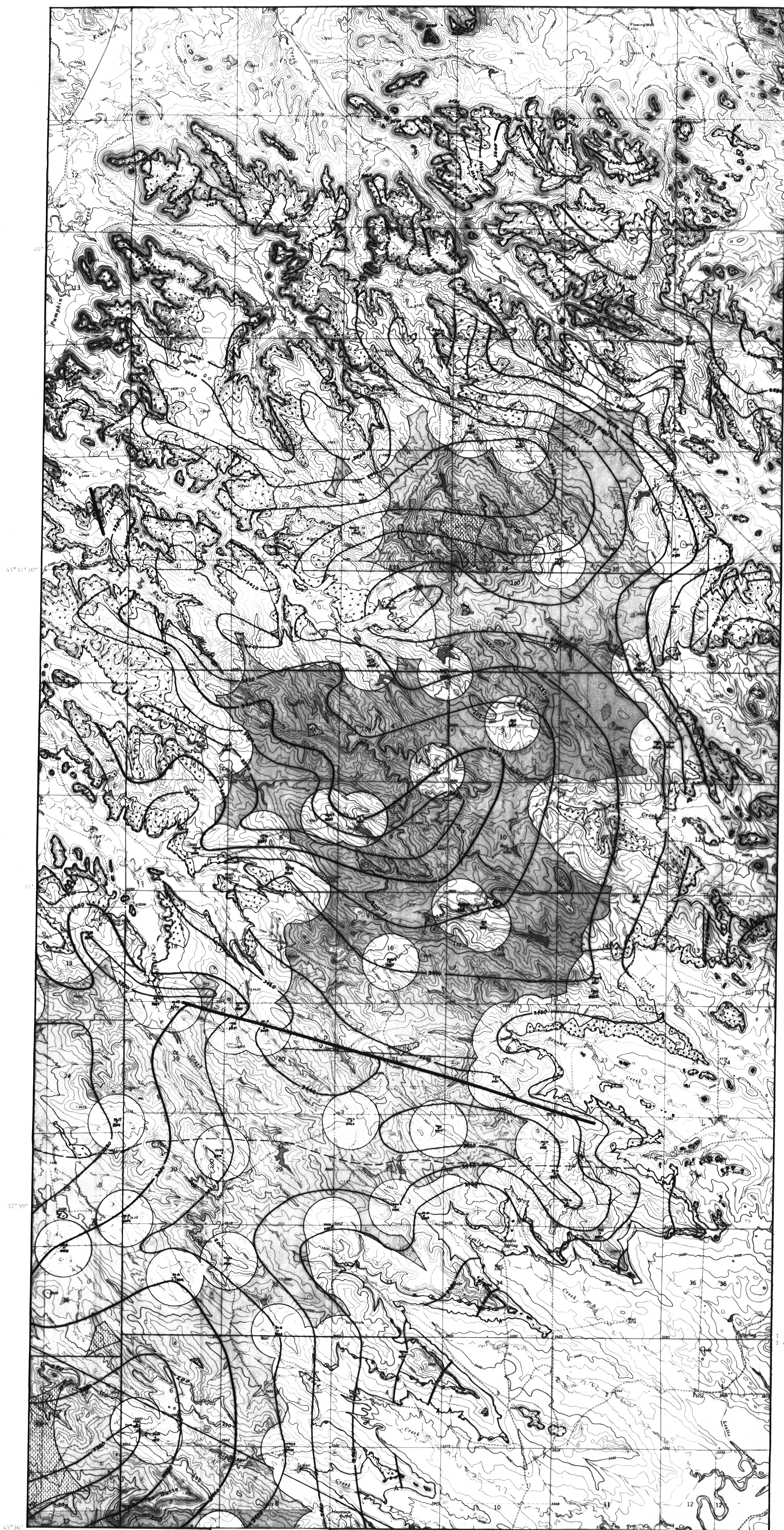


R 49 E R 50 E

T 3 S  
T 4 S



BASE FROM U.S. GEOLOGICAL SURVEY BOX ELDER CREEK, LESLIE CREEK, COALWOOD, AND OLIVE QUADRANGLES  
CONTOUR INTERVAL 20 FEET  
Geology mapped 1976, 77  
SCALE 1:25,000  
0 1.0 MILE  
0 5000 FEET  
0 1.0 KILOMETER

STRUCTURE MAP OF THE TOP OF THE SAWYER COAL BED IN THE PUMPKIN CREEK EMRIA STUDY SITE  
SHOWING THE CATEGORIES OF COAL RESOURCES LISTED ON TABLES 1 AND 2,  
BOX ELDER CREEK, LESLIE CREEK, COALWOOD, AND OLIVE QUADRANGLES,  
POWDER RIVER COUNTY, MONTANA

BY  
MARGUERITE GLENN  
1978

EXPLANATION

- S— OUTCROP OF SAWYER COAL BED OF THE TONGUE RIVER MEMBER, FORT UNION FORMATION (PALEOCENE)--Drawn on base of coal. Dashed where inferred; dotted where concealed by alluvial deposits
- A— OUTCROP OF COAL BED A OF THE TONGUE RIVER MEMBER, FORT UNION FORMATION (PALEOCENE) (LOWER SPLIT OF SAWYER)--Drawn on base of coal
- ▲ AREA OF BURNED COAL BED--Solid line indicates approximate limit of burned coal. Heat from the burning coal bed has baked or fused the overlying rocks into a predominantly reddish resistant rock called clinker
- 1420— STRUCTURE CONTOUR--Drawn on top of Sawyer coal bed or projected top of Sawyer. Number is altitude above mean sea level in feet. (Contour interval 20 feet (6.1 meters))
- U— FAULT--U, Uphrown side; D, Downthrown side
- APPROXIMATE NORTH EDGE OF PARTING SEPARATING THE COAL BED A FROM THE SAWYER
- RESOURCE AREA CONTACT
- 200— RESOURCE AREA CONTACT WHERE OVERBURDEN EXCEEDS 200 FEET--For some very small areas with more than 200 feet of overburden resources were not separated from those of the adjoining areas with less than 200 feet of overburden
- AREA OF MEASURED RESOURCES--Area that is within 0.25 mile (0.40 km) of a point of observation on the coal bed
- AREA OF INDICATED RESOURCES--Area that is between 0.25 mile (0.40 km) and 0.75 mile (1.21 km) of a point of observation on the coal bed
- ▨ AREA OF INFERRED RESOURCES--Area that is more than 0.75 mile (1.21 km) from a point of observation on the coal bed
- PKW1 ● DRILL HOLE--Number shown above  
Altitude of surface shown in feet above mean sea level  
Holes drilled for the EMRIA study are shown as follows:  
PKW1-PKW11, Holes drilled by U.S. Geological Survey  
76101, 77102-77110, Holes drilled by the U.S. Bureau of Reclamation  
77118-77137, Holes drilled by Montana Bureau of Mines and Geology and U.S. Geological Survey  
Previously drilled holes from which data (Matson, Blumer, and Wegelin, 1973, pls. 15, 17; geophysical and drillers' logs) were used are shown as follows:  
US-A-1254, US-6, and US-7, Holes drilled by U.S. Geological Survey  
BR3, BR9, BR10, PC1-PC17, PC26, PC27, PC32, and PC33, Holes drilled by Northern Pacific Railroad and Montana Bureau of Mines and Geology  
Greer-E1 Paso 100-5 NPKR, Wolf 13, 15, 16, and 14-13 NPKR, Abandoned holes drilled in exploration for oil and gas
- ✖ ABANDONED COAL MINE

REFERENCE

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