STATE OF SOUTH DAKOTA
Nils Boe, Governor

SOUTH DAKOTA STATE GEOLOGICAL SURVEY
Duncan J. McGregor, State Geologist

CIRCULAR NO. 33

BIBLIOGRAPHY OF REPORTS CONTAINING MAPS ON SOUTH DAKOTA GEOLOGY
published before January 1, 1959

by
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INTRODUCTION

This circular makes available to the public a complete bibliography of reports (except textbooks, and maps of North America) containing maps on South Dakota geology published before January 1, 1959. It should be emphasized that these are only the reports containing geologic maps. Reports of the South Dakota Geological Survey are included through January 1, 1963.

Because this report is designed to be used as an easy reference, Part I has been subdivided into general sections according to subject matter. Each section in Part I contains a figure showing the location of the geologic map referred to in each of the publications mentioned. Part II is an alphabetical listing by author of all references found in Part I.

Reports that contain geologic maps that were published previously are not included in this compilation unless the map was in some way modified.

It would be appreciated if any errors or omissions were reported to the senior author for future publication of a supplement to this report.
Figure 1
MAP SHOWING PUBLISHED GEOLOGIC REPORTS ON SOUTH DAKOTA RECONNAISSANCE AND PLEISTOCENE GEOLOGY
PART I--BIBLIOGRAPHY OF REPORTS CONTAINING MAPS ON SOUTH DAKOTA GEOLOGY SUBDIVIDED INTO GENERAL SECTIONS BY SUBJECT MATTER

Published Geologic Reports on South Dakota
Reconnaissance and Pleistocene Geology


2. Hayden, F. V., 1857, Notes explanatory of a map and section illustrating the geological structure of the country bordering on the Missouri River, from the mouth of the Platte River to Pt. Benton: Philadelphia, Merrihew and Thompson, printers, 34 p. Map following p. 34.


6. Chamberlin, T. C., 1883, Preliminary paper on the terminal moraine of the second glacial epoch: U. S. Geol. Survey Ann. Rept. 3, p. 291-402. (a) Pl. 28, 1:10,000,000; (b) pl. 35, 1:3,800,000.


14. O’Harra, C. C., 1899, Notes on the geology and mineral deposits of a portion of the southern Black Hills: S. Dak. School of Mines Bull. 2, 41 p. (a) Fig. 4, 1:160,000; (b) map, p. 32, 1:7,200.
15. Todd, J. E., 1899, Moraines of southeastern South Dakota and their attendant deposits: U. S. Geol. Survey Bull. 158, 169 p. (a) Pl. 1, 1:2,000,000; (b) pl. 7, 1:450,000 (approx.).
32. Paige, Sidney, 1924, Geology of the region around Lead, South Dakota, and its bearing on the Homestake ore body: U. S. Geol. Survey Bull. 765, 58 p. (a) Pl. 1, 1:31,680; (b) pl. 8 and figs. 1-8, 1:8,000.
33. Darton, N. H., and Paige, Sidney, 1925, Central Black Hills, South Dakota: U. S. Geol. Survey, Geol. Folio 219, 34 p. (a) Map, 1:125,000; (b) Lead Quadrangle, 1:62,500; (c) fig. 10, 1:48,000; (d) fig. 31, 1:48,000.
34. Wilson, R. A., 1925, The Ragged Butte structure: S. Dak. Geol. Survey Circ. 24, 7 p. Fig. 2, 1:70,000.
35. Russell, W. L., 1926, Structures in western Haakon and eastern Pennington Counties: S. Dak. Geol. and Nat. Hist. Survey Circ. 28, 24 p. (a) Fig. 2, 1:190,000; (b) fig. 4, 1:45,000.
42. Leverett, Frank, 1932, Quaternary geology of Minnesota and parts of adjacent states: U. S. Geol. Survey Prof. Paper 161, 149 p. (a) Figs. 11 and 12, 1:500,000; (b) pl. 5, 1:62,500.
44. Searight, W. V., 1934, Geology of central Perkins County: S. Dak. Geol. Survey Rept. Inv. 21, 52 p. (a) Fig. 1, 1:500,000; (b) pl. 1, 1:62,500.
48. Petsch, B. C., 1942, The Medicine Butte anticline: S. Dak. Geol. Survey Rept. Inv. 45, 30 p. Fig. 2, 1:2,787,000.
55. Petsch, B. C., 1949, North part of the Whitewood anticline: S. Dak. Geol. Survey Rept. Inv. 65, 30 p. Fig. 3, 1:125,000.
57. Gwynne, C. S., 1951, Minor moraines in South Dakota and Minnesota: Geol. Soc. America Bull., v. 62, p. 233-250. (a) Fig. 1, 1:2,500,000; (b) fig. 2, 1:385,000.
65. Flint, R. F., 1955, Pleistocene geology of eastern South Dakota: U. S. Geol. Survey Prof. Paper 262, 173 p. (a) Pl. 1, 1:500,000; (b) fig. 4, 1:2,250,000.


69. White, E. M., 1957, A relocation of part of the Mankato Drift boundary in Hand County, South Dakota: Iowa Acad. Sci. Proc., v. 64, p. 413-415. Fig. 1, 1:42,000.

