THE GEOLOGICAL SURVEY OF WYOMING

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PRELIMINARY MAP OF KNOWN SURFICIAL STRUCTURAL FEATURES FOR THE SHERIDAN 1° \times 2° QUADRANGLE

compiled by

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This report has not been reviewed for conformity with the editorial standards of the $Geological\ Survey$ of Wyoming.

This listing of sources of information and index map were prepared to accompany the preliminary map of known surficial structural features for the Sheridan $1^{\circ}x$ 2° Quadrangle.

Sources of geologic data

General

(These references are the sources of geologic data where more detailed, specific maps were not available).

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Love, J.D., and Christiansen, A.C., 1985, Geologic map of Wyoming: U.S. Geological Survey, scale 1:500,000.

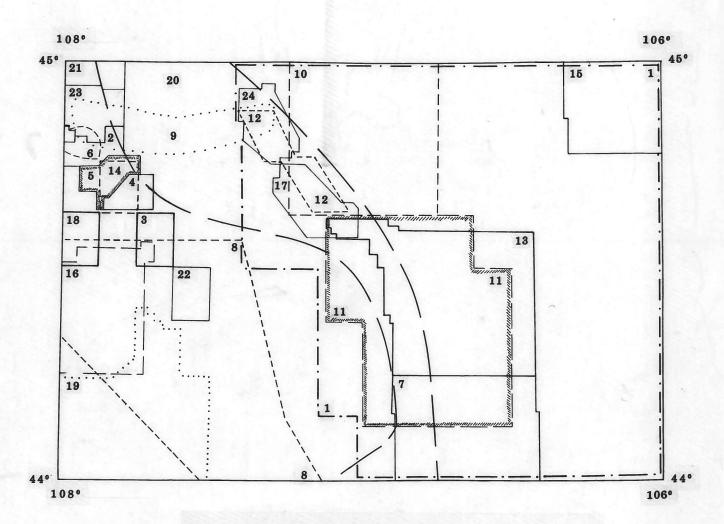
Love, J.D., Christiansen, A.C., and Earle, J.L., compilers, 1978, Preliminary geologic map of the Sheridan 1°x 2° Quadrangle, northern Wyoming: U.S. Geological Survey Open File Report 78-456, scale 1:250,000.

