm]

1926 24.876 *Freytag & Berndt's Tektonische Schulwandkarte der Erde.* Wien: Druck und Verlag der Kartog. Anstalt G. Freytag & Berndt A. G. ("Bearbeitet von Prof. Dr. Max Fritz.") ("Laut Erlaß des Bundesministeriums für Unterricht vom 16.Juli 1926 Z. 6445/g-II, für Mittelschulen, Lehrer-u. Lehrerinnenbildungsansalten zulässig erklärt.") Scale 1:16,000,000. [An early tectonic map of the world, supporting the new theory of plate tectonics. Within the area of interest here two symbols west of the San Francisco Peaks and south of the Colorado River, indicating "Epizentren solcher Erdbeben, welche eine Reichweite von mehr als 4000 km mikroseismisch, beziehungsweise mehr als 300 km makroseismisch aufweisen. (vorwiegend nach A. Sieberg)" (Epicenters of some earthquakes, which have a range of more than 4000 km microseismically or more than 300 km macroseismically. (mainly based on A. Sieberg)). These symbols lie within, and are the only ones within, the delimited area of "Colorado-Plateau".] [In German.]

Gannett, Henry

1896 24.376 (COMPILER) *United States contour map.* [Washington, D.C.]: U.S. Geological Survey, 1 sheet. ("Edition of Dec. 1896. reprinted Sept. 1899.") [Scale 1 inch = approximately 115 miles. Contour interval 1000 feet, 500-foot supplementary contours.]

Garrity, Christopher P., AND Soller, David R.

2009 24.833 Database of the Geologic Map of North America—adapted from the map by J.C. Reed, Jr. and others (2005). *U.S. Geological Survey, Data Series 424*, 7 pp. + digital files online at https://pubs.er.usgs.gov/publication/ds424. [Refer to Reed *et al.* (2005, ITEM NO. 24.832).]

Giardina, Salvatore, Jr.

1980 24.73 Atlas of late Quaternary-Tertiary faults of the State of Arizona. *Arizona Oil and Gas Conservation Commission, Special Publication 5*, 48 pp.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Gilbert, G. K.; Marvine, A. R.; AND Howell, E. E.

1876 24.74 Parts of northern and north western Arizona and southern Utah. *In: Geological atlas projected to illustrate geographical explorations and surveys west of the 100th meridian of longitude, under the command of First Lieut. Geo. M. Wheeler*. New York, sheet 67, scale 1:506,880. [Physiographic map. Prominently displays the eastern and central Grand Canyon, and Marble Canyon.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 56| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Gootee, Brian F.

2019 24.866 **Geologic Timeline of the Grand Canyon.** *Arizona Geological Survey, Open-File Report 2019-02*, 2 pp.; with "Supplemental resource document for Geologic Timeline of the Grand Canyon", 3 pp. [Includes "Generalized Geologic Map of the Grand Canyon Region" (Proterozoic rocks not visible at this scale). Stratigraphic column includes map vignettes showing world continental reconstructions with Grand Canyon region pinpointed.] [*NOTE*: The stratigraphic column is greatly elaborated upon and updated by Robert S. Leighty, "Grand Canyon stratigraphy," *Arizona Geological Survey, Contributed Report CR-21-D* (2021), 1 plate, which does not include a map; released digitally for high-density printing as a poster.]

Grose, L. Trowbridge

1972 24.75 Tectonics. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 35-44.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Grubensky, Michael J., AND Reynolds, Stephen J.

1987 24.76 Index of unpublished (pre-1969) geologic mapping in Arizona done by the Arizona Bureau of Mines and the U.S. Geological Survey. *Arizona Bureau of Geology and Mineral Technology, Open-File Report 87-5*. [Grand Canyon quadrangle, sheet 4 of 14.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

H

Hackman, R. J., AND Olson, A. B.

1977 24.77 Geology, structure, and uranium deposits of the Gallup 1° × 2° quadrangle, New Mexico and Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-981*, scale 1:250,000, 2 sheets.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

Hall, James

1857 24.846 (ASSISTED BY J. P. Lesley) *Map illustrating the general geological features of the country West of the Mississippi River. Compiled from the surveys of W. H. Emory and from the Pacific Railroad Surveys and other sources. In:* Emory, William H., Report on the United States and Mexican boundary survey, made under the direction of the Secretary of the Interior. *U.S. 34th Congress, 1st Session, House Executive Document 135* AND *Senate Executive Document 108*. ("Drawn by Th^{s} Jekyll." "Lith. of Sarony. Major & Knapp 449 Broadway New York".) [See the full citations for Emory (1857) as ITEM NOS. 2.2542 and 2.18594.] [Hand-colored map. Not a separately published map as such, but cited here for its portrayal of the Grand Canyon region prior to even the first geological exploration in 1858. The base map depicts "Rio Colorado" from the head of "Gulf of California" northward approximately to the confluence of the Virgin River (not labeled), at which point the line depicting the river becomes dashed, as also is the lower reach of the Virgin. In the Grand Canyon region (largely blank), the Colorado is depicted on a generalized east-west course, connecting directly to, and only to, "Colorado Chiquito", with but two tributaries from the south (both unlabeled), the easterly one of which is Cataract Creek. Geologically, only rocks of igneous centers are depicted in the region, although some generalized, broadly applied shading apears in the area to designate "Devonian" rocks.]

≡ CROSS-LISTINGS WHEAT III:827*, IV:922

Hammond, Becky J.

1991 24.808 Geologic map of the Jarvis Peak quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 212*, 2 sheets (scale 1:24,000), text 53 [63] pp.

Hayden, Janice M. *see also* Higgins, Janice M.

2004 24.793 Geologic map of the Little Creek Mountain quadrangle, Washington County, Utah. *Utah Geological Survey, Map 204*, 2 plates (scale 1:24,000).

2004 24.805 Geologic map of The Divide quadrangle, Washington County, Utah. *Utah Geological Survey, Map 197*, 2 sheets (scale 1:24,000).

2005 24.794 Geologic map of the Washington Dome quadrangle, Washington County, Utah. *Utah Geological Survey, Map 209*, 2 sheets (scale 1:24,000), text 29 pp.

2006 24.795 Interim geologic map of the Kanab quadrangle, Kane County, Utah, and Mohave and Coconino Counties, Arizona. *Utah Geological Survey, Open-File Report 487*, 1 sheet (scale 1:24,000), text 8, [4] pp. [For updated map see Hayden (2011, ITEM NO. 24.375).]

2007 24.796 Interim geologic map of the Thompson Point quadrangle, Kane County, Utah[,] and Coconino County, Arizona. *Utah Geological Survey, Open-File Report 511*, 2 sheets (scale 1:24,000). [For updated map see Hayden (2011, ITEM NO. 24.797).]

2009 24.801 Interim geologic map of the Yellowjacket Canyon quadrangle, Kane County, Utah, and Mohave County, Arizona. *Utah Geological Survey, Open-File Report 554*, 1 sheet (scale 1:24,000), text 15 [17] pp. [For updated map see Hayden (2013, ITEM NO. 24.802).]

2011 24.797 Geologic map of the Thompson Point quadrangle, Kane County, Utah, and Coconino County, Arizona. *Utah Geological Sruvey, Map 249DM*, 2 sheets (scale 1:24,000).

2011 24.375 Geologic map of the Kanab 7.5′ quadrangle, Kane County, Utah[,] and Coconino and Mohave Counties, Arizona. *Utah Geological Survey, Map 248DM*, 2 sheets (scale 1:24,000).

2011 24.798 Interim geologic map of the Johnson Lakes quadrangle, Kane County, Utah, and Coconino County, Arizona. *Utah Geological Survey, Open-File Report 584*, 1 sheet (scale 1:24,000), text 10 [13] pp. [For updated map see Hayden (2013, ITEM NO. 24.799).]

2011 24.800 Geologic map of the White Hills quadrangle, Washington County, Utah. *Utah Geological Survey, Map 250DM*, 2 sheets (scale 1:24,000), text 11 pp.

2013 24.799 Geologic map of the Johnson Lakes quadrangle, Kane County, Utah, and Coconino County, Arizona. *Utah Geological Survey, Map 261DM*, 2 sheets (scale 1:24,000).

2013 24. 802 Geologic map of the Yellowjacket Canyon quadrangle, Kane County, Utah, and Mohave County, Arizona. *Utah Geological Survey, Map 256DM*, 2 sheets (scale 1:24,000).

Hayden, Janice M., AND Willis, Grant C.

2011 24.803 Geologic map of the St. George 7.5′ quadrangle, Washington County, Utah. *Utah Geological Survey, Map 251DM*, 2 sheets (scale 1:24,000), text 20 pp.

Hayden, Janice M.; Hintze, Lehi F.; AND Ehler, J. Buck

2005 24.804 Interim geologic map of the Castle Cliff quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 457*, 1 sheet (scale 1:24,000); with text, "Interim Geologic Maps of the Castle Cliff Quadrangle and the east half of Terry Benches Quadrangle, Washington County, Utah and Mohave County, Arizona", 10 [16] pp.

2005 24.805 Interim geologic map of the east half of Terry Benches quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 464*, 1 sheet (scale 1:24,000); with text, "Interim Geologic Maps of the Castle Cliff Quadrangle and the east half of Terry Benches Quadrangle, Washington County, Utah and Mohave County, Arizona", 10 [16] pp.

Hayes, Gavin P.; Smoczyk, Gregory M.; Villaseñor, Antonio H.; Furlong, Kevin P.; AND Benz, Harley M.

2020 24.834 Seismicity of the Earth, 1900-2018. *U.S. Geological Survey, Scientific Investigations Map 3446*, scale 1:22,500,000, https://doi.org/10.3133/sim3446. [Supersedes USGS Scientific Investigations Map 3064.]

Haynes, D. D., AND Hackman, R. J.

1978 24.78 Geology, structure, and uranium deposits of the Marble Canyon 1° × 2° quadrangle, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1003*, 2 sheets, scale 1:250,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 58| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Heffner, J. D., AND Hyder, M. L.

