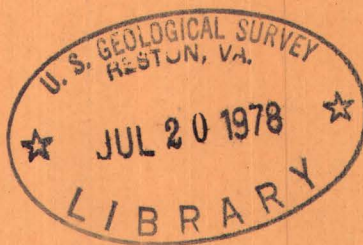


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Compiled by Paul E. Soister, Dora R. Conklin, and Mary D. Bowman



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Trace Elements Investigations Report 600

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Geology and Mineralogy

UNITED STATES DEPARTMENT OF THE INTERIOR

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BIBLIOGRAPHY AND INDEX OF

U. S. GEOLOGICAL SURVEY TRACE ELEMENTS AND RELATED REPORTS

THROUGH JUNE 1956*

Compiled by

Paul E. Soister, Dora R. Conklin, and Mary D. Bowman

December 1956

Trace Elements Investigations Report 600

This preliminary report is distributed without editorial and technical review for conformity with official standards and nomenclature. It is not for public inspection or quotation.

*This report concerns work done on behalf of the Division of Raw Materials and Division of Research of the U. S. Atomic Energy Commission.

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RELATED REPORTS THROUGH JUNE 1956

Compiled by Paul E. Soister, Dora R. Conklin, and Mary D. Bowman

INTRODUCTION

This bibliography supersedes TEI-500, "U. S. Geological Survey Trace Elements and related reports through 1954."

Part I is a numerical list of U. S. Geological Survey Trace Elements Investigations and Memorandum reports^{1/}. This part lists reports that have been transmitted to the U. S. Atomic Energy Commission and also reports in preparation (followed by an asterisk) for which tentative titles were available on June 30, 1956. If a report or part of a report has been published, the fact is indicated by the abbreviation of the medium of publication. (See also Part II.)

Part II is a reference guide to Trace Elements and related reports that are available to the public. (Part II supersedes Part I of Bulletin 1019-B.) These reports are grouped according to type of publication or release. If a report or part of a report has been published in more than one form, cross-references indicate the other forms of publication. Publications in preparation or in press on June 30, 1956, are designated by an asterisk.

^{1/} Reports prepared by the Geologic Division of the Geological Survey on behalf of the Division of Raw Materials and the Division of Research of the U. S. Atomic Energy Commission.

Part III is an author index. The words "with" and "and" are used to indicate seniority of authorship. For example, a listing of Black and White indicates that Black is the senior author. A listing of Black with White indicates that White is the senior author.

Part IV is an index for finding reports on specific areas or subjects. Information for the index was taken from titles, tables of contents, and abstracts of unpublished reports and from titles of published reports. The index in TEI-500 was used as a guide.

The following abbreviations have been used:

- B - Bulletin
- C - Circular
- J - Journal
- MC - Maps and charts
- MFO - Microcard form only of TE report at AEC depository libraries
- NSA - Nuclear Science Abstracts
- OF - Open file
- P - Professional Paper
- RME - Division of Raw Materials Exploration report
- TEI - Trace Elements Investigations report
- TEM - Trace Elements Memorandum report
- TIE - Technical Information Service Extension release

PART I. NUMERICAL LIST OF TRACE ELEMENTS REPORTS

(* Indicates report is in preparation. Title subject to change).

Abbreviations used: B, Bulletin; C, Circular; J, Journal; MC, Maps and charts; MFO, Microcard form only of TE report at AEC depository libraries; NSA, Nuclear Science Abstracts; OF, Open file; P, Professional Paper; TIE, Technical Information Service Extension.

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3016. Hansen, L. A. and Cuppels, N. P., Monazite placer on the First Broad River and its tributaries, Cleveland County, North Carolina: (Official use only). August 1954. (TIE; RME-3116, TIE).
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PART II. TRACE ELEMENTS AND RELATED REPORTS

AVAILABLE TO THE PUBLIC

Many U. S. Geological Survey Trace Elements / and related reports have been made available to the public, either by open-file release, reproduction and distribution by Technical Information Service Extension (referred to as TIE), U. S. Atomic Energy Commission, or publication by the Geological Survey or in a scientific journal.

The following list has been compiled as a reference guide to Geological Survey Trace Elements reports on radioactive raw materials that have been made available to the public, through June 30, 1956. These reports are listed according to the type of publication or release. Some reports have been released in more than one form, for which cross-references are indicated in parentheses. The abbreviations for the form of publication have been explained under Introduction.

1. Reports released in open file

(* Indicates report is in preparation)

Reports released in open file may be consulted at the U. S. Geological Survey Library, Room 1033, GSA Building, Washington 25, D. C., and at various depositories, whose addresses are indicated after the date of open file, either by symbol or complete address. Symbols are used for the following depositories:

/ Reports prepared by the Geologic Division of the Geological Survey on behalf of the Division of Raw Materials and the Division of Research of the U. S. Atomic Energy Commission. (TEI - Trace Elements Investigations Report; TEM - Trace Elements Memorandum Report; reports with no TE designation are not numbered in the Trace Elements Reports Series.)

- B - Office of the Director, Montana Bureau of Mines and Geology, Butte, Montana
- BA - Atomic Energy Commission, Butte Suboffice, Butte, Montana
- D - Geological Survey Public Inquiries Office, Room 468, New Customhouse, Denver, Colorado
- DA - Atomic Energy Commission, Denver Area Office, Denver Federal Center, Denver, Colorado
- GJ - Geological Survey, Grand Junction, Colorado
- GJA - Atomic Energy Commission, Grand Junction Operations Office, Grand Junction, Colorado
- IM - Idaho Bureau of Mines and Geology, Moscow, Idaho
- LA - Geological Survey Public Inquiries Office, Room 1030, Bartlett Building, Los Angeles, California
- R - Atomic Energy Commission, Rapid City Suboffice, "Prep" Bldg., South Dakota School of Mines and Technology, Rapid City, South Dakota
- SF - Geological Survey Public Inquiries Office, Room 724, Appraisers Building, San Francisco, California
- SL - Geological Survey Public Inquiries Office, Room 504, Federal Building, Salt Lake City, Utah
- SLA - Atomic Energy Commission, Salt Lake Area Office, Salt Lake City, Utah
- T - Arizona Bureau of Mines, University of Arizona, Tucson, Arizona
- U - University of Utah, Salt Lake City, Utah
- W - Geological Survey, South 157 Howard Street, Spokane, Washington

a. Trace Elements Investigations Reports

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- 71. Hinrichs, E. N., The pegmatites of the Errington-Thiel mine, Elko County, Nevada: Dec. 28, 1949; Office of Director, Nevada Bureau of Mines, Reno, Nev.; Cornell University Library, Ithaca, N. Y.
- 104. Fletcher, M. H., May, Irving, and Slavin, Morris, A transmission fluorimeter for use in the fluorimetric method of analysis for uranium: Oct. 12, 1950. (B-1006, Pt. 11).
- 109. Fischer, R. P., The Uravan mineral belt: July 7, 1951: GJ; SL. (B-988-A).
- 118. Silverman, S. R., Fuyat, R. K., and Weiser, J. D., The quantitative determination of calcite associated with carbonate-bearing apatites: Oct. 19, 1951: D; SL; T. (TIE; J-208).
- 120. Fletcher, M. H. and May, Irving, An improved fluorimeter for the determination of uranium in fluoride melts: Oct. 12, 1950. (TIE; B-1006, Pt. 10).

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125. Sims, P. K., Tooker, E. W., and Osterwald, F. W., Radioactive deposits in Eureka Gulch area, Central City district, Gilpin County, Colorado (3 geologic maps only): Feb. 15, 1954: D. (B-1032-A).
127. Stieff, L. R. and Stern, T. W., The preparation of nuclear-track plates and stripping films for the study of radioactive minerals: Feb. 26, 1951. (J-235).
129. Stern, T. W., A catalog of study material of radioactive minerals: Oct. 19, 1951: D; SL; T. (TIE).
133. Fletcher, M. H., May, Irving, and Anderson, J. W., The design of the Model V transmission fluorimeter: Oct. 19, 1951: D; SL; T. (TIE; B-1006, Pt. 12).
138. Staatz, M. H. and Trites, A. F., Jr., Geology of Quartz Creek pegmatite district, Gunnison County, Colorado: July 15, 1952: D; SL; Columbia University Library, New York, N. Y. (P-265).
139. Thurston, W. R., Pegmatites of the Crystal Mountain district, Larimer County, Colorado: July 15, 1952: D; SL; Columbia University Library, New York, N. Y. (B-1011).
144. Phair, George and Onoda, Kiyoko, Hydrothermal uranothorite in fluorite breccias from the Blue Jay mine, Jamestown, Boulder County, Colorado: Oct. 19, 1951: D; SL; T. (TIE; J-188).
- 148A. Rabbitt, J. C., Summary of the research work of the Trace Elements Section, Geochemistry and Petrology Branch, for the period April 1, 1948 -- December 31, 1950: Oct. 19, 1951: D; SL; T. (TIE).
151. Rabbitt, J. C., Summary of the research work of the Trace Elements Section, Geochemistry and Petrology Branch, for the period January 1 -- March 31, 1951: Oct. 19, 1951: D; SL; T. (TIE).
152. Cuttitta, Frank, A photometric method for the estimation of the oil yield of oil shale: Oct. 19, 1951: D; SL; T. (TIE; B-992).
168. Kaiser, E. P., King, R. U., Wilmarth, V. R., Stugard, Frederick, Jr., Wyant, D. G., Gott, G. B., and others, Selected papers on uranium deposits in the United States: June 10, 1952: D. (C-220; J-103, 127, 129, 241, 273, 275).
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183. McKelvey, V. E., Davidson, D. F., O'Malley, F. W., Smith, L. E., Armstrong, F. C., and Sheldon, R. P., Stratigraphic sections of the Phosphoria formation in Idaho, 1947-48, Part I: Aug. 15, 1951: B; IM; SL; U; W; Geol. Survey, Montpelier, Idaho; Wyoming Geol. Survey, Laramie, Wyo. (C-208).

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246. Swanson, R. W., McKelvey, V. E., and Sheldon, R. P., Progress report on investigations of western phosphate deposits: June 21, 1953: D; IM; SL; W; Geol. Survey, Montpellier, Idaho. (C-297).
254. Stugard, Frederick, Jr., Physical exploration for uranium during 1951 in the Silver Reef district, Washington County, Utah: Jan. 11, 1954: D; SL.
258. Cressman, E. R., Geology of the Dry Valley quadrangle, Idaho: Aug. 25, 1952: IM; SL; W. (B-1015-I).
259. Meyers, W. B., Geology and mineral deposits of the northwest quarter Willis quadrangle and adjacent Brown's Lake area, Beaverhead County, Montana: July 28, 1952: B; IM; W.
260. Gulbrandsen, R. A., McLaughlin, K. P., Honkala, F. S., Clabaugh, S. E., and Krauskopf, K. B., Geologic map and structure sections of the Johnson Creek quadrangle, Caribou County, Idaho: Aug. 25, 1952: IM; SL; W. (B-1042-A*).
261. Gillerman, Elliot and Whitebread, D. H., The uranium-bearing nickel-cobalt-native silver deposits in the Black Hawk district, Grant County, New Mexico (Fig. 3 only -- "Geologic map of the Black Hawk mining district, Grant County, New Mexico): July 14, 1954: D; LA; SF; SL; T; Bur. of Mines, Mineral Resources, Socorro, N. Mex. (B-1009-K).
263. McKelvey, V. E., Swanson, R. W., and Sheldon, R. P., The Permian phosphorite deposits of western United States: Mar. 30, 1953: D; SL; W. (J-154).
265. Cathcart, J. B., Blade, L. V., Davidson, D. F., and Ketner, K. B., The geology of the Florida land-pebble phosphate deposits: Mar. 30, 1953: D; SL. (J-41).
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279. Shoemaker, E. M. and Luedke, R. G., Map of the uranium region of the Colorado Plateau: Mar. 30, 1953: D; GJ; SL; T; N. Mex. Bur. of Mines & Mineral Resources, Socorro, N. Mex.
282. Becraft, G. E., Meschter, D. Y., and Gross, E. B., Geologic map of the Comet area, Jefferson City quadrangle, Jefferson County, Montana: Oct. 8, 1952: B; SL; W. (C-277).
287. Finch, W. I., Geology of the Shinarump No. 1 uranium mine, Seven Mile Canyon area, Grand County, Utah: Jan. 11, 1954: GJ; SL. (C-336).

