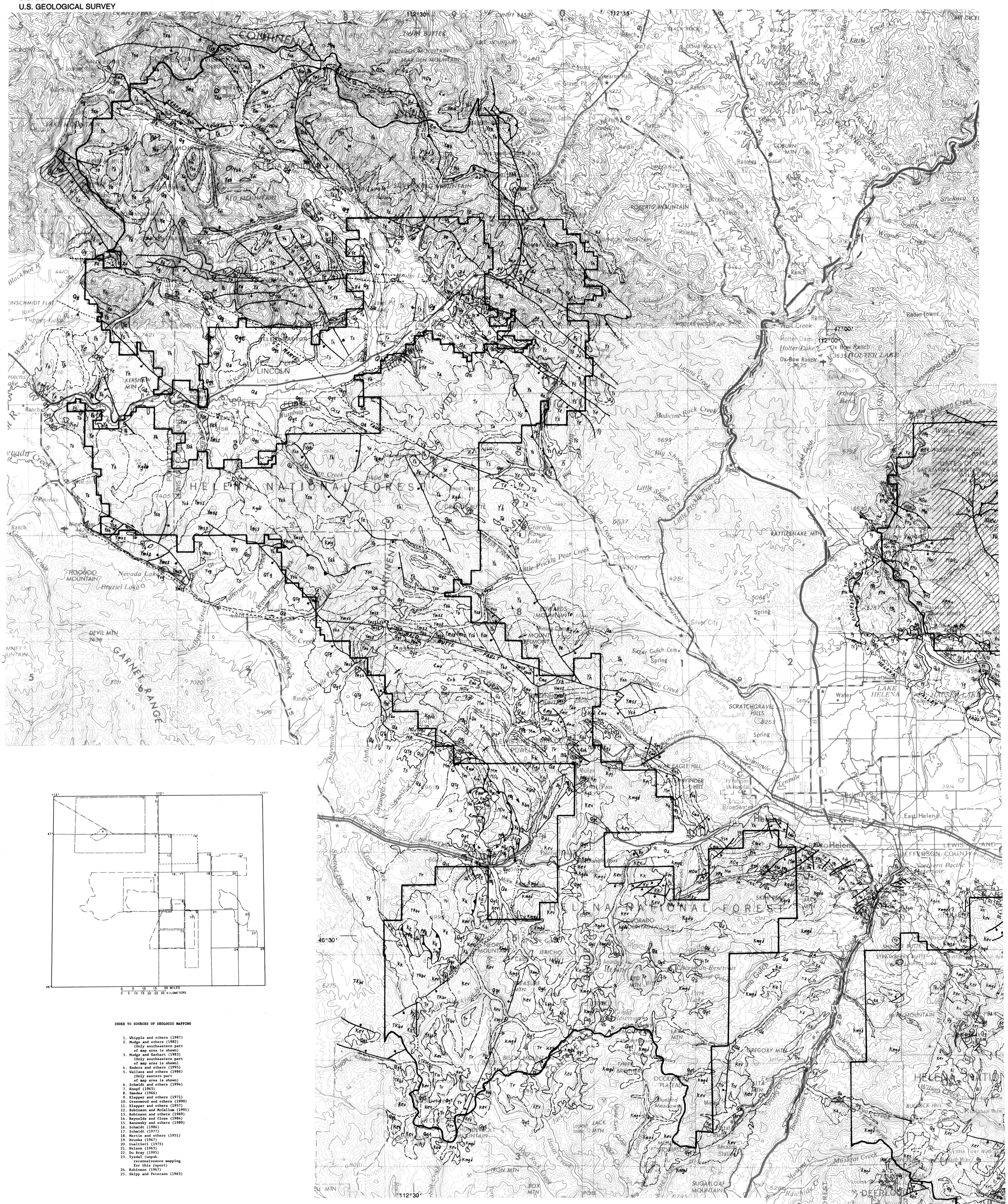
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY







INDEX TO SOURCES OF GEOLOGIC MAPPING

1. Whipple and others (1987)
2. Mudge and others (1982)
   (Only southeastern part of map area is shown)
3. Mudge and Earhart (1983)
   (Only southeastern part of map area is shown)
4. Enders and others (1995)
5. Wallace and others (1986)
   (Only eastern part of map area is shown)
6. Schmidt and others (1994)
7. Knopf (1963)
8. Smedes (1966)
9. Klepper and others (1971)
10. Greenwood and others (1990)
11. Klepper and others (1957)
12. Robinson and McCallum (1991)
13. Robinson and others (1969)
14. Reynolds and Close (1984)
15. Banowsky and others (1989)
16. Schmidt (1986)
17. Schmidt (1977)
18. Mertie and others (1951)
19. Hruska (1967)
20. Gualtieri (1975)
21. Nelson (1963)
22. Du Bray (1995)
23. Tysdal (unpub. reconnaissance mapping for this report)
24. Robinson (1967)
25. Skipp and Peterson (1965)

MAP A

# GEOLOGIC MAP OF HELENA NATIONAL FOREST, MONTANA

## COMPILED BY R. G. TYSDAL

1996

SCALE 1: 126 720

5 0 5 MILES

5 0 5 10 KILOMETERS

CONTOUR INTERVAL 200 FEET
with supplementary intervals at 100 feet

Base from U.S. Geological Survey 1:250,000
Butte 1958, revised 1977
Choteau 1955, revised 1978
White Sulphur Springs 1958, revised 1972