70-115 OPEN FILE 1970

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

Bear Canyon Station
SUNNYSIDE NO. 1 MINE
Pasture Canyon Recording Station
SUNNYSIDE NO. 3 MINE
Approximate position of base of Sunnyside coal seam
Sunnyside
Dragerton
MAIN HAULAGE SLOPE
SUNNYSIDE NO. 2 MINE
Columbia
SUNNYSIDE FAULT ZONE
Patmos Head
COLUMBIA MINE
Horse Canyon Station
Sheep Canyon Station
MAIN SLOPE
GENEVA MINE
Flat Station
Book Cliffs Coal Co.
THE COVE
CARBON CO.
EMERY CO.

SUBSURFACE FAULT

EXPLANATION

SEISMIC NETWORK

Basic seismometer station

Supplemental seismometer station

Central recording station and tiltmeter

TREMOR HYPOCENTERS

Richter magnitude

First Month / Second Month / Third Month

Pie segment indicates range of focal depth, above or below sea level, in thousands of feet. Ring segment indicates first or second half of month. Example shown: Tremor of Richter magnitude between 2.1 and 3.0 with focus between 0 and 2,000 feet above sea level, occurring in the last half of the first month.

MINES

Haulageways and bleeders

Mine portal

(1) Mined-out areas
(2) Areas mined this quarter

GEOLOGY

At surface — In mine workings

Faults
U, upthrown side; D, downthrown side

Base from U.S. Geological Survey Sunnyside (1915 reprinted 1948), Woodside (1948), Range Creek (1954), and Flat Canyon (1954) quadrangles, 1:62,500
United States Steel Corp. reference grid (in thousands of feet)
Haulageways and breakers of the mine workings shown compiled from Kaiser Steel Corp., United States Steel Corp., and Book Cliffs Coal Co. mine maps

0 2000 4000 6000 8000 10,000 FEET
SCALE 1:24,000

APPROXIMATE MEAN DECLINATION, 1969

U.S. Geological Survey
OPEN FILE REPORT
This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards.

Mines compiled from maps of the Sunnyside No. 1 mine area (Waterwald, 1962) Columbia area (Waterwald, Sunnyside and Mahogany, 1969) Sunnyside mine area

FIGURE 6.--MAP OF THE SUNNYSIDE MINING DISTRICT, UTAH, SHOWING TOPOGRAPHY, FAULTS, COAL OUTCROPS, MAJOR MINE WORKINGS, AND TREMOR HYPOCENTERS FOR THE PERIOD OCTOBER THROUGH DECEMBER, 1968