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304. Sims, P. K., Drake, A. A., and Moench, R. H., Preliminary geologic and vein maps of part of the Central City district, Gilpin and Clear Creek Counties, Colorado: Jan. 11, 1954: D.
312. Lowell, W. R., Geologic map and structure sections of the southwest quarter Willis quadrangle, Beaverhead County, Montana: Mar. 30, 1953: B; IM; W; Dept. of Geology, Indiana University, Bloomington, Ind.
323. Honkala, F. A., Preliminary report on geology of the phosphate deposits in the Centennial Range, Montana-Idaho: June 22, 1953: B; IM; SL; U; W; Wyoming Geol. Survey, Laramie, Wyo. (J-116).
345. Troyer, M. L., McKay, E. J., Soister, P. E., and Wallace, S. R., Summary of investigations of uranium deposits in the Pumpkin Buttes area, Johnson and Campbell Counties, Wyoming (Fig. 1 only -- "Geologic map of the east-central part of the Pumpkin Buttes area, Campbell County, Wyoming"): Aug. 20, 1954: D; LA; SF; SL; Geol. Survey offices at Geology Hall, Univ. of Wyo., Laramie, Wyo.; 1214 Big Horn Ave., Worland, Wyo.; and 315 Federal Bldg., Billings, Mont.; Bur. of Mines, Rapid City, S. Dak.; DA; R; AEC Casper Suboffice, Casper, Wyo. (C-338).
353. Olson, J. C. and Wallace, S. R., Thorium in the Powderhorn district, Gunnison County, Colorado (Fig. 3 only -- "Geologic map of the Little Johnnie thorium deposit, Gunnison County, Colorado," by S. R. Wallace, J. C. Olson, and J. E. Roadifer): July 19, 1954: D; GJ: SL.
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387. Moxham, R. M., Airborne radioactivity surveys for phosphate in Florida: Apr. 2, 1954: D; GJ; SL; Geol. Survey Offices at Menlo Park, Calif.; Custer, S. Dak.; Casper and Worland, Wyo.; Bldg. 211, Camp Roosevelt, Ocala, Fla.; Dinner Key, S. Bayshore Drive, Miami, Fla.; New Dining Hall Bldg., Fla. State Univ., Tallahassee, Fla.; Bur. of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA; AEC Buying Stations at Shiprock, N. Mex., and Monticello, Utah; AEC Suboffices at Casper, Wyo.; Albuquerque, N. Mex.; Phoenix, Arizona; Ishpeming, Mich. (C-230).
462. Sheldon, R. P., Physical stratigraphy of the Phosphoria formation in northwestern Wyoming: June 13, 1955. (B-1042-B; J-202).

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477. Pipiringos, G. N., Uranium-bearing coal in the central part of the Great Divide Basin, Sweetwater County, Wyoming: May 18, 1956. (J-191).
520. Parshall, E. E. and Rader, L. F., Diagrams for construction of Model #54 transmission and reflection fluorimeter (Figs. 1, 2, 3, 4, 5, 6, 7, and 8): Dec. 6, 1955: D; SF. (B-1036 *).
586. Pommer, A. M., Oxidation and state of some vanadium ores and the relation of woody material to their deposition: June 25, 1956: D; Geological Survey Office, Menlo Park, Calif.

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31. Klepper, M. R., Forty-Niner, King Solomon Ridge, and West End claims near Clancy, Jefferson County, Montana: Oct. 19, 1951: D; SL; T. (TIE).
96. Staff, Wamsutter (Red Desert) area, Wyoming, progress report: Oct. 19, 1951: D; SL; T. (TIE).
97. Staff, Colorado Front Range area, progress report: Oct. 19, 1951: D; SL; T. (TIE).
104. Thurston, W. R., Exploration of the Buckhorn mica mine, Larimer County, Colorado: July 12, 1950: D; State Mine Inspector, 220 State Bldg., Denver, Colo. (B-1011).
105. Thurston, W. R., Exploration of the Hyatt pegmatite, Larimer County, Colorado: Mar. 8, 1951: D; Office of State Commissioner of Mines, State Museum Bldg., Denver, Colo. (B-1011).
106. Thurston, W. R., Exploration of the Big Boulder prospect, Larimer County, Colorado: Mar. 8, 1951: D; Office of State Commissioner of Mines, State Museum Bldg., Denver, Colo. (B-1011).
149. Jaffe, E. B. and Sherwood, A. M., Physical and chemical comparison of modern and fossil tooth and bone material: Oct. 19, 1951: D; SL; T. (TIE).
183. Page, L. R., Interim report of geologic investigation, Lost Creek schroeckingerite deposits, Sweetwater County, Wyoming: Oct. 19, 1951: D; SL; T. (TIE).
205. Fischer, R. P., MacKallor, Jules, and Brown, C. N., Base maps of a part of the Thompsons district, Grand County, Utah: May 26, 1952: D; GJ; SL; U; Library, Denver Federal Center, Denver, Colo.
212. Wyant, D. G and Stugard, Frederick, Jr., Indian Creek uranium prospects, Beaver County, Utah: Nov. 30, 1951: D; SL.
214. Stugard, Frederick, Jr., Uranium resources in the Silver Reef (Harrisburg) district, Washington County, Utah: Oct. 8, 1951: D; SL; U.
229. Roberts, W. A. and Gude, A. J., III, Uranium-bearing deposits west of Clancy, Jefferson County, Montana: Mar. 14, 1952: B; W; Helena Public Library, Helena, Montana. (B-988-F).

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235. Wedow, Helmuth, Jr., White, M. G., and Moxham, R. M., Interim report on an appraisal of the uranium possibilities of Alaska: July 16, 1952: Geol. Survey offices in Juneau, Anchorage, Palmer, Fairbanks, and College, Alaska; Territorial Dept. of Mines offices in Juneau, Ketchikan, Anchorage, College, and Nome, Alaska; Bureau of Mines, Anchorage, Alaska.
251. Weeks, A. D., Red and gray clay underlying ore-bearing sandstone of the Morrison formation in western Colorado: Oct. 19, 1951: D; SL; T. (TIE).
252. Fletcher, M. H. and Warner, E. R., A fluorimeter for solutions: Oct. 19, 1951: D; SL; T. (TIE; C-311).
292. Gude, A. J., III, and McKeown, F. A., Results of exploration at the Old Leyden coal mine, Jefferson County, Colorado: Mar. 30, 1953: D; GJ.
301. Luedke, R. G. and Shoemaker, E. M., Tectonic map of the Colorado Plateau: July 23, 1953: D; GJ; SL; T; Bur. of Mines, Mineral Resources, N. Mex. School of Mines, Socorro, N. Mex.; Office of the Area Director, Bureau of Indian Affairs, Window Rock, Ariz.
355. West, W. S., Reconnaissance for a uranothorianite-bearing lode in the vicinity of the headwaters of the Peace River, Candle quadrangle, Seward Peninsula, Alaska: Oct. 27, 1952: SF; Geol. Survey offices in Juneau, Anchorage, Fairbanks, and College, Alaska; Territorial Dept. of Mines offices in Juneau, College, Ketchikan, and Nome, Alaska. (C-250).
364. Hackman, R. J., Photogeologic map, Aneth-2 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL. (MC-62).
365. Hackman, R. J., Photogeologic map, Aneth-3 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL. (MC-63).
366. Hackman, R. J., Photogeologic map, Aneth-4 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL. (MC-64).
367. Hackman, R. J., Photogeologic map, Aneth-7 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL. (MC-67).
368. Hackman, R. J., Photogeologic map, Aneth-8 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL. (MC-68).
369. Hackman, R. J., Photogeologic map, Bluff-1 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
370. Hackman, R. J., Photogeologic map, Bluff-8 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.

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370A. Miller, C. F., Photogeologic map, Bluff-8 quadrangle, San Juan County,
Utah: Feb. 11, 1955: D; GJ; SL; Bur. of Indian Affairs,
Window Rock, Ariz. (MC-74).
371. Ray, R. G., Photogeologic map, Bluff-13 quadrangle, San Juan County,
Utah: Aug. 25, 1952: D; GJ; SL.
372. Tolbert, G. E., Photogeologic map, Carlisle-1 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL. (MC-77*).
373. Tolbert, G. E., Photogeologic map, Carlisle-8 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
374. Tolbert, G. E., Photogeologic map, Carlisle-9 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
375. Tolbert, G. E., Photogeologic map, Carlisle-16 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
376. Hackman, R. J., Photogeologic map, Elk Ridge-13 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
377. Hackman, R. J., Photogeologic map, Elk Ridge-16 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
378. Tolbert, G. E., Photogeologic map, Mt. Peale-5 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
379. Tolbert, G. E., Photogeologic map, Mt. Peale-6 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
- 379A. Tolbert, G. E. and Hackman, R. J., Photogeologic map, Mt. Peale-6
quadrangle, San Juan County, Utah: July 23, 1953: D; GJ; SL.
380. Tolbert, G. E., Photogeologic map, Mt. Peale-11 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
- 380A. Hackman, R. J. and Tolbert, G. E., Photogeologic map, Mt. Peale-11
quadrangle, San Juan County, Utah: Feb. 5, 1953: D; GJ; SL.
381. Tolbert, G. E., Photogeologic map, Mt. Peale-12 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
382. Tolbert, G. E., Photogeologic map, Mt. Peale-14 quadrangle, San Juan
County, Utah: Aug. 25, 1952: D; GJ; SL.
383. Ray, R. G., Photogeologic map, Stinking Spring Creek-11 quadrangle,
Emery County, Utah: Aug. 25, 1952: D; GJ; SL.
384. Fischer, W. A., Photogeologic map, Stinking Spring Creek-12 quadrangle,
Emery County, Utah: Aug. 25, 1952: D; GJ; SL.

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385. Hackman, R. J., Photogeologic map, Verdure-9 quadrangle, Colorado-Utah: Aug. 25, 1952: D; GJ; SL.
386. Hackman, R. J., Photogeologic map, Verdure-10 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
387. Hackman, R. J., Photogeologic map, Verdure-11 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
388. Hackman, R. J., Photogeologic map, Verdure-12 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
389. Hackman, R. J., Photogeologic map, Verdure-13 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
390. Hackman, R. J., Photogeologic map, Verdure-14 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
391. Hackman, R. J., Photogeologic map, Verdure-15 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
392. Hackman, R. J., Photogeologic map, Verdure-16 quadrangle, Colorado-Utah: Aug. 25, 1952: D; GJ; SL.
393. Hackman, R. J., Photogeologic map, Aneth-5 quadrangle, San Juan County, Utah: Oct. 8, 1952: D; GJ; SL. (MC- 65).
394. Bates, C. E., Photogeologic map, Stinking Spring Creek-14 quadrangle, Emery County, Utah: Oct. 8, 1952: D; GJ; SL.
395. Hackman, R. J., Photogeologic map, Verdure-7 quadrangle, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
396. Hackman, R. J., Photogeologic map, Elk Ridge-12 quadrangle, San Juan County, Utah: Oct. 8, 1952: D; GJ; SL.
397. Bates, C. E., Photogeologic map, Stinking Spring Creek-13 quadrangle, Emery County, Utah: Oct. 8, 1952: D; GJ; SL.
398. Tolbert, G. E., Photogeologic map, Mt. Peale-13 quadrangle, San Juan County, Utah: Oct. 8, 1952: D; GJ; SL.
399. Hackman, R. J., Photogeologic map, Verdure-1 quadrangle, Colorado-Utah: Oct. 27, 1952: D; GJ; SL.
400. Hackman, R. J., Photogeologic map, Aneth-6 quadrangle, San Juan County, Utah: Oct. 8, 1952: D; GJ; SL. (MC- 66).
401. Ray, R. G., Photogeologic map, Bluff-14 quadrangle, Navajo Indian Reservation, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.

