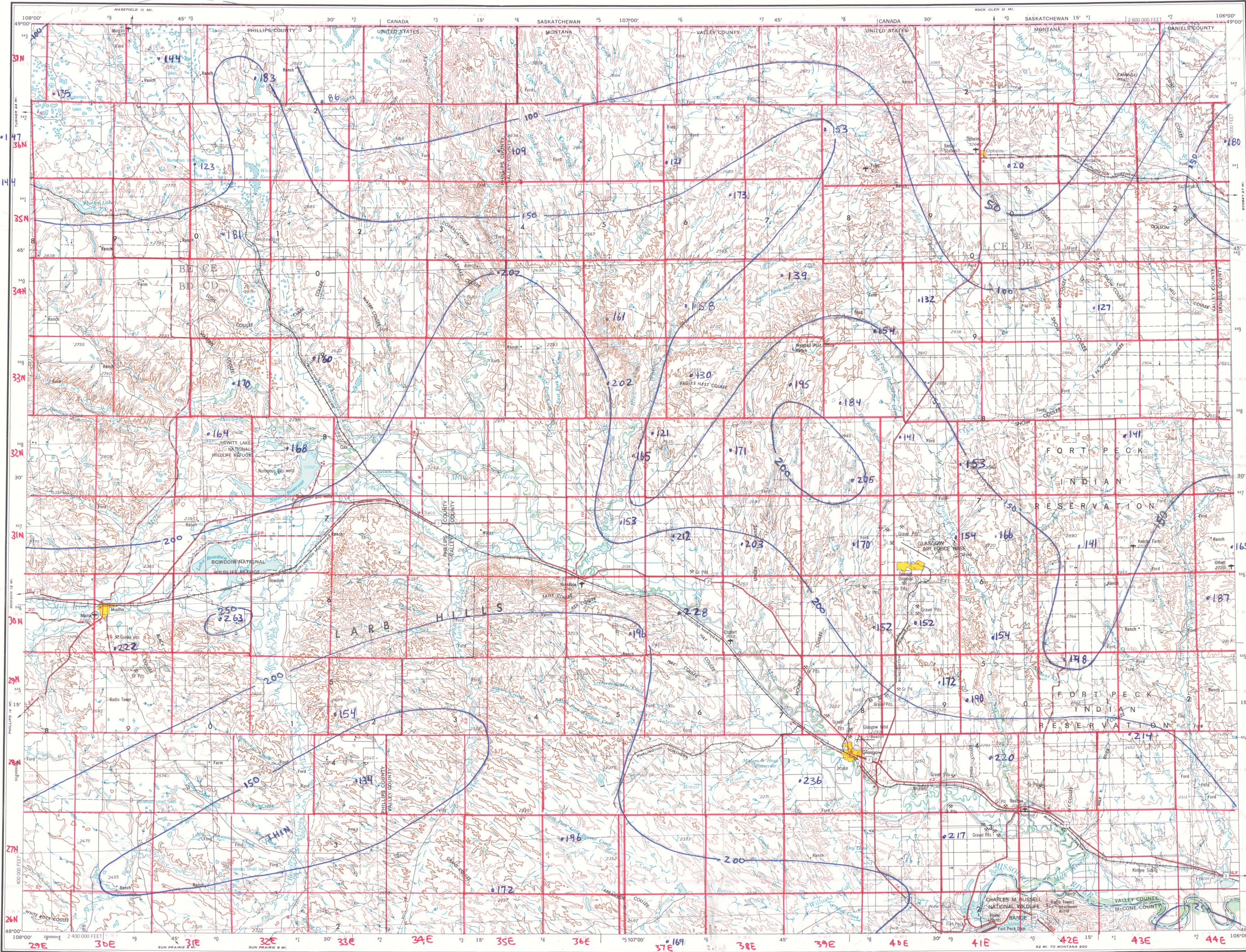


WESTERN UNITED STATES 1:250,000 Kootenai Formation - Thickness

GLASGOW\*

NM 13-10



Prepared by the Defense Mapping Agency Topographic Center, Washington, D. C. Compiled in 1955 by photogrammetric methods from aerial photographs taken 1951-1952. Photographs field annotated 1954. Revised by the U. S. Geological Survey from aerial photographs taken 1973 and 1975. Map edited in 1977.  
100,000-foot grid based on Montana coordinate system, north zone  
Location of geodetic control established by government agencies is shown on corresponding 1:250,000-scale Geodetic Control Diagram  
**Data points from:**  
Feltis, R.D., Lewis, B.D., Frasure, R.L., Rioux, R.P. Jauhola, C.A. and Hotchkiss, W.R., 1981, Selected Geologic Data from the Northern Great Plains area of Montana: U.S. Geological Survey Water-Resources Investigations Open-File report 81-415, 63 p.,  
Contoured by R.N. Bergantino, 1982

**LEGEND**  
Figures in red denote approximate distances in miles between stars  
**POPULATED PLACES**  
Over 500,000  
100,000 to 500,000  
25,000 to 100,000  
5,000 to 25,000  
1,000 to 5,000  
Less than 1,000  
**ROADS**  
Primary, all-weather, hard surface  
Secondary, all-weather, hard surface  
Light-duty, all-weather, hard or improved surface  
Fair or dry weather, unimproved surface  
Trail  
Interchange  
Route markers: Interstate, U.S., State  
**RAILROADS**  
Standard gauge  
Narrow gauge  
Single track Double or Multiple  
International  
State; Province  
County  
Park or reservation  
**BOUNDARIES**  
Landplane airport  
Landing area  
Seaplane airport  
Dry lake  
Woods-brushwood  
**Landmark: School; Church; Other**  
Spot elevation in feet  
Marsh or swamp  
Intermittent or dry stream  
Power line

Scale 1:250,000  
