THE GEOLOGICAL SURVEY OF WYOMING

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OPEN FILE REPORT 87-1G

PRELIMINARY MAP OF KNOWN SURFICIAL STRUCTURAL FEATURES FOR THE ARMINTO 1° $\mathbf x$ 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 Arminto $1^{\circ}x \ 2^{\circ}$ 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.

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 Arminto 1° x 2° Quadrangle, northern Wyoming: U.S. Geological Survey Open File Report 78-456, scale 1:250,000.

Specific

- Bown, T.M., 1977, Geology and mammalian paleontology of the Sand Creek facies, lower Willwood Formation (early Eocene), Washakie County, Wyoming: Ph.D. dissertation, University of Wyoming, Laramie, Wyoming, plate 1, scale 1:24,000.
- Buffett, R.N., 1958, Geology of the Little Canyon Creek area, Washakie County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 11, scale 1:20,000.
- Crist, M.A., and Lowry, M.E., 1972, Ground-water resources of Natrona County, Wyoming: U.S. Geological Survey Water-Supply Paper 1897, 92 p., plate 2, scale 1:125,000.
- 4. DeBruin, R.H., and Greer, P.L., 1985, Geological Survey of Wyoming unpublished maps of the Fraker Mountain and Barnum Quadrangles, scale 1:24,000.
- 5. 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.
- 6. Dudley, J.L., 1984, Laramide folding and post-Laramide faulting in the Little Canyon Creek area, southeastern Bighorn Basin, Washakie County, Wyoming: M.S. thesis, University of Wyoming, Laramie, Wyoming, Figure 12, scale 1:24,000.
- 7. Gillum, J.P., 1956, Stratigraphy and structure of the Alkali Creek-Willow Creek area, Natrona County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 1, scale 1:31,680.

- 8. Gubbels, T.L., 1986, University of Wyoming Department of Geology and Geophysics, thesis mapping in progress, scale 1:250,000.
- 9. Hall, J.M., 1963, Geology of the northwestern part of the Casper Arch, Wyoming: M.S. thesis, University of Kentucky, Lexington, Kentucky, plate 1, scale 1:20,000.
- 10. Hares, C.J., and others, 1946, Geologic map of the southeastern part of the Wind River Basin and adjacent areas in central Wyoming: U.S. Geological Survey Oil and Gas Investigations Preliminary Map OM-51, scale 1:126,720.
- 11. Horn, G.H., 1955, Geologic and structure map of the Sussex and Meadow Creek oil fields and vicinity, Johnson and Natrona Counties, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-164, scale 1:31,680.
- 12. Horn, G.H., 1959, Geologic and structure map of Teapot Dome and vicinity, Natrona County, Wyoming: U.S. Geological Survey Open File Report 59-57, scale 1:24,000.
- Horn, G.H., Geology of the East Thermopolis area, Hot Springs and Washakie Counties, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-213, scale 1:48,000.
- 14. Horn, G.H., and Richardson, E.E., 1959, Areal geology of the West Sussex oil field, Johnson County, Wyoming: U.S. Geological Survey Open File Report 59-64, scale 1:24,000.
- Hose, R.K., 1955, Geology of the Crazy Woman Creek area, Johnson County, Wyoming: U.S. Geological Survey Bulletin 1027-B, plate 6, scale 1:48,000.
- 16. 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.
- 17. Keefer, W.R., 1970, Structural geology of the Wind River Basin, Wyoming: U.S. Geological Survey Professional Paper 495-D, plate 1, scale 1:250,000.
- Kohout, F.A., 1957, Geology and ground water resources of the Kaycee irrigation project, Johnson County, Wyoming: U.S. Geological Survey Water-Supply Paper 1360-E, plate 22, scale 1:31,680.
- 19. Morgan, J.K., 1951, Geology of the Otter Creek area, Washakie County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 1, scale 1:20,000.
- 20. Richardson, A.L., 1950, Geology of the Mayoworth region, Johnson County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate 2, scale 1:24,000.
- 21. Richardson, E.E., 1957, Geologic and structure contour map of the Tisdale anticline and vicinity, Johnson and Natrona Counties, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-194, scale 1:31,680.

- 22. Richardson, E.E., 1961, Geologic and structure map of the North Fork oil field, Kaycee dome, and vicinity, Johnson County, Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-206, scale 1:24,000.
- 23. 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.
- 24. Thaden, R.E., 1979, Geologic map of the Lysite Quadrangle, showing chromolithofacies and coal beds in the Wind River Formation, Fremont County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1526, scale 1:24,000.
- 25. Thaden, R.E., 1980, Geologic map of the DePass Quadrangle, Fremont and Hot Springs Counties, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1526, scale 1:24,000.
- 26. Thaden, R.E., 1980, Geologic map of the Guffy Peak Quadrangle, showing chromolithofacies in the Wind River Formation, Fremont and Hot Springs Counties, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1527, scale 1:24,000.
- 27. Thaden, R.E., 1980, Geologic map of the Gates Butte Quadrangle, showing chromolithofacies and coal beds in the Wind River Formation, Fremont County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1538, scale 1:24,000.
- 28. Thaden, R.E., 1980, Geologic map of the Picard Ranch Quadrangle, showing chromolithofacies and coal beds in the Wind River Formation, Fremont County, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1539, scale 1:24,000.
- 29. Thaden, R.E., 1980, Geologic map of the Arapahoe Butte Quadrangle, Fremont and Hot Springs Counties, Wyoming: U.S. Geological Survey Geologic Quadrangle Map GQ-1558, scale 1:24,000.
- 30. Trotter, J.R., 1954, Geology of the Nowood-Tensleep area, Washakie County, Wyoming: M.A. thesis, University of Wyoming, Laramie, Wyoming, plate IV, scale 1:20,000.
- 31. Tourtelot, H.A., 1953, Geology of the Badwater area, central Wyoming: U.S. Geological Survey Oil and Gas Investigations Map OM-124, sheet 1, scale 1:48,000.
- 32. VerPloeg, A.J., and Greer, P.L., 1987, Preliminary geologic map of the Mayoworth Quadrangle, Johnson County, Wyoming: Geological Survey of Wyoming Open File Report 87-4, plate 1, scale 1:24,000.
- 33. VerPloeg, A.J., and Greer, P.L., 1987, Preliminary geologic map of the Red Fork Powder River Quadrangle, Johnson County, Wyoming: Geological Survey of Wyoming Open File Report 87-5, plate, 1, scale 1:24,000.

34. Woodward, T.C., 1957, Geology of Deadman Butte area, Natrona County, Wyoming: American Association of Petroleum Geologists Bulletin, v. 41, no. 2, p. 212-262; Figure 2, scale approximately 1:100,000.





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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.

CONTOUR INTERVAL 200 FLET TRANSVERSE MERCATOR PROJECTION PRELIMINARY MAP OF KNOWN SURFICIAL STRUCTURAL FEATURES FOR THE ARMINTO 1° x 2°QUADRANGLE

COMPILED BY PHILLIP L. GREER, JON K. KING, AND ALAN J. VER PLOEG

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