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402. Ray, R. G., Photogeologic map, Setsiltso Springs-3 quadrangle Navajo Indian Reservation, Apache County, Arizona: Oct. 27, 1952: D; GJ; SL; T.
403. Hackman, R. J., Photogeologic map, Verdure-8 quadrangle, Colorado-Utah: Oct. 27, 1952: D; GJ; SL.
404. Ray, R. G., Photogeologic map, Setsiltso Springs-4 quadrangle, Navajo Indian Reservation, Apache County, Arizona: Nov. 24, 1952: D; GJ; T.
405. Hackman, R. J., Photogeologic map, Verdure-6 quadrangle, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
406. Hackman, R. J., Photogeologic map, Verdure-2 quadrangle, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
407. Hackman, R. J., Photogeologic map, Elk Ridge-8 quadrangle, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
408. Hackman, R. J., Photogeologic map, Verdure-5 quadrangle, San Juan County, Utah: Oct. 8, 1952: D; GJ; SL.
409. Fischer, W. A., Photogeologic map, Clay Hills-13 quadrangle, Navajo Indian Reservation, San Juan County, Utah, Oct. 8, 1952: D; GJ; SL.
410. Hackman, R. J., Photogeologic map, Elk Ridge-1 quadrangle, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
411. Eckstein, W. H., Photogeologic map, Agathla Peak-2 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: Jan. 9, 1953: D; GJ; T.
412. Hackman, R. J., Photogeologic map, Agathla Peak-4 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: Oct. 8, 1952: D; GJ; T.
413. Fischer, W. A., Photogeologic map, Clay Hills-12 quadrangle, Piute Indian Reservation, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
414. Eckstein, W. H., Photogeologic map, Clay Hills-15 quadrangle, Navajo Indian Reservation, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.
433. Hackman, R. J., Photogeologic map, Verdure-3 quadrangle, San Juan County, Utah: Oct. 8, 1952: D; GJ; SL.
438. Hackman, R. J., Photogeologic map, Verdure-4 quadrangle, San Juan County, Utah: Oct. 27, 1952: D; GJ; SL.

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439. Ray, R. G., Photogeologic map, Setsiltso Springs-5 quadrangle, Navajo Indian Reservation, Apache County, Arizona: Oct. 27, 1952: D; GJ; T.
440. Ray, R. G., Photogeologic map, Agathla Peak-8 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: Nov. 24, 1952: D; GJ; T.
441. Ray, R. G., Photogeologic map, Agathla Peak-1 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: Jan. 9, 1953: D; GJ; T.
442. Fischer, W. A., Photogeologic map, Clay Hills-14 quadrangle, Navajo Indian Reservation, San Juan County, Utah: Jan. 9, 1953: D; SL.
447. Hackman R. J., Photogeologic map, Mt. Peale-15 quadrangle, San Juan County, Utah: Feb. 5, 1953: D; GJ; SL.
448. Hackman, R. J., Photogeologic map, Mt. Peale-16 quadrangle, Utah-Colorado: Jan. 9, 1953: D; SL. (MC-184*).
449. Bates, C. E. and Eckstein, W. H., Photogeologic map, Clay Hills-16 quadrangle, Navajo Indian Reservation, San Juan County, Utah: Jan. 9, 1953: D; SL.
450. Hackman, R. J., Photogeologic map, Mt. Peale-9 quadrangle, Utah-Colorado: Jan. 9, 1953: D; SL.
451. Hackman, R. J., Photogeologic map, Mt. Peale-10 quadrangle, San Juan County, Utah: May 11, 1953: D; GJ; SL.
452. Hackman, R. J., Photogeologic map, Aneth-1 quadrangle, Utah-Colorado: Aug. 25, 1952: D; GJ; SL. (MC-61).
453. Hackman, R. J., Photogeologic map, Elk Ridge-9 quadrangle, San Juan County, Utah: Aug. 25, 1952: D; GJ; SL.
465. Hackman, R. J., Photogeologic map, Mt. Peale-8 quadrangle, Utah-Colorado: Jan. 9, 1953: D; SL. (MC-180*).
466. Hackman R. J., Photogeologic map, Mt. Peale-7 quadrangle, San Juan County, Utah: Feb. 5, 1953: D; GJ; SL. (MC-179*).
467. Hackman, R. J., Photogeologic map, Mt. Peale-1 quadrangle, Grand and San Juan Counties, Utah, Montrose County, Colorado: Feb. 5, 1953: D; GJ; SL. (MC-176).
468. Ray, R. G. Photogeologic map, Agathla Peak-7 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: Feb. 5, 1953: D; GJ; SL; T.

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469. Fischer, W. A. and Condon, W. H., Photogeologic map, Navajo Mountain-9 quadrangle, Navajo Indian Reservation, San Juan County, Utah: Feb. 5, 1953: D; GJ; SL.
470. Fischer, W. A. and Condon, W. H., Photogeologic map, Navajo Mountain-16 quadrangle, San Juan County, Utah: Feb. 5, 1953: D; GJ; SL.
499. Fischer, W. A. and Condon, W. H., Photogeologic map, Shanto Spring-1 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: Feb. 5, 1953: D; GJ; SL; T.
500. Ray, R. G., Photogeologic map, Orange Cliffs-13 quadrangle, Garfield County, Utah: Feb. 5, 1953: D; GJ; SL.
501. Ray, R. G., Photogeologic map, Orange Cliffs-14 quadrangle, Garfield County, Utah: Feb. 5, 1953: D; GJ; SL.
508. Stead, F. W., Balsley, J. R., Moxham, R. M., and Reinhardt, P. W., Airborne radioactivity survey of the Pumpkin Buttes area, Campbell and Johnson Counties, Wyoming: June 10, 1953: D; GJ; SF; SL; Geol. Survey offices at Casper, Wyo., and Custer, S. Dak.; Univ. of Wyoming, Laramie, Wyo.; Bur. of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA.
523. Ray, R. G., Photogeologic map, Orange Cliffs-11 quadrangle, Wayne and Garfield Counties, Utah: May 11, 1953: D; GJ; SL.
524. Ray, R. G., Photogeologic map, Orange Cliffs-12 quadrangle, Wayne and Garfield Counties, Utah: July 23, 1953: D; GJ; SL.
525. Hosley, V. M., Photogeologic map, Orange Cliffs-5 quadrangle, Wayne County, Utah: July 23, 1953: D; GJ; SL.
526. Hackman, R. J., Photogeologic map, Navajo Mountain-13 quadrangle, Navajo Indian Reservation, San Juan and Kane Counties, Utah: May 11, 1953: D; GJ; SL.
527. Hackman R. J., Photogeologic map, Mt. Peale-4 quadrangle, Grand and San Juan Counties, Utah: July 23, 1953: D; GJ; SL. (MC-177*).
528. Orkild, P. P., Photogeologic map, Stinking Spring Creek-5 quadrangle, Emery County, Utah: May 11, 1953: D; GJ; SL.
529. Scott, J. M., Photogeologic map, Circle Cliffs-9 quadrangle, Garfield County, Utah: June 22, 1953: D; GJ; SL; (MC- 99).
530. Hemphill, W. R., Photogeologic map, Stinking Spring Creek-6 quadrangle, Emery County, Utah: June 22, 1953: D; GJ; SL.

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531. Hackman, R. J., Photogeologic map, Circle Cliffs-10 quadrangle, Garfield County, Utah: May 11, 1953: D; GJ; SL. (MC-100).
532. Orkild, P. P., Photogeologic map, Stinking Spring Creek-4 quadrangle, Emery County, Utah: May 11, 1953: D; GJ; SL.
536. Witkind, I. J., Thaden, R. E., and Lough, C. F., Preliminary report on geologic studies in the Monument Valley Area, Arizona (3 maps only--Agathla Peak, Garnet Ridge, and Boot Mesa): May 11, 1953: D; GJ; SL; T.
541. Eckstein, W. H., Photogeologic map, Agathla Peak-6 quadrangle, Navajo Indian Reservation, Navajo County, Arizona: June 22, 1953: D; GJ; SL; T.
542. Orkild, P. P., Photogeologic map, Stinking Spring Creek-3 quadrangle, Emery County, Utah: June 22, 1953: D; GJ; SL.
543. Hemphill, W. R., Photogeologic map, Stinking Spring Creek-10 quadrangle, Emery County, Utah: July 14, 1954: D; GJ; SL.
544. Hosley, V. M., Photogeologic map, Carlisle-5 quadrangle, Wayne and San Juan Counties, Utah: July 23, 1953: D; GJ; SL. (MC-81).
545. Orkild, P. P., Photogeologic map, Stinking Spring Creek-15 quadrangle, Emery County, Utah: July 23, 1953: D; GJ; SL.
546. Condon, W. H., Photogeologic map, Emery-16 quadrangle, Emery County, Utah: July 23, 1953: D; GJ; SL.
547. Hosley, V. M., Photogeologic map, Carlisle-4 quadrangle, Wayne and San Juan Counties, Utah: July 23, 1953: D; GJ; SL. (MC-80).
548. Hackman, R. J., Photogeologic map, Circle Cliffs-2 quadrangle, Garfield County, Utah: Dec. 21, 1953: D; GJ; SL. (MC-92).
549. Scott, J. M., Photogeologic map, Circle Cliffs-3 quadrangle, Garfield County, Utah: July 23, 1953: D; GJ; SL. (MC-93).
550. Hemphill, W. R., Photogeologic map, Stinking Spring Creek-7 quadrangle, Emery County, Utah: June 22, 1953: D; GJ; SL.
584. Hosley, V. M., Photogeologic map, Moab-14 quadrangle, Grand County, Utah: July 23, 1953: D; GJ; SL. (MC-173).
585. Hackman, R. J., Photogeologic map, Circle Cliffs-6 quadrangle, Garfield County, Utah: July 23, 1953: D; GJ; SL. (MC-96).
586. Scott, J. M., Photogeologic map, Circle Cliffs-1 quadrangle, Garfield County, Utah: August 17, 1953: D; SJ; SL. (MC-91).

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587. Bates, C. E., Photogeologic map, Carlisle-6 quadrangle, San Juan County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-82).
588. Condon, W. H., Photogeologic map, Emery-9 quadrangle, Emery County, Utah: Oct. 19, 1953: D; GJ; SL.
589. Hemphill, W. R., Photogeologic map, Stinking Spring Creek-2 quadrangle, Emery County, Utah: July 23, 1953: D; GJ; SL.
590. Hackman R. J., Photogeologic map, Circle Cliffs-7 quadrangle, Garfield County, Utah: Aug. 17, 1953: D; GJ; SL. (MC-97).
591. Orkild, P. P., Photogeologic map, Emery-1 quadrangle, Emery County, Utah: Aug. 17, 1953: D; GJ; SL. (MC-139).
592. Bates, C. E., Photogeologic map, Carlisle-3 quadrangle, San Juan County, Utah: July 23, 1953: D; GJ; SL. (MC-79).
593. Condon, W. H., Photogeologic map, Emery-8 quadrangle, Emery County, Utah: Aug. 17, 1953: D; GJ; SL. (MC-143).
594. Orkild, P. P., Photogeologic map, Orange Cliffs-3 quadrangle, Wayne County, Utah: July 23, 1953: D; GJ; SL.
595. Scott, J. M., Photogeologic map, Circle Cliffs-8 quadrangle, Garfield County, Utah: July 23, 1953: D; GJ; SL. (MC-98).
596. Hackman, R. J., Photogeologic map, Mt. Pennell-5 quadrangle, Garfield County, Utah: Aug. 17, 1953: D; GJ; SL. (MC-185).
597. Scott, J. M., Photogeologic map, Mt. Pennell-12 quadrangle, Garfield County, Utah: July 23, 1953: D; GJ; SL. (MC-187).
598. Hosley, V. M., Photogeologic map, Moab-15 quadrangle, Grand County, Utah: Aug. 17, 1953: D; GJ; SL. (MC-174).
599. Hemphill, W. R., Photogeologic map, Orange Cliffs-6 quadrangle, Wayne County, Utah: Feb. 15, 1954: D; GJ; SL.
600. Orkild, P. P. Photogeologic map, Orange Cliffs-2 quadrangle, Wayne County, Utah: Aug. 17, 1953: D; GJ; SL.
602. Mackin, J. H. and Schmidt, D. L., Reconnaissance geology of placer deposits containing radioactive minerals in the Bear Valley district, Valley County, Idaho (Part I): June 22, 1953: IM; SL; W. (J-156).
605. Henderson, J. R. and Moxham, R. M., Airborne radioactivity survey of the Devil's Tower area, Crook County, Wyoming: June 1, 1953: D; GJ; SF; Geol. Survey offices at Custer, S. Dak.; Casper and Sheridan, Wyo.; Science Hall, Univ. of Wyoming, Laramie, Wyo.; BA; DA; GJA; R; SLA.