0 5 10 15 20 25 30 Statute Miles  
0 5 10 15 20 25 30 Kilometers  
0 5 10 15 20 25 30 Nautical Miles  
**CONTOUR INTERVAL 100 FEET**  
**TRANSVERSE MERCATOR PROJECTION**  
BLACK NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 13  
1977 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 16°11' (200 MILES) EASTERLY FOR THE CENTER OF THE WEST EDGE TO 15°12' (20 MILES) EASTERLY FOR THE CENTER OF THE EAST EDGE  
**FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092**

**LOCATION DIAGRAM**  
SASKACHEWAN CANADA  
ALBERTA  
MONTANA  
NEBRASKA  
DAKOTA  
SOUTH DAKOTA  
WYOMING  
UTAH  
ARIZONA  
NEW MEXICO  
TEXAS  
LOUISIANA  
MISSISSIPPI  
ALABAMA  
GEORGIA  
FLORIDA  
LOUISIANA  
MISSISSIPPI  
ALABAMA  
GEORGIA  
FLORIDA

**SECTIONIZED TOWNSHIP**  
6 5 4 3 2 1  
7 8 9 10 11 12  
18 17 16 15 14 13  
19 20 21 22 23 24  
30 29 28 27 26 25  
31 32 33 34 35 36  
**TOWNSHIP OR RANGE LINE**  
**LAND GRANT BOUNDARY**

**GRID ZONE DESIGNATION:**  
13U  
100,000 M. SQUARE IDENTIFICATION  
BE CE DE  
BD CD DD  
**TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 100 METERS**  
SAMPLE POINT - INCHES  
1. Read letters identifying 100,000 meter square in which the point lies:  
2. Locate the VERTICAL grid line to LEFT of point and read LARGE figure labeling the line either in the top or bottom margin, or on the line itself:  
3. Estimate tenths from grid line to point:  
4. Locate the HORIZONTAL grid line BELOW point and read LARGE figure labeling the line either in the left or right margin, or on the line itself:  
5. Estimate tenths from grid line to point:  
**SAMPLE REFERENCE:**  
If reporting beyond 10" in any direction, prefix Grid Zone Designation, etc.  
GLASGOW, MONTANA  
225 1954  
REVISED 1977

Thickness of the Kootenai Formation, feet