DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
78-998
CROW RESERVE AREA, MONT.

EXPLANATION

QUATERNARY

Qa — ALLUVIUM, SLOPE WASH, AND LOW STREAM TERRACE DEPOSITS--Silt, sand, and gravel on the floors of the major stream valleys

Ql — LANDSLIDE MATERIAL--Slumped masses of sandstone, siltstone, and shale of the Fort Union Formation

TERTIARY

Tfr — TONGUE RIVER MEMBER OF THE FORT UNION FORMATION--Yellowish gray siltstone and sandstone, gray shale and silty shale, brown carbonaceous shale, and coal

TERTIARY AND CRETACEOUS

TK — LEBO SHALE MEMBER OF THE FORT UNION FORMATION AND OLDER ROCKS--Gray silty shale and thin beds of gray sandstone in the Lebo Shale Member of the Fort Union Formation; underlain by yellowish gray evenly bedded sandstone, gray shale, and brown carbonaceous shale in the Tullock Member of the Fort Union Formation; and massively bedded light-gray sandstone and gray to greenish gray mudstone in the Hell Creek Formation

CONTACT--Dashed where approximately located

OUTCROP OF COAL BED--Approximately located. Drawn on the base of the bed. Number and x show locality where the coal bed was measured at the surface. Letters identify the coal bed as follows:

- A --Anderson
- Cy--Canyon
- Co--Cook
- W --Wall
- H --Hope
- C --Corral
- S --Swift
- R --Robinson
- L --Local

CLINKER--Rocks fused and baked by the heat of burning of coal underground. Dotted line outlines area of clinker

FAULT--Dashed where approximately located; dotted where concealed. U, upthrown side; D, downthrown side

ABANDONED COAL MINE OR PROSPECT

NOMENCLATURE AND CORRELATION

The Anderson, Canyon, and Wall coal beds are correlated with beds of the same names as identified by Baker (1929) and by Matson and others (1973) near Kirby, about 3 miles southeast of the Crow Reserve Area. The Cook coal bed is correlated with the Cook bed of the Kirby area as used by Matson and others (1973). The Robinson coal bed is tentatively correlated with the Robinson bed of the Forsyth coal field (Dobbin, 1929), about 15 miles northeast of the Crow Reserve Area. The names Hope, Corral, and Swift are used here for coals in the interval between the Wall and Robinson beds. These coals could not be correlated with named coal beds in nearby mapped areas.

REFERENCES CITED

Baker, A. A., 1929, The northward extension of the Sheridan coal field, Big Horn and Rosebud Counties, Montana: U. S. Geological Survey Bulletin 806-B, p. 15-67.

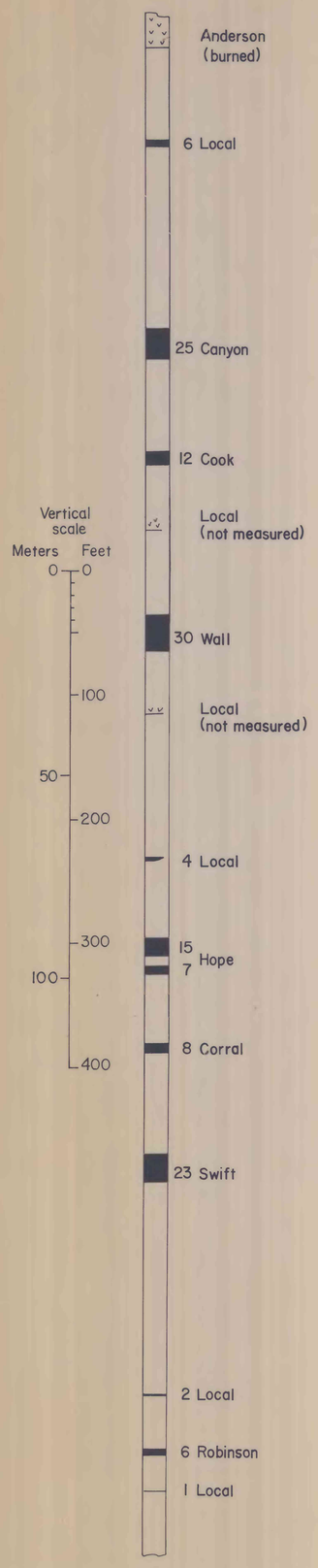
Dobbin, C. E., 1929, The Forsyth coal field, Rosebud, Treasure, and Big Horn Counties, Montana: U. S. Geological Survey Bulletin 812-A, p. 1-55.

Matson, R. E., Blumer, J. W., and Wegelin, L. A., 1973, Quality and reserves of strippable coal, selected deposits, southeastern Montana: Montana Bureau Mines and Geology, Bulletin 91, 135 p.

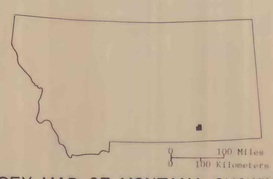
SCALE

0 1/2 1 2 Miles

0 1 2 Kilometers



GENERALIZED SECTION SHOWING STRATIGRAPHIC POSITION AND REPRESENTATIVE THICKNESSES, IN FEET, OF COAL BEDS



INDEX MAP OF MONTANA SHOWING LOCATION OF AREA

Base map from U. S. Geological Survey quadrangle maps, 1967

Geology mapped in 1978

PRELIMINARY GEOLOGIC MAP OF THE CROW RESERVE AREA, BIG HORN COUNTY, MONTANA

By
W.J.Mapel

1978