THE GEOLOGICAL SURVEY OF WYOMING

Gary B. Glass, State Geologist

OPEN FILE REPORT 87-1L

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

compiled by

Jon K. King, Phillip L. Greer, and Alan J. VerPloeg

Laramie, Wyoming
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 Torrington 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).

Case, J.C., 1986, Earthquakes and related geologic hazards in Wyoming: Geological Survey of Wyoming Public Information Circular 26, 22 p., sheet 1, scale 1:1,000,000.

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Specific

1. **Barlow, J.A., Jr.,** 1950, Geology of the LaPrele Creek - Boxelder Creek area, Converse County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, 49 p., plate 5, scale 1:21,120.

2. **Barnett, V.H.,** 1915, Possibilities of oil in the Big Muddy dome, Converse and Natrona Counties, Wyoming, *in* Contributions to Economic Geology, 1913, Part II mineral fuels: U.S. Geological Survey Bulletin 581, p. 105-117, map scale 1:125,000.

3. **Berryman, R.J.,** 1942, The geology of the Deer Creek-Little Deer Creek area, Converse County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming 51 p., plate 1, scale 1:24,000.

4. **Blackstone, D.L., Jr.,** as of 1987, University of Wyoming, unpublished mapping completed prior to 1976, map scale 1:125,000 (used in Blackstone and others, 1976).

5. **Blackstone, D.L., Jr.,** Sears, J.W., and Wilson, B.D, compilers, 1976, Geologic map of the Paleozoic rocks along the northern flank of the Laramie Mountains, Wyoming: Prepared by the Wyoming Water Resources Research Institute for the Wyoming State Engineer in cooperation with the Office of Water Research and Technology, map scale 1:48,000.

6. **Cary, B.D., Jr.,** 1950, Geology of the eastern part of the Flat Top anticline, Albany and Carbon Counties, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, 62 p., map scale 1:31,180.

7. **Condie, K.C.,** 1969, Petrology and geochemistry of the Laramie batholith and related metamorphic rocks of Precambrian age in eastern Wyoming: Geological Society of America Bulletin, v. 80, p. 57-82 (Precambrian only, sketch map).

8. **Denson, N.M.**, 1974, Geologic map of the Lusk area, Goshen and Niobrara Counties, Wyoming: U.S. Geological Survey Open File Report 74-349, scale 1:125,000.

9. **Denson, N.M.**, and Botinelly, Theodore, 1949, Geology of the Hartville uplift, eastern Wyoming: U.S. Geological Survey Oil and Gas Investigations Preliminary Map OM-102, sheet 1, scale 1:48,000.

10. **Denson, N.M.**, and Harshman, E.N., 1969, Map showing areal distribution of Tertiary rocks, Bates Hole - Shirley Basin area, south-central Wyoming: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-570, scale 1:125,000.

11. ***Denson, N.M.**, and Horn, G.H., 1972, Geologic map of Tertiary and uppermost Cretaceous rocks showing structure contours, oil and gas fields, dry holes, and mines in the southern part of the Powder River Basin, Converse, Niobrara, and Natrona Counties, Wyoming: U.S. Geological Survey Open File Report 72-88, map scale 1:126,720.

12. **Denson, N.M.**, and Horn, G.H., 1975, Geologic and structure map of the southern part of the Powder River Basin, Converse, Niobrara, and Natrona Counties, Wyoming: U.S. Geological Survey Miscellaneous Investigations Series Map I-877, scale 1:125,000.

13. **Dobbin, C.E.**, Kramer, W.B., and Horn, G.H., 1957, Geologic and structure map of the southeastern part of the Powder River Basin, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-185, scale 1:125,000.

14. **Drwenski, V.R.**, 1952, Geology of the Boxelder-Mormon Canyon area, Converse County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, 56 p., plate 3, scale 1:24,000.

15. **Giddings, H.J.**, 1935, The geology of a portion of the Laramie Basin lying north of Como anticline, Albany County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming 46 p., plate 11, scale 1:42,240.

16. **Graff, P.J.**, Sears, J.W., Holden, G.S., and Hausel, W.D., 1982, Geology of the Elmers Rock greenstone belt, Laramie Range, Wyoming: Geological Survey of Wyoming Report of Investigations 14, 23 p., plate 2, scale 1:50,000 (Precambrian only).

