THE GEOLOGICAL SURVEY OF WYOMING

Gary B. Glass, State Geologist

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PRELIMINARY MAP OF KNOWN SURFICIAL STRUCTURAL FEATURES FOR THE THERMOPOLIS 1° x 2° QUADRANGLE

compiled by

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1987

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 Thermopolis 1°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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Specific

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2. **Bown, T.M.,** 1982, Geology, paleontology, and correlation of Eocene volcaniclastic rocks, southeast Absaroka Range, Hot Springs County, Wyoming: U.S. Geological Survey Professional Paper 1201-A, 75 p.; plate 1, scale 1:50,000.

3. **Bown, T.M.,** 1979, Geology and mammalian paleontology of the Sand Creek facies, lower Willwood Formation (lower Eocene), Washakie County, Wyoming: Geological Survey of Wyoming Memoir 2, 151 p.; scale approximately 1:160,000.

4. **Conard, J.B.,** 1981, Geology of the Castle Rock 7½-minute Quadrangle, Fremont County, Wyoming: M.S. thesis, University of Wyoming, Laramie, Wyoming, plate 1, scale 1:24,000.

5. **Ellerby, R.S.,** 1962, Geology of the Dry Creek-Willow Creek area, Fremont County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 6, scale 1:24,000.

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8. **Keefer, W.R.**, 1955, Geologic map of the DuNoir area: U.S. Geological Survey Oil and Gas Investigations Map OM-166, scale 1:48,000.

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12. **Long, J.S., Jr.**, 1959, Geology of the Phlox Mountain area Hot Springs and Fremont Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 8, scale 1:24,000.

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14. **Murphy, J.F.**, Privrasky, N.C., and Moerlein, G.A., 1956, Geology of the Sheldon-Little Dome area, Fremont County, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-181, scale 1:48,000.

15. **Murphy, J.F.**, and Roberts, R.W., 1954, Geology of the Steamboat Butte-Pilot Butte area, Fremont County, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-151, scale 1:48,000.

16. **Phillips, D.P.**, 1958, Geology of the Sheep Ridge area, Hot Springs and Fremont Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate VI, scale 1:24,000.

17. **Powell, J.D.**, 1957, Geology of the Blackrock Ridge area, Hot Springs and Fremont Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate II, scale 1:24,000.

18. **Rohrer, W.L.**, 1965, Adam Weiss Peak Quadrangle, Hot Springs and Park Counties, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-382, scale 1:24,000.

19. **Spencer, S.A.**, 1986, Groundwater movement in the Paleozoic rocks and impact of petroleum production on water levels in the southwestern Bighorn Basin, Wyoming: M.S. thesis, University of Wyoming, Laramie, Wyoming, plate 1, scale 1:250,000.

20. **Sundell, K.A.**, 1982, Geology of the headwater area of the North Fork of Owl Creek, Hot Springs County, Wyoming: Geological Survey of Wyoming Report of Investigations 15, 51 p., plates 1-4, scale 1:24,000.

21. **Thaden, R.E.**, 1980, Geologic map of the Birdseye Pass Quadrangle, showing chromolithofacies and coal beds in the Wind River Formation, Fremont and

Hot Springs Counties, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1537, scale 1:24,000.

22. **Thompson, R.M.**, Troyer, M.L., White, V.L., and Pipiringos, G.N., 1950, Geology of the Lander area, central Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-112, scale 1:48,000.