1980 24.79 Marble Canyon 1° × 2° NTMS area, Arizona; hydrogeochemical and stream sediment reconnaissance. *U.S. Department of Energy, Grand Junction Office, Report GJBX-138-81, DPST-79-146-18*, 36 pp., scale 1:250,000. [National Topographic Map Series.] [Includes microfiche and a copy of *U.S. Geological Survey, Miscellaneous Investigations Map I-1003*.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Hemphill, W. R.

1956 24.80 Photogeologic map of the Fredonia NW quadrangle, Mohave county, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-33*, scale 1:24,000.

Hereford, Richard

1993 24.81 Map showing surficial geology and geomorphology of the Palisades Creek archeologic area, Grand Canyon National Park, Arizona. *U.S. Geological Survey, Open-File Report 93-553*, 20 pp., 1 plate (scale 1:2,000).

1996 24.82 Map showing surficial geology and geomorphology of the Palisades Creek area, Grand Canyon National Park, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-2449*, scale 1:2,000, contour interval 1 m, 1 sheet (scale 1:2,000), text 12 pp.
≡ CROSS-LISTINGS FQ24/2:1206

1997 24.83 Topographic map of the Nine Mile Draw area, Colorado River, Glen Canyon National Recreation Area, Arizona. *U.S. Geological Survey, Open-File Report 97-253*, 1 sheet, scale 1:1,000.

2003 24.236 Map showing Quaternary geology and geomorphology of the Lonely Dell reach of the Paria River, Lees Ferry, Arizona. *U.S. Geological Survey, Geologic Investigations Series, I-2771*, 1 sheet, scale 1:5,000. [See also accompanying pamphlet by Robert H. Webb and Richard Hereford (2003, ITEM NO. 21.4856), "Comparative Landscape Photographs of the Lonely Dell Area and the Mouth of the Paria River", 21 pp.]

Hereford, Richard, AND Thompson, Kathryn S.

1994 24.84 Topographic map of the Granite Park area, Grand Canyon, Arizona. *U.S. Geological Survey, Open-File Report 94-563*, 1 sheet, scale 1:2,000, contour interval 1 m.

1994 24.85 Topographic map of the Nankoweap Rapids area, Marble Canyon, Arizona. *U.S. Geological Survey, Open-File Report 94-564*, 1 sheet, scale 1:2,000, contour interval 1 m.

Hereford, Richard; Burke, Kelly J.; AND Thompson, Kathryn S.

1996 24.86 Map showing Quaternary geology and geomorphology of the Nankoweap Rapids area, Marble Canyon, Arizona. *U.S. Geological Survey, Open-File Report 96-502*, 29 pp., 1 sheet, scale 1:2,000, contour interval 1 m.

1998 24.226 Quaternary geology and geomorphology of the Nankoweap Rapids area, Marble Canyon, Arizona. *U.S. Geological Survey, Geologic Investigations Series, I-2608*, 18 pp.
≡ CROSS-LISTINGS FQ24/2:1207

2000 24.229 Map showing Quaternary geology and geomorphology of the Granite Park area, Grand Canyon, Arizona. *U.S. Geological Survey, Geologigic Investigations Series, I-2662*, scale 1:2000.

2000 24.230 Map showing Quaternary geology and geomorphology of the Lees Ferry area, Glen Canyon, Arizona. *U.S. Geological Survey, Geologigic Investigations Series, I-2663*, scale 1:2333.

Higgins, Janice M. *see also* Hayden, Janice M.

1997 24.790 Interim geologic map of the White Hills quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 352*, 2 sheets (scale 1:24,000), text 94 pp. [For updated map see Hayden (2011, ITEM NO. 24.800).]

2000 24.791 Interim geologic map of The Divide 7.5' quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 378*, 2 sheets (scale 1:24,000), text 61 pp. + figures. [For updated map see Hayden (2004, ITEM NO. 24.805).]

Higgins, Janice M., AND Willis, Grant C.

1995 24.792 Interim geologic map of the St. George quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 323*, 1 sheet (scale 1:24,000), text 45 pp. [For updated map see Hayden and Willis (2011, ITEM NO. 24.803).]

Hitchcock, Charles H.

1882 24.87 *Gray's geological map of the United States. By Prof. Charles H. Hitchcock, Ph. D.* ("Copyright 1882 by O. W. Gray & Son.") *In: National Atlas*. Philadelphia: O. W. Gray and Son, pp. 204-205.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–7"|

Hitchcock, Charles H., AND Blake, William P.

1874 24.855 (COMPILERS) Geological map of the United States. *In:* Walker, Francis A. (compiler), *Statistical atlas of the United States based on the results of the Ninth Census 1870 : with contributions from many eminent men of science and several departments of the government.* [Washington, D.C.]: U.S. Department of the Interior, Census Office, Plates 13/14, text pp. 6-9. [In text see Blake, William P., "General View of the Geology of the Western Portion of the United States), pp. 7-8; combined references, p. 9.]

Hitchcock, Edward, AND Hitchcock, Charles H.

1861 24.848 *Geological Map of the United States Compiled by Prof. Edward Hitchcock L.L.D[.] and C. H. Hitchcock, A.M., of Amherst College 1862* [sic]. *Inset map in:* U.S. National Observatory, Superintendent, *The Washington Map of the United States by the Superintendent U.S. National Observatory Washington D.C. 1861.* ("S. Taintor & Cº. 36, Dey, St. New York. Publishers.") ("Holmes, Harrison & Cº. London.") ("Entered according to Act of Congress in the year 1861 by Robert P. Smith in the Clerks Office of the District Court of the Eastern District of Pennsylvania.") [In the geological map of the U.S. and northern Mexico, the entire lower Colorado River and Grand Canyon region is depicted simply as "Cretaceous *or Chalk formation*" with spot areas of "Igneous Rocks". The same inset map is also presented in the 1864 ed. of *The Washington Map*.]

Horton, John D.; San Juan, Carma A.; AND Stoeser, Douglas B.

2017 24.380 The State Geologic Map Compilation (SGMC) geodatabase of the conterminous United States. *U.S. Geological Survey, Data Series 1052*, 46 pp. + appendices (text, as introductory material for interactive map online, https://doi.org/10.3133/ds1052).

Houser, B. B.

1992 24.88 Map of industrial mineral occurrences in the national forests of Arizona. *U.S. Geological Survey, Open-File Report 92-687*, 1 sheet, text 30 pp.

Howard, Arthur D., AND Williams, John W.

1972 24.89 Physiography. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 29-31.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Howell, Edwin E.

NO DATE 24.309 *The Grand Cañon of the Colorado of the West and the cliffs of southern Utah.* [No place]: U.S. Geological Survey, 3-dimensional map, topography with colored time-stratigraphic outcrop markings, vertical and horizontal scales 1 inch = 2 miles (1:126,720). [1875; with different states at later dates.] [The original commercially produced model, measuring 6 feet, 6 inches × 6 feet 7 inches (see Merrill, 1889, ITEM NO. 21.6720), indicated an imprint of the Geographical and Geological Survey of the Rocky Mountain Region, which is the Powell Survey of general parlance; a model was first exhibited at the Centennial Exposition in Philadelphia, 1876, and commercially produced thereafter. A *photograph of the model*, which the Library of Congress attributes date as "191-", denotes "U.S. Geological Survey J. W. Powell, Director"; Powell was director during 1881-1894 (Geography and Map Division, call no. "G4332.G7 191-.G4 TIL"; digital view at http://hdl.loc.gov/loc.gmd/g4332g.np000097). A model was also exhibited at the World's Industrial and Cotton Centennial Exposition, New Orleans, 1884-1885 (see U.S. Bureau of Education, 1886, ITEM NO. 21.5213).] [See also McCalmont (2015, ITEM NO. 21.7612).]
[A 22 × 22 cm black-and-white photograph of this map, from the Library of Congress, is shown at the beginning of Part 24 of this bibliography.]

1931 24.783 *Grand Canyon of the Colorado and the cliffs of southern Utah.* [No place]: U.S. Geological Survey, 3-dimensional map, topography with colored time-stratigraphic outcrop markings, vertical and horizontal scales 1 inch = 2 miles (1:126,720). ("Modelled by E. E. Howell from maps of the United States Geological and Geographical Survey [*sic*] by J. W. Powell; revised by F. T. Thwaites and Fred Wilhelm in 1931 from geological maps of Arizona 1924 and Utah 1918".) [For original see Howell (no date, ITEM NO. 24.309).]

Huntoon, Peter W., AND Billingsley, George H.

1977 24.90 *Geological map of western Grand Canyon, Arizona*. Grand Canyon Natural History Association, open file, 43 sheets.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 60| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

Huntoon, Peter W., AND Billingsley, George H.; WITH Clark, Malcolm D.

1981 24.91 *Geologic map of the Hurricane fault zone and vicinity, western Grand Canyon, Arizona*. Grand Canyon Natural History Association, scale 1:48,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"| FQ21:409

1982 24.92 *Geologic map of the Lower Granite Gorge and vicinity, western Grand Canyon, Arizona*. Grand Canyon Natural History Association, scale 1:48,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"| FQ21:410

Huntoon, Peter W.; Billingsley, George H., Jr.; Breed, William J.; Sears, J. W.; Ford, Trevor D.; Clark, Malcolm D.; Babcock, R. S.; Brown, E. H.; *et al.*

1976 24.93 *Geologic map of the Grand Canyon National Park, Arizona*. Grand Canyon Natural History Association, and Museum of Northern Arizona, 1 sheet, scale 1:62,500. [*NOTE*: Map embraces the limits of the national park prior to the Grand Canyon National Park Enlargement Act (88 Stat. 2089). Later revisions of this map note as "eastern Grand Canyon National Park".] [This is the so-called "Blue Dragon" map.]
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 60| |CITED» GCNHA Monograph 8: page "3–Special Section 2–2"|

1980 24.784 *Geologic map of the eastern part of the Grand Canyon National Park, Arizona*. Grand Canyon Natural History Association, and Museum of Northern Arizona, 1 sheet, scale 1:62,500. [2nd ed. of this map.] [This is the so-called "Blue Dragon" map.] [This ed. also reproduced in smaller facsimiles; see [2024], ITEM NO. 24.902.]

1986 24.785 *Geologic map of the eastern part of the Grand Canyon National Park, Arizona*. Grand Canyon Natural History Association, and Museum of Northern Arizona, 1 sheet, scale 1:62,500. [3rd ed. of this map.] [This is the so-called "Blue Dragon" map.]