Published Geologic Reports on South Dakota
 Structural Geology

1. Darton, N. H., 1901, Preliminary description of the geology and water resources of the southern half of the Black Hills and adjoining regions in South Dakota and Wyoming: U. S. Geol. Survey Ann. Rept. 21, pt. 4, p. 489-599. (a) Pl. 89, 1:900,000; (b) fig. 290, 1:650,000.


3. Winchester, D. E., 1913, Cross bedding in the White River formation of northwestern South Dakota: Jour. Geology, v. 21, p. 550-556. Fig. 1, 1:125,000.


6. Ward, Freeman, and Wilson, R. A., 1922, The possibilities of oil in western Dewey County: S. Dak. Geol. and Nat. Hist. Survey Circ. 9, 10 p. Fig. 2, 1:200,000.


8. ______, 1922b, The possibilities of oil in northern Dewey County: S. Dak. Geol. Survey Circ. 10, 7 p. Fig. 2, 1:443,000.

9. Moulton, G. F., 1923, Oil and gas prospects in southern Perkins County: S. Dak. Geol. and Nat. Hist. Survey Circ. 14, 12 p. Fig. 2, 1:97,000.


12. Ward, Freeman, 1925a, Structures in northern Haakon County: S. Dak. Geol. Survey Circ. 22, 25 p. Fig. 2, 1:433,000.


14. Wilson, R. A., 1925a, Oil and gas possibilities in northeastern Meade County: S. Dak. Geol. and Nat. Hist. Survey Circ. 23, 14 p. Fig. 2, 1:100,000.

15. ______, 1925b, The Ragged Butte structure: S. Dak. Geol. Survey Circ. 24, 7 p. Fig. 3, 1:70,000.

16. Russell, W. L., 1926a, The possibilities of oil in western Corson County: S. Dak. Geol. and Nat. Hist. Survey Circ. 27, 18 p. Fig. 4, 1:160,000.
17. Russell, W. L., 1926b, Structures in western Haakon and eastern Pennington Counties: S. Dak. Geol. and Nat. Hist. Survey Circ. 28, 24 p. (a) Fig. 3, 1:190,000; (b) fig. 4, 1:45,000.
18. ______, 1927a, Origin of sandstone dikes of the Black Hills region: Am. Jour. Sci., 5th ser., v. 14, p. 402-408. Fig. 1, two areas, 1:625,000.
21. Russell, W. L., 1930, The possibilities of oil and gas in western Potter County: S. Dak. Geol. Survey Rept. Inv. 7, 15 p. Fig. 4, 1:95,000.
25. Rothrock, E. P., 1937, Structural conditions in Harding County: S. Dak. Geol. Survey Rept. Inv. 28, 30 p. (a) Map following p. 30, 1:250,000; (b) map following p. 28, 1:63,360; (c) map following p. 27, 1:62,500.
26. Wing, M. E., 1938, A structural survey of the Pierre gas field, South Dakota: S. Dak. Geol. Survey Rept. Inv. 29, 20 p. (a) Map following p. 18, 1:2,500,000; (b) map following p. 20, 1:95,000.
27. Gries, J. P., 1939, A structural survey of part of the upper Missouri Valley in South Dakota: S. Dak. Geol. Survey Rept. Inv. 31, 38 p. (a) Pl. III, 1:2,500,000; (b) map in pocket, 1:126,720.
28. ______, 1940, Structural survey of northeastern Stanley County: S. Dak. Geol. Survey Rept. Inv. 34, 52 p. (a) Pl. V, 1:2,500,000; (b) map in pocket, 1:120,000.
29. Wing, M. E., and Gries, J. P., 1941, Stratigraphy and structure of the Chamberlain section of the Missouri River Valley: S. Dak. Geol. Survey Rept. Inv. 39, 72 p. (a) Pl. IV, 1:2,500,000; (b) map in back, 1:125,000.
31. Petsch, B. C., 1942, The Medicine Butte anticline: S. Dak. Geol. Survey Rept. Inv. 45, 30 p. (a) Fig. 3, 1:10,000,000; (b) fig. 4, 1:2,787,000; (c) map in pocket, 1:190,000.
33. Rothrock, E. P., 1944, A geology of South Dakota, part III: Mineral resources: S. Dak. Geol. Survey Bull. 15, 255 p. Fig. 13, 1:4,000,000.

34. Morgan, R. E., and Petsch, B. C., 1945, A geological survey in Dewey and Corson Counties, South Dakota: S. Dak. Geol. Survey Rept. Inv. 49, 53 p. (a) Map, 1:160,000; (b) fig. 7, 1:2,000,000.


38. Rothrock, E. P., 1949, Structures south of the Black Hills: S. Dak. Geol. Survey Rept. Inv. 62, 52 p. (a) Map following p. 38, 1:380,000; (b) map in back, 1:250,000; (c) map in back, 1:158,000.

39. Petsch, B. C., 1949, North part of the Whitewood anticline: S. Dak. Geol. Survey Rept. Inv. 65, 30 p. (a) Fig. 10, 1:23,000; (b) map in pocket, 1:62,500.


47. Petsch, B. C., 1953, Structure map of South Dakota (Greenhorn datum): S. Dak. Geol. Survey, map, 1:140,000.

48. Erickson, H. D., 1954, Artesian conditions in east-central South Dakota: S. Dak. Geol. Survey Rept. Inv. 74, 116 p. (a) Map, p. 113, 1:1,400,000; (b) map (in pocket), 1:600,000.


