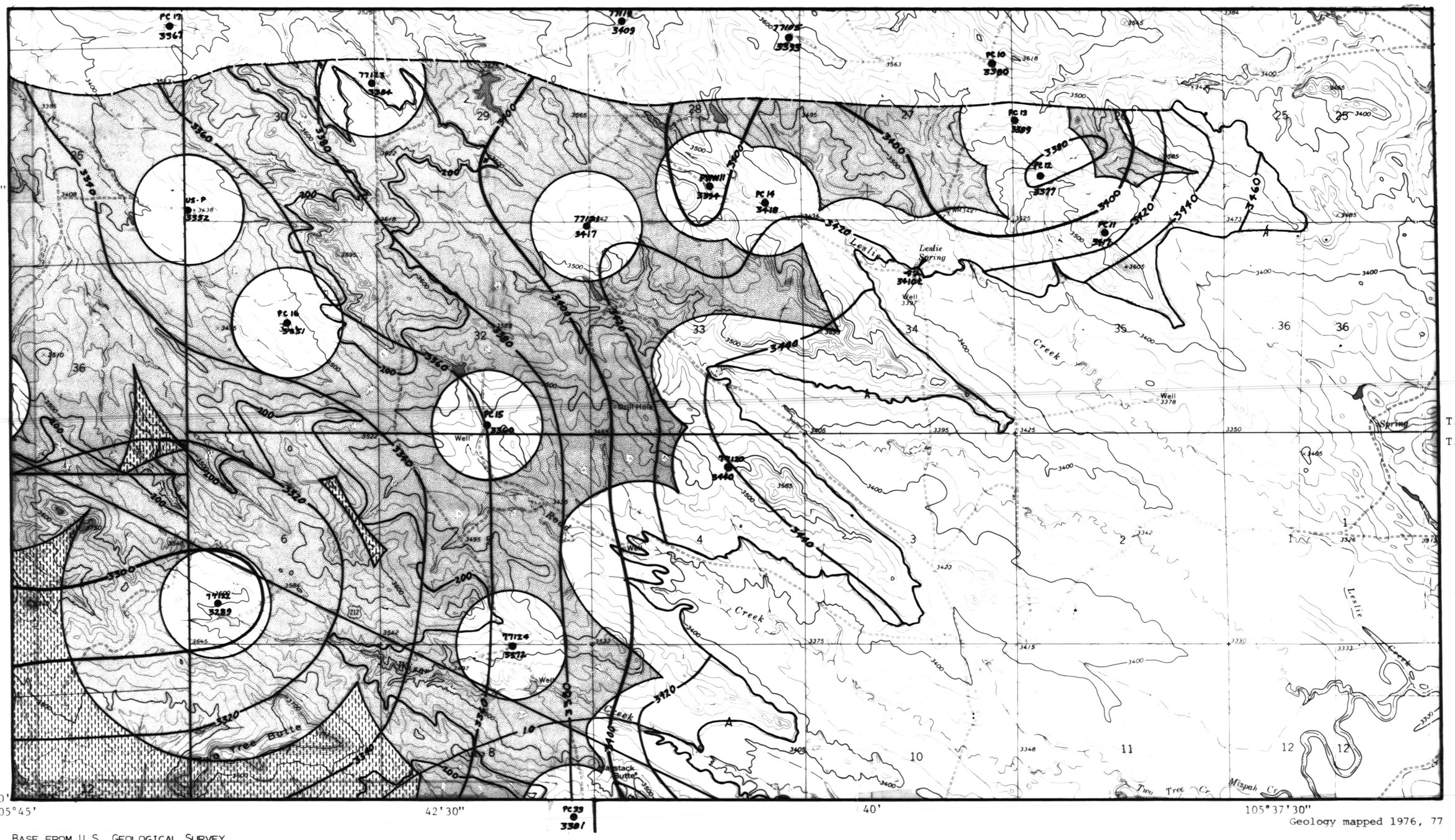
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OF-78-897

OPEN-FILE REPORT

SHEET 4 OF 8
SOUTHEASTERN MONTANA



BASE FROM U.S. GEOLOGICAL SURVEY
LESLIE CREEK AND OLIVE QUADRANGLES

CONTOUR INTERVAL 20 FEET

Geology mapped 1976, 77

SCALE 1:24,000

0 1.0 MILE

0 5000 FEET

0 1.0 KILOMETER

MONTANA

STRUCTURE MAP ON TOP OF COAL BED A, PUMPKIN CREEK EMRIA STUDY SITE, POWDER RIVER COUNTY, MONTANA, SHOWING THE CATEGORIES OF COAL RESOURCES LISTED ON TABLES 1 AND 2,

LESLIE CREEK AND OLIVE QUADRANGLES,
POWDER RIVER COUNTY, MONTANA

BY
MARGUERITE GLENN

1978

EXPLANATION

—A 4+ 3401±— OUTCROP OF COAL BED A OF THE TONGUE RIVER MEMBER, FORT UNION FORMATION (PALEOCENE) (LOWER SPLIT OF SAWYER)--Drawn on base of coal. Triangle indicates a locality at which coal was measured. Thickness of coal is shown in feet. Approximate altitude of top of bed is shown in feet above mean sea level

—3320— STRUCTURE CONTOUR--Drawn on top of coal bed A. Number is altitude above mean sea level. Contour interval 20 feet (6.1 meters)

APPROXIMATE NORTH EDGE OF COAL BED A--South of this line the parting separating coal bed A from the Sawyer is more than 2 feet (0.61 meters) thick

RESOURCE AREA CONTACT

—200— RESOURCE AREA CONTACT WHERE OVERBURDEN EXCEEDS 200 FEET (61 METERS)--For some very small areas with more than 200 feet (61 meters) of overburden resources were not separated from those of the adjoining areas with less than 200 feet (61 meters) 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 point of observation on the coal bed

AREA OF INFERRED RESOURCES--Area that is more than 0.75 mile (1.41 km) from a point of observation on the coal bed

PWW11
3350

DRILL HOLE—Number shown above
Altitude of top of coal bed A shown in feet above mean sea level
Holes drilled for the EMRIA study are shown as follows:
PWW11, Hole drilled by U.S. Geological Survey
77105, Hole drilled by the U.S. Bureau of Reclamation
77119—77124, 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-P, Hole drilled by U.S. Geological Survey
PC10-PC17, and PC33, Holes drilled by Northern Pacific Railroad and Montana Bureau of Mines and Geology

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.

LOCALITY AND STRUCTURE CONTOUR MAPS OF THE PUMPKIN CREEK EMRIA STUDY SITE, POWDER RIVER COUNTY, MONTANA

By
Marguerite Glenn

1978