17. **Kaabar, S.M.**, 1970, The geology of the Pinto Creek Quadrangle, Albany County, Wyoming: M.S. thesis, University of Wyoming, Laramie, Wyoming, 61 p., plate 1, scale 1:32,000.

18. **Konkel, Philip**, 1935, The geology of the northeast portion of the Laramie Basin, Little Medicine Mountain district, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, 59, p., plate 11, scale 1:42,240.

19. **Langstaff, G.D.**, 1984, Investigation of Archean metavolcanic and metasedimentary rocks of Sellers Mountain, west-central Laramie Mountains, Wyoming: M.S. thesis, University of Wyoming, Laramie, Wyoming, 386 p., Figure 70, sketch map, plate 2, scale 1:24,000 (Precambrian only).

20. **Love, J.D.**, Denson, N.M., and Botinelly, Theodore, 1949, Geology of the Glendo area, Wyoming: U.S. Geological Survey Oil and Gas Investigations Preliminary Map OM-92, sheet 1, scale 1:48,000.

21. **McGrew, L.W.**, 1963, Geology of the Fort Laramie area, Platte and Goshen Counties, Wyoming: U.S. Geological Survey Bulletin 1141-F, 39 p., plate 1, scale 1:31,680.

22. **McGrew, L.W.**, 1967, Geologic map of the Antelope Gap Quadrangle, Platte County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-619, scale 1:24,000.

23. **McGrew, L.W.**, 1967, Geologic map of the Casebier Hill Quadrangle, Goshen County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-621, scale 1:24,000.

24. **McGrew, L.W.**, 1967, Geologic map of the Wheatland Quadrangle, Platte County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-627, scale 1:24,000.

25. **McGrew, L.W.**, 1967, Geologic map of the Wheatland NE Quadrangle, Platte County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-628, scale 1:24,000.

26. **Morris, D.A.**, and Babcock, H.M., 1960 [1961], Geology and ground-water resources of Platte County, Wyoming, *with a section on* Chemical quality of the water *by* R.H. Langford: U.S. Geological Survey Water Supply Paper 1490, 195 p., plate 1, scale 1:125,000.

27. **Mort, F.P.**, 1939, The geology of an area between LaBonte and LaPrele Creeks, Converse County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming 16 p., plate 1, scale 1:24,000.

28. **Pennington, J.J.**, 1947, Stratigraphy and structure of the Horse Draw area, Albany and Platte Counties, Wyoming: M.A. thesis, University of Missouri, Columbia, Missouri, 85 p., plate 2, scale 1:42,240.

29. **Rapp, J.R.**, Visher, F.N., and Littleton, R.T., 1957, Geology and ground-water resources of Goshen County, Wyoming, *with a section on* Chemical quality of the ground water *by* W.H. Dunrum: U.S. Geological Survey Water Supply Paper 1377, 145 p., plate 1, scale 1:96,000.

30. **Segerstrom**, K., and Weisner, R.C., 1977, Mineral resources of the Laramie Peak study area, Albany and Converse Counties, Wyoming, *with a section on* Aeromagnetic interpretation *by* M.D. Kleinkopf: U.S. Geological Survey Bulletin 1397-B, 35 p., plate 1, scale 1:48,000.

31. **Sharp, W.N.**, and Gibbons, A.B., 1964, Geology and uranium deposits of the southern part of the Powder River Basin, Wyoming: U.S. Geological Survey Bulletin 1147-D, 60 p., plate 1, scale 1:62,500.