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606. Meuschke, J. L. and Moxham, R. M., Airborne radioactivity survey of the Miller Hill area, Carbon County, Wyoming: Mar. 28, 1953: D; GJ; SF; SL; Geol. Survey offices at Custer, S. Dak.; Casper and Sheridan, Wyo.; University of Wyoming, Laramie, Wyo.; BA; DA; GJA; R; SLA.
607. Johnson, R. W. and Moxham, R. M., Airborne radioactivity survey of portions of the Defiance Uplift and Carrizo Mountains, Apache County, Arizona: Aug. 25, 1953: D; GJ; LA; SF; SL; T; Geol. Survey offices at Room 5, Spencer Bldg., Flagstaff, Ariz.; Holbrook, Ariz.; Hadley Hall, University of New Mexico, Albuquerque, New Mexico; Bur. of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA.
609. Meuschke, J. L. and Moxham, R. M., Airborne radioactivity survey of the Aspen Mountain area, Sweetwater County, Wyoming: Aug. 10, 1953: D; GJ; SF; SL; Geol. Survey offices at Custer, S. Dak.; Sheridan and Casper, Wyo.; University of Wyoming, Laramie, Wyo.; Bureau of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA.
610. Meuschke, J. L. and Moxham, R. M., Airborne radioactivity survey of the Tabernacle Buttes area, Sublette and Fremont Counties, Wyoming: Aug. 10, 1953: D; GJ; SF; SL; Geol. Survey offices at Custer, S. Dak.; Sheridan and Casper, Wyo.; University of Wyoming, Laramie, Wyo.; Bur. of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA.
611. Meuschke, J. L. and Moxham, R. M. Airborne radioactivity survey of the West Lone Tree area, Uinta County, Wyoming: Aug. 10, 1953: D; GJ; SF; SL; Geol. Survey offices at Custer, S. Dak.; Sheridan and Casper, Wyo.; University of Wyoming, Laramie, Wyo.; Bur. of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA.
612. Hemphill, W. R., Photogeologic map, Orange Cliffs-7 quadrangle, Wayne County, Utah: Sept. 16, 1953: D; GJ; SL.
613. Hackman, R. J., Photogeologic map, Mt. Pennell-14 quadrangle, Garfield and Kane Counties, Utah: Oct. 19, 1953: D; GJ; SL. (MC-189).
614. Hackman, R. J., Photogeologic map, Circle Cliffs-16 quadrangle, Garfield and Kane Counties, Utah: Sept. 16, 1953: D; GJ; SL. (MC-106).
615. Scott, J. M., Photogeologic map, Mt. Pennell-13 quadrangle, Garfield and Kane Counties, Utah: Sept. 16, 1953: D; GJ; SL. (MC-188).
616. Bates, C. E., Photogeologic map, Moab-10 quadrangle, Grand County, Utah: Sept. 16, 1953: D; GJ; SL. (MC-169).
617. Orkild, P. P., Photogeologic map, Tidwell-16 quadrangle, Emery and Grand Counties, Utah: Dec. 21, 1953: D; GJ; SL. (MC-236)
618. Condon, W. H., Photogeologic map, Orange Cliffs-10 quadrangle, Wayne and Garfield Counties, Utah: Sept. 16, 1953: D; GJ; SL.

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619. Scott, J. M., Photogeologic map, Navajo Mountain-4 quadrangle, Kane County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-193).
620. Scott, J. M., Photogeologic map, Navajo Mountain-6 quadrangle, San Juan and Kane Counties, Utah: Dec. 21, 1953: D; GJ; SL. (MC-195).
621. Hackman, R. J., Photogeologic map, Navajo Mountain-3 quadrangle, Kane and San Juan Counties, Utah: Oct. 19, 1953: D; GJ; SL. (MC-192).
633. Scott, J. M., Photogeologic map, Mt. Pennell-11 quadrangle, Garfield County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-186).
634. Scott, J. M., Photogeologic map, Circle Cliffs-4 quadrangle, Garfield County, Utah: Dec. 21, 1953: D; GJ; SL. (MC-94).
635. Scott, J. M., Photogeologic map, Circle Cliffs-5 quadrangle, Garfield County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-95).
636. Hackman, R. J., Photogeologic map, Circle Cliffs-11 quadrangle, Garfield County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-101).
637. Hackman, R. J., Photogeologic map, Circle Cliffs-14 quadrangle, Garfield and Kane Counties, Utah: Oct. 19, 1953: D; GJ; SL. (MC-104).
638. Hosley, V. M., Photogeologic map, Straight Cliffs-1 quadrangle, Kane County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-217).
639. Hosley, V. M., Photogeologic map, Moab-12 quadrangle, Grand County, Utah: Oct. 19, 1953: D; GJ; SL. (MC-171).
640. Hackman, R. J. and Tolbert, G. E., Photogeologic map, Notom-15 quadrangle, Garfield County, Utah: Nov. 25, 1953: D; GJ; SL. (MC-201).
641. Hackman, R. J., Photogeologic map, Circle Cliffs-15 quadrangle, Garfield and Kane Counties, Utah: Oct. 19, 1953: D; GJ; SL. (MC-105).
642. Orkild, P. P., Photogeologic map, Tidwell-5 quadrangle, Emery County, Utah: Nov. 25, 1953: D; GJ; SL. (MC-228).
644. Moxham, R. M. and Johnson, R. W., Airborne radioactivity survey of parts of the Atlantic Ocean Beach, Virginia to Florida: Sept. 18, 1953: D; GJ; SF; SL;
New Dining Hall, Fla. State Univ., Tallahassee, Fla.; Fla. Geol. Survey, Tallahassee, Fla.; Georgia Dept. of Mines, Mining and Geology, 425 State Capitol, Atlanta, Ga.; Bur. of Mines, Rapid City, S. Dak.; BA; DA; GJA; R; SLA.
650. Hemphill, W. R., Photogeologic map, Stinking Spring Creek-9 quadrangle, Emery County, Utah: Nov. 25, 1953: D; GJ; SL.

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651. Kent, B. H., Photogeologic map, Desert Lake-14 quadrangle, Emery County, Utah: Nov. 25, 1953: D; GJ; SL. (MC-122).
652. Bates, C. E., Photogeologic map, Moab-11 quadrangle, Grand County, Utah: Dec. 21, 1953: D; GJ; SL. (MC-170).
653. Kent, B. H. and Condon, W. H., Photogeologic map, Orange Cliffs-15 quadrangle, Garfield and San Juan Counties, Utah: April 26, 1954: D; GJ; SL.
654. Hemphill, W. R., Photogeologic map, Orange Cliffs-8 quadrangle, Wayne and San Juan Counties, Utah: Nov. 25, 1953: D; GJ; SL.
655. Orkild, P. P., Photogeologic map, Tidwell-4 quadrangle, Emery County, Utah: Dec. 21, 1953: D; GJ; SL. (MC-227).
656. Hosley, V. M., Photogeologic map, Tidwell-15 quadrangle, Emery County, Utah: Nov. 25, 1953: D; GJ; SL. (MC-235).
657. Hemphill, W. R., Photogeologic map, Stinking Spring Creek-8 quadrangle, Emery County, Utah: Dec. 21, 1953: D; GJ; SL.
658. Kent, B. H., Photogeologic map, Desert Lake-11 quadrangle, Emery County, Utah: Nov. 25, 1953: D; GJ; SL. (MC-119).
659. Orkild, P. P., Photogeologic map, Woodside-13 quadrangle, Emery County, Utah: Nov. 25, 1953: D; GJ; SL. (MC-250).
660. Bates, C. E. and Hosley, V. M., Photogeologic map, Tidwell-9 quadrangle, Emery and Grand Counties, Utah: Nov. 25, 1953: D; GJ; SL. (MC-232).
661. Scott, J. M., Photogeologic map, Kaiparowits Peak-8 quadrangle, Garfield County, Utah: Jan. 11, 1954: D; GJ; SL. (MC-156).
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*Las Vegas, Las Vegas Public Library

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*Socorro, New Mexico Institute of Mining and Technology Library

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*Vernal, Utah Field House of Natural History

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WISCONSIN

Madison, University of Wisconsin Library

WYOMING

*Casper, Natrona County Public Library
*Cheyenne, Wyoming State Library

ARGENTINA

Buenos Aires, Comision Nacional de Energia Atomica

AUSTRALIA

Canberra, Australian National Library

Coogee, New South Wales, Australian Atomic Energy Commission

AUSTRIA

Vienna, Institut fur Radiumforschung der Oesterreichischen
Akademie der Wissenschaften

BURMA

Rangoon, Union of Burma Applied Research Institute

CANADA

Ottawa, National Research Council Library

DENMARK

Copenhagen, Atomic Energy Commission, c/o Institute of Theoretical Physics

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Helsinki, Teknillisen Korkeakoulun Kirjasto

FORMOSA (TAIWAN)

Taipei, National Tsing Hua University Library

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Gif-sur-Yvette, Centre d'Etudes Nucleaires de Saclay

GREECE

Athens, Greek Atomic Energy Commission

HAITI

Port au Prince, National Library

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Bombay, Department of Atomic Energy

ISRAEL

Tel Aviv, Israel Atomic Energy Commission

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ITALY

Rome, Istituto Nazionale delle Ricerche

JAPAN

Tokyo, Science Section, Diet Library

LEBANON

Beirut, American University

NETHERLANDS

Utrecht, Stichting Reactor Centrum

PAKISTAN

Karachi, Atomic Energy Commission

PERU

Lima, Biblioteca Nacional

PHILIPPINE REPUBLIC

Manila, American Embassy

Manila, Interdepartmental Committee on Atomic Energy, c/o National Economic Council

PORTUGAL

Lisbon, Junta de Energia Nuclear

SCOTLAND

Glasgow, Corporation of Glasgow Library's Department "Mitchell"

SPAIN

Madrid, Junta de Energia Nuclear

SWEDEN

Stockholm, Atomenergi AB

SWITZERLAND

Geneva, United Nations Library

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3. Circulars

Free on application to the
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135. Jaffe, E. B., Abstracts of the literature on synthesis of apatites and some related phosphates: Dec. 1951. (TEI-132, Pt. 1).
137. Kaiser, E. P., Uraniferous quartzite, Red Bluff prospect, Gila County, Arizona: Oct. 1951. (TEM-210).
142. Staatz, M. H. and Bauer, H. L., Jr., Virgin Valley opal district, Humboldt County, Nevada: Dec. 1951. (TEM-227).
175. Page, L. R. and Redden, J. A., The carnotite prospects of the Craven Canyon area, Fall River County, South Dakota: March 1952. (TEM-152).
176. Love, J. D., Preliminary report on uranium deposits in the Pumpkin Buttes area, Powder River Basin, Wyoming: March 1952.
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186. Moore, F. B. and Butler, C. R., Pitchblende deposits at the Wood and Calhoun mines, Central City mining district, Gilpin County, Colorado: Oct. 1952. (TEM-198).
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194. Frondel, J. W. and Fleischer, Michael, A glossary of uranium- and thorium-bearing minerals, second edition: June 1952. (Revision of C-74; superseded by B-1009-F).

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208. McKelvey, V. E., Davidson, D. F., O'Malley, F. W., and Smith, L. E., Stratigraphic sections of the Phosphoria formation in Idaho, 1947-48, Part I: April 1953. (TEI-183). (OF)
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- * Heyl, A. V., Zoning of the Bitter Creek vanadium deposits, Montrose County, Colorado. (TEI-443).
- * Stugard, Frederick, Jr., Pegmatites of the Middletown area, Connecticut. (TEI-233).