Specific

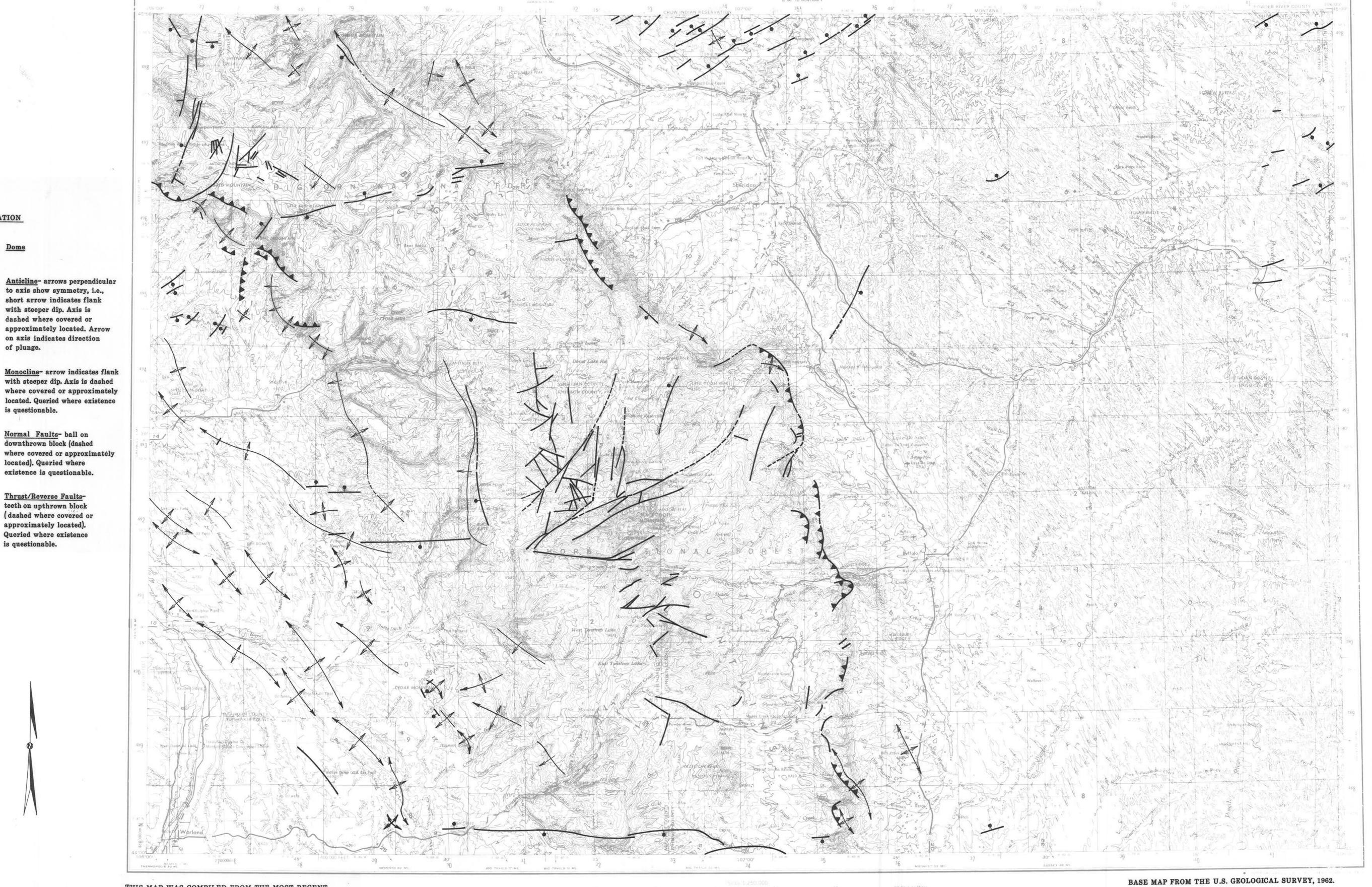
- 1. Blackstone, D.L., Jr., 1981, Compression as an agent in deformation of the east-central flank of the Bighorn Mountains, Sheridan and Johnson Counties, Wyoming: University of Wyoming Contributions to Geology, v. 19, no. 2, p. 105-122, figure 4, scale approximately 1:500,000.
- 2. Cardinal, D.F., 1958, Geology of the Crystal Creek Bald Mountain area, Big Horn and Sheridan Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 10, scale 1:20,000.
- 3. Finley, M.E., 1985, Geologic map of the Black Mountain Quadrangle, Wyoming: Geological Survey of Wyoming Map Series MS-16, scale 1:24,000.
- 4. Frey, D.M., 1959, Geology of the Hunt Mountain Red Gulch area, Big Horn and Sheridan Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 6, scale 1:20,000.
- 5. Harston, L.W., 1959, Geology of the Bear Creek-Beaver Creek area, Big Horn and Sheridan Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 9, scale 1:20,000.
- 6. **Hoppin, R.A.,** 1970, Structural development of Five Springs Creek area, Bighorn Mountains, Wyoming: Geological Society of America Bulletin, v. 81, p. 2403-2416, figure 2, scale 1:48,000.
- 7. Hose, R.K., 1955, Geology of the Crazy Woman Creek Area, Johnson County, Wyoming: U.S. Geological Survey Bulletin 1027-B, p. 33-118, plate 6, scale 1:48,000.