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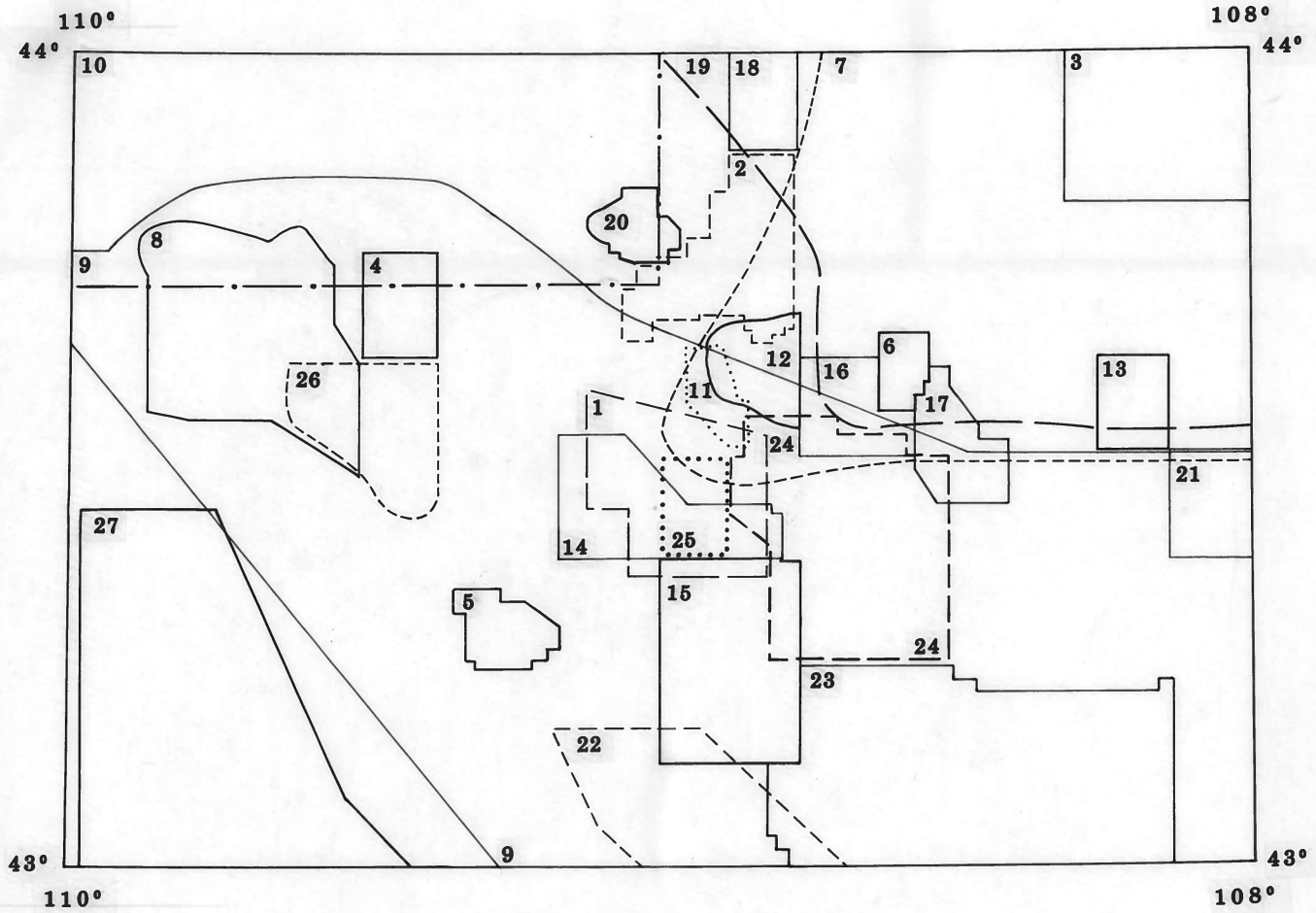
25. **Warlow, R.C.**, 1985, Geologic map and coal resources of the Maverick Spring Quadrangle, Fremont County, Wyoming: U.S. Geological Survey Coal Investigations Map C-91, scale 1:24,000.

26. **Winterfeld, G.F.**, 1986, Laramide tectonism, deposition, and early Cenozoic stratigraphy of the northwestern Wind River Range, Wyoming: Ph.D. dissertation, University of Wyoming, Laramie, Wyoming, plates II, III, and IV, scale 1:24,000.

27. **Worl, R.G.**, Koesterer, M.E., and Hulsebosch, T.P., 1986, Geologic map of the Bridger Wilderness and the Green-Sweetwater roadless area, Sublette and Fremont Counties, Wyoming: U.S. Geological Survey Miscellaneous Field Studies Map 1636-B, scale 1:250,000.



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EXPLANATION

Dome

Anticline- arrows perpendicular to axis show symmetry, i.e., short arrow indicates flank with steeper dip. Axis is dashed where covered or approximately located. Arrow on axis indicates direction of plunge.