1046. Contributions to the geology of uranium, 1956.
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- (B)* McKeown, F. A. and Klemic, Harry, Rare-earth-bearing apatite at Mineville, Essex County, New York. (TEI-383).
- * Armstrong, F. C. and Weis, P. L., Uranium-bearing minerals in placer deposits of the Red River Valley, Elk City district, Idaho County, Idaho. (TEI-562).
- * Becraft, G. E., Uranium in carbonaceous rocks in the Townsend and Helena Valleys, Montana. (TEI-581).
- * Klepper, M. R. and Wyant, D. G., Notes on the geology of uranium. (TEI-529) (J-132).
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- * Trites, A. F., Jr., and Hadd, G. A., Uranium deposits of the Jomac mine, White Canyon area, San Juan County, Utah. (TEI-561).
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1055. Uranium in coals of the western United States.
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- (A)* Denson, N. M., Introduction to investigations of uranium in coal of the Western States.

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1055. Uranium in coals of the western United States. (Continued)

- (B)* Denson, N. M., Bachman, G. O., and Zeller, H. D., Uranium-bearing lignite and its relation to the White River and Arikaree formations in northwestern South Dakota and adjacent states. (TEI-467) (MC-263, 264, and 265).
- (C)* Zeller, H. D., Results of exploratory drilling for uranium-bearing lignite deposits in Harding and Perkins Counties, South Dakota and Bowman County, North Dakota. (TEI-238).
- (D)* Gill, J. R. and Zeller, H. D., Results of core drilling for uranium-bearing lignite, Mendenhall area, Harding County, South Dakota. (TEI-456).
- (E)* Moore, G. W., Melin, R. E., and Kepferle, R. C., Uranium-bearing lignite in southwestern North Dakota. (TEI-463) (MC-267).
- (F)* Gill, J. R., Reconnaissance for uranium-bearing lignite in the Ekalaka lignite field, Carter County, Montana. (TEI-452).
- (G)* Masursky, Harold and Pipiringos, G. N., Preliminary report on uranium-bearing coal in the Red Desert, Great Divide Basin, Sweetwater County, Wyoming. (TEI-332 and TEM-601).
- (H)* Mapel, W. J. and Hail, W. J., Jr., Tertiary geology of the Goose Creek district, Cassia County, Idaho, Boxelder County, Utah, and Elko County, Nevada. (TEI-339 and -438).
- (I)* Vine, J. D., Geology and uranium deposits in carbonaceous rocks of the Fall Creek area, Bonneville County, Idaho. (TEI-451).
- (J)* Bachman, G. O., Vine, J. D., Read, C. B., and Moore, G. W., Uranium-bearing coal and carbonaceous shale in the La Ventana Mesa area, Sandoval County, New Mexico. (TEI-241).

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1061. Contributions to general geology, 1956.
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- * Ketner, K. B. and McGreevy, L. J., Stratigraphy of the area between Hernando and Hardee Counties, Florida. (TEI-524).

5. Professional papers

For sale by the Superintendent of Documents,
U. S. Government Printing Office
Washington 25, D. C., at the price indicated.

(* Indicates professional paper is in preparation)

P. No.

227. Hanley, J. B., Heinrich, E. W., and Page, L. R., Pegmatite investigations in Colorado, Wyoming, and Utah, 1942-44: 1950. \$1.50.
228. Hunt, C. B., assisted by Averitt, Paul and Miller, R. L., Geology and geography of the Henry Mountains region, Utah: 1953. \$6.25.
261. Olson, J. E., and others, Rare-earth mineral deposits of the Mountain Pass district, San Bernardino County, California: (Includes TEI-251) 1955. \$3.00 (NSA).
265. Staatz, M. H. and Trites, A. F., Jr., Geology of the Quartz Creek pegmatite district, Gunnison County, Colorado: 1955. \$3.00 (TEI-138) (OF; NSA).
279. Hunt, C. B., Cenozoic geology of the Colorado Plateau: 1956, 75¢.
- 297-A*. Sheridan, D. M., Stephens, H. G., Staatz, M. H., and Norton, J. J., Geology and beryl deposits of the Peerless pegmatites, Pennington County, South Dakota. (TEI-226).
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Listed below are the papers published in Prof. Paper 300. Many of these papers, some in condensed form, were published in Proceedings of the International Conference on the Peaceful Uses of Atomic Energy, v. 6, 1956, United Nations, New York, \$9.00, and are shown by (IC). Organizational affiliation is shown for authors who are not employees of the Geological Survey. Papers are listed alphabetically by senior author.

Adams, J. W. and Stugard, Frederick, Jr., Summary of wall-rock control of certain pitchblende deposits in Golden Gate Canyon, Jefferson County, Colorado (IC, p. 279-282).

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- Altschuler, Z. S., Jaffe, E. B., and Cuttitta, Frank, The aluminum phosphate zone of the Bone Valley formation, Florida, and its uranium deposits. (IC, p. 507-513).
- Becraft, G. E., Uranium deposits of the Boulder batholith, Montana. (IC, p. 270-274).
- Bell, Henry, III, Gott, G. B., Post, E. V., and Schnabel, R. W., Lithologic and structural controls of uranium deposition in the southern Black Hills, South Dakota. (IC, p. 407-411).
- Bell, K. G., Uranium in precipitates and evaporites. (IC, p. 520-524).
- Black, R. A., Geophysical exploration for uranium on the Colorado Plateau. (IC, p. 766-771).
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- Breger, I. A. and Deul, Maurice, The organic geochemistry of uranium. (IC, p. 418-421).
- Brown, Andrew, Uranium in the Chattanooga shale of eastern Tennessee. (IC, p. 439-444).
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- Cannon, H. L. and Kleinhamper, F. J., Botanical methods of prospecting for uranium. (IC, p. 801-805).
- Cathcart, J. B., Distribution and occurrence of uranium in the calcium phosphate zone of the land-pebble phosphate district of Florida. (IC, p. 514-519).
- Clinton, N. J. (AEC) and Carithers, L. W. (AEC), Uranium deposits in sandstones of marginal marine origin. (IC, p. 383-386).
- Coats, R. R., Uranium and certain other trace elements in felsic volcanic rocks of Cenozoic age in Western United States. (IC, p. 248-251).

Conant, L. C., Environment of accumulation of the Chattanooga shale. (IC, p. 435-438).

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Finch, W. I., Uranium in terrestrial sedimentary rocks in the United States exclusive of the Colorado Plateau. (IC, p. 600-604).

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Gabelman, J. W. (AEC), Uranium deposits in paludal black shales, Dakota sandstone, San Juan Basin, New Mexico. (IC, p. 422-429).

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- Grimaldi, F. S., The analytical chemistry of uranium and thorium.
- Gruner, J. W. (University of Minnesota), A comparison of black uranium ore deposits in Utah, New Mexico, and Wyoming. (IC, p. 530-532).
- Grutt, E. W., Jr. (AEC), Uranium deposits in Tertiary sedimentary rocks in Wyoming and northern Colorado. (IC, p. 392-402).
- Hail, W. J., Jr., Myers, A. T., and Horr, C. A., Uranium in asphalt-bearing rocks of the Western United States. (IC, p. 489-493).
- Hilpert, L. S. and Freeman, V. L., Guides to uranium deposits in the Morrison formation, Gallup-Laguna area, New Mexico. (IC, p. 346-349).
- Hoekstra, H. R. (Argonne National Laboratory) and Katz, J. J. (ANL), Isotope geology of some uranium minerals. (IC, p. 547-550).
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- Jobin, D. A., Regional transmissivity of the exposed sediments of the Colorado Plateau as related to distribution of uranium deposits. (IC, p. 317-320).
- Johnson, J. C. (AEC), Nuclear fuel for the world power program. (IC, p. 60-62).
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- Kerr, P. F. (Columbia University), Rock alteration criteria in the search for uranium. (IC, p. 679-684).
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- Overstreet, W. C., Theobald, P. K., Jr., Whitlow, J. W., and Stone, Jerome, Heavy-mineral prospecting. (IC, p. 692-694).
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- Pipiringos, G. N., Uranium-bearing coal in the central part of the Great Divide Basin, Sweetwater County, Wyoming. (IC, p. 484-488).
- Pitman, R. K. (AEC), Dodd, P. H. (AEC), and Tom, C. W. (AEC), Subsurface techniques for outlining favorable zones by widely spaced core drilling. (IC, p. 695-700).
- Poole, F. G. and Williams, G. A., Direction of sediment transport in the Triassic and associated formations of the Colorado Plateau. (IC, p. 326-330).
- Sakakura, A. Y., Air scattering of gamma rays from thick uranium sources. (IC, p. 748-751).
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- Shawe, D. R., Significance of roll ore bodies in genesis of uranium-vanadium deposits on the Colorado Plateau. (IC, p. 335-337).
- Shoemaker, E. M., Occurrence of uranium in diatremes on the Navajo and Hopi Reservations, Arizona, New Mexico, and Utah. (IC, p. 412-417).
- Shoemaker, E. M., Structural features of the central Colorado Plateau and their relation to uranium deposits.
- Sims, P. K. and Tooker, E. W., Pitchblende deposits in the Central City district and adjoining areas, Gilpin and Clear Creek Counties, Colorado. (IC, p. 265-269).
- Singewald, Q. D. and Brock, M. R., Thorium deposits in the Wet Mountains, Colorado. (IC, p. 578-581).
- Staat, M. H. and Osterwald, F. W., Uranium in the fluorspar deposits of the Thomas Range, Utah. (IC, p. 275-278).
- Stead, F. W., Instruments and techniques for measuring radioactivity in the field. (IC, p. 714-721).
- Stieff, L. R. and Stern, T. W., Interpretation of the discordant age sequence of uranium ores. (IC, p. 540-546).
- Stocking, H. E. (AEC) and Page, L. R., Natural occurrence of uranium in the United States--a summary. (IC, p. 211-216).

- Swanson, V. E., Uranium in marine black shales of the United States. (IC, p. 430-434).
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- Twenhofel, W. S. and Buck, K. L., Geology of thorium deposits in the United States. (IC, p. 562-567).
- Vickers, R. C., Geology and monazite content of the Goodrich quartzite, Palmer area, Marquette County, Michigan. (IC, p. 597-599).
- Vine, J. D., Uranium-bearing coal in the United States. (IC, p. 452-457).
- Vine, J. D., Geology of uranium in the basins of Tertiary age in Wyoming and the northern Great Plains.
- Walker, G. W. and Osterwald, F. W., Relation of secondary uranium minerals to pitchblende-bearing veins at Marysvale, Piute County, Utah. (IC, p. 283-287).
- Wallace, S. R. and Olson, J. C., Thorium in the Powderhorn district, Gunnison County, Colorado. (IC, p. 582-586).
- Weeks, A. D., Mineralogy and oxidation of the Colorado Plateau uranium ores. (IC, p. 525-529).
- Witkind, I. J., Channels and related swales at the base of the Shinarump conglomerate, Monument Valley, Arizona. (IC, p. 368-370).
- Wood, H. B. (AEC), Relations of the origin of host rocks to uranium deposits and ore production in Western United States. (IC, p. 307-316).
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6. Maps and charts

(* Indicates publication is in preparation)

If copies are available, they may be purchased from the U. S. Geological Survey, Washington 25, D. C., or the Distribution Section, U. S. Geological Survey, Denver Federal Center, Denver, Colorado.

a. Geologic quadrangle maps

1. Anderson Mesa, Montrose and San Miguel Counties, Colorado. Geology of, by F. W. Cater, Jr., with a section on "The Mines" by C. F. Withington: GQ 77, 1956. \$1.00 (TEM-690).
2. Atkinson Creek, Montrose County, Colorado. Geology of, by E. J. McKay: GQ 57, 1955. \$1.00 (TEM-691) (NSA) (MC-48).
3. Bull Canyon, Montrose and San Miguel Counties, Colorado. Geology of, by F. W. Cater, Jr.: GQ 33, 1954. \$1.00 (TEM-692).
4. Calamity Mesa, Mesa County, Colorado. Geology of, by F. W. Cater, Jr., with a section on "The Mines" by H. K. Stager: GQ 61, 1955. \$1.00 (TEM-693) (NSA) (MC-29).
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6. Egnar, Dolores, and San Miguel Counties, Colorado. Geology of, by F. W. Cater, Jr., with a section on "The Mines" by A. L. Bush and Henry Bell, III: GQ 68, 1955. \$1.00 (TEM-695) (NSA) (MC-31).
7. Gateway, Mesa County, Colorado. Geology of, by F. W. Cater, Jr.: GQ 55, 1955. \$1.00 (TEM-696) (NSA).
8. Gypsum Gap, San Miguel County, Colorado. Geology of, by F. W. Cater, Jr.: GQ 59, 1955. \$1.00 (TEM-697) (NSA) (MC-32).
9. Hamm Canyon, San Miguel County, Colorado. Geology of, by F. W. Cater, Jr.: GQ 69, 1955. \$1.00 (TEM-698) (NSA) (MC-33).
10. Horse Range Mesa, San Miguel County, Colorado. Geology of, by F. W. Cater, Jr., with a section on "The Mines" by A. L. Bush, Henry Bell, III, and C. F. Withington: GQ 64, 1955. \$1.00 (TEM-699) (NSA) (MC-34).
11. Joe Davis Hill, Dolores, and San Miguel Counties, Colorado. Geology of, by F. W. Cater, Jr., and Henry Bell, III: GQ 66, 1955. \$1.00 (TEM-700) (NSA) (MC-35).
12. Juanita Arch, Mesa County, Colorado. Geology of, by E. M. Shoemaker: GQ 81, 1955. \$1.00 (TEM-701) (MC-53).