51. Petsch, B. C., 1954, Preliminary report on the Reva Gap anticline: S. Dak. Geol. Survey Rept. Inv. 76, 11 p. (a) Fig. 3, 1:45,000; (b) fig. 4, 1:158,000.


55. Braddock, W. A., 1957, Stratigraphy and structural controls of uranium deposits on Long Mountain, South Dakota: U. S. Geol. Survey Bull. 1063-A, p. 1-11. (a) Fig. 2, 1:20,400; (b) fig. 3, 1:20,400.


57. Perry, E. S., ?, Oil and gas in Montana: Montana School of Mines, Memoir, no. 35, ? p. Pl. 8, 1:5,700,000.
Published Geologic Reports on South Dakota
Stratigraphy and Paleontology


10. Clark, John, 1937, The stratigraphy and paleontology of the Chadron formation in the Big Badlands of South Dakota: Carnegie Museum Annals, v. XXV, p. 261-350. (a) Fig. 2, 1:450,000; (b) fig. 3, 1:630,000; (c) fig. 4, 1:450,000.

11. Searight, W. V., 1937, Lithologic stratigraphy of the Pierre formation of the Missouri Valley in South Dakota: S. Dak. Geol. Survey Rept. Inv. 27, 63 p. (a) Pl. 1, 1:1,650,000; (b) pl. 4, 1:3,200,000.


13. Ballard, Norval, 1942, Regional geology of Dakota Basin: Am. Assoc. Petroleum Geologists Bull., v. 26, no. 10, p. 1557-1584. (a) Fig. 1, 1:6,000,000; (b) fig. 6, 1:1,300,000; (c) fig. 7, 1:1,300,000; (d) fig. 8, 1:6,000,000; (e) fig. 9, 1:6,000,000.

14. Perry E. S., and Sloss, L. L., 1943, Big Snowy group: Lithology and correlation in the northern Great Plains: Am. Assoc. Petroleum Geologists Bull., v. 27, no. 10, p. 1287-1304. (a) Fig. 1, 1:7,000,000; (b) fig. 2, 1:8,000,000; (c) fig. 7, 1:32,000,000.
15. Plumbley, W. J., 1948, Black Hills terrace gravels: A study in sediment transport: Jour. Geology, v. 56, p. 526-577. (a) Fig. 1, 1:1,250,000; (b) fig. 2, 1:45,000; (c) fig. 5, 1:45,000; (d) fig. 7, 1:45,000.


22. Brown, J. L., 1953, South Dakota--geology and stratigraphy: Petroleum Eng., v. 25, no. 10, p. B-7- B-13. Fig. 2, 1:3,600,000.


27. Moore, G. W., and Levish, Murray, 1955, Uranium-bearing sandstone in the White River Badlands, Pennington County, South Dakota: U. S. Geol. Survey Circ. 359, 7 p. Fig. 6, 1:4,750,000.

28. Young, R. C., and Waterman, J. L., 1955, Jurassic stratigraphy of Black Hills: N. Dak. Geol. Soc. Black Hills Field Conf., p. 57-63. Fig. 3 and 4, 1:2,400,000.

29. Ziegler, D. L., 1957, Pre-Piper post-Minnekahta red beds in the Williston Basin: First Int. Williston Basin Symposium, p. 170-178. (a) Fig. 1, 1:5,700,000; (b) fig. 8, 1:4,450,000.
interval in North Dakota and northwestern South Dakota: N. Dak.
5-8 and 10, 1:700,000.

Geol. Survey Prof. Paper 307, 83 p. (a) Fig. 12, 1:110,000; (b)
fig. 14, 1:850,000 (also published in Geol. Soc. America Bull. 64,
pt. 1, 1953, p. 592); (c) fig. 23, 1:225,000 (report also contains
Pierre, Oahe and Canning quadrangle maps).

32. Gries, J. P., 1958, The Dakota Formation in central South Dakota:
S. Dak. Acad. Sci. Proc., v. 37, p. 161-168. Fig. 2, 1:500,000.

33. Pye, W. D., 1958, Northern Great Plains paleoecology and inter-
stratigraphic relationships: N. Dak. Geol. Soc. 2nd Int. Williston
Basin Symposium, p. 8-16. Fig. 2-13, 1:33,480,000.

34. Sandberg, C. A., and Hammond, C. R., 1958, Devonian system in
Williston Basin and central Montana: Am. Assoc. Petroleum
Geologists Bull., v. 42, no. 10, p. 2293-2334. Fig. 3, 1:5,500,000.
Published Geologic Reports on South Dakota Ground Water
(also see Special Reports in the next section)


2. Darton, N. H., 1901, Preliminary description of the geology and water resources of the southern half of the Black Hills and adjoining regions in South Dakota and Wyoming: U. S. Geol. Survey Ann. Rept. 21, pt. 4, p. 489-599. (a) Pl. 59, 1:250,000; (b) pl. 94, 1:450,000; (c) pl. 95, 1:450,000; (d) pl. 96, 1:250,000; (e) pl. 97, 1:250,000.


7. ______ 1909b, Geology and underground waters of South Dakota: U. S. Geol. Survey Water-Supply Paper 227, 156 p. (a) Fig. 6, 1:400,000; (b) pl. 1, 1:1,250,000; (c) pl. 13, 1:2,500,000.


9. Rothrock, E. P., 1933, Water supplies and geology of Lake Kameska: S. Dak. Geol. Survey Rept. Inv. 17, 11 p. Fig. 7, 1:105,000.


