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EXPLANATION

SEDIMENTARY ROCKS

Pleistocene and Recent — QUATERNARY

Qal — Alluvium
Shown only where significant structures or rock rock types are concealed.

Oligocene, Miocene, and Pliocene — TERTIARY

Ts — Sedimentary rocks, undifferentiated

Middle Cambrian to Eocene — CAMBRIAN TO TERTIARY

su — Sedimentary rocks, undifferentiated

IGNEOUS AND METAMORPHIC ROCKS

Lower Tertiary — TERTIARY

Til — Intrusive rocks

PRECAMBRIAN

pCg — Granite

pCs — Schist
General trend of foliation shown by curved linear pattern.

Approximate contact

Fault
Dashed where inferred or indefinite; dotted where concealed or recognized from subsurface data. Hachures are on relatively downthrown side; arrows show direction of dip.

The following fold symbols are solid where position of fold is known; dashed where indefinite or inferred; dotted where concealed or recognized from subsurface data; queried where doubtful or probable. The relative wave length of folds is indicated by length of cross arrows. Structure contours indicate approximate configuration only.

Anticline, showing crest line or trace of axial plane and direction of plunge

Asymmetric anticline
Short arrow indicates steeper limb.

Dome

Syncline, showing position of trough or trace of axial plane and direction of plunge

Asymmetric syncline
Short arrow indicates steeper limb.

Anticlinal bend of monocline or terrace

Synclinal bend of monocline or terrace

Broad anticline or arch, showing approximate position of crest line and direction of plunge
Dips associated with these structures are very low; position of crest line is shown only within wide limits.

Broad syncline, showing approximate position of trough and direction of plunge
Dips associated with these structures are very low; position of trough shown only within wide limits.

Joints and small faults

Igneous dike

Border of Missouri Coteau

Intrusive rocks not exposed at surface

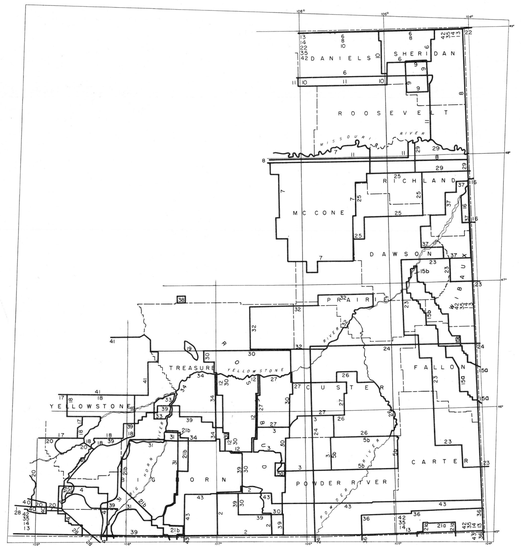
(10) Numbers refer to list of named structures

Uranium deposit, or a locality from which a sample containing 0.01% or more uranium has been obtained or from which visible uranium minerals have been obtained
Box around symbol indicates deposit yielded uranium ore.

Group of uranium deposits or localities

LIST OF STRUCTURES

1. North Pryor (Castle Butte) fault
2. Shivley Hill dome
3. Dryhead fault
4. Dryhead syncline
5. Sykes Spring fault
6. Sage Creek fault zone
7. Crooked Creek fault
8. Gypsum Creek anticline
9. Bighorn Mountains uplift
10. Willow Creek dome
11. Sport Creek dome
12. Black Gulch dome
13. Rotten Grass dome
14. Reed dome
15. Soap Creek dome
16. Grapevine dome
17. Point Creek dome
18. Birdhead dome
19. Boundary dome
20. Mifflin anticline
21. Telegraph Creek anticline
22. Beauvais Creek uplift
23. Woody Creek dome
24. Two Leggin uplift
25. Soap Creek anticline
26. East Pryor Mountain anticline
27. Gypsum Creek syncline
28. Frannie syncline
29. Frannie anticline
30. Elk Basin anticline
31. Dry Creek—Golden anticline
32. Black Butte dome
33. Red dome
34. Bowler fault
35. Frosty Jack fault
36. Bluewater fault
37. Fromberg fault zone
38. Devil's Hole anticline
39. Porcupine Creek anticline
40. Crooked Creek anticline
41. Ashland syncline
42. Bull Mountains syncline
43. Willow Creek syncline
44. Sumatra anticline
45. Sumatra syncline
46. Ragged Point dome
47. Ingomar dome
48. Porcupine dome
49. Alice dome
50. Freedom dome
51. Vananda dome
52. Decker anticline
53. Aberdeen uplift
54. East Sarpy anticline
55. Tongue River syncline
56. West Pryor Mountain anticline
57. Wolf Creek anticline
58. Willow Creek anticline
59. Bull Creek anticline
60. Seven Mile Creek anticline
61. Albion anticline
62. Colony anticline
63. Ekalaka syncline
64. Westmore anticline
65. Plevna anticline
66. Sheep Mountain syncline
67. Cedar Creek (Baker-Glendive) anticline
68. Ollie basin
69. Blood Creek syncline
70. Weldon fault
71. Bowdoin dome
72. Poplar anticline
73. Antwerp anticline
74. Weldon monocline
75. Brockton-Froid fault zone
76. Opheim syncline
77. Bredette nose
78. Wolf Creek nose
79. Oswego nose
80. Wibaux nose
81. Fort Smith anticline
82. Camp Creek monocline
83. East dome (Cat Creek anticline)
84. Miles City arch
85. Medicine Rocks anticline
86. Williston basin
87. Northeast Pryor Mountain anticline
88. Big Pryor Mountain anticline