13. Naturita NW, Montrose and San Miguel Counties, Colorado. Geology of, by F. W. Cater, Jr., with a section on "The Mines" by J. D. Vogel: GQ 65, 1955. \$1.00 (TEM-702) (NSA) (MC- 36).
14. Paradox, Montrose County, Colorado. Geology of, by C. F. Withington: GQ 72, 1955. \$1.00 (TEM-703) (MC- 59).
15. Pine Mountain, Mesa County, Colorado. Geology of, by F. W. Cater, Jr., GQ 60, 1955. \$1.00 (TEM-704) (MC-37; MFO).
16. Red Canyon, Montrose County, Colorado. Geology of, by E. J. McKay, with a section on "The Mines" by D. A. Jobin: GQ 58, 1955. \$1.00 (TEM-705) (NSA) (MC- 49).
17. Roc Creek, Montrose County, Colorado. Geology of, by E. M. Shoemaker: GQ 83, 1956. \$1.00 (TEM-706) (MC- 54).
18. Uravan, Montrose County, Colorado. Geology of, by F. W. Cater, Jr., A. P. Butler, Jr., and E. J. McKay, with a section on "The Mines" by R. L. Boardman: GQ 78, 1955. \$1.00 (TEM-707) (MC- 38).

b. Geophysical investigations maps

19. Johnson, R. W., Airborne radioactivity survey of part of Moffat County, Colorado (Sunny Peak NW and NE quadrangles): GP 125, 1955. 50¢ (NSA).
20. Johnson, R. W., Airborne radioactivity survey of part of Moffat County, Colorado (Sunny Peak SW and SE, and Craig SW and SE quadrangles): GP 126: 1955, 50¢ (NSA).
21. Johnson, R. W., Airborne radioactivity survey of the Myton area, Duchesne and Uintah Counties, Utah: GP 127, 1955, 50¢ (NSA).
22. Meuschke, J. L., Airborne radioactivity survey of the Edisto Island area, Berkeley, Charleston, Colleton, and Dorchester Counties, South Carolina: GP 123, 1955. 50¢.
23. Meuschke, J. L., Airborne radioactivity survey of the Fort Myers area, Charlotte and Lee Counties, Florida: GP 121, 1955. 50¢ (NSA).
24. Meuschke, J. L., Airborne radioactivity survey of the Gardner area, DeSoto, Hardee, Manatee, and Sarasota Counties, Florida: GP 122; 1955. 50¢.
25. Meuschke, J. L., Airborne radioactivity survey of the Painted Desert area, Coconino and Navajo Counties, Arizona: GP 120, 1955. 50¢.
26. Meuschke, J. L., Airborne radioactivity survey of the Pinto-Chinle area, Apache County, Arizona: GP 124, 1955. 50¢.
27. Moxham, R. M., Airborne radioactivity survey in the Folkston area, Charlston County, Georgia, and Nassau County, Florida: GP 119, 1955. 50¢.

c. Mineral investigations field studies
and preliminary maps and reports

28. Braddock, W. A., Map showing distribution and occurrences of uranium deposits in part of Edgemont mining district, Fall River County, South Dakota: MF 39, 1955. 50¢ (TEI-355) (NSA).
29. Cater, F. W., Jr., Geology of the Calamity Mesa quadrangle, Mesa County, Colorado, with a section on "The Mines" by H. K. Stager: MF 32, 1955. 25¢ (TEM-693) (NSA) (MC-4).
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31. Cater, F. W., Jr., Geology of the Egnar quadrangle, Dolores and San Miguel Counties, Colorado, with a section on "The Mines" by A. L. Bush and Henry Bell, III: MF 26, 1955. 25¢ (TEM-695) (NSA) (MC-6).
32. Cater, F. W., Jr., Geology of the Gypsum Gap quadrangle, San Miguel County, Colorado: MF 19, 1955. 25¢ (TEM-697) (NSA) (MC-8).
33. Cater, F. W., Jr., Geology of the Hamm Canyon quadrangle, San Miguel County, Colorado: MF 21, 1955. 25¢ (TEM-698) (NSA) (MC-9).
34. Cater, F. W., Jr., Geology of the Horse Range Mesa quadrangle, Colorado, with a section on "The Mines" by A. L. Bush, Henry Bell, III, and C. F. Withington: MF 29, 1955. 25¢ (TEM-699) (MC-10).
35. Cater, F. W., Jr., Geology of the Joe Davis Hill quadrangle, Dolores and San Miguel Counties, Colorado, with a section on "The Mines" by Henry Bell, III: MF 27, 1955. 25¢ (TEM-700) (NSA) (MC-11).
36. Cater, F. W., Jr., Geology of the Naturita NW quadrangle, Montrose and San Miguel Counties, Colorado, with a section on "The Mines" by J. D. Vogel: MF 30, 1955. 25¢ (TEM-702) (NSA) (MC-13).
37. Cater, F. W., Jr., Geology of the Pine Mountain quadrangle, Mesa County, Colorado: MF 20, 1954. 25¢ (TEM-704) (MC-15; MFO).
38. Cater, F. W., Jr., Butler, A. P., Jr., and McKay, E. J., Geology of the Uravan quadrangle, Montrose County, Colorado, with a section on "The Mines" by R. L. Boardman: MF 24, 1955. 50¢ (TEM-707) (NSA) (MC-18).
39. Chew, R. T., III, Uranium and vanadium deposits of the Colorado Plateau that produced more than 1,000 tons of ore through June 30, 1955: MF 54* (TEI-344).

40. Finch, W. I., Preliminary geologic map showing the distribution of uranium deposits and principal ore-bearing formations of the Colorado Plateau region: MF 16, 1955. 50¢.
41. Finnell, T. L. and Parrish, I. S., Uranium deposits and principal ore-bearing formations of the central Cordilleran Foreland region: MF 120 *. (TEM-953).
42. Fischer, R. P., Stokes, W. L., and Smith, L. E., Geology of the Rifle Creek vanadium area, Garfield County, Colorado: U. S. Geological Survey Strategic Minerals Investigations Preliminary Report (Mimeographed-limited distribution) 1. 1944.
43. Fischer, R. P., Vanadium region of southwestern Colorado and southeastern Utah: U. S. Geological Survey Strategic Minerals Investigations Preliminary Map (with text). 1944 (Second edition issued as Minerals Investigations Preliminary Map 3-226, 1949. 30¢).
44. Knechtel, M. M. and Patterson, S. H., Bentonite deposits of the northern Black Hills district, Montana, Wyoming, and South Dakota: MF 36, 1956. \$1.50.
45. Gott, G. B. and Schnabel, R. W., Preliminary geologic map of the northwestern part of the Edgemont NE quadrangle, Custer and Fall River Counties, South Dakota: MF 55*. (OF-10).
46. Gott, G. B. and Schnabel, R. W., Preliminary geologic map of the northeastern part of the Edgemont NE quadrangle, Custer and Fall River Counties, South Dakota: MF 56*. (OF-10).
47. Gott, G. B. and Schnabel, R. W., Preliminary geologic map of the west-central part of the Edgemont NE quadrangle, Fall River County, South Dakota: MF 58*. (OF-10).
48. McKay, E. J., Preliminary geologic map of the Atkinson Creek quadrangle, Colorado: MF 18, 1954. 25¢ (TEM-691) (NSA) (MC-2).
49. McKay, E. J., Preliminary geologic map of the Red Canyon quadrangle, Colorado: MF 17, 1954. 25¢ (TEM-705) (NSA) (MC-16).
50. Deleted.
51. Sharp, W. N. and Pray, L. C., Geologic map of the bastnaesite deposits of the Birthday claims, San Bernardino County, California: MF 4, 1952. 75¢.
52. Sharp, W. N. and White, A. M., Preliminary geologic map of the Pumpkin Buttes area, showing location of uranium occurrences, Campbell and Johnson Counties, Wyoming: MF 98 * (TEM-899).

53. Shoemaker, E. M., Geology of the Juanita Arch quadrangle, Mesa County, Colorado: MF 23, 1955. 50¢ (TEM-701) (NSA) (MC-12).
54. Shoemaker, E. M., Geology of the Roc Creek quadrangle, Montrose County, Colorado: MF 23, 1955. 50¢ (TEM-706) (NSA) (MC-17).
55. Singewald, Q. D., Christman, R. A., Brock, M. R., Swinney, C. M., Pearson, R. C., Calkins, J. A., and Heyman, A. M., Geologic and radiometric maps of the McKinley Mountain area, Wet Mountains, Colorado: MF 37, 1956. \$1.00 (Figs. 2 and 3 from TEI-354).
56. Deleted.
57. Stokes, W. L., Russell, R. T., Fischer, R. P., and Butler, A. P., Jr., Geologic map of the Gateway area, Mesa County, Colorado and adjoining part of Grand County, Utah: U. S. Geological Survey Strategic Minerals Investigations Preliminary Map (with text). 3-173, 1945. 25¢.
58. Deleted.
59. Withington, C. F., Preliminary geologic map of the Paradox quadrangle, Colorado: MF 22, 1955. 25¢ (TEM-703) (NSA) (MC-14).
60. Zeller, H. D., Soister, P. E., and Hyden, H. J., Preliminary geologic map of the Gas Hills uranium district, Fremont and Natrona Counties, Wyoming: MF 83 * (Figures and tables from TEI-560).

d. Miscellaneous geologic investigations maps

61. Aneth-1 quadrangle, San Juan County, Utah and Montezuma County, Colorado, photogeologic map, by R. J. Hackman: I 90, 1955. 50¢ (TEM-452) (OF; NSA).
62. Aneth-2 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 91, 1955. 50¢ (TEM-364) (OF; NSA).
63. Aneth-3 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 92, 1955. 50¢ (TEM-365) (OF; NSA).
64. Aneth-4 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 93, 1955. 50¢ (TEM-366) (OF).
65. Aneth-5 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 94, 1955. 50¢ (TEM-393) (OF; NSA).
66. Aneth-6 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 95, 1955. 50¢ (TEM-400) (OF; NSA).
67. Aneth-7 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 96, 1955. 50¢ (TEM-367) (OF; NSA).
68. Aneth-8 quadrangle, San Juan County, Utah and Montezuma County, Colorado, photogeologic map, by R. J. Hackman: I 97, 1955. 50¢ (TEM-368) (OF; NSA).
69. Bluff-1 quadrangle, San Juan County, Utah, photogeologic map, by C. F. Miller: I 64, 1955. 50¢ (TEM-369A) (NSA).
70. Bluff-3 quadrangle, San Juan County, Utah, photogeologic map, by C. H. Marshall: I 181* (TEM-795) (OF).
71. Bluff-4 quadrangle, San Juan County, Utah, photogeologic map by J. N. Platt: I 59, 1955. 50¢ (TEM-818) (OF; NSA).
72. Bluff-5 quadrangle, San Juan County, Utah, photogeologic map, by P. P. Orkild: I 60, 1955. 50¢ (TEM-824) (OF; NSA).
73. Bluff-6 quadrangle, San Juan County, Utah, photogeologic map, by P. P. Orkild: I 53, 1955. 50¢ (TEM-814) (OF; NSA).
74. Bluff-8 quadrangle, San Juan County, Utah, photogeologic map, by C. F. Miller: I 61, 1955. 50¢ (TEM-370A) (OF; NSA).
75. Bluff-11 quadrangle, San Juan County, Utah, photogeologic map, by C. F. Miller: I 54, 1955. 50¢ (TEM-796) (OF; NSA).
76. Bluff-12 quadrangle, San Juan County, Utah, photogeologic map, by P. P. Orkild: I 80, 1955. 50¢ (TEM-848) (NSA).