[2024] 24.902 **Geologic map of the eastern part of the Grand Canyon National Park, Arizona.** Grand Canyon, Arizona: Grand Canyon Association, 1 sheet. [Facsimile of 1980 ed. (ITEM NO. 24.784), reproduced by Museum of Northern Arizona as a poster in two sizes, 24 × 16 inches or 36 ×24 inches (original measures 60 × 42 inches); commemorated by a special exhibit, "The Grand Canyon Dragon Map", about the making of the map, on display at the museum 25 May 2024 through January 2025. Reproduction on heavy stock shows scale but faithfully reproduces the "1:62,500" indicator, which of course is not correct for these facsimiles.] [This is the so-called "Blue Dragon" map.]

Huntoon, Peter W.; Billingsley, George H.; Sears, James W.; Ilg, Bradley R.; Karlstrom, Karl E.; Williams, Michael L.; Hawkins, David; Breed, William J.; Ford, Trevor D.; Clark, Malcome D. [Clark, Malcolm D.]; Babcock, R. Scott; AND Brown, Edwin H.

1996 24.94 *Geologic map of the eastern part of the Grand Canyon National Park, Arizona*. Grand Canyon, Arizona: Grand Canyon Association, 1 sheet, scale 1:62,500. [4th ed. of this map.] [This is the so-called "Blue Dragon" map.]

I

Ives, Joseph C.

1861 24.95 *Report upon the Colorado River of the West, explored in 1857 and 1858 by Lieutenant Joseph C. Ives, Corps of Topographical Engineers, under the direction of the Office of Explorations and Surveys, A. A. Humphreys, Captain Topographical Engineers, in charge. By order of the Secretary of War.* Washington, D.C.: U.S. Government Printing Office, 5 parts in 1 volume, each part separately paginated. (Volume: *30th Congress, 1st Session, House and Senate Executive Document 90*; also *Senate Document [no number].*) [Appendix D, Remarks upon the construction of the maps, p. 33; Map No. 1, Rio Colorado of the West, drawn by Frhr. F. W. v. Egloffstein, scale 1 inch = 6 miles [1:380,160], shaded relief (from mouth of Colorado Rio to head of navigation; 4 maps on 1 sheet); Map No. 2, Rio Colorado of the West, drawn by Frhr. F. W. v. Egloffstein, scale 1 inch = 12 miles [1:760,320], shaded relief (from head of navigation to Fort Defiance, including Grand Canyon).] • [For fuller information regarding the volume see Ives (1861, ITEM NOS. 2.3584, 2.3585 in Part 2 of this bibliography. For citations of the topographic maps see Egloffstein (1861, CARTOBIBLIOGRAPHY ITEM NOS. 25.493, 25.494). For citations of the geologic maps see Newberry (1861, ITEM NOS. 24.146, 24.378), which also are cited in the Cartobibliography. Cartobibliography is THE GRAND CANON Volume 2.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 3–Special Section 2–2 to 3| *see further* Ives (1861, ITEM NO. 2.3584) for cross-listings to reference lists and additional data relating to this title.]

≡ REVIEWS AND NOTICES *see* Ives (1861, ITEM NO. 2.3584) for cross-listings to reviews and notices

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J

Jay, J. E.; Havens, T. H.; Hendricks, D. M.; Post, D. F.; AND Guernsey, C. W.

1983 24.96 *Arizona general soil map*. U.S. Department of Agriculture, Soil Conservation Service; University of Arizona, Agricultural Experiment Station, 1 sheet, scale 1:1,000,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Jensen, Fred S.

1972 24.97 (COMPILER) Thickness of Phanerozoic rocks (depth to Precambrian basement). *From:* Kent, Harry C., Review of Phanerozoic history. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, p. 56. (Compiled from data provided by James G. Mitchell, James C. MacLachlan, *et al.*)

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

K

Kamilli, Robert J., AND Richard, Stephen M.

1998 24.98 (EDS.) Geologic highway map of Arizona. *Arizona Geological Survey, Map 33*, scale 1:1,000,000, 1 sheet, 2 sides.

Kieffer, Susan Werner

1988 24.99 Hydraulic map of House Rock Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-A*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.100 Hydraulic map of 24.5 Mile Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-B*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.101 Hydraulic map of Hance Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-C*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.102 Hydraulic map of Bright Angel Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-D*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.103 Hydraulic map of Horn Creek Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-E*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.104 Hydraulic map of Granite Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-F*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|
FQ17:601

1988 24.105 Hydraulic map of Hermit Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-G*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.106 Hydraulic map of Crystal Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-H*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|
FQ17:600

1988 24.107 Hydraulic map of Deubendorff Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-I*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1988 24.108 Hydraulic map of Lava Falls Rapids, Grand Canyon, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1897-J*, 1 sheet, scale 1:1,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

King, Harry

1890 24.871 *United States. Compiled under the direction of Henry Gannett, Chief Topographer by Harry King, Chief Draughtsman. 1890.* U.S. Geological Survey. ("Engraved by Julius Bien & Cº New York.") Scale 1:2,500,000. ("Contour lines are drawn at the following elevations above Sea level 100, 500, 1000, 1500 (except in the Colorado Basin and the Great Basin) 2000 and thence upward at each 1000 feet.") [Various credits are given. Grand Canyon is not labeled but the boundaries of "Hualpai Ind Res." and "Suppai Ind. Res." are delineated, as is also the route of the Atlantic & Pacific Railroad (not labeled).]

King, Philip B.

1969 24.109 (COMPILER) *Tectonic map of North America*. U.S. Geological Survey, scale 1:5,000,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 63| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

King, Philip B.; Beikman, Helen M.; AND Edmonston, Gertrude J.

1974 24.110 **Geologic map of the United States (exclusive of Alaska and Hawaii).** U.S. Geological Survey, scale 1:2,500,000; 2 sheets + 1-sheet legend. [King and Beikman, compilers; geologic cartography by Edmonston.]
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 63| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Kister, L. R.

1973 24.111 Quality of ground water in the lower Colorado River region, Arizona, Nevada, New Mexico, and Utah. *U.S. Geological Survey, Hydrological Investigations Atlas HA-478*, 2 sheets, scale 1:1,000,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: pages 37, 63| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Kleinkopf, M. Dean

1972 24.112 (CHAIRMAN, R.M.A.G. RESEARCH COMMITTEE; WITH H. C. Bemis, R. S. Bryson, R. D. Holt, C. J. Lewis, J. C. MacLachlan, and D. E. Wilde; MAPPING COORDINATED BY J. C. MacLachlan) Configuration of the Precambrian rock surface. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, p. 53.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Kneale, S. M., AND Richard, S. M.

1998 24.113 Arizona geologic index map, version 1.0. *Arizona Geological Survey, Digital Information DI-9*, 5 pp., 3 high-density digital diskettes.

Kron, Andrea June

1988 24.308 *The firey canyon.* Los Alamos, New Mexico: A. J. Kron. [Colored LANDSAR thematic mapper scene from EOSAT, Lanham, Maryland; base map U.S. Geological Survey 15-minute scale Bright Angel quadrangle, 1962, contour interval 400 ft.]

L

Lepley, Larry K.

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Levings, G. W., AND Farrar, C. D.

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 64| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

1979 24.115 Maps showing ground-water conditions in the Kanab area, Coconino and Mohave Counties, Arizona—1976. *U.S. Geological Survey Water-Resources Investigations, Open-File Report 79-1070*, 2 sheets, scale 1:125,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 64| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Lochman-Balk, Christina

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Lucchitta, Ivo

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 3-109|

1994 24.117 Topographic map of the Lees Ferry area, Arizona. *U.S. Geological Survey, Open-File Report 94-411*, 1 sheet, scale 1:5000, contour interval 5 m (2.5-m supplemental contours).

1995 24.372 Topographic map of the Nankoweap-Kwagunt area, Grand Canyon, Arizona. *U.S. Geological Survey, Open-File Report 95-529*, 1 sheet, scale 1:5000, contour interval 5 m (2.5-m supplemental contours).

Lucchitta, Ivo, AND Beard, Sue [Beard, L. Sue]

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1981 24.900 Preliminary geologic map of the Olaf Knolls quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 81-1321*, scale 1:24,000, pamphlet.

Lucchitta, Ivo; Basdekas, P. G.; Bohannon, R. G.; Reick, H. J.; AND Dehler, C. M.

1995 24.118 Geologic map of the Cane Springs quadrangle, northern Mohave County, Arizona. *U.S. Geological Survey, Open-File Report 95-86*, scale 1:24,000.

Lucchitta, Ivo; Beard, L. Sue; Billingsley, George H.; Antweiler, J. C.; Rieck, Hugh J.; AND Lane, M. E.

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

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1986 24.120 Geologic map of the Pigeon Canyon, Nevershine Mesa, and Snap Point Wilderness Areas, Mohave County, Arizona. *U.S. Geological Survey Miscellaneous Field Studies Map MF-1860-B*, 1 sheet.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Lucchitta, Ivo; Dehler, Carol M.; AND Basdekas, Peggy G.

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Lucchitta, Ivo; Dehler, Carol M.; Davis, Marie E.; Burke, Kelly J.; AND Basdekas, Peggy O.

1995 24.273 Quaternary geologic map of the Palisades Creek-Comanche Creek area, eastern Grand Canyon, Arizona. *U.S. Geological Survey, Open-File Report 95-832*, 2 sheets, text 39

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Luedke, R. G.

1993 24.123 Maps showing distribution, composition, and age of early and middle Cenozoic volcanic centers in Arizona, New Mexico, and West Texas. *U.S. Geological Survey, Miscellaneous Investigations Map I-2291-A*, 2 sheets, scale 1:1,000,000, text 16 pp.

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 66| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

Luedke, R. G., AND Smith, R. L.

1979 24.124 Map showing distribution, composition, and age of late Cenozoic volcanic centers in Arizona and New Mexico. *U.S. Geological Survey, Miscellaneous Investigations Map I-1091-A*, 2 sheets, scale 1:1,000,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 66| |CITED» GCNHA Monograph 8: page "3–Special Section 2–3"|

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1980 24.851 *Residual Bouguer gravity anomaly map of Arizona (IGSN 71).* Tucson: University of Arizona, Laboratory of Geophysics, scale 1:1,000,000. [International Gravity Standardization Net 71 is the official gravity datum worldwide.]