16. Rothrock, E. P., and Otton, E. G., 1947, Ground water resources of the Sioux Falls area, South Dakota, Part I: S. Dak. Geol. Survey Rept. Inv. 56. Fig. 2, 1:145,000.
30. _____ 1957c, The water supply at Mound City, Campbell County, South Dakota: S. Dak. Geol. Survey, 15 p. Fig. 2, 1:9,000.
32. Lee, K. Y., 1958, Geology and shallow ground water resources of the Brookings area, Brookings County, South Dakota: S. Dak. Geol. Survey Rept. Inv. 84, 62 p. (a) Pl. 1, 1:48,000; (b) fig. 3, 1:186,000 (both cover same area).

33. Steece, F. V., 1958, Geology and shallow ground water resources of the Watertown-Estelleine area, South Dakota: S. Dak. Geol. Survey Rept. Inv. 85, 36 p. (a) Pl. 1 and 2, 1:125,000; (b) fig. 4, 1:1,660,000 (both cover same area).

34. Jorgensen, D. C., 1960, Geology and shallow ground water resources of the Missouri Valley between North Sioux City and Yankton, South Dakota: S. Dak. Geol. Survey Rept. Inv. 86, 59 p. Pl. 1, 1:125,000.

35. Lee, K. Y., and Powell, J. E., 1961, Geology and ground-water resources of glacial deposits in the Flandreau area, Brookings, Moody and Lake Counties, South Dakota: S. Dak. Geol. Survey Rept. Inv. 87, 117 p. (a) Pl. 2, 1:125,000; (b) pl. 3, 1:125,000.


37. Walker, I. R., 1961b, Shallow outwash deposits in Huron-Wolsey area, Beadle County, South Dakota: S. Dak. Geol. Survey Rept. Inv. 91, 44 p. (a) Fig. 3, 1:200,000; (b) fig. 4, 1:250,000; (c) fig. 5, 1:200,000 (all cover same area).


Published Geologic Reports on South Dakota Special Reports,
Sand and Gravel, and Engineering Geology

(South Dakota Geological Survey Special Reports)

3. Jorgensen, D. C., 1960a, Geology and ground water resources at Ethan, South Dakota: S. Dak. Geol. Survey Spec. Rept. 5, 19 p.; Fig. 3, 1:63,360.
4. _____1960b, Geology and ground water resources at Howard, South Dakota: S. Dak. Geol. Survey Spec. Rept. 6, 21 p. (a) Fig. 4, 1:63,360; (b) Fig. 6, 1:10,260.
5. Tipton, M. J., 1960a, Shallow water supply near Huron, South Dakota: S. Dak. Geol. Survey Spec. Rept. 4, 15 p. (a) Pl. 1, 1:115,000; (b) Fig. 1, 1:2,500,000 (both cover same area).
6. _____1960b, Shallow water supply for the city of Parker: S. Dak. Geol. Survey Spec. Rept. 10, 15 p.; Fig. 1, 1:63,360.
7. _____1960c, Shallow water supply for the city of Ft. Pierre: S. Dak. Geol. Survey Spec. Rept. 11, 13 p.; Fig. 3, 1:15,600.
8. _____1960d, Shallow water supply for the city of Sisseton: S. Dak. Geol. Survey Spec. Rept. 12, 22 p.; Fig. 3, 1:85,000.
10. _____1960b, Shallow water supply for the city of Clark: S. Dak. Geol. Survey Spec. Rept. 8, 13 p.; Fig. 1, 1:63,360.
11. _____1960c, Shallow water supply for the city of Selby: S. Dak. Geol. Survey Spec. Rept. 9, 19 p.; Fig. 1, 1:63,360.
15. _____1962b, Ground water supply for the city of Miller: S. Dak. Geol. Survey Spec. Rept. 17, 23 p.; Fig. 3, 1:110,000.
16. _____1962c, Shallow water supply for the city of Burke: S. Dak. Geol. Survey Spec. Rept. 18, 13 p.; Fig. 3, 1:48,000.
(Sand and Gravel)

1. Rothrock, E. P., 1924, Sand and gravel deposits in eastern South Dakota, Part 2, along the Yellowstone Trail in Edmunds County: S. Dak. Geol. and Nat. Hist. Survey Circ. 15, 21 p. Fig. 5, 1:190,000.


3. Rothrock, E. P., and Newcomb, R. V., 1926, Sand and gravel deposits of Minnehaha County: S. Dak. Geol. and Nat. Hist. Survey Circ. 26, 166 p. (a) Fig. 2, 1:250,000; (b) fig. 6, 1:633,600; (c) fig. 8, 1:220,000 (all cover same area).

4. _____ 1932, Sand and gravel deposits in Potter and Faulk Counties: S. Dak. Geol. Survey Rept. Inv. 11, pt. 1 and 2, 103 p. (a) Maps following p. 4; (b) map following p. 4; (c) map following p. 14; (d) map following p. 17; (e) map following p. 50, all maps 1:250,000.


6. _____ 1944, Sand and gravel deposits in the Missouri Valley between Little Bend and White River: S. Dak. Geol. Survey Rept. Inv. 47, 118 p. (a) Map A, (includes 10 figs.), 1:200,000; (b) map B, (includes 13 figs.), 1:200,000.