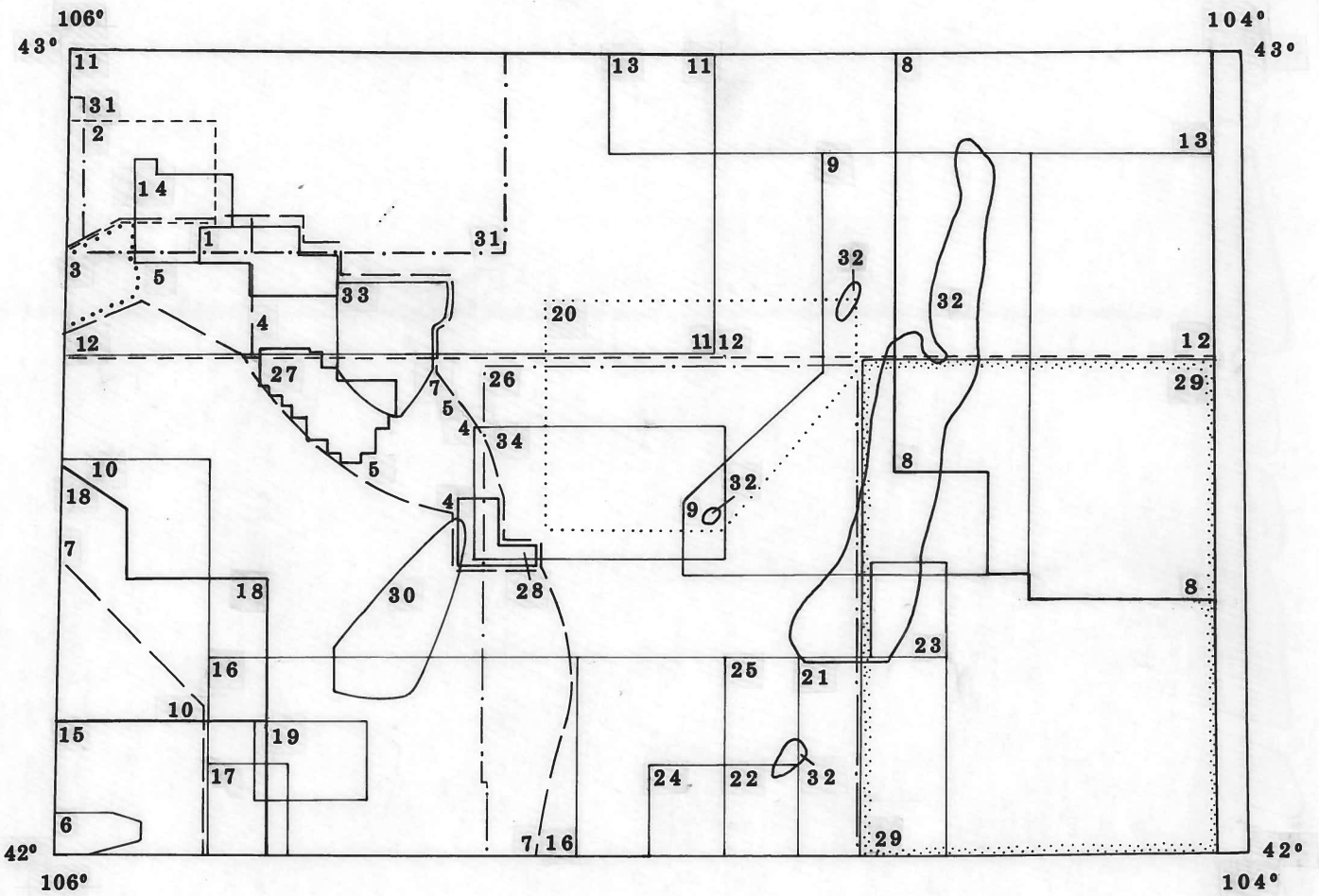
32. **Snyder, G.L.**, 1980, Map of Precambrian and adjacent Phanerozoic rocks of the Hartville uplift, Goshen, Niobrara, and Platte Counties, Wyoming:

U.S. Geological Survey Open File Report 80-779, 12 p., map scale 1:48,000 (Precambrian only).

33. **Spelman, A.R.**, 1959, Geology of the area between Bed Tick Creek and the West Fork of LaBonte Creek, Converse County, Wyoming: M.S. thesis, University of Wyoming, Laramie, Wyoming, 81 p., plate 2, scale 1:24,000.

34. **Welder, G.E.**, and Weeks, E.P., 1965, Hydrologic conditions near Glendo, Platte County, Wyoming: U.S. Geological Survey Water Supply Paper 1791, 82 p., plate 1, scale 1:48,000.

*as shown on Love and others, 1980.