- 8. Jarvis, W.T., 1986, Regional hydrogeology of the Paleozoic aquifer system, southeastern Bighorn Basin, Wyoming, with an impact analysis on Hot Springs State Park: M.S. thesis, University of Wyoming, Laramie, Wyoming, plate 1, scale 1:250,000.
- 9. **Jennings, T.V.,** 1967, Structural analysis of the northern Big Horn [sic] Mountains, Wyoming: Ph.D. dissertation, University of Iowa, Iowa City, Iowa, plate 1, scale 1:20,000.
- 10. Kanizay, S.P., 1978, Preliminary geologic map of the Sheridan area, northeastern Powder River Basin, Wyoming: U.S. Geological Survey Miscellaneous Field Studies Map MF-1043, scale 1:50,000.
- 11. Kanizay, S.P., Obernyer, S.L., and Cattermole, J.M., 1976, Preliminary geologic map of the Buffalo area, northwest Powder River Basin, Wyoming: U.S. Geological Survey Miscellaneous Field Studies Map MF-806, scale 1:50,000.
- 12. Langenheim, R.L., Jr., Reinbold, M.L., and Tissue, J.S., 1976, Geologic map of Paleozoic and Mesozoic rocks, east flank of the Bighorn Mountains from latitude 44°37'30"N to latitude 44°52'30"N., Sheridan County, Wyoming: Wyoming Geological Association 28th Annual Field Conference Guidebook, p. 97-105, figures 1-6, scale approximately 1:62,500.
- 13. Mapel, W.J., 1959, Geology and coal resources of the Buffalo Lake DeSmet area, Johnson and Sheridan Counties, Wyoming: U.S. Geological Survey Bulletin 1078, plate 1, scale 1:48,000.
- 14. Noggle, K.S., 1986, Stratigraphy and structure of the Leavitt Reservoir Quadrangle, Big Horn County, Wyoming: M.S. thesis, Iowa State University of Science and Technology, Ames, Iowa, plate 1, scale 1:24,000.
- 15. Olive, W.W., 1957, The Spotted Horse coal field, Sheridan and Campbell Counties, Wyoming: U.S. Geological Survey Bulletin 1050, plates 1 and 2, scale 1:63,360.
- 16. Pierce, W.G., 1948, Geologic and structure contour map of the Basin Greybull area, Big Horn County, Wyoming: U.S. Geological Survey Oil and Gas Investigations Preliminary Map OM-77, scale 1:48,000.
- 17. Ramsey, R.D., 1955, Geology of the Big Goose Canyon area, Sheridan County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 2, scale 1:24,000.
- 18. Reppe, C.C., 1986, Geologic map of the Devils Kitchen Quadrangle, Wyoming: Geological Survey of Wyoming Map Series MS-18, scale 1:24,000.
- 19. Rogers, C.P., Jr., Richards, P.W., Conant, L.C., Vine, J.D., and Notley, D.F., 1948, Geology of the Worland Hyattville area, Big Horn and Washakie Counties, Wyoming: U.S. Geological Survey Oil and Gas Investigations Preliminary Map OM-84, scale 1:48,000.
- 20. Sears, J.W., Wilson, B.D., and Wolf, R.M., (Peter Huntoon, Principal Investigator), 1976, Geologic map of the Paleozoic rocks along the eastern

- flank of the Bighorn Mountains, Wyoming: Prepared by the Wyoming Water Resources Research Institute for the Office of Water Research and Technology in cooperation with the Wyoming State Engineer, scale 1:48,000.
- 21. Taucher, L.M., 1953, Geology of the Cookstove Basin area, Big Horn County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 2, scale 1:31,680.
- 22. VerPloeg, A.J., and DeBruin, R.H., 1985, Trapper Canyon tar sand deposit, Big Horn County, Wyoming: an exhumed stratigraphic oil trap: Geological Survey of Wyoming Report of Investigations 30, plate 1, scale 1:24,000.
- 23. Willis, R.P., 1953, Geology of the Porcupine Creek area, Big Horn County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 2, scale approximately 1:28,000.
- 24. Zakis, W.N., 1950, Geology of the east flank of the Bighorn Mountains near Dayton, Sheridan County, Wyoming: M.A. thesis, University of Wyoming, plate 2, scale 1:31,680.



Index To Sources of Geologic Data



THIS MAP WAS COMPILED FROM THE MOST RECENT AVAILABLE INFORMATION AND IS ONLY AS RELIABLE AND COMPLETE AS THE SOURCES CONSULTED. SOME SMALLER FEATURES WERE OMITTED SINCE THEY COULD NOT BE PLOTTED AT THIS SCALE. SOURCES CONSULTED ARE LISTED IN ACCOMPANYING REFERENCE LIST.

EXPLANATION

short arrow indicates flank with steeper dip. Axis is dashed where covered or approximately located. Arrow on axis indicates direction

of plunge.

is questionable.

Normal Faults- ball on downthrown block (dashed

located). Queried where existence is questionable.

Thrust/Reverse Faults-teeth on upthrown block

Queried where existence is questionable.

(dashed where covered or approximately located).

THIS MAP HAS NOT BEEN REVIEWED FOR CONFORMITY WITH THE EDITORIAL STANDARDS OF THE GEOLOGICAL

SURVEY OF WYOMING.

CONTOUR INTERVAL 200 FEET