Montana Bureau of Mines and Geology
Open File No. 390

Geologic Map of the Glasgow 30' x 60' Quadrangle, Northeast Montana

Robert N. Bergantino

1999

To view a full scale version of this map, click here.

For the text files with the map information, click here.

Digital data link

Note— This map was originally published at a scale of 1;100,000 but the page sizes have been modified to fit average printer capabilities (8½ x 14; legal size paper). There is a an eighth inch overlap on these pages. A full sized colored print of this map can be ordered from the **MBMG Publication Sales Office, 1300 West Park Street, Butte, MT, 59701-8997**.

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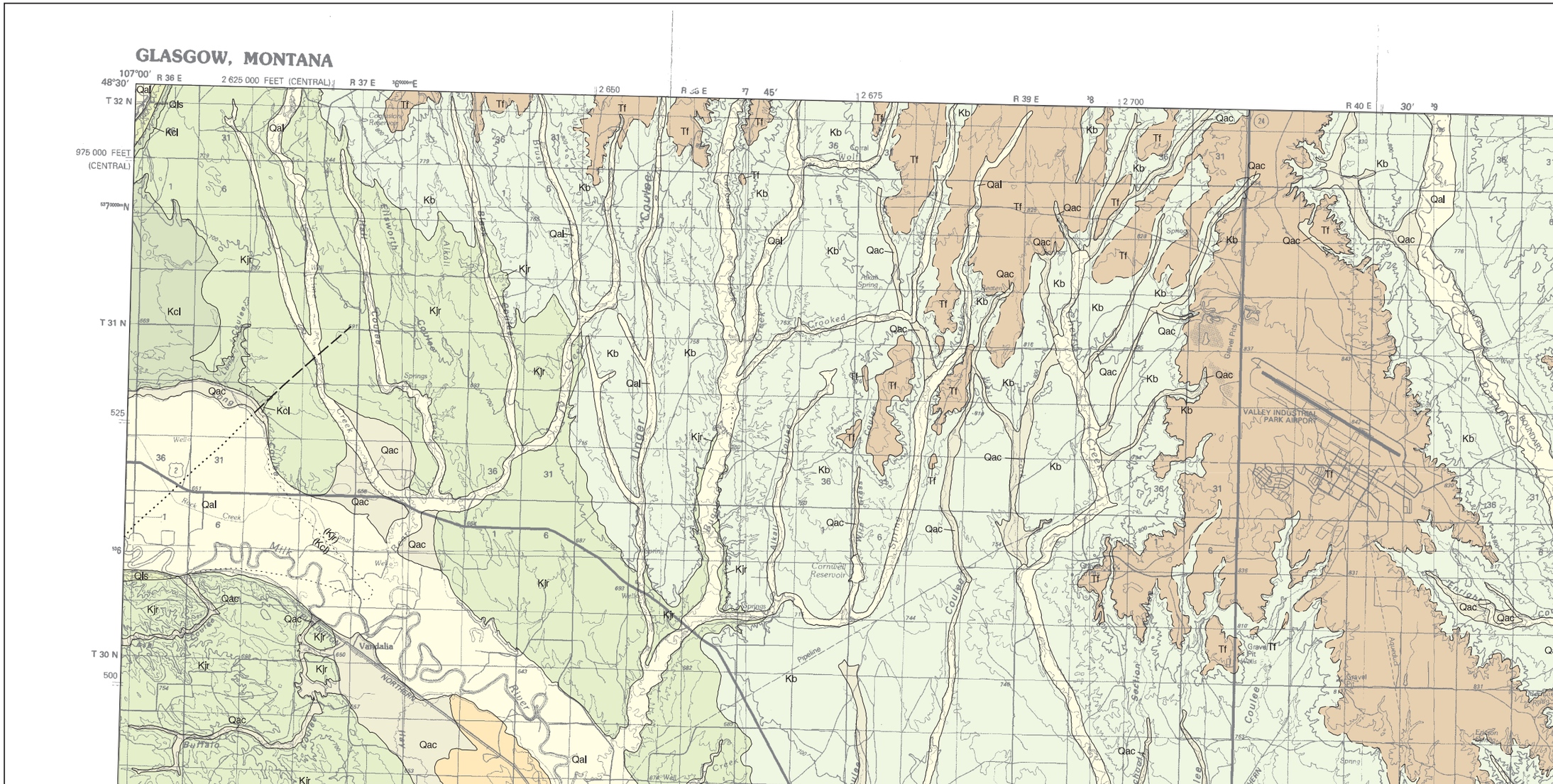
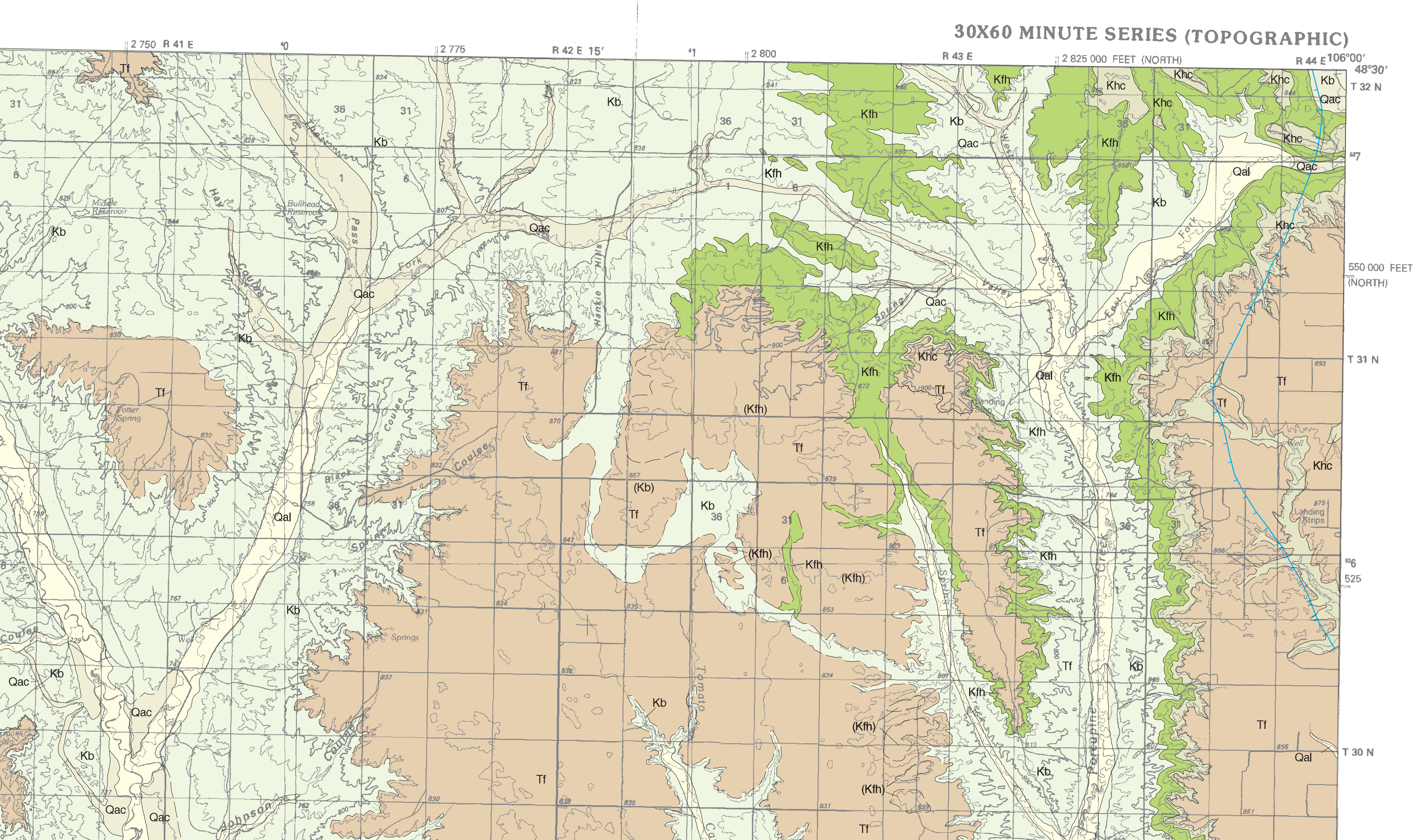
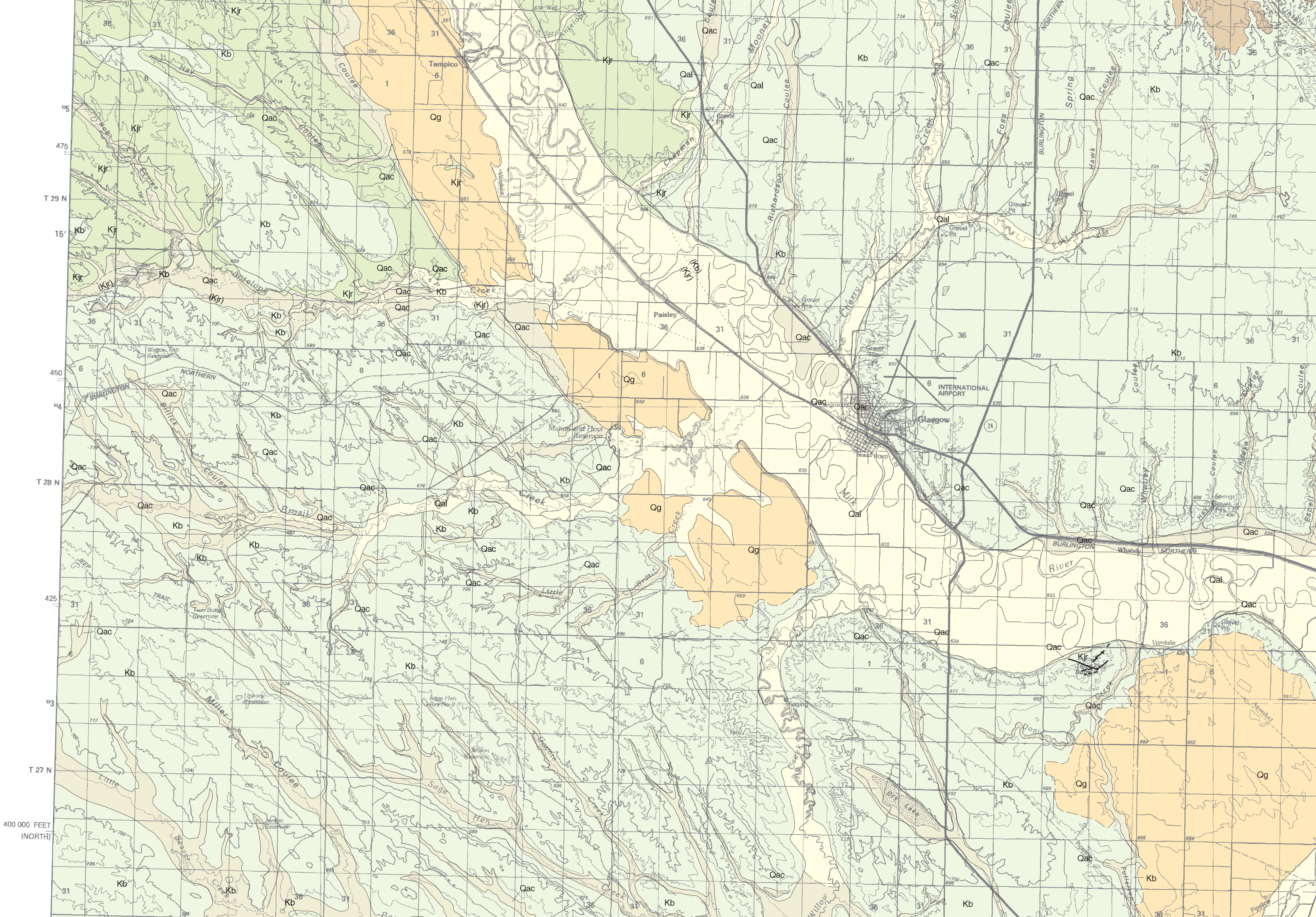
Open File MBMG 390, Plate 1 of 2
Geologic Map, Glasgow 30'x60' Quadrangle

