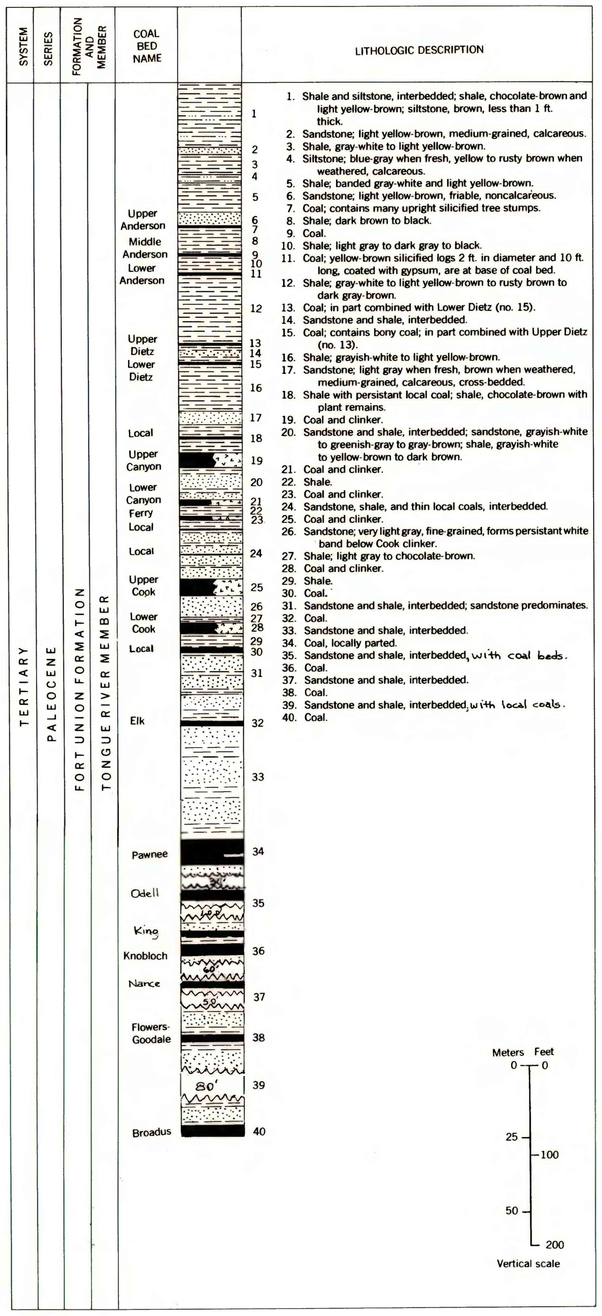
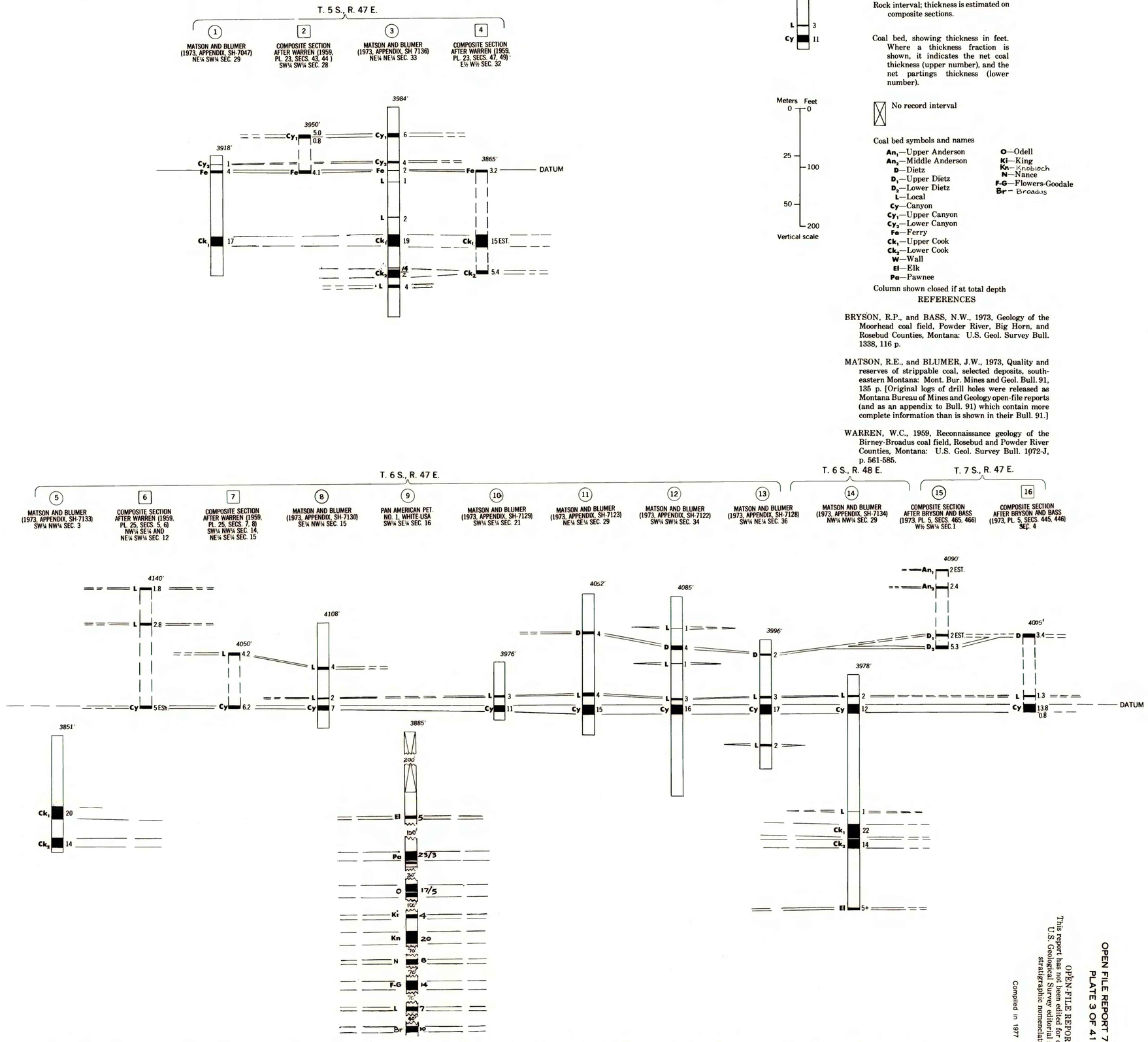
COMPOSITE COLUMNAR SECTION