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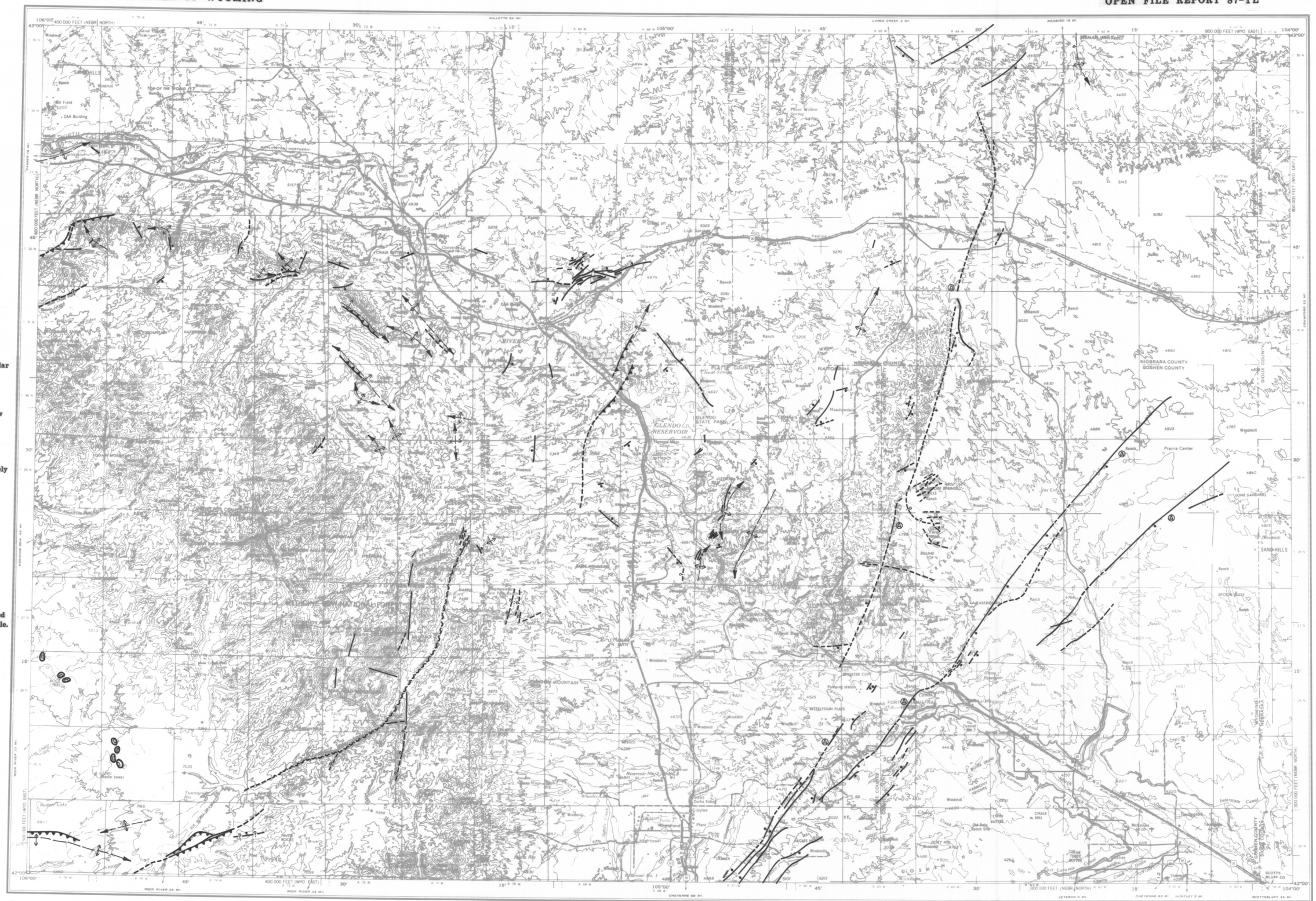

EXPLANATION

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.

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

Possible Active Fault- as identified by Case (1986).

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 Kilometres

5 0 5 10 15 Nautical Miles

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

BASE MAP FROM THE U.S. GEOLOGICAL SURVEY, 1975.

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

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