(Engineering Geology)


2. Crandall, D. R., 1952, Landslides and rapid-flowage phenomena near Pierre, South Dakota: Econ. Geology, v. 47, no. 5, p. 548-568. (a) Fig. 3, 1:2,400; (b) fig. 8, 1:3,250; (c) fig. 9, 1:4,680.

Figure 6

MAP SHOWING PUBLISHED GEOLOGIC REPORTS ON SOUTH DAKOTA GOLD AND RADIOACTIVE MATERIALS.

Index Map of South Dakota

Scale

Gold - Radioactive Materials
Published Geologic Reports on South Dakota
Gold and Radioactive Materials

(Gold)


3. Paige, Sidney, 1923, The geology of Homestake mine: Econ. Geology, v. 18, p. 205-237. Fig. 34, 1:48,000.

4. ______, 1924, Geology of region around Lead, South Dakota and its bearing on the Homestake ore body: U. S. Geol. Survey Bull. 765, 58 p. (a) Pl. 1, 1:31,680; (b) pl. 8 and figs. 1-8, 1:8,000.


6. Connolly, J. P., 1933, Geologic history of Black Hills gold placers: S. Dak. Geol. Survey Rept. Inv. 16, 16 p. Fig. 4, 1:450,000.

7. Gustafson, J. K., 1933, Metamorphism and hydrothermal alteration of the Homestake gold-bearing formation: Econ. Geology, v. 28, p. 123-162. Fig. 2, 1:36,000.


(Radioactive Materials)

1. Page, L. R., and Redden, J. A., 1952, The Carnotite prospects of the Craven Canyon area, Fall River County, South Dakota: U. S. Geol. Survey Circ. 175, 18 p. (a) Fig. 2, 1:15,840; (b) pl. 1, 1:960.


9. Bell, Henry, and Bales, W. E., 1955, Uranium deposits in Fall River County, South Dakota: U. S. Geol. Survey Bull. 1009-G, p. 211-233. (a) Fig. 33, 1:570,000; (b) pl. 3, 1:2,400; (c) pl. 4, 1:1,800; (d) pl. 5, 1:24,000; (e) pl. 6, 1:24,000; (f) pl. 7, 1:2,400.

10. Curtiss, R. E., 1955, A preliminary report on the uranium in South Dakota: S. Dak. Geol. Survey Rept. Inv. 79, 102 p. (a) Fig. 8, 1:140,000; (b) fig. 9, 1:450,000; (c) fig. 10, 1:633,600; (d) fig. 11, 1:31,680; (e) fig. 12, 1:960.

11. Denson, N. M., and others, 1955, Uraniferous coal beds in parts of North Dakota, South Dakota and Montana: U. S. Geol. Survey Coal Inv. Map C-33. (a) Fig. 5, 1:63,360; (b) fig. 6, 1:750,000; (c) pl. 1, 1:450,000.


15. Gill, J. R., and Denson, N. M., 1955, Lignite investigations, (in) Geologic investigations of radioactive deposits--Semiannual progress report, June 1, to Nov. 30, 1955, U. S. Geol. Survey T.E.I.-590, p. 233-240. (a) Fig. 46, 1:1,450,000; (b) fig. 47, 1:7,000.


17. Kepferle, R. C., and Chisholm, W. A., 1955, Cave Hills, Harding County, South Dakota, (in) Geologic investigations of radioactive deposits--Semiannual progress report, June 1 to Nov. 30, 1955, U. S. Geol. Survey T.E.I.-590, p. 240-247. (a) Fig. 49, 1:220,000; (b) fig. 51, 1:80,000.


24. Denson, N. M., and Gill, J. R., 1956, Uranium-bearing lignite and its relations to volcanic tuffs in eastern Montana and North and South Dakota: U. S. Geol. Survey Prof. Paper 300, p. 413-418. Fig. 140, 1:950,000.


30. Vine, J. D., 1956, Geology of uranium in the basins of Tertiary age in Wyoming and the northern Great Plains: U. S. Geol. Survey Prof. Paper 300, p. 337-344. Fig. 110, 1:2,400,000.

31. Braddock, W. A., 1957, Stratigraphic and structural controls of uranium deposits on Long Mountain, South Dakota: U. S. Geol. Survey Bull. 1063-A, p. 1-11. (a) Fig. 2, 1:20,400; (b) fig. 3, 1:20,400; (c) pl. 1, 1:6,000.


Figure 7
MAP SHOWING PUBLISHED GEOLOGIC REPORTS ON SOUTH DAKOTA MINERAL RESOURCES AND GEOPHYSICAL STUDIES.

Following numbers cover whole State
(Mineral Resources)
5, 7c, 8, 9, 10,
(Geophysical Studies)
6b

Mineral Resources ————
Geophysical Studies ————

SCALE
20 0 20 40 60 80 100 miles
Published Geologic Reports on South Dakota
Mineral Resources and Geophysical Studies

(Mineral Resources Surveys)


3. O'Harra, C. C., 1899, Geology and mineral deposits of a portion of the southern Black Hills: S. Dak. School of Mines Bull. 2, 41 p. (a) Fig. 4, 1:160,000; (b) map 32, 1:7,200.

4. Irving, J. D., 1904, Economic resources of the northern Black Hills: U. S. Geol. Survey Prof. Paper 26, 222 p. (a) Pl. 5, 1:142,560; (b) pl. 9, 1:16,000; (c) pl. 17, 1:16,000.