77. Carlisle-1 quadrangle, San Juan County, Utah, photogeologic map, by G. E. Tolbert: I 180 * (TEM-372).
78. Carlisle-2 quadrangle, San Juan County, Utah, photogeologic map, by J. S. Detterman: I 67, 1955. 50¢ (TEM-667) (OF; NSA).
79. Carlisle-3 quadrangle, San Juan County, Utah, photogeologic map, by C. E. Bates: I 68, 1955. 50¢ (TEM-592) (OF; NSA).
80. Carlisle-4 quadrangle, Wayne and San Juan Counties, Utah, photogeologic map, by V. H. Sable: I 69, 1955. 50¢ (TEM-547) (OF; NSA).
81. Carlisle-5 quadrangle, Wayne and San Juan Counties, Utah, photogeologic map, by V. H. Sable: I 70, 1955. 50¢ (TEM-544) (OF; NSA).
82. Carlisle-6 quadrangle, San Juan County, Utah, photogeologic map, by C. E. Bates: I 71, 1955. 50¢ (TEM-587) (OF; NSA).
83. Carlisle-7 quadrangle, San Juan County, Utah, photogeologic map, by V. H. Sable: I 72, 1955. 50¢ (TEM-733) (OF; NSA).
84. Carlisle-10 quadrangle, San Juan County, Utah, photogeologic map, by J. S. Detterman: I 73, 1955. 50¢ (TEM-669) (OF; NSA).
85. Carlisle-11 quadrangle, San Juan County, Utah, photogeologic map, by J. N. Platt: I 74, 1955. 50¢ (TEM-763) (OF; NSA).
86. Carlisle-12 quadrangle, Wayne, San Juan, and Garfield Counties, Utah, photogeologic map, by J. N. Platt: I 75, 1955. 50¢ (TEM-793) (NSA).
87. Carlisle-13 quadrangle, San Juan and Garfield Counties, Utah, photogeologic map, by J. N. Platt: I 2, 1955. 50¢ (TEM-753) (OF).
88. Carlisle-14 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 6, 1955. 50¢ (TEM-752) (OF; NSA).
89. Carlisle-15 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 76, 1955. 50¢ (TEM-668) (OF; NSA).
90. Castle Dale-16 quadrangle, San Juan County, Utah, photogeologic map, by G. E. Tolbert: I 124, 1956. 50¢ (TEM-768) (OF).
91. Circle Cliffs-1 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 17, 1955. 50¢ (TEM-586) (OF; NSA).
92. Circle Cliffs-2 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman: I 18, 1955. 50¢ (TEM-548) (OF; NSA).
93. Circle Cliffs-3 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 19, 1955. 50¢ (TEM-549) (OF; NSA).
94. Circle Cliffs-4 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 20, 1955. 50¢ (TEM-634) (OF; NSA).

95. Circle Cliffs-5 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 21, 1955. 50¢ (TEM-635) (OF; NSA).
96. Circle Cliffs-6 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman: I 22, 1955. 50¢ (TEM-585) (OF).
97. Circle Cliffs-7 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 23, 1955. 50¢ (TEM-590) (OF).
98. Circle Cliffs-8 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 24, 1955. 50¢ (TEM-595) (OF).
99. Circle Cliffs-9 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 25, 1955. 50¢ (TEM-529) (OF; NSA).
100. Circle Cliffs-10 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman: I 26, 1955. 50¢ (TEM-531) (OF; NSA).
101. Circle Cliffs-11 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman: I 27, 1955. 50¢ (TEM-636) (OF; NSA).
102. Circle Cliffs-12 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman: I 52, 1955. 50¢ (TEM-821) (OF; NSA).
103. Circle Cliffs-13 quadrangle, Garfield and Kane Counties, Utah, photogeologic map, by B. H. Kent: I 28, 1955. 50¢ (TEM-797) (OF; NSA).
104. Circle Cliffs-14 quadrangle, Garfield and Kane Counties, Utah, photogeologic map, by R. J. Hackman: I 29, 1955. 50¢ (TEM-637) (OF; NSA).
105. Circle Cliffs-15 quadrangle, Garfield and Kane Counties, Utah, photogeologic map, by R. J. Hackman: I 30, 1955. 50¢ (TEM-641) (OF; NSA).
106. Circle Cliffs-16 quadrangle, Garfield and Kane Counties, Utah, photogeologic map, by R. J. Hackman: I 31, 1955. 50¢ (TEM-614) (OF; NSA).
107. Clay Hills-1 quadrangle, San Juan and Garfield Counties, Utah, photogeologic map, by C. H. Marshall: I 51, 1955. 50¢ (TEM-816) (OF; NSA).
108. Clay Hills-7 quadrangle, San Juan County, Utah, photogeologic map, by C. H. Marshall: I 62, 1955. 50¢ (TEM-825) (NSA).
109. Clay Hills-8 quadrangle, San Juan County, Utah, photogeologic map, by C. H. Marshall: I 58, 1955. 50¢ (TEM-820) (OF; NSA).
- 109a. Clay Hills-9 quadrangle, San Juan County, Utah, photogeologic map, by P. P. Orkild: I 79, 1955. 50¢ (TEM-851) (NSA).

110. Clay Hills-10 quadrangle, San Juan County, Utah, photogeologic map, by C. H. Marshall: I 78, 1955. 50¢ (TEM-841) (NSA).
111. Clay Hills-11 quadrangle, San Juan County, Utah, photogeologic map, by C. H. Marshall: I 65, 1955. 50¢ (TEM-840) (NSA).
112. Desert Lake-1 quadrangle, Emery and Carbon Counties, Utah, photogeologic map, by J. S. Detterman: I 99, 1955. 50¢ (TEM-762) (OF; NSA).
113. Desert Lake-2 quadrangle, Emery and Carbon Counties, Utah, photogeologic map, by C. F. Miller: I 100, 1955. 50¢ (TEM-760) (OF; NSA).
114. Desert Lake-6 quadrangle, Emery County, Utah, photogeologic map, by C. F. Miller: I 101, 1955. 50¢ (TEM-756) (OF; NSA).
115. Desert Lake-7 quadrangle, Emery County, Utah, photogeologic map, by W. H. Condon and C. F. Miller: I 102, 1955. 50¢ (TEM-758) (OF; NSA).
116. Desert Lake-8 quadrangle, Emery County, Utah, photogeologic map, by P. P. Orkild: I 4, 1955. 50¢ (TEM-761) (OF).
117. Desert Lake-9 quadrangle, Emery County, Utah, photogeologic map, by J. T. Cass: I 103, 1955. 50¢ (TEM-737) (OF; NSA).
118. Desert Lake-10 quadrangle, Emery County, Utah, photogeologic map, by W. H. Condon: I 104, 1955. 50¢ (TEM-767) (OF; NSA).
119. Desert Lake-11 quadrangle, Emery County, Utah, photogeologic map, by B. H. Kent: I 105, 1955. 50¢ (TEM-658) (OF; NSA).
120. Desert Lake-12 quadrangle, Emery County, Utah, photogeologic map, by C. F. Miller: I 106, 1955. 50¢ (TEM-764) (OF; NSA).
121. Desert Lake-13 quadrangle, Emery County, Utah, photogeologic map, by C. H. Marshall: I 154, 1956. 50¢ (TEM-766).
122. Desert Lake-14 quadrangle, Emery County, Utah, photogeologic map, by B. H. Kent: I 120, 1956. 50¢ (TEM-651) (OF).
123. Desert Lake-15 quadrangle, Emery County, Utah, photogeologic map, by W. R. Hemphill and C. R. Lewis: I 121, 1956. 50¢ (TEM-666) (OF).
124. Desert Lake-16 quadrangle, Emery County, Utah, photogeologic map, by C. H. Marshall: I 122, 1956. 50¢ (TEM-735) (OF).
125. Elk Ridge-1 quadrangle, San Juan County, Utah, photogeologic map, by C. F. Miller: I 82, 1955. 50¢ (TEM-410A) (NSA).
126. Elk Ridge-2 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 7, 1955. 50¢ (TEM-794) (OF; NSA).

127. Elk Ridge-3 quadrangle, San Juan County, Utah, photogeologic map, by C. L. Pillmore, Jr.: I 125, 1956. 50¢ (TEM-846).
128. Elk Ridge-4 quadrangle, San Juan County, Utah, photogeologic map, by J. S. Detterman and J. N. Platt: I 151, 1956. 50¢ (TEM-844).
129. Elk Ridge-5 quadrangle, San Juan County, Utah, photogeologic map, by V. H. Sable: I 152, 1956. 50¢ (TEM-894).
130. Elk Ridge-6 quadrangle, San Juan County, Utah, photogeologic map, by J. S. Detterman and J. C. Reed, Jr., I 98, 1955. 50¢ (TEM-847) (NSA).
131. Elk Ridge-7 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 32, 1955. 50¢ (TEM-810) (OF; NSA).
132. Elk Ridge-8 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 126, 1955. 50¢ (TEM-407A) (OF).
133. Elk Ridge-9 quadrangle, San Juan County, Utah, photogeologic map, by C. F. Miller: I 127, 1955. 50¢ (TEM-453A).
134. Elk Ridge-10 quadrangle, San Juan County, Utah, photogeologic map, by H. S. Bennett: I 55, 1955. 50¢ (TEM-822) (OF; NSA).
135. Elk Ridge-11 quadrangle, San Juan County, Utah, photogeologic map, by J. C. Reed, Jr., I 56, 1955. 50¢ (TEM-819) (OF; NSA).
136. Elk Ridge-14 quadrangle, San Juan County, Utah, photogeologic map, by C. F. Miller: I 8, 1955. 50¢ (TEM-798) (OF; NSA).
137. Elk Ridge-15 quadrangle, San Juan County, Utah, photogeologic map, by H. S. Bennett: I 35, 1955. 50¢ (TEM-812) (OF; NSA).
138. Elk Ridge-16 quadrangle, San Juan County, Utah, photogeologic map, by H. S. Bennett: I 63, 1955. 50¢ (TEM-377A) (NSA).
139. Emery-1 quadrangle, Emery County, Utah, photogeologic map, by P. P. Orkild: I 166, 1956. 50¢ (TEM-591) (OF).
140. Emery-2 quadrangle, Emery County, Utah, photogeologic map, by J. S. Detterman: I 9, 1955. 50¢ (TEM-792) (NSA).
141. Emery-7 quadrangle, Emery County, Utah, photogeologic map, by H. S. Bennett: I 10, 1955. 50¢ (TEM-791) (OF; NSA).
142. Emery-8 quadrangle, Emery County, Utah, photogeologic map, by W. H. Condon: I 177 * (TEM-593) (OF).
143. Emery-10 quadrangle, Emery County, Utah, photogeologic map by H. S. Bennett: I 11, 1955. 50¢ (TEM-790) (OF; NSA).

- 114. Emmett Wash NE quadrangle, Coconino County, Arizona, photogeologic map, by J. S. Detterman: I 190 * (TEM-913).
- 115. Emmett Wash NW quadrangle, Coconino County, Arizona, photogeologic map, by J. P. Minard: I 192 * (TEM-955).
- 116. Fredonia NW quadrangle, Coconino County, Arizona, photogeologic map, by W. R. Hemphill: I 133, 1956. 50¢ (TEM-879).
- 117. Fredonia SW quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 160, 1956. 50¢ (TEM-912).
- 118. Heaton Knolls NW quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 143, 1956. 50¢ (TEM-875).
- 119. House Rock Spring SE quadrangle, Coconino County, Arizona, photogeologic map, by Kathleen McQueen: I 198 * (TEM-965).
- 150. House Rock Spring NE quadrangle, Coconino County, Arizona, photogeologic map, by J. P. Minard: I 199 * (TEM-968).
- 151. Jacob Lake NE quadrangle, Coconino County, Arizona, photogeologic map, by C. H. Marshall: I 194 * (TEM-959).
- 152. Johnson SW quadrangle, Kane County, Utah, photogeologic map, by J. S. Detterman: I 164, 1956. 50¢ (TEM-905).
- 153. Kaiparowits Peak-1 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 134, 1956. 50¢ (TEM-890).
- 154. Kaiparowits Peak-2 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 135, 1956. 50¢ (TEM-877).
- 155. Kaiparowits Peak-7 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 136, 1956. 50¢ (TEM-859).
- 156. Kaiparowits Peak-8 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 14, 1955. 50¢ (TEM-661) (OF; NSA).
- 157. Kaiparowits Peak-9 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 15, 1955. 50¢ (TEM-663) (OF; NSA).
- 158. Kanab SE quadrangle, Kane County, Utah, photogeologic map, by J. S. Detterman: I 137, 1956. 50¢ (TEM-892).
- 159. Kanab SW quadrangle, Kane County, Utah, photogeologic map, by C. L. Pillmore: I 138, 1956. 50¢ (TEM-893).
- 160. Lees Ferry SE quadrangle, Coconino County, Arizona, photogeologic map, by Kathleen McQueen: I 169, 1956. 50¢ (TEM-956).