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MacLachlan, Marjorie E.

1972 24.125 Triassic System. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 166-176.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page 3–Special Section 2–3 to 4|

Mallory, William Wyman

1972 24.126 (ED.-IN-CHIEF) *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, 331 pp.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

Marcou, Jules

1861 24.863 *Carte géologique de la terre. Geological map of the world. By Jules Marcou; constructed by J. M. Ziegler.* Winterthur [Switzerland]: Joh. Wurster & Comp. 8 sheets. [Also various later reproductions in reduced format on one sheet under other imprints.] [In French and English.] [*Not seen for this bibliography.*]

1875 24.864 *Carte géologique de la terre par Jules Marcou. Construite par J. M. Ziegler. 2e Edition. / Geological map of the world by Jules Marcou; constructed by J. M. Ziegler. Second Edition.* Zurich: J. Wursterg et Cie; London: Edward Stanford; Paris: F. Savy; Milano, Napoli, and Pisa: Ulrico Hoepli. 8 sheets [with accompanying text]. [Also various later reproductions in reduced format on one sheet under other imprints.] [In the greater Grand Canyon region are broadly mapped (reading from the key) "Secondary rocks. Jurassic", "New red sandstone rocks", "Carboniferous rocks", and "Volcanic rocks".] [In French and English.]

Marshall, C. H.

1956 24.127 Photogeologic map of the Short Creek SW quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-140*, scale 1:24,000.

1956 24.128 Photogeologic map of the Heaton Knolls NW quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-143*, scale 1:24,000.

1956 24.129 Photogeologic map of the Lost Spring Mountain SE quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-144*, scale 1:24,000.

1956 24.130 Photogeologic map of the Lost Spring Mountain NE quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-145*, scale 1:24,000.

1956 24.313 Photogeologic map of the Jacob Lake NE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Geologic Investigations Map I-194*, scale 1:24,000.

1957 24.131 Photogeologic map of the Hurricane Cliffs 2 NE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-252*, scale 1:24,000.

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1956 24.132 Photogeologic map of the Short Creek NW quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-141*, scale 24,000.

Marvin, Richard F.

1968 24.362 Transcontinental geophysical survey (35°-39° N); radiometric age determinations of rocks. A contribution to the Upper Mantle Project. *U.S. Geological Survey, Miscellaneous Geologic Investigations, Map I-537*, 25 pp., 1 plate.

Matthes, François E.

1906 24.133 *Bright Angel, Ariz.* U.S. Geological Survey, 1 sheet. [1:48,000-scale topographic map of Bright Angel quadrangle, Arizona.] [Text on verso by L. F. Noble: *The Grand Canyon of the Colorado River*.] [Reprinted 1932, 1947.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 66| |CITED» GCNHA Monograph 8: page 3-61 to 3-62|

Maxson, John H.

1961 24.382 *Geologic map of the Bright Angel quadrangle, Grand Canyon National Park, Ariz.* Grand Canyon Natural History Association, Map No. 1, 1 sheet, scale 1:48,000, contour interval 50 feet. ("Topography by Francois T. Matthes, 1902-1903; United States Geological Survey; Culture as of 1962".) [Text on verso: "Geologic History of the Bright Angel Quadrangle".]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 67| |CITED» GCNHA Monograph 8: page 3-62|

≡ REVIEWS AND NOTICES Campbell, 1962, ITEM NO. 21.7362

1967 24.135 *Preliminary geologic map of the Grand Canyon and vicinity, Arizona. Eastern section*. Grand Canyon Natural History Association, scale 1:62,500.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 67| |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

1966 24.383 *Geologic map of the Bright Angel quadrangle, Grand Canyon National Park, Ariz.* Grand Canyon Natural History Association, Map No. 1, 1 sheet, scale 1:48,000, contour interval 50 feet. 2nd ed., revised. ("Topography by Francois T. Matthes, 1902-1903; United States Geological Survey; Culture as of 1962".) [Text on verso: "Geologic History of the Bright Angel Quadrangle".]

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 67| |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

McCrory, Fred J., AND O'Haire, Robert T.

1961 24.780 (COMPILERS) *Map of known metallic mineral occurrences of Arizona.* Tucson: Arizona Bureau of Mines, 1 sheet, scale 1:1,000,000.

McGarvin, T. G.

1986 24.137 (COMPILER) Index to published geologic maps of Arizona July 1984-December 1985. *Arizona Bureau of Geology and Mineral Technology, Open-File Report 86-4*, 1 sheet.

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

McKee, Edwin D., AND Oriel, S. S.

1967 24.139 Paleotectonic maps of the Permian System. *U.S. Geological Survey, Miscellaneous Investigations Map I-450*, text 164 pp., scale 1:5,000,000.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 69| |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

McQueen, Kathleen

1956 24.894 Photogeologic map of the Lees Ferry SE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-189*, scale 1:24,000.

1956 24.893 Photogeologic map of the Lees Ferry SW quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-189*, scale 1:24,000.

1957 24.896 Photogeologic map of the Lees Ferry NE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-222*, scale 1:24,000.

1957 24.140 Photogeologic map of the Shinarump NE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-255*, scale 1:24,000.

Menges, Christopher M., AND Pearthree, Philip A.

1983 24.374 Map of Neotectonic (latest Pliocene-Quaternary) deformation in Arizona. *Arizona Geological Survey, Open-File Report 83-22*, text 15+ pp. [54 pp. total], 4 sheets, scales 1:500,000, 1:133,830, 1:121,000.

Minard, J. P.

1956 24.895 Photogeologic map of the Tanner Wash NW quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-193*, scale 1:24,000.

1957 24.141 Photogeologic map of the House Rock Springs NW quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-253*, scale 1:24,000.

Molenaar, C. M.

1969 24.142 Tectonic map of N.W. Arizona-S.W. Utah. *In:* Baars, Donald L. (ed.), Geology and natural history of the Grand Canyon region. *Four Corners Geological Society, 5th Field Conference, Guidebook*, p. 7.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 70| |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

Moore, David W., AND Sable, Edward G.

1994 24.809 Interim geologic map of the Smithsonian Butte quadrangle, Washington County, Utah. *Utah Geological Survey, Open-File Report 305*, 38, 40 pp., 2 plates. [For later map see Moore and Sable (2001, ITEM NO. 24.810).]

2001 24.810 Geologic map of the Smithsonian Butte quadrangle, Washington County, Utah. *Utah Geological Survey, Miscellaneous Publication 01-1*, 2 sheets (scale 1:24,000).

Moore, Richard T.; Wilson, Eldred D.; AND O'Haire, R. T.

1960 24.143 *Geologic map of Coconino County, Arizona*. Arizona Bureau of Mines, scale 1:375,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 70| |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

Morris, R. H.

1957 24.144 Photogeologic map of the Fredonia NE quadrangle, Coconino and Mohave Counties, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-247*, scale 1:24,000.

Muir Way [firm]

____ 24.852 *Geologic map of the Grand Canyon National Park, Arizona.* [San Diego, California]: Muir Way. [Muir Way print-on-demand products from https://muir-way.com (accessed 21 February 2021). Reproduction of the geologic map by Huntoon *et al.* (1976, ITEM NO. 24.93) on Fine Art paper ("archival paper and inks, 100% cotton, OBA-free and acid-free, heavyweight 21.5 mil, certified to last 100 years"; "Digital Elevation Data with shaded relief applied to the original 1976 map adding a 3D appearance" [from the Muir Way website, advertised there as "Grand Canyon 1976 Relief Map"]). This is a print-on-demand product (copy acquired new in 2021); available in three states—24 × 18 inches, 32 × 24 inches, 40 × 30 inches.] [The 1976 original (and subsequent eds.) is the so-called "Blue Dragon" map.] [The Muir Way imprint or any credit to the firm does not appear on the map.]

Myers, S. M.

1987 24.311 Depth to water, altitude of water level, and chemical quality of water map showing groundwater conditions in the Peach Springs basin, Mohave, Coconino, and Yavapai Counties, Arizona—1987. *Arizona Department of Water Resources, Hydrologic Map Series, Report 15*, 1 sheet.

N

National Geographic Society, Cartographic Division

1978 24.357 (IN COLLABORATION WITH Boston Museum of Science) *The heart of the Grand Canyon, Grand Canyon National Park, Arizona.* Washington, D.C.: National Geographic Society, 1 sheet, scale 1:24,000, contour interval 100 ft. ("Produced by the Cartographic Division, National Geographic Society".) ("This map was compiled from 1972 aerial photography and field surveys by Bradford Washburn, assisted by Barbara P. Washburn, Harry R. Feldman and Wendell Mason. Relief by Tibor G. Toth, research and compilation by Thomas L. Gray, contours by Norbert and Walter Vasques, all National Geographic Staff. Cliff hachures by the Topographical Survey of Switzerland. Photogrammetry by Lockwood Mapping, laser assistance by K & E Laser Systems and Electronics. The National Geographic is also grateful to the Grand Canyon National Park, and Professor J. Harvey Butchart, Northern Arizona University, for their generous cooperation and assistance during the preparation of this map.") [This is *Variant A*. 35 × 36 inches, printed on one side on plasticized paper, omitting text and illustrations that appear in Variant B [see ITEM NO. 24.145]. Compared to Variant B this map expands ground coverage on the west by 1.5 miles, to the west of Hermit's Rest, and on the east by *ca.* 3,000 feet. Includes table of trail distances that is omitted from Variant B. Key and credit notations are placed differently than in Variant B.] [See also Variants C and D, 1990, 1999, ITEM NOS. 24.827, 24.828.] [*CONSERVATIONAL NOTE*: The materials with which Variant A was produced may not be long-lived, depending upon storage conditions. The compiler's copy is severely degraded, becoming fragmented, with noticeable off-gassing after several years' storage contained in a screw-capped plastic tube under conventional room temperatures. — *E.E.S., 2014*]