6. Gries, J. P., 1942, Economic possibilities of the Pierre Shale: S. Dak. Geol. Survey Rept. Inv. 43, 79 p. Fig. 1, 1:2,500,000.

7. Rothrock, E. P., 1944, A geology of South Dakota, Part III: Mineral resources: S. Dak. Geol. Survey Bull. 15, 255 p. (a) Fig. 3, 1:95,000; (b) fig. 5, 1:250,000; (c) map (in pocket), 1:1,250,000.


(Geophysical Studies)


3. Tullis, E. L., 1942, Magnetometer surveys during 1941: S. Dak. Geol. Survey Rept. Inv. 42, 40 p. (a) Fig. 7, 1:460,000; (b) fig. 8, 1:460,000; (c) map, 1:460,000.

4. Davis, V. C., 1948, Belle-Eldridge lead-zinc deposits, Lawrence County, South Dakota: U. S. Bur. Mines Rept. Inv. 4215, 8 p. Fig. 1, 1:2,700.

6. Petsch, B. C., and Carlson, L. C., 1950, Magnetic observations in South Dakota: S. Dak. Geol. Survey Rept. Inv. 66, 35 p. (a) Fig. 3, 1:500,000; (b) fig. 7 and 8, 1:2,800,000; (c) map, 1:418,000; (d) map, 1:1,250,000 (part of map showing completion of magnetometer surveys through 1946).


9. ______ 1960, Magnetometer map of Custer, Fall River, and Shannon Counties: S. Dak. Geol. Survey Oil and Gas Inv. Map 9, 1:250,000.

10. Lum, Daniel, 1961a, Gravity measurements east of the Black Hills and along a line from Rapid City to Sioux Falls, South Dakota: S. Dak. Geol. Survey Rept. Inv. 88, 26 p. (a) Fig. 1, 1:2,500,000; (b) pl. 1, 1:250,000.

11. ______ 1961b, The resistivity method applied to ground water studies of glacial outwash deposits in eastern South Dakota: S. Dak. Geol. Survey Rept. Inv. 89, 24 p. (a) Fig. 10, 1:63,360; (b) fig. 11, 1:63,360.


14. ______ 1962b, Magnetometer map of Todd and Mellette Counties: S. Dak. Geol. Survey Oil and Gas Inv. Map 8, 1:250,000.
Published Geologic Reports on South Dakota

Economic Geology (Nonmetallic)

(Selenium, see fig. 8)


(Coal, see fig. 8 and 13)


5. 1931, The Isabel-Firesteel coal area: S. Dak. Geol. Survey Rept. Inv. 10, 35 p. (a) Fig. 1, 1:760,000; (b) pl. 2, 1:63,360; (c) fig. 7, 1:31,680 (coal boundary); (d) fig. 8, 1:31,680 (coal boundary).

6. 1934, The Stoneville coal area: S. Dak. Geol. Survey Rept. Inv. 22, 20 p. (a) Pl. 1, 1:63,360; (b) fig. 1, 1:900,000.


9. Denson, N. M., 1950, The lignite deposits of the Cheyenne River and Standing Rock Indian Reservations, Corson, Dewey and Ziebach Counties, South Dakota, and Sioux County, North Dakota: U. S. Geol. Survey Circ. 78, 22 p. Map, 1:500,000. (a) Fig. 7, 1:24,000; (b) fig. 8, 1:24,000; (c) fig. 11, 1:24,000; (d) fig. 14, 1:24,000; (e) fig. 18, 1:24,000; (f) pl. 1, 1:500,000.


11. Denson, N. M., and others, 1955, Uraniferous coal beds in parts of North Dakota, South Dakota and Montana: U. S. Geol. Survey Coal Inv. Map C-33. (a) Fig. 5, 1:63,360; (b) fig. 6, 1:750,000; (c) pl. 1, 1:450,000.


(Chalk, see fig. 8)

1. Rothrock, E. P., 1931, Preliminary report on the chalk of eastern South Dakota: S. Dak. Geol. Survey Rept. Inv. 2, 51 p. (a) Map following p. 1, 1:2,500,000; (b) map following p. 10, 1:63,360; (c) map following p. 16, 1:63,360; (d) map following p. 21, 1:95,000; (e) map following p. 26, 1:174,240; (f) map following p. 38, 1:63,360; (g) map following p. 40, 1:63,360.

(Manganese, see fig. 9)


2. Gries, J. P., 1942, Economic possibilities of the Pierre Shale: S. Dak. Geol. Survey Rept. Inv. 43, 79 p. Fig. 11, 1:4,000,000.


4. _______1944, A geology of South Dakota, Part III: Mineral resources: S. Dak. Geol. Survey Bull. 15, 255 p. Fig. 9, 1:1,400,000.

5. Pesonen, P. E., Tullis, E. L., and Zinner, Paul, 1949, Missouri Valley manganese deposits: U. S. Bur. Mines Rept. Inv. 4375, pt. 1, 90 p. (a) Figs. 7-11, 12 (area J), and (b) fig. 12 (area K), 1:24,000; (c) fig. 3, 1:375,000.

(Bentonite, see fig. 9)

1. Spivey, R. C., 1940, Bentonite in southwestern South Dakota: S. Dak. Geol. Survey Rept. Inv. 36, 56 p. (a) Pl. 5, 1:3,000; (b) pl. 6, 1:3,000; (c) pl. 7, 1:3,000; (d) map, 1:250,000.