161. Lees Ferry SW quadrangle, Coconino County, Arizona, photogeologic map, by J. S. Detterman: I 189 * (TEM-914).
162. Lees Ferry NW quadrangle, Coconino County, Arizona, photogeologic map, by Kathleen McQueen: I 196 * (TEM-954).
163. Lost Spring Mountain NW quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 146, 1956. 50¢ (TEM-852).
164. Lost Spring Mountain SE quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 144, 1956. 50¢ (TEM-856).
165. Lost Spring Mountain NE quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 145, 1956. 50¢ (TEM-857).
166. Moab-4 quadrangle, Grand County, Utah, photogeologic map, by J. S. Detterman: I 85, 1955. 50¢ (TEM-829) (NSA).
167. Moab-5 quadrangle, Grand County, Utah, photogeologic map, by J. S. Detterman: I 57, 1955. 50¢ (TEM-823) (OF; NSA).
168. Moab-6 quadrangle, Grand County, Utah, photogeologic map, by J. S. Detterman: I 86, 1955. 50¢ (TEM-826) (NSA).
169. Moab-10 quadrangle, Grand County, Utah, photogeologic map, by C. E. Bates: I 116, 1955. 50¢ (TEM-616) (OF; NSA).
170. Moab-11 quadrangle, Grand County, Utah, photogeologic map, by C. E. Bates: I 107, 1955. 50¢ (TEM-652) (OF; NSA).
171. Moab-12 quadrangle, Grand County, Utah, photogeologic map, by V. H. Sable: I 117, 1955. 50¢ (TEM-639) (OF; NSA).
172. Moab-13 quadrangle, Grand County, Utah, photogeologic map, by W. E. Berquist: I 118, 1955. 50¢ (TEM-731) (OF; NSA).
173. Moab-14 quadrangle, Grand County, Utah, photogeologic map, by V. H. Sable: I 119, 1956. 50¢ (TEM-584) (OF; NSA).
174. Moab-15 quadrangle, Grand County, Utah, photogeologic map, by V. H. Sable: I 128, 1956. 50¢ (TEM-598) (OF).
175. Moab-16 quadrangle, Grand County, Utah, photogeologic map, by W. R. Hemphill: I 83, 1955. 50¢ (TEM-845) (NSA).
176. Mt. Peale-1 quadrangle, Grand and San Juan Counties, Utah and Montrose County, Colorado, photogeologic map, by R. J. Hackman: I 165, 1956. 50¢ (TEM-467) (OF).
177. Mt. Peale-4 quadrangle, Grand and San Juan Counties, Utah, photogeologic map, by R. J. Hackman: I 172 * (TEM-527) (OF).

178. Mt. Peale-6 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 173* (TEM-379B).
179. Mt. Peale-7 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 183* (TEM-466) (OF).
180. Mt. Peale-8 quadrangle, Utah-Colorado, photogeologic map, by R. J. Hackman: I 174* (TEM-465) (OF).
181. Mt. Peale-9 quadrangle, San Juan County, Utah and Montrose and San Miguel Counties, Colorado, photogeologic map, by R. J. Hackman: I 157, 1956. 50¢ (TEM-450A) (OF).
182. Mt. Peale-10 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 158, 1956. 50¢ (TEM-451A) (OF).
183. Mt. Peale-11 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman and G. E. Tolbert: I 159, 1956. 50¢ (TEM-380B) (OF).
184. Mt. Peale-16 quadrangle, Utah-Colorado, photogeologic map by R. J. Hackman: I 176* (TEM-448) (OF).
185. Mt. Pennell-5 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman: I 46, 1955. 50¢ (TEM-596) (OF; NSA).
186. Mt. Pennell-11 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 47, 1955. 50¢ (TEM-633) (OF; NSA).
187. Mt. Pennell-12 quadrangle, Garfield County, Utah, photogeologic map, by J. S. Detterman: I 48, 1955. 50¢ (TEM-597) (OF; NSA).
188. Mt. Pennell-13 quadrangle, Garfield and Kane Counties, Utah, photogeologic map, by J. S. Detterman: I 49, 1955. 50¢ (TEM-615) (OF; NSA).
189. Mt. Pennell-14 quadrangle, Garfield and Kane Counties, Utah, photogeologic map, by R. J. Hackman: I 50, 1955. 50¢ (TEM-613) (OF; NSA).
190. Navajo Mountain-1 quadrangle, San Juan County, Utah, photogeologic map, by A. B. Olson: I 229 * (TEM-940).
191. Navajo Mountain-2 quadrangle, Kane and San Juan Counties, Utah, photogeologic map, by H. S. Bennett: I 66, 1955. 50¢ (TEM-827) (NSA).
192. Navajo Mountain-3 quadrangle, Kane and San Juan Counties, Utah, photogeologic map, by R. J. Hackman: I 42, 1955. 50¢ (TEM-621) (OF; NSA).

193. Navajo Mountain-4 quadrangle, Kane County, Utah, photogeologic map, by J. S. Detterman: I 43, 1955. 50¢ (TEM-619) (OF; NSA):
194. Navajo Mountain-5 quadrangle, Kane and San Juan Counties, Utah, photogeologic map, by H. S. Bennett: I 44, 1955. 50¢ (TEM-734) (OF; NSA).
195. Navajo Mountain-6 quadrangle, San Juan and Kane Counties, Utah, photogeologic map, by J. S. Detterman: I 41, 1955. 50¢ (TEM-620) (OF; NSA).
196. Navajo Mountain-7 quadrangle, San Juan and Kane Counties, Utah, photogeologic map, by H. S. Bennett: I 77, 1955. 50¢ (TEM-843) (NSA).
197. Navajo Mountain-10 quadrangle, San Juan County, Utah, photogeologic map, by R. J. Hackman: I 233 * (TEM-934).
198. Navajo Mountain-12 quadrangle, Kane and San Juan Counties, Utah, photogeologic map, by H. S. Bennett: I 45, 1955. 50¢ (TEM-736) (OF; NSA).
199. Navajo Mountain-13 quadrangle, San Juan and Kane Counties, Utah, photogeologic map, by R. J. Hackman: I 184 * (TEM-526A).
200. Navajo Mountain-15 quadrangle, San Juan County, Utah and Navajo County, Arizona, photogeologic map, by R. J. Hackman: I 185 * (TEM-935).
201. Notom-15 quadrangle, Garfield County, Utah, photogeologic map, by R. J. Hackman and G. E. Tolbert: I 34, 1955. 50¢ (TEM-640) (OF; NSA).
202. Orange Cliffs-11 quadrangle, Wayne and Garfield Counties, Utah, photogeologic map, by R. G. Ray: I 187 * (TEM-523A).
203. Orange Cliffs-13 quadrangle, Garfield County, Utah; photogeologic map, by R. G. Ray: I 178 * (TEM-500A).
204. Orange Cliffs-16 quadrangle, Garfield and San Juan Counties, Utah, photogeologic map, by J. N. Platt: I 16, 1955. 50¢ (TEM-738) (OF; NSA).
205. Orderville Canyon NW quadrangle, Kane and Washington Counties, Utah, photogeologic map, by C. L. Pillmore: I 188 * (TEM-911).
206. Paria Plateau NW quadrangle, Coconino County, Arizona, photogeologic map, by J. P. Minard: I 171 * (TEM-963).
207. Paria Plateau SE quadrangle, Coconino County, Arizona, photogeologic map, by C. H. Marshall: I 191 * (TEM-937).

208. Paria Plateau NE quadrangle, Coconino County, Arizona, photogeologic map, by Kathleen McQueen: I 182 * (TEM-964).
209. Shinarump NW quadrangle, Coconino County, Arizona, photogeologic map, by R. H. Morris: I 139, 1956. 50¢ (TEM-850).
210. Short Creek NE quadrangle, Mohave County, Arizona, photogeologic map, by C. L. Pillmore: I 142, 1956. 50¢ (TEM-858).
211. Short Creek SE quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 153, 1956. 50¢ (TEM-908).
212. Short Creek NW quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall and C. L. Pillmore: I 141, 1956. 50¢ (TEM-876).
213. Short Creek SW quadrangle, Mohave County, Arizona, photogeologic map, by C. H. Marshall: I 140, 1956. 50¢ (TEM-891).
214. Springdale NE quadrangle, Kane County, Utah, photogeologic map, by C. L. Pillmore: I 148, 1956. 50¢ (TEM-854).
215. Springdale SE quadrangle, Kane County, Utah, photogeologic map, by C. L. Pillmore: I 131, 1956. 50¢ (TEM-855).
216. Springdale SW quadrangle, Washington and Kane Counties, Utah, photogeologic map, by C. L. Pillmore: I 132, 1956. 50¢ (TEM-878).
217. Straight Cliffs-1 quadrangle, Kane County, Utah, photogeologic map, by V. H. Sable: I 40, 1955. 50¢ (TEM-638) (OF; NSA).
218. Straight Cliffs-2 quadrangle, Kane County, Utah, photogeologic map, by J. S. Detterman: I 37, 1955. 50¢ (TEM-662) (OF; NSA).
219. Straight Cliffs-3 quadrangle, Kane County, Utah, photogeologic map, by B. H. Kent: I 13, 1955. 50¢ (TEM-799) (OF; NSA).
220. Straight Cliffs-7 quadrangle, Kane County, Utah, photogeologic map, by B. H. Kent: I 39, 1955. 50¢ (TEM-765) (OF; NSA).
221. Straight Cliffs-8 quadrangle, Kane County, Utah, photogeologic map, by B. H. Kent: I 81, 1955. 50¢ (TEM-769) (NSA).
222. Straight Cliffs-9 quadrangle, Kane County, Utah, photogeologic map, by J. C. Reed, Jr.: I 38, 1955. 50¢ (TEM-757) (OF; NSA).
223. Tanner Wash NW quadrangle, Coconino County, Arizona, photogeologic map, by J. P. Minard: I 193 * (TEM-939).
224. Tidwell-1 quadrangle, Grand County, Utah, photogeologic map, by V. H. Sable: I 87, 1955. 50¢ (TEM-828) (NSA).

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227. Tidwell-4 quadrangle, Emery County, Utah, photogeologic map, by P. P. Orkild: I 112, 1955. 50¢ (TEM-655) (NSA).
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233. Tidwell-10 quadrangle, Emery County, Utah, photogeologic map, by A. B. Olson: I 186 * (TEM-932).
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248. Woodside-5 quadrangle, Emery County, Utah, photogeologic map, by P. P. Orkild: I 5, 1955. 50¢ (TEM-754) (OF; NSA).
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(Publications are listed alphabetically by authors)

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Under many subjects such as "Structure" or "Guides to uranium deposits," the reports listed are only those in which these subjects seem to be of major interest. Examples of subjects listed under "Rocks and materials containing uranium, thorium, or high radioactivity," are "Sandstone," "Veins," and "Metallic ore deposits (base or precious metals)."

Following is a list of most of the major headings used:

- Analytical methods and research
- Geochemistry and petrology
- Mineralogy, crystallography, and petrography
- Reconnaissance or prospecting for radioactive materials
- State
 - Airborne radioactivity surveys
 - Areas and districts
 - Counties
 - Maps, photogeologic
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 - Mineralogy
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