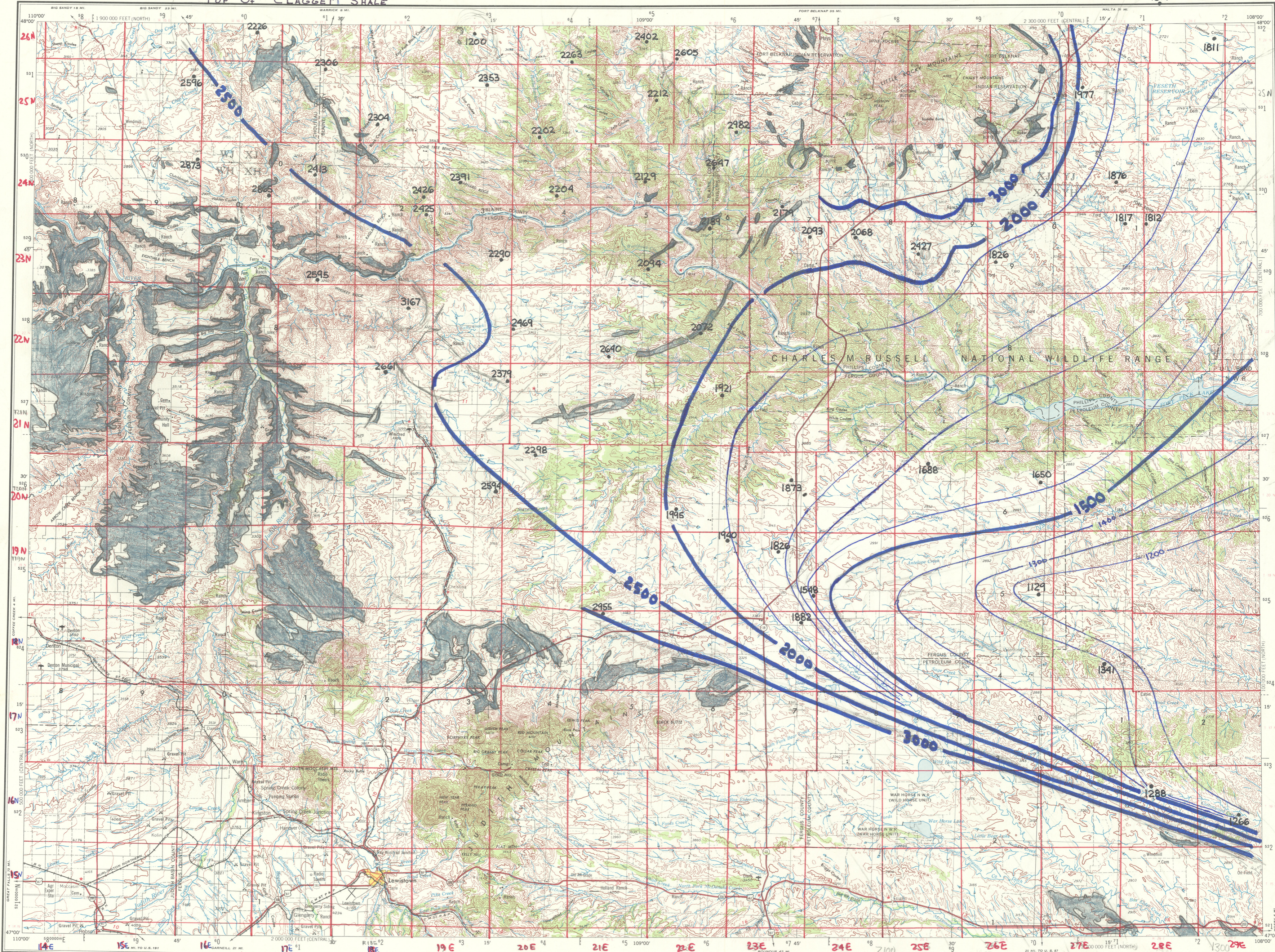


WESTERN UNITED STATES 1:250,000

# LEWISTOWN

NL 12-3

## TOP OF CLAGGETT SHALE



Prepared by the Defense Mapping Agency Topographic Center, Washington, D. C. Compiled in 1956 by photogrammetric methods from aerial photographs taken 1953. Photographs field annotated 1954. Revised by the U. S. Geological Survey from aerial photographs taken 1974. Map edited 1977.

Areas covered by dashed light-blue pattern are subject to controlled inundation. 100,000-foot grid based on Montana coordinate system, central and north zones.

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**

**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  
 Grand Coulee Interchange  
 Sun Valley

**RAILROADS**  
 Single track  
 Double or Multiple track  
 Standard gauge  
 Narrow gauge

**BOUNDARIES**  
 International  
 State  
 County  
 Park or reservation

**Other Features**  
 Landmark: School, Church, Other  
 Spot elevation in feet  
 Marsh or swamp  
 Intermittent or dry stream  
 Power line  
 Mine  
 Landing area  
 Seaplane airport  
 Dry lake  
 Woods brushwood

**LOS ANGELES**  
**OMAHA**  
**GALVESTON**  
**Durango**

**ROUTE MARKERS**  
 Interstate, U.S., State

Scale 1:250,000

0 5 10 15 20 25 30 Statute Miles  
 0 5 10 15 20 25 30 Nautical Miles  
 0 5 10 15 20 25 30 Kilometers

**CONTOUR INTERVAL 100 FEET**

**TRANSVERSE MERCATOR PROJECTION**

BLACK NUMBERED LINES INDICATE THE 10,000 METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 12

1977 MAGNETIC DECLINATION FROM TRUE NORTH VARIES FROM 17°15' 30" WEST EASTERN FOR THE CENTER OF THE WEST EDGE TO ONLY 1200' WEST EASTERN FOR THE CENTER OF THE EAST EDGE

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

**LOCATION DIAGRAM**

ALBERTA		SASKATCHEWAN	
NM 12-10	NM 12-11	NM 13-10	NM 13-11
UNITED STATES		UNITED STATES	
NL 12-1	NL 12-2	NL 13-1	NL 13-2
NL 12-3	NL 12-4	NL 13-3	NL 13-4
NL 12-5	NL 12-6	NL 13-5	NL 13-6
NL 12-7	NL 12-8	NL 13-7	NL 13-8

**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

**GRID ZONE DESIGNATION:** 12T

**100,000 M. SQUARE IDENTIFICATION:** WJ XJ YJ 530

**TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 100 METERS**

- Read bottom identifying 100,000 meter square in which the point lies.
- Locate first 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.
- Estimate tenths from grid line to point.
- Locate first horizontal grid line BELOW point and read LARGE figure labeling the line either in the left or right margin, or on the line itself.
- Estimate tenths from grid line to point.

**SAMPLE REFERENCE:** If measuring feature 10' in any direction, grid Grid Zone Designation, etc.

**TOWNSHIP OR RANGE LINE**  
**LAND GRANT BOUNDARY**

**LEWISTOWN, MONTANA**

1954  
REVISED 1977

Top of the Claggett Shale, feet, mean sea level