3. Gries, J. P., 1942, Economic possibilities of the Pierre Shale: S. Dak. Geol. Survey Rept. Inv. 43, 79 p. Fig. 10, 1:4,000,000.

(Cement materials, including lime and gypsum, see fig. 9)

2. Anonymous, 1936, Portland cement, gypsum, and lime industries in South Dakota: S. Dak. State Planning Board, 70 p. Fig. 2, 1:750,000.

(Building Stone, see fig. 9)

1. Beyer, S. W., 1897, Sioux quartzite and associated rocks: Iowa Geol. Survey, v. 6, p. 69-112. (a) Map following p. 70, 1:570,000; (b) map following p. 80, 1:21,680.
2. Baldwin, Brewster, 1949, A preliminary report on the Sioux Quartzite: S. Dak. Geol. Survey Rept. Inv. 63, 34 p. Fig. 1, 1:250,000.

(Shale, see fig. 9)


(Rock, see fig. 9)

Figure 10
MAP SHOWING PUBLISHED GEOLOGIC REPORTS ON SOUTH DAKOTA IGNEOUS GEOLOGY
(also see section on Pegmatites and associated minerals)

Following numbers cover whole state:
4, 7, 14, 17

SCALE
0  20  40  60  80  100 miles
Published Geologic Reports on South Dakota

Igneous Geology


2. Van Hise, C. R., 1890, The pre-Cambrian rocks of the Black Hills: Geol. Soc. America Bull., v. 1, p. 203-244. Fig. 1, 1;825,000.

3. Beyer, S. W., 1896, The Sioux Quartzite and certain associated rocks: Iowa Geol. Survey Ann. Rept. VI, p. 67-112. (a) Map following p. 70, 1;570,000; (b) map following p. 80, 1;21,680.


5. Jaggar, T. A., Jr., 1901, The laccoliths of the Black Hills: U. S. Geol. Survey Ann. Rept. 21, pt. 3, p. 163-303. (a) Pl. 19, 1;250,000; (b) pl. 20, 1;62,500; (c) pl. 30, 1;110,000; (d) pl. 41, 1;62,500.


8. Paige, Sidney, 1923, The geology of the Homestake Mine: Econ. Geology, v. 18, no. 3, p. 205-237. Fig. 34, 1;95,000.

9. Runner, J. J., 1934, Pre-Cambrian geology of the Nemo district, Black Hills: Am. Jour. Sci., 5th ser., v. 28, p. 353-372. Fig. 1, 1;140,000.


11. Dodge, T. A., 1942, Amphibolites of the Lead area, northern Black Hills, South Dakota: Geol. Soc. America Bull., v. 63, p. 561-584. Fig. 2, 1;95,000.


13. Baldwin, Brewster, 1949, A preliminary report on the Sioux Quartzite: S. Dak. Geol. Survey Rept. Inv. 63, 34 p. Fig. 1, 1;250,000.


15. Steece, F. V., 1958, Geology and shallow ground water resources of the Watertown-Estellite area, South Dakota: S. Dak. Geol. Survey Rept. Inv. 85, 36 p. Fig. 4, 1;1,670,000.

16. Jorgensen, D. G., 1960, Geology and shallow ground water resources of the Missouri Valley between North Sioux City and Yankton, South Dakota: S. Dak. Geol. Survey Rept. Inv. 86, 59 p. Fig. 5, 1;760,000.

Figure II

MAP SHOWING PUBLISHED GEOLOGIC REPORTS ON SOUTH DAKOTA PEGMATITE AND ASSOCIATED MINERALS AND METALLIC ORES (beryl, mica, spodumene, tin, tungsten).

Following number covers whole State:18

Index Map of South Dakota

Scale 10 0 10 20 30 40 50 miles
Published Geologic Reports on South Dakota
Pegmatite and Associated Minerals and Metallic Ores
(Beryl, Mica, Spodumene, Tin, Tungsten)


4. Schwartz, G. M., 1925, Geology of the Etta spodumene mine, Black Hills, South Dakota: Econ. Geology, v. 20, no. 7, p. 646-659. Fig. 1, 1:1,320.

5. 1930, Tin Mountain spodumene mine, Black Hills, South Dakota: Econ. Geology, v. 25, p. 275-284. Fig. 2, 1:600.

6. Johnson, A. I., and Schwartz, G. M., 1937, Pegmatite mining in South Dakota: S. Dak. State Planning Board, 80 p. (a) Fig. 13, 1:240; (b) fig. 15, 1:720; (c) fig. 17, 1:360.

7. Stobbe, Helen, 1937, A brief description of the pegmatites southwest of Custer, South Dakota: Econ. Geology, v. 32, p. 964-973. (a) Fig. 2, 1:13,200; (b) fig. 3, 1:1,320.


10. Gardner, E. D., 1939, Tin deposits of the Black Hills, South Dakota: U. S. Bur. Mines Inf. Circ. 7069, p. 1-78. (a) Fig. 7, 1:24; (b) fig. 12, 1:1,320.

11. Smith, W. C., and Page, L. R., 1941, Tin-bearing pegmatites of the Tinton district, Lawrence County, South Dakota, a preliminary report: U. S. Geol. Survey Bull. 922-T, p. 595-630. (a) Pl. 90, 1:24,000; (b) pl. 91, 1:720; (c) pl. 92, 1:360; (d) pl. 93, 1:240; (e) fig. 83, 1:336; (f) fig. 87, 1:300.