≡ REVIEWS AND NOTICES Auden, 1980, ITEM NO. 30.412

1978 24.145 (IN COLLABORATION WITH Boston Museum of Science) *The heart of the Grand Canyon, Grand Canyon National Park, Arizona.* Washington, D.C.: National Geographic Society, 1 sheet, scale 1:24,000, contour interval 100 ft.; text and illustrations on verso, "The Grand Canyon of the Colorado". ("Produced by the Cartographic Division, National Geographic Society" [recto and verso notations].) ("Supplement to National Geographic, July 1978, Page 35A, Vol. 154, No. 1—THE HEART OF THE GRAND CANYON" [recto notation].) ("This map was compiled from 1972 aerial photography and field surveys by Bradford Washburn, assisted by Barbara P. Washburn, Harry R. Feldman and Wendell Mason. Relief by Tibor G. Toth, research and compilation by Thomas L. Gray, contours by Norbert and Walter Vasques, all National Geographic Staff. Cliff hachures by the Topographical Survey of Switzerland. Photogrammetry by Lockwood Mapping, laser assistance by K & E Laser Systems and Electronics. The National Geographic is also grateful to the Grand Canyon National Park, and Professor J. Harvey Butchart, Northern Arizona University, for their generous cooperation and assistance during the preparation of this map." [recto notation]) [This is *Variant B*. 22⅝ × 35 inches (reduced from Variant A to accommodate presses used for very large National Geographic magazine press run), published for distribution with July 1978 issue of *National Geographic*, accompanying the features by W. E. Garrett (ITEM NOS. 2.2846, 2.2847). "Copies of this map with additional coverage extending westward beyond Hermits Rest, same scale, 35" × 36", printed one side only on

plastic, may be purchased from the National Geographic Society, Washington, D.C." (recto notation). For the larger format variant A, with slightly broader geographic coverage, see ITEM NO. 24.357. Key and credit notations are placed differently than in Variant A. Omits the table of trail distances that appears in Variant A.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 70| |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

1990 24.827 (IN COLLABORATION WITH Boston Museum of Science) *The heart of the Grand Canyon, Grand Canyon National Park, Arizona.* Washington, D.C.: National Geographic Society, 1 sheet, scale 1:24,000, contour interval 100 ft. ("Produced by the Cartographic Division, National Geographic Society".) ("Limited Revision 1990".) ("This map was compiled from 1972 aerial photography and field surveys by Bradford Washburn, assisted by Barbara P. Washburn, Harry R. Feldman and Wendell Mason. Relief by Tibor G. Toth, research and compilation by Thomas L. Gray, contours by Norbert and Walter Vasques, all National Geographic Staff. Cliff hachures by the Topographical Survey of Switzerland. Photogrammetry by Lockwood Mapping, laser assistance by K & E Laser Systems and Electronics. The National Geographic is also grateful to the Grand Canyon National Park, and Professor J. Harvey Butchart, Northern Arizona University, for their generous cooperation and assistance during the preparation of this map.") [This is *Variant C*. 35 × 36 inches, printed on one side on plasticized paper, omitting text and illustrations that appear in Variant B [see 1978, ITEM NO. 24.145]; National Geographical Society promotional note in lower-left corner; copyright notice in lower-right corner. Compared to Variant B this map expands ground coverage on the west by 1.5 miles, to the west of Hermit's Rest, and on the east by *ca.* 3,000 feet. Includes table of trail distances that is omitted from Variant B. Key and credit notations are placed differently than in Variant B.]

1999 24.828 (IN COLLABORATION WITH Boston Museum of Science) *The heart of the Grand Canyon, Grand Canyon National Park, Arizona.* Washington, D.C.: National Geographic Society, 1 sheet, scale 1:24,000, contour interval 100 ft. ("Produced by the Cartographic Division, National Geographic Society".) ("Reprinted 1999".) ("Distributed by MapQuest.com, Mountville, Pennsylvania, USA".) ("This map was compiled from 1972 aerial photography and field surveys by Bradford Washburn, assisted by Barbara P. Washburn, Harry R. Feldman and Wendell Mason. Relief by Tibor G. Toth, research and compilation by Thomas L. Gray, contours by Norbert and Walter Vasques, all National Geographic Staff. Cliff hachures by the Topographical Survey of Switzerland. Photogrammetry by Lockwood Mapping, laser assistance by K & E Laser Systems and Electronics. The National Geographic is also grateful to the Grand Canyon National Park, and Professor J. Harvey Butchart, Northern Arizona University, for their generous cooperation and assistance during the preparation of this map.") [This is *Variant D*. 35 × 36 inches, printed on one side on *regular paper*, omitting text and illustrations that appear in Variant B [see 1978, ITEM NO. 24.145]; omits "THE HEART OF THE GRAND CANYON" in lower-right corner, replaced with availability information; copyright and distributional note are in lower-left corner. Compared to Variant B this map expands ground coverage on the west by 1.5 miles, to the west of Hermit's Rest, and on the east by *ca.* 3,000 feet. Includes table of trail distances that is omitted from Variant B. Key and credit notations are placed differently than in Variant B.]

Newberry, J. S. [Newberry, John Strong]

1861 24.146 *Geological Map No. 1 : prepared by J. S. Newberry M.D. geologist of the expedition*. *Accompanying:* Newberry, John S., Geological report [Newberry, 1861, ITEM NO.

21.2455]. *In:* Ives, Joseph C., *Report upon the Colorado River of the West, explored in 1857 and 1858 by Lieutenant Joseph C. Ives, Corps of Topographical Engineers, under the direction of the Office of Explorations and Surveys, A. A. Humphreys, Captain Topographical Engineers, in charge. By order of the Secretary of War.* Washington, D.C.: U.S. Government Printing Office, 1 sheet, scale 1:380,160. (Volume: *U.S. 36th Congress, 1st Session, Senate Executive Document [no number], Serial 1058*.) [*NOTE*: The geologic map portrays geology by Newberry, overprinted in color on shaded-relief map by F. W. von Egloffstein, *Map No. 1, Rio Colorado of the West, Explored by 1st. Lieut. Joseph C. Ives, Topl. Engrs. under the direction of the Office of Explorations and Surveys, A. A. Humphreys, Capt. Topl. Engrs. in charge, by order of Hon. John B. Floyd, Secretary of War. 1858.* (Egloffstein, 1861, CARTOBIBLIOGRAPHY ITEM NO. 25.494; Cartobibliography is THE GRAND CANON Volume 2) [from mouth of Colorado River to head of navigation]. The geologic map accompanies only the Senate Executive Document variant (ITEM NO. 2.3585) (*fide* WAGNER–CAMP 375, p. 648).] [*NOTE on collation of maps.* Although some sources may indicate that the maps are laid in loose, the copy of the Senate variant held in the American Philosophical Society, presented by J. S. Newberry, is in its original binding, wherein the two Egloffstein topographic maps are fold-outs following the second free leaf of the volume, preceding the plate titled "General Report; Profile" and the frontispiece. The two Newberry geologic maps are fold-outs following Part III.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 71| |CITED» GCNHA Monograph 8: page 3-69|

1861 24.378 *Geological Map No. 2 : prepared by J. S. Newberry M.D. geologist of the expedition*. *Accompanying:* Newberry, John S., Geological report [Newberry, 1861, ITEM NO. 21.2455]. *In:* Ives, Joseph C., *Report upon the Colorado River of the West, explored in 1857 and 1858 by Lieutenant Joseph C. Ives, Corps of Topographical Engineers, under the direction of the Office of Explorations and Surveys, A. A. Humphreys, Captain Topographical Engineers, in charge. By order of the Secretary of War.* Washington, D.C.: U.S. Government Printing Office, 4 maps on 1 sheet, scale 1:760,320. (Volume: *U.S. 36th Congress, 1st Session, Senate Executive Document [no number], Serial 1058*.) [*NOTE*: The geologic map portrays geology by Newberry, overprinted in color on shaded-relief map by F. W. von Egloffstein, *Map No. 2, Rio Colorado of the West, Explored by 1st. Lieut. Joseph C. Ives, Topl. Engrs. under the direction of the Office of Explorations and Surveys, A. A. Humphreys, Capt. Topl. Engrs. in charge, by order of Hon. John B. Floyd, Secretary of War. 1858.* (Egloffstein, 1861, CARTOBIBLIOGRAPHY ITEM NO. 25.494; Cartobibliography is THE GRAND CANON Volume 2) [from head of navigation of Colorado River to Fort Defiance, including Grand Canyon]. The geologic map accompanies only the Senate Executive Document variant (Ives, 1861, ITEM NO. 2.3585 (*fide* WAGNER–CAMP 375, p. 648)]. [*NOTE on collation of maps.* Although some sources may indicate that the maps are laid in loose, the copy of the Senate variant held in the American Philosophical Society, presented by J. S. Newberry, is in its original binding, wherein the two Egloffstein topographic maps are fold-outs following the second free leaf of the volume, preceding the plate titled "General Report; Profile" and the frontispiece. The two Newberry geologic maps are fold-outs following Part III.]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 71| |CITED» GCNHA Monograph 8: page 3-69|

Niemuth, Nyal

2015 24.388 2015 Arizona major mines. *Arizona Geological Survey, Map 40*, 1 sheet. [Sketch map, digital only, http://tinyurl.com/arizonamajormines2015.] [Plots "Nelson" lime-production site and "Canyon" uranium development.]

The Northern Miner

2021 24.877 *U.S. Four Corners Mining and Exploration Activity : featuring Arizona, Colorado, New Mexico, and Utah.* [Toronto, Ontario]: The Northern Miner, 1 sheet. [In the Grand Canyon region plots the following mines and prospects: EZ1 & EZ2 (uranium), Pinyon Plain (uranium), Wate Breccia Pipe and Wate (uranium), Hackberry (silver). In the adjacent upper portion of the lower Colorado River region plots Gold Basin (gold), Gold Chain (gold), Philadelphia (gold), Secret Pass (gold), Moss (gold, silver), Gold Road (gold, silver). All others extralimital to this bibliography.]

O

Oetking, Philip; Feray, Dan E.; AND Renfro, H. B.

1967 24.147 (COMPILERS) *Geological highway map of the southern Rocky Mountain region : Utah, Colorado, Arizona, New Mexico*. Tulsa, Oklahoma: American Association of Petroleum Geologists, AAPG United States Geological Highway Map Series, map no. 2, geological map scale 1 inch = *ca.* 30 miles.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

P

Pearthree, P. A.