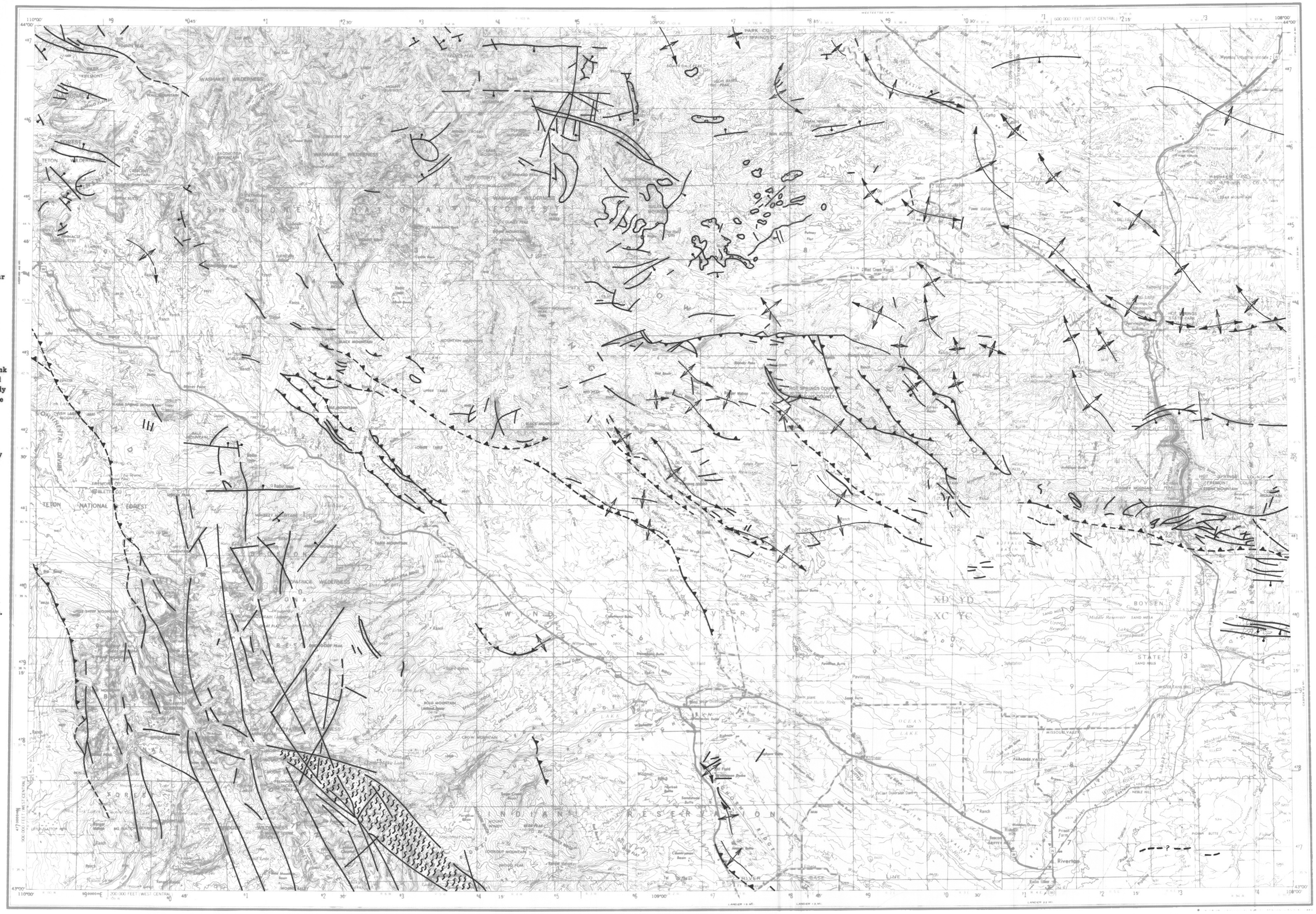
Monocline- arrow indicates flank with steeper dip. Axis is dashed where covered or approximately located. Queried where existence is questionable.

Normal Faults- ball on downthrown block (dashed where covered or approximately located). Queried where existence is questionable.

Thrust/Reverse Faults- teeth on upthrown block (dashed where covered or approximately located). Queried where existence is questionable.

Detachment Faults- open squares on detachment block (dashed where covered or approximately located). Queried where existence is questionable.

Shear Zones



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.

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET

1980 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 14° (260 MILS) EASTERLY FOR THE CENTER OF THE WEST EDGE TO 14½° (260 MILS) EASTERLY FOR THE CENTER OF THE EAST EDGE

BASE MAP FROM THE U.S. GEOLOGICAL SURVEY, 1980.

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

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