INDEX MAP OF EASTERN MONTANA, SHOWING SOURCES OF DATA
Compiled by Arloa Shipman
APPROXIMATE SCALE 0 50 100 MILES

SOURCES OF DATA

Index Map Number[1]

1 Andrews, D. A., Pierce, W. G., and Eargle, D. H., 1947, Geologic map of the Big Horn Basin, Wyoming and Montana, showing terrace deposits and physiographic features: U. S. Geol. Survey Oil and Gas Inv. Prelim. Map 71.

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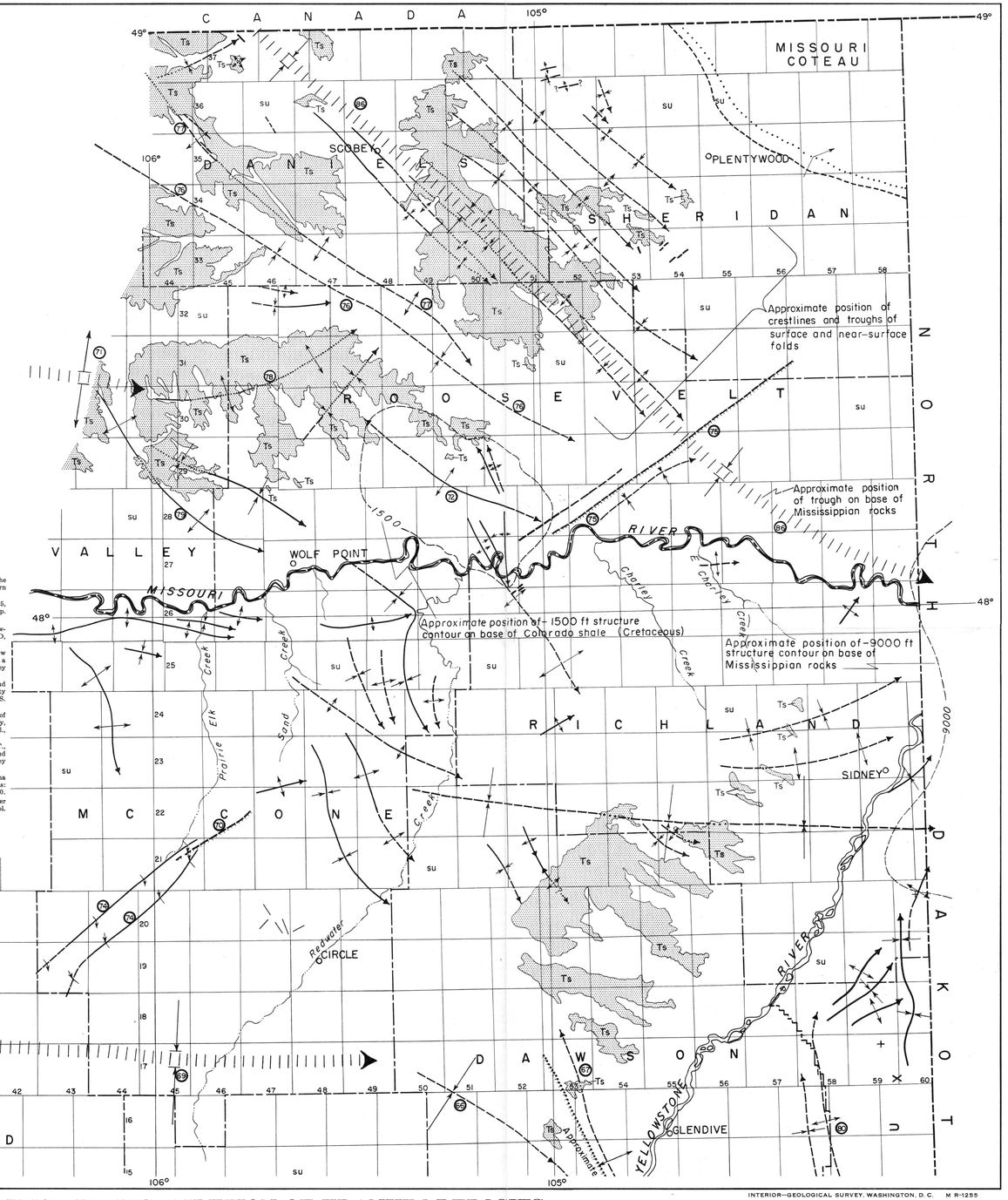

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C. M R-1255

PRELIMINARY TECTONIC MAP OF EASTERN MONTANA, SHOWING THE DISTRIBUTION OF URANIUM DEPOSITS

Compiled by
F. W. Osterwald and B. G. Dean

Scale 1:500 000

10 0 10 20 30 Miles

1958

For sale by U. S. Geological Survey, price 50 cents per set