1998 24.148 (COMPILER) Quaternary fault data and map for Arizona. *Arizona Geological Survey, Open-File Report 98-24*, 122 pp., 1 DOS diskette, 1 sheet, scale 1:750,000.

Pearthree, P. A., AND Bausch, D. B.

1999 24.215 Earthquake hazards in Arizona. *Arizona Geological Survey, Map 34*, scale 1:1,000,000, text.

Peterson, R. G.

1959 24.149 Preliminary geologic map of the Emmett Wash NE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Field Investigations Map MF-215*, scale 1:24,000.

1961 24.150 Preliminary geologic map of the Paria Plateau SE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Field Investigations Map MF-196*, scale 1:24,000.

Peterson, R. G., AND Phoenix, D. A.

1959 24.151 Preliminary geologic map of the Paria Plateau NE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Field Investigations Map MF-214*, scale 1:24,000.

Peterson, R. G., AND Wells, J. D.

1961 24.152 Preliminary geologic map of the Emmett Wash NW quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Field Investigations Map MF-197*, scale 1:24,000.

Phoenix, David A.

2009 24.892 Geologic map of part of the Lees Ferry area, Glen Canyon National Recreation Area, Coconino County, Arizona. *Utah Geological Survey, Miscellaneous Publication 09-2DM*, scale 1:24,000 (contour intervals 40 and 20 feet, structural contour interval 100 feet). ("Geologic Map of part of the Lees Ferry Area, digitized from U.S. Geological Survey Bulletin 1137 (1963)", which refers to D. A. Phoenix, "Geology of the Lees Ferry area, Coconino County, Arizona".) [Miscellaneous Publication 09-2DM originally produced on CD-ROM, which included digital data sets as well as the digital map.]

Pillmore, C. L.

1956 24.153 Photogeologic map of the Short Creek NE quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-142*, scale 1:24,000.

Pilonero, Joseph T.

1976 24.154 Satellite image maps of the State of Arizona and of Phoenix. *In:* Williams, R. S., Jr., and Carter, W. D. (eds.), ERTS-1, a new window on our planet. *U.S. Geological Survey, Professional Paper 929*, pp. 29-31. [Earth Resources Technology Satellite.]

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Pomeroy, J. S.

1957 24.155 Photogeologic map of the House Rock Spring SW quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-254*, scale 1:24,000.

1957 24.156 Photogeologic map of the Hurricane Cliffs 2 NW quadrangle, Mohave County, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-293*, scale 1:24,000.

Poponoe, Peter

1968 24.157 Complete Bouguer gravity anomaly map of the area north of the Grand Canyon in Arizona. *U.S. Geological Survey, Open-File Report 68-216*, scale 1:250,000. [See also text, *Open-File Report 68-217* (Popenoe, 1968, ITEM NO. 21.2620).]

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Porena, F. [Porena, Filippo]

NO DATE 24.854 (DIRETORE) *Carta Geologica dell' America Settentr^le^* ("Stab. Lit. Galileo Milano"; "Casa Edit. Dottor Fº Vallardi Proprieta` [*sic*] Letteraria"; "F. Porena dir.") *From:* Porena, Filippo, L'America del nord; o America Anglo-Sassone. *In:* Marinelli, G., ed altri scienziati Italiani, *La terra : trattato popolare di geografia universale.* Milano, Napoli, Roma, Torino, Palermo, Pisa, Bologna, Catania, Firenze, Genova, Padova, Cagliari, Sassari, Bari, and Pavia: Casa Editrice Dottor Francesco Vallardi, between pp. 28/29. [*Ca.* 1885.] [Physiography: "F. Colorado dell Occid." is shown between "Golfo di California" and the confluence of "Green R." and an unlabeled tributary from the Rockies. The Little Colorado River and Virgin River (neither labeled) are sketched very generally. Downstream of the confluence of "Rio Gila" the Colorado bifurcates twice before reaching the gulf.] [Geology: Colored areas generally depict only the major eras and "vulcaniche"; Grand Canyon region mapped as "paleozoiche", lower Colorado River region principally "quaternarie" with mountainous areas "paleozoiche".] [In Italian.]

Priest, Susan S.; Felger, Tracey J.; AND Billingsley, George H.

2005 24.237 Geologic mapping of the greater Grand Canyon region, northwestern Arizona [ABSTRACT]. *In: Eighth Biennial Conference of Research on the Colorado Plateau, du Bois Center, Northern Arizona University, 7-10 November 2005 : program and abstracts of presented papers and posters (version 2.0)*, p. 70.

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Radbruch-Hall, Dorothy H.; Colton, Roger B.; Davies, William E.; Skipp, Betty A.; Lucchitta, Ivo; AND Varnes, David J.

1976 24.158 Preliminary landslide overview map of the conterminous United States. *U.S. Geological Survey Miscellaneous Field-Studies Map MF-771*, scale 1:7,500,000.

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1981 24.159 Landslide overview map of the conterminous United States. *U.S. Geological Survey, Professional Paper 1183*, 25 pp. [See pp. 1, 6, 14-15; plate 1.]
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

Raisz, Erwin

1939 24.822 *Map of landforms of the United States : to accompany Atwood's Physiographic Provinces of North America.* [Cambridge, Massachusetts]: [Harvard University, Institute of Geographical Exploration], 1 sheet, scale *ca.* 1:4,500,000. (Printed by Ginn and Co.) [Sheet, 25 × 40 inches, produced separately to accompany Atwood (1940, ITEM NO. 21.114).]

1943 24.823 *Map of the landforms of the United States : to accompany Atwood's Physiographic Provinces of North America.* [Cambridge, Massachusetts]: [Harvard University, Institute of Geographical Exploration], 3rd revised ed., 1 sheet, scale *ca.* 1:4,500,000. (Printed by Ginn and Co.) [Sheet, 25 × 40 inches, produced separately to accompany Atwood (1940, ITEM NO. 21.114).]

1946 24.824 *Map of the landforms of the United States : to accompany Atwood's Physiographic Provinces of North America.* [Cambridge, Massachusetts]: [Harvard University, Institute of Geographical Exploration], 4th revised ed., 1 sheet, scale *ca.* 1:12,000,000. [Sheet, 11 × 17 inches, produced separately to accompany Atwood (1940, ITEM NO. 21.114).]

1952 24.825 *Map of the landforms of the United States : to accompany Atwood's Physiographic Provinces of North America.* [No place]: U.S. Weather Bureau, 1 sheet, scale *ca.* 1:4,500,000. [Sheet, 25 × 40 inches, printed in sepia tone; reprinted from 1946 4th ed. To accompany Atwood (1940, ITEM NO. 21.114).]

1957 24.826 *Map of the landforms of the United States : to accompany Atwood's Physiographic Provinces of North America.* [Cambridge, Massachusetts]: [Harvard University, Institute of Geographical Exploration], 4th revised ed., 1 sheet, scale *ca.* 1:12,000,000. [Sheet, 11 × 17 inches, produced separately to accompany Atwood (1940, ITEM NO. 21.114).] [Also reprinted 1968.]

1972 24.160 Physiographic provinces in the Rocky Mountain region and landforms of western United States. *From:* Howard, Arthur D., and Williams, John W., Physiography. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, p. 30.
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Ranney, Wayne

2024 21.8545 Grand Canyon's "blue dragon" rises again. *The Ol' Pioneer* (Grand Canyon Historical Society), 35(3) (Summer): 6-7. [Regarding the reprinting in facsimile and at smaller size of the 1980 ed. of "Geologic Map of the Eastern Part of the Grand Canyon National Park, Arizona" (Huntoon *et al.*, 1980, ITEM NO. 24.902), and the coinciding special exhibit at the Museum of Northern Arizona, through January 19, 2025. The "blue dragon" map takes that informal name from the colorful appearance of the Grand Canyon's geology as displayed thereon. It is also the "best-selling geologic map in the United States (over 100,000 copies sold in it approximate 30-year existence").

The original edition (1976) embraced the old boundaries of the Grand Canyon National Park; after the enlargement of the park "Eastern" was added to the title.]

Rascoe, Bailey, Jr., AND Baars, Donald L.

1972 24.161 Permian System. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 143-165.

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Raven Maps and Images

Print-on-demand series from https://www.ravenmaps.com/. Various states are listed; most are available on "art" paper or laminated. (Accessed 7 March 2020.) [*NOTE*: Raven Maps and Images is not related to Raven's Perch Media.]

____ 24.835 *Arizona.* Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 51 × 42 inches; elevation tints map, 36 × 30, 52 × 44 inches.]

____ 24.836 *California.* Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 49 × 34 inches; elevation tints map, 44 × 30, 66 × 44 inches.]

____ 24.837 *Nevada.* Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 61 × 43 inches.]

____ 24.838 *Nevada* [with bounding areas]. Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 33 × 25, 41 × 31, 54 × 42 inches.]

____ 24.839 *Utah* [with bounding areas]. Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 30 × 23, 37 × 29, 50 × 38 inches.]

____ 24.840 *The Great Basin.* Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 39 × 29, 51 × 39 inches. [Includes most of the American Southwest.]

____ 24.841 *The United States.* Medford, Oregon: Raven Maps and Images. [Lithograph physiographic map, 37 × 58 inches; elevation tints map, 30 × 44, 36 × 56, 44 × 65 inches.]

____ 24.842 *United States land cover : except Alaska and Hawaii.* Medford, Oregon: Raven Maps and Images. [30 × 44, 36 × 56, 44 × 65 inches.]

____ 24.843 *Land forms and drainage of the 48 states.* Medford, Oregon: Raven Maps and Images. [37 × 58 inches.]

____ 24.844 *The West Coast.* Medford, Oregon: Raven Maps and Images. [Elevation tints map, 48 × 22, 64 × 29 inches.] [Includes lower Colorado River region.]

____ 24.845 *Mexico.* Medford, Oregon: Raven Maps and Images. [Elevation tints map, 37 × 54 inches.]

Reed, John C., Jr.; Wheeler, John O.; AND Tucholke, Brian E.

2005 24.832 (COMPILERS) *Geologic map of North America.* Boulder, Colorado: Geological Society of America, Decade of North American Geology, Map 001, scale 1:5,000,000. [See also Garrity and Soller (2009, ITEM NO. 24.833).]

