UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ADVANCE PROOF
SUBJECT TO CORRECTION
SCALE 1:24 000
F

STONY RIDGE QUADRANGLE
COLORADO
7.5 MINUTE SERIES (TOPOGRAPHIC)

Base from U.S. Geological Survey 1963

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1963 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

COLORADO
QUADRANGLE LOCATION

Geologic map compiled 1977 from geology mapped by J.R. Donnell, W.E. Hallgarth, and E.R. Landis, USGS (1952-53), and modified from Donnell (1962) and Collins (1976, pl. 1)

DESCRIPTION OF MAP UNITS

Qa — ALLUVIUM (HOLOCENE)--Gravel, sand, and silt in and adjacent to streams

QTa — HIGH-LEVEL ALLUVIUM (PLEISTOCENE AND/OR PLIOCENE)--Gravels preserved on ridge tops, characterized by abundant basalt boulders up to 4 feet in diameter and in places has been mapped previously as basalt of Tertiary age

Twc — WASATCH FORMATION, OHIO CREEK CONGLOMERATE (EOCENE AND PALEOCENE)--Variegated claystone, siltstone, sandstone and conglomerate. Ohio Creek Conglomerate, a sandstone about 90 feet thick and containing distinctive quartz, quartzite, and chert pebbles, forms base of map unit

Kwu, Kwp, Kwb, A — WILLIAMS FORK FORMATION (UPPER CRETACEOUS)--Sandstone, locally conglomeratic; siltstone, mudstone, shale, and coal. Upper part of Williams Fork Formation (Kwu) about 2,300 feet thick; contact with underlying Paonia Shale Member (Kwp) gradational. As used here, Paonia Shale Member defines a sequence of coal-bearing rocks about 600 feet thick and contains the "upper coal zone" of this report; Sunshine coal bed forms base of (Kwp) map unit. Underlying Bowie Shale Member (Kwb), 850-1,000 feet thick, characterized by upper sandstone unit (U) at top of member, and middle sandstone unit (M). Lowermost 150 feet of Bowie Shale Member contains "lower coal zone" of this report; coal bed A (A) forms base of map unit

Kir, Ki — ILES FORMATION (UPPER CRETACEOUS)--Sandstone, siltstone, mudstone, and shale; intertongues with Mancos Shale. Rollins Sandstone Member (Kir), at top of Iles Formation, is directly overlain by lower coal zone.

Km, Kmb — MANCOS SHALE (UPPER CRETACEOUS)--Chiefly dark-gray marine shale; minor amounts of limestone in lower part of Formation. Basal unit (Kmb) consists of black shale thought to be equivalent to the Benton Shale of eastern Colorado

CONTACT--Dashed where indefinite

FAULT--U, upthrown side; D, downthrown side. Arrows show direction of relative movement

33 STRIKE AND DIP OF BED

6500 STRUCTURE CONTOUR--Drawn on base of coal bed A. Contour interval 500 feet. Datum is mean sea level

DRILL HOLE

STONY RIDGE, COLO.
N3915—W10715/7.5
1963
AMS 4562 IV SE—SERIES V877

MARION SE.
COLORADO
FS A-12

Figure 4.-- GEOLOGIC MAP OF THE THOMPSON CREEK COAL MINING AREA, PITKIN COUNTY, COLORADO