1. Shale and siltstone, interbedded; shale, chocolate-brown and light yellow-brown; siltstone, brown, less than 1 ft. thick.
2. Sandstone; light yellow-brown, medium-grained, calcareous.
3. Shale, gray-white to light yellow-brown.
4. Siltstone; blue-gray when fresh, yellow to rusty brown when weathered, calcareous.
5. Shale; banded gray-white and light yellow-brown.
6. Sandstone; light yellow-brown, friable, noncalcareous.
7. Coal; contains many upright silicified tree stumps.
8. Shale; dark brown to black.
9. Coal.
10. Shale; light gray to dark gray to black.
11. Coal; yellow-brown silicified logs 2 ft. in diameter and 10 ft. long, coated with gypsum, are at base of coal bed.
12. Shale; gray-white to light yellow-brown to rusty brown to dark gray-brown.
13. Coal; in part combined with Lower Dietz (no. 15).
14. Sandstone and shale, interbedded.
15. Coal; contains bony coal; in part combined with Upper Dietz (no. 13).
16. Shale; grayish-white to light yellow-brown.
17. Sandstone; light gray when fresh, brown when weathered, medium-grained, calcareous, cross-bedded.
18. Shale with persistant local coal; shale, chocolate-brown with plant remains.
19. Coal and clinker.
20. Sandstone and shale, interbedded; sandstone, grayish-white to greenish-gray to gray-brown; shale, grayish-white to yellow-brown to dark brown.
21. Coal and clinker.
22. Shale.
23. Coal and clinker.
24. Sandstone, shale, and thin local coals, interbedded.
25. Coal and clinker.
26. Sandstone; very light gray, fine-grained, forms persistant white band below Cook clinker.
27. Shale; light gray to chocolate-brown.
28. Coal and clinker.
29. Shale.
30. Coal.
31. Sandstone and shale, interbedded; sandstone predominates.
32. Coal.
33. Sandstone and shale, interbedded.
34. Coal, locally parted.
35. Sandstone and shale, interbedded, with coal beds.
36. Coal.
37. Sandstone and shale, interbedded.
38. Coal.
39. Sandstone and shale, interbedded, with local coals.
40. Coal.

CORRELATION OF COAL BEDS IN DRILL HOLES, MEASURED SECTIONS, AND COMPOSITE SECTIONS



EXPLANATION

(10) MATSON AND BLUMER (1973, APPENDIX, SH 7129) SW¼ SE¼ SEC. 21 — Index number (within circle or square); Source of information or company and well name; Location

3976′ — Ground elevation

L 3 — Rock interval; thickness is estimated on composite sections.

Cy 11 — Coal bed, showing thickness in feet. Where a thickness fraction is shown, it indicates the net coal thickness (upper number), and the net partings thickness (lower number).

Meters 0–25, Feet 0–100, 50–200: Vertical scale

No record interval

Coal bed symbols and names

- An_1—Upper Anderson
- An_2—Middle Anderson
- D—Dietz
- D_1—Upper Dietz
- D_2—Lower Dietz
- L—Local
- Cy—Canyon
- Cy_1—Upper Canyon
- Cy_2—Lower Canyon
- Fe—Ferry
- Ck_1—Upper Cook
- Ck_2—Lower Cook
- W—Wall
- El—Elk
- Pa—Pawnee
- O—Odell
- Ki—King
- Kn—Knobloch
- N—Nance
- F-G—Flowers-Goodale
- Br—Broadus

Column shown closed if at total depth

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BRYSON, R.P., and BASS, N.W., 1973, Geology of the Moorhead coal field, Powder River, Big Horn, and Rosebud Counties, Montana: U.S. Geol. Survey Bull. 1338, 116 p.

MATSON, R.E., and BLUMER, J.W., 1973, Quality and reserves of strippable coal, selected deposits, southeastern Montana: Mont. Bur. Mines and Geol. Bull. 91, 135 p. [Original logs of drill holes were released as Montana Bureau of Mines and Geology open-file reports (and as an appendix to Bull. 91) which contain more complete information than is shown in their Bull. 91.]

WARREN, W.C., 1959, Reconnaissance geology of the Birney-Broadus coal field, Rosebud and Powder River Counties, Montana: U.S. Geol. Survey Bull. 1072-J, p. 561-585.

OPEN FILE REPORT 79-096
PLATE 3 OF 41

OPEN-FILE REPORT
This report has not been edited for conformity with U.S. Geological Survey editorial standards or stratigraphic nomenclature.

Compiled in 1977

PLATE 3
COAL DATA SHEET

COAL RESOURCE OCCURRENCE MAP OF THE PHILLIPS BUTTE QUADRANGLE, POWDER RIVER COUNTY, MONTANA

BY
COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

1979