Reynolds, Stephen J.

1988 24.162 Geologic map of Arizona. *Arizona Geological Survey, Map 26*, scale 1:1,000,000. (Prepared in cooperation with U.S. Geological Survey as part of Cooperative Geologic Mapping (COGEOMAP) program. Map also released with *Geology of Arizona*, 2nd ed. (Nations and Stump, 1996).]

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Reynolds, Stephen J.; Florence, F. P.; Roddy, M. S.; Welty, J. W.; AND Trapp, R. A.

1986 24.163 Map of K-Ar and Ar-Ar age determinations in Arizona. *Arizona Bureau of Geology and Mineral Technology Map 24*, 1 sheet. [Also included with Arizona Bureau of Geology and Mineral Technology, Bulletin 197 (Reynolds *et al.*, 1986, ITEM NO. 21.7379).]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

1986 24.164 Map of fission-track, Rb-Sr, and U-Pb age determinations in Arizona. *Arizona Bureau of Geology and Mineral Technology Map 25*, 1 sheet. [Also included with Arizona Bureau of Geology and Mineral Technology, Bulletin 197 (Reynolds *et al.*, 1986, ITEM NO. 21.7379).]

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–4"|

Reynolds, Stephen J.; Roddy, Michael S.; AND Welty, John W.

1986 24.166 Map of Paleozoic rocks and conodont color alteration indices in Arizona. *Arizona Bureau of Geology and Mineral Technology, Open-File Report 86-1*, 1 sheet, base map scale 1:1,000,000.

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Richard, Stephen M.; Reynolds, S. J.; Spencer, J. E.; AND Pearthree, P. A.

2000 24.218 Geologic map of Arizona. *Arizona Geological Survey, Map 35*, 1 sheet, scale 1:1,000,000.

2000 24.349 Digital graphic files for the Geologic Map of Arizona; a representation of Arizona Geological Survey Map 35. *Arizona Geological Survey, Digital Geological Map DGM-17*, CD.

Richard, Stephen M.; Shipman, Todd C.; Greene, Lizbeth C.; AND Harris, Raymond C.

2008 24.353 Estimated depth to bedrock in Arizona. *Arizona Geological Survey, Digital Geological Map DGM-52*; 1 sheet, scale 1:1,000,000, text 9 pp.

Robinson, Peter

1972 24.167 Tertiary history. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 233-242.

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Rogers, H. D. [Rogers, Henry Darwin]

1856 24.788 Geological map of the United States and British North America, constructed from the most recent documents and unpublished materials, for Keith Johnston's Physical Atlas, by Professor H. D. Rogers, Boston U. S. 1855. *In:* Johnston, Alexander Keith, *the physical atlas of natural phenomena. A new and enlarged edition.* Edinburgh and London: William Blackwood and Sons, Plate 8. [Colored, with stratigraphic key. Scale 1:10,000,000.] ["The Colorado Desert" is depicted ranging from the lower Colorado River region northeastward to the area of the confluence of "Rio Colorado" and "R. San Juan". Portrayal of geology is rudimentary in this area.]

Ryder, Robert T.

1983 24.787 Petroleum potential of Wilderness Lands; Arizona. (Betty M. Miller, ed.) *U.S. Geological Survey, Miscellaneous Investigations Map I-1537*, 1 sheet, scale 1:1,000,000. (Accompanied by text, *U.S. Geological Survey Circular 902-C* [see in Part 21, Ryder (1983, ITEM NO. 21.7662)].)

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S.A.R. System

1988 24.168 *Grand Canyon, Arizona. Synthetic Aperture Radar imagery X Band, near range, east look*. Produced for U.S. Geological Survey by Aero Service Division, Western Atlas International, Inc., scale 1:250,000.

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Sable, Edward G.

1995 24.811 Geologic map of the Hildale quadrangle, Washington and Kane Counties, Utah[,] and Mohave County, Arizona. *Utah Geological Survey, Map 167*, 2 sheets (scale 1:24,000).

Sable, Edward G., AND Doelling, Hellmut H.

1990 24.812 Geologic map of the Elephant Butte quadrangle, Kane County, Utah, and Mohave County, Arizona. *Utah Geological Survey, Map 126*, 2 sheets (scale 1:24,000).

Sable, Edward G., AND Hereford, Richard

1990 24.169 Preliminary geologic map of the Kanab 30- by 60-minute quadrangle, Utah and Arizona. *U.S. Geological Survey Open-File Report 90-542*, 1 sheet (scale 1:100,000). [For later map see Doelling (2008, ITEM NO. 24.814).]

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Saleeby, J. B.

1986 24.170 [Corridor] C-2 central California offshore to Colorado Plateau (R. C. Speed, coordinator). *Geological Society of America, Centennial Continent/Ocean Transect #10*, 2 sheets, Explanatory text, by J. B. Saleeby, 63 pp. [With contributions by R. C. Speed, M. C. Blake, R. W. Allmendinger, P. B. Gans, R. W. Kistler, D. C. Ross, D. A. Stauber, M. L. Zoback, A. Griscom, D. S. McCulloch, A. H. Lachenbruch, R. B. Smith, and D. P. Hill.] [California-Nevada-Utah.]

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Saltus, R. W.

1982 24.171 A description of Bouguer anomaly and isostatic residual colored gravity maps of the southwestern Cordillera. *U.S. Geological Survey, Open-File Report 82-0839*, 8 pp.

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Santa Fe Pacific Railroad Company

1981 24.172 Geologic map of Santa Fe Pacific Railroad Company mineral holdings in northwestern Arizona. *Arizona Bureau of Geology and Mineral Technology, Miscellaneous Map Series, MM-88-A*, scale 1:250,000, 1 sheet.

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Sass, J. H.; Diment, W. H.; Lachenbruch, A. H.; Marshall, B. V.; Monroe, R. J.; Moses, T. H., Jr.; AND Urban, T. C.

1976 24.173 A new heat-flow contour map of the conterminous United States. *U.S. Geological Survey, Open-File Report 76-756*, 24 pp.

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Sauck, W. A., AND Sumner, J. S.

1971 24.174 *Residual aeromagnetic map of Arizona*. University of Arizona.

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Scarborough, Robert B.

1985 24.175 *Map of post-15-M.Y. volcanic outcrops in Arizona*. Arizona Bureau of Geology and Mineral Technology, 1 sheet, scale 1:1,000,000.
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1986 24.176 Map of mid-Tertiary (40-15 M.Y.) volcanic, plutonic, and sedimentary rock outcrops in Arizona. *Arizona Bureau of Geology and Mineral Technology, Map 20*, 1 sheet, scale 1:1,000,000.
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Scarborough, Robert B., AND Coney, Michael L.

1982 24.177 (COMPILERS) *Index of published geologic maps of Arizona 1903 to 1982*. Arizona Bureau of Geology and Mineral Technology, 6 plates and errata sheet.
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Scarborough, Robert B., AND McGarvin, Thomas

1984 24.178 Update of published geologic maps of Arizona (Nos. 1-43) November 1982-June 1984. *Arizona Bureau of Geology and Mineral Technology Open-Rile Report 84-5*, 1 sheet.
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Schruben, Paul G.; Arndt, Raymond E.; AND Bawiec, Walter J.

1994 24.875 Geology of the Conterminous United States at 1:2,500,000 Scale—A Digital Representation of the 1974 P. B. King and H. M. Beikman Map. *U.S. Geological Survey, Digital Data Series 11, Release 2*. [For King map see King *et al.* (1974, ITEM NO. 24.110).]

Schuchert, Charles

1955 24.179 *Atlas of paleogeographic maps of North America*. New York: John Wiley and Sons, Inc., 177 pp.
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Simon, Ruth B.

1972 24.180 Seismicity. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 48-51.
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Sloss, L. L.; Dapples, E. C.; AND Krumbein, W. C.

1960 24.181 *Lithofacies maps : an atlas of the United States and southern Canada*. New York: John Wiley and Sons, Inc., 108 pp.
≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 77| |CITED» GCNHA Monograph 8: page "3–Special Section 2–5"|

Spencer, Jon E., AND Shenk, Jonathan D.

1986 24.182 Map showing areas in Arizona with elevated concentrations of uranium. *Arizona Bureau of Geology and Mineral Technology, Open-File Report 86-11*, scale 1:1,000,000, 1 sheet. [Superseded by Open-File Report 90-5 (Spencer *et al.*, 1990, ITEM NO. 24.183).]

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Spencer, Jon E.; Shenk, Jonathan D.; AND Duncan, John T.

1990 24.183 Map showing areas in Arizona with elevated concentrations of Uranium. *Arizona Geological Survey, Open-File Report 90-5*, scale 1:1,000,000, 1 sheet. [Supersedes Open-File Report 86-11 (Spencer and Shenk, 1986, ITEM NO. 24.182).]

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Steven, T. A.; Smedes, H. W.; Prostka, H. J.; Lipman, P. W.; AND Christiansen, R. L.

1972 24.184 Upper Cretaceous and Cenozoic igneous rocks. *In:* Mallory, William Wyman (ed.-in-chief), *Geologic atlas of the Rocky Mountain region*. Denver: Rocky Mountain Association of Geologists, pp. 229-232.

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Stewart, John H., AND Carlson, J. E.

1978 24.185 Generalized maps showing distribution, lithology, and age of Cenozoic igneous rocks in the western United States. *In:* Smith, R. B., and Eaton, G. P. (eds.), Cenozoic tectonics and regional geophysics of the western Cordillera. *Geological Society of America, Memoir 152*, pp. 263-264.

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Stipp, Thomas F., AND Beikman, Helen M.

1959 24.186 Map of Arizona showing oil, gas, and exploratory wells, pipelines, and areas of igneous and metamorphic rocks. *U.S. Geological Survey, Oil and Gas Investigations Map OM-201*, scale 1:500,000.

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Sumner, John S.; Schmidt, J. S.; AND Aiken, C. L. V.

1976 24.187 Free-air gravity anomaly map of Arizona. *Arizona Geological Society, Digest 10*, pp. 7-12, Plate 2 in Map Supplement slipcase.

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Sutphin, Hoyt B., AND Wenrich, Karen J.