12. Fisher, D. J., 1942, Preliminary report on some pegmatites of the Custer district: S. Dak. Geol. Survey Rept. Inv. 44, 35 p. (a) Fig. 2, 1:1,200; (b) fig. 3, 1:360; (c) fig. 5, 1:1,680.


15. Fisher, D. J., 1945, Preliminary report on the mineralogy of some pegmatites near Custer: S. Dak. Geol. Survey Rept. Inv. 50, 35 p. (a) Fig. 6, 1:1,600; (b) fig. 9, 1:1,500; (c) inset 1, 1:480; (d) inset 2, 1:960.


21. ______ 1948b, Mateen spodumene deposit: U. S. Bur. Mines Rept. Inv. 4339. Fig. 1, 1:440.

22. Lang, A. J., Jr., and Redden, J. A., 1953, Geology and pegmatites of part of the Fourmile area, Custer County, South Dakota: U. S. Geol. Survey Circ. 245, 20 p. (a) Fig. 2, 1:250,000; (b) pl. 1, 1:12,000.


Figure 12
MAP SHOWING PUBLISHED GEOLOGIC REPORTS ON SOUTH DAKOTA OIL AND GAS

Following numbers cover whole State:
4, 7, 15 a, b, c, 17

Scale:
20 0 20 40 60 80 100 miles
Published Geologic Reports on South Dakota

Oil and Gas

1. Ward, Freeman, 1921, The possibilities of oil in eastern Pennington County: S. Dak. Geol. and Nat. Hist. Survey Circ. 8, 11 p. Fig. 1, 1:158,000.

2. Ward, Freeman, and Wilson, R. A., 1922, The possibilities of oil in western Dewey County: S. Dak. Geol. and Nat. Hist. Survey Circ. 9, 10 p. Fig. 2, 1:200,000.

3. Wilson, R. A., 1922a, The possibilities of oil in northern Dewey County: S. Dak. Geol. Survey Circ. 10, 7 p. Fig. 2, 1:443,000.


5. Moulton, G. F., 1923, Oil and gas prospects in southern Perkins County: S. Dak. Geol. and Nat. Hist. Survey Circ. 14, 12 p. Fig. 2, 1:97,000.


10. Wilson, R. A., 1925a, Oil and gas possibilities in northeastern Meade County: S. Dak. Geol. and Nat. Hist. Survey Circ. 23, 14 p. Fig. 2, 1:100,000.

11. ——— 1925b, The Ragged Butte structure: S. Dak. Geol. Survey Circ. 24, 7 p. Fig. 2, 1:70,000.


15. Gries, J. P., 1952, South Dakota: Petroleum Eng., v. 24, no. 4, p. A71-A81. (a) Fig. 1, 1:5,700,000; (b) fig. 2, 1:7,600,000; (c) fig. 3, 1:7,600,000.


South Dakota Geological Survey Geological Quadrangles

(Missouri River Valley Area)

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(Lignite Coal Area, Northwestern South Dakota)

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(Tertiary Area)

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<td>S- 3</td>
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<td>S- 2</td>
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<td>White</td>
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(James River Valley Area)

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<th>No.</th>
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<td>J-3</td>
<td>Alexandria</td>
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<td>Mitchell</td>
<td>1961</td>
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United States Geological Survey Geological Quadrangles (GQ), Folios (F), and Minerals Investigations Field Studies Maps (M)

1. Aberdeen—Redfield, 1909 (F)
2. Aladdin, 1905 (F)
3. Belle Fourche, 1909 (F)
4. Newell, 1919 (F)
5. Central Black Hills, 1925 (F)
6. Oahe, 1955 (GQ)
7. Pierre, 1954 (GQ)
8. Canning, 1954 (GQ)
9. Sundance, 1905 (F)
11. Huron, 1904 (F)
12. DeSmet, 1904 (F)
13. Newcastle, 1904 (F)
14. Mitchell, 1903 (F)
15. Alexandria, 1903 (F)
16. Edgemont, 1904 (F)
   Edgemont NE (northeast part), 1956 (M)
   Edgemont NE (northwest part), 1956 (M)
   Edgemont NE (west-central part), 1956 (M)
   Edgemont NE (east-central part), 1956 (M)
   Edgemont NE (southwest part), 1956 (M)
   Edgemont NE (southeast part), 1956 (M)
   Flint Hill (northwest part), 1957 (M)
   Flint Hill (northeast part), 1957 (M)
   Flint Hill (east-central part), 1957 (M)
   Flint Hill (west-central part), 1957 (M)
   Flint Hill (southwest part), 1957 (M)
   Flint Hill (southeast part), 1957 (M)
   Minnekahta (west-central part), 1957 (M)
   Minnekahta (east-central part), 1957 (M)
   Minnekahta (southeast part), 1957 (M)
   Minnekahta (southwest part), 1957 (M)
   Burdock (west-central), 1958 (M)
   Burdock (northeast), 1958 (M)
   Burdock (northwest), 1958 (M)
   Burdock (east-central), 1958 (M)
   Burdock (southeast), 1958 (M)
17. Oelrichs, 1902 (F)
18. Olivet, 1903 (F)
19. Parker, 1903 (F)
20. Elk Point, 1908 (F)
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