1983 24.188 Structural control of breccia pipes on the southern Marble Plateau, Arizona. *U.S. Geological Survey, Open-File Report 83-908*, 6 pp., 2 sheets, scale 1:50,000.
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1988 24.189 Map showing structural control of breccia pipes on the southern Marble Plateau, north-central Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1778*, 2 sheets; Sheet 1, Northern part, scale 1:50,000; Sheet 2, Southern part, scale 1:250,000.
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1989 24.190 Map of locations of collapse-breccia pipes in the Grand Canyon region of Arizona. *U.S. Geological Survey, Open-File Report 89-550*, 1 sheet, scale 1:250,000.
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Thelin, Gail P., AND Pike, Richard J.

1991 24.872 Landforms of the conterminous United States—a digital shaded-relief portrayal. *U.S. Geological Survey, Miscellaneous Investigations Map I-2206*, 1 sheet, pamphlet 16 pp.

Thompson, Kathryn S.; Burke, Kelly J.; AND Hereford, Richard

1996 24.191 Topographic map showing drainage basins associated with pre-dam terraces in the Granite Park area, Grand Canyon, Arizona. *U.S. Geological Survey, Open-File Report 96-298*, 1 sheet, scale 1:2,000.

Timmons, J. Michael, AND Karlstrom, Karl

2007 24.307 *Geologic map of the Butte fault/East Kaibab monocline area, eastern Grand Canyon, Arizona* (with field data supplemented by Joel Pederson and Matt Anders). Grand Canyon, Arizona: Grand Canyon Association, in cooperation with the New Mexico Bureau of Geology and Mineral Resources, 2 sheets, scale 1:24,000.

2012 24.363 Geologic map of eastern Grand Canyon, Arizona (with field data supplemented by Joel Pederson and Matt Anders). [Accompanies] *Geological Society of America, Special Paper 489*, 2 sheets, scale 1:24,000. [For text volume see Timmons and Karlstrom (2012, ITEM NO. 21.5893).] [This map *after* Timmons and Karlstrom (2007, ITEM NO. 24.307), Geologic map of the Butte fault/East Kaibab monocline area, eastern Grand Canyon, Arizona. Published in cooperation with Geological Society of America, University of New Mexico, New Mexico Bureau of Geology and Mineral Resources, Grand Canyon Association, U.S. National Science Foundation, U.S. National Park Service.]

Tobin, Bret D., AND Weary, David J.

2004 24.354 Digital engineering aspects of karst map: A GIS version of Davies, W. E., Simpson, J. H., Ohlmacher, G. C., Kirk, W. S., and Newton, E. G., 1984, Engineering aspects of karst: U.S. Geological Survey, National Atlas of the United States of America, scale 1:7,500,000. *U.S. Geological Survey, Open-File Report 2004-1352*, 1 sheet. [Geographic Information System.]

Trapp, Richard A., AND Reynolds, Stephen J.

1995 24.192 Map showing names and outlines of physiographic areas in Arizona used by the Arizona Geological Survey with comprehensive base map. *Arizona Geological Survey, Open-File Report OFR 95-2a*, 1 sheet.

1995 24.193 Map showing names and outlines of physiographic areas in Arizona used by the Arizona Geological Survey with base map showing township and range only. *Arizona Geological Survey, Open-File Report OFR 95-2b*, 1 sheet.

Trapp, Richard A.; Reynolds, Stephen J.; AND Kneale, S. M.

1998 24.194 Physiographic areas in Arizona used by the Arizona Geological Survey. *Arizona Geological Survey, Digital Information DI-10*, 4 pp., 1 high-density diskette.

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Ulrich, George E.; Billingsley, George H.; Hereford, Richard; Wolfe, Edward W.; Nealey, L. David; AND Sutton, Robert L.

1984 24.195 Map showing geology, structure, and uranium deposits of the Flagstaff 1° × 2° quadrangle, Arizona. *U.S. Geological Survey, Miscellaneous Investigations Map I-1446*, scale 1:250,000, 2 sheets.

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Ulrich, George E.; Hereford, Richard; Nealey, L. David; *et al.*

1979 24.196 Preliminary geologic map of the Flagstaff 1° × 2° quadrangle, Arizona. *U.S. Geological Survey, Open-File Report 79-294*.

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U.S. Air Force, Aeronautical Chart and Information Center

1968 24.197 (COMPILER) Transcontinental geophysical survey (35°-39° N) bouguer gravity map from 112° W longitude to the coast of California. *U.S. Geological Survey, Miscellaneous Investigations Map I-532-B*, scale 1:1,000,000.

1968 24.198 (COMPILER) Transcontinental geophysical survey (35°-39° N) bouguer gravity map from 100° to 112° W longitude. *U.S. Geological Survey, Miscellaneous Investigations Map I-533-B*, scale 1:1,000,000.

U.S. Army Engineer Department

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 2: page 79| |CITED» GCNHA Monograph 8: page 3-88|

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See Volume 2, CARTOBIBLIOGRAPHY OF THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS, for guides to topographical quadrangles of the U.S. Geological Survey in the Grand Canyon region

1896 24.377 *United States relief map.* [Washington, D.C.]: U.S. Geological Survey, 1 sheet. [Base map is Henry Gannett (compiler), *United States contour map* (ITEM NO. 24.376). Scale 1 inch = approximately 115 miles. Contour interval 1000 feet with 500-foot supplementary contours.]

1927 24.386 (WITH U.S. National Park Service) *Topographic map of the Grand Canyon National Park, Arizona (east half).* U.S. Geological Survey, 1 sheet, scale 1:48,000, contour interval 50 feet. ("Topography by Francois E. Matthes and Richard T. Evans. Surveyed in 1902-1923.") [Reprinted 1948.]

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1948 24.831 *Plan and profile of Little Colorado River from mouth to Tolchaco damsite, Arizona.* U.S. Geological Survey, 3 sheets, scale 1:31,680. (Topography by J. L. Lewis. "Surveyed in 1926.") [Reprint of 1927 ed.]

1967 24.819 *Grand Canyon National Park and vicinity, Arizona.* U.S. Geological Survey, 1 sheet, scale 1:62,500, contour interval 80 feet with 40-foot supplementary contours. ("Compiled in 1967 from 1:62,500 scale maps dated 1954 and 1962 and by

photogrammetric methods from aerial photographs taken 1951, 1954, 1958, and 1960.") [Date shown with map name in lower right of sheet: 1962.] [Also reprints.] [Original park size, prior to Grand Canyon Enlargement Act of 1975.]

1967 24.820 *Bright Angel quadrangle, Arizona—Coconino Co. : 15 minute series (topographic).* U.S. Geological Survey, 1 sheet, scale 1:62,500, contour interval 80 feet with 40-foot supplementary contours, *shaded relief*. ("Topography and photogrammetric methods from aerial photographs taken 1954 and 1960. Field checked 1962".) [Label in lower right: "Bright Angel, Ariz.", "1962 minor corrections made 1967".] [In the Appendix to Part 24 the base map 15-minute Bright Angel quadrangle is listed as ITEM NO. 24.738.]

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≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–5"|

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1959 24.203 Preliminary geologic map of the House Rock Spring SE quadrangle, Coconino County, Arizona. *U.S. Geological Survey, Miscellaneous Field Investigations Map MF-189*, scale 1:24,000.

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1986 24.205 Breccia pipe and geologic map of the northeastern Hualapai Indian Reservation and vicinity, Arizona. *U.S. Geological Survey, Open-File Report 86-458A*, 29 pp., 2 plates, scale 1:48,000.

≡ CROSS-LISTINGS |CITED» GCNHA Monograph 8: page "3–Special Section 2–5"|

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House. Chicago. Copyrighted 1887. [Three-dimensional relief map, without labeling. Grand Canyon is only roughly portrayed but with bounding plateaus.]

1893 24.869 *Topography of the United States of America. In: Yaggy's geographical portfolio.* Chicago: C. F. Rassweiler and Co. ("Patent applied for & copyrighted by L. W. Yaggy 1893.") [Chromolithographed relief map of the U.S., without labeling. Grand Canyon is reasonably portrayed for the scale.]

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2024 24.880 Geologic map of the Milkweed Canyon NW quadrangle, AZ. (Cenozoic geology by Richard A. Young, 1962-2011; bedrock mapping updated from Billingsley et al., 1999. USGS Topographic map base: N3530 - W11322.5/7.5 (1967) Contour Interval 40 feet.) *In:* Young, Richard A., Brief Cenozoic geologic history of the western Grand Canyon region on the Milkweed Canyon NW and Hindu Canyon 7.5' quadrangles with an emphasis on the exhumed Hualapai Plateau paleocanyons, Mohave County, AZ. *Arizona Geologic Survey, Contributed Map CM-24-A*. [Report, 48 pp., and map available separately online.]

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Sheet 1 of 4", which embraces western U.S. and adjacent southwestern Canada and northwestern Mexico.]

PART 24

GEOLOGIC AND SPECIAL TOPOGRAPHIC MAPS IN THE GRAND CANYON REGION

APPENDIX

Guides to Quadrangles for Topographic and Geologic Maps in the Greater Grand Canyon Region Produced by the U.S. Geological Survey

THIS APPENDIX IS NOW
SECTION 4A OF THE GRAND CANON VOLUME 2

CARTOBIBLIOGRAPHY OF THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS

See information in Part 25 herein or go to https://ravensperch.org

GENERAL INFORMATION ABOUT THE CONTENT OF SECTION 4A FOLLOWS

SECTION 4A OF THE CARTOBIBLIOGRAPHY provides graphical and itemized guides to the topographic maps of the lower Colorado River region, produced by the U.S. Geological Survey. Both legacy paper map guides and current online guides are referred to. Graphical guides illustrate the geographical arrangement of named topographical quadrangles. Itemized guides list, either alphabetically or by special geographical order, the quadrangle names within the region. These lists provide the names of quadrangles by which researchers may refer to either in physical map collections or in the U.S. Geological Survey's very comprehensive collections of digitized historic and current maps. (Table of contents for Section 4A of the Cartobibliography is on the next page.) The complete Cartobibliography can be accessed at https://ravensperch.org.

The alphabetical lists are provided so that users who wish to acquire complete sets may locate the maps easily by name. ITEM NOS. are added here to the complete alphabetical lists, in order to uniquely identify each map as a discrete publication.

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