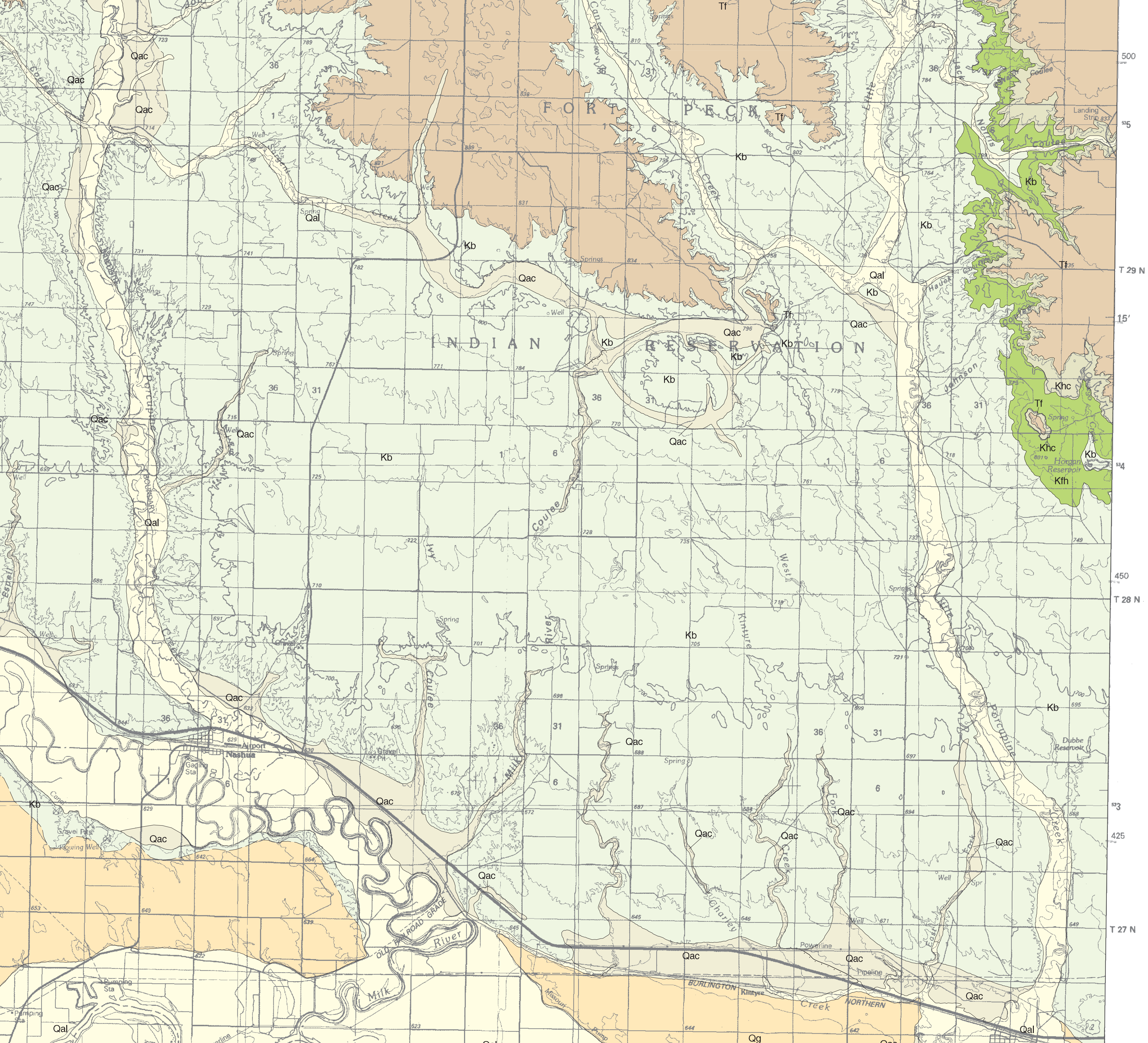


MONTANA BUREAU OF MINES AND GEOLOGY
A Department of Montana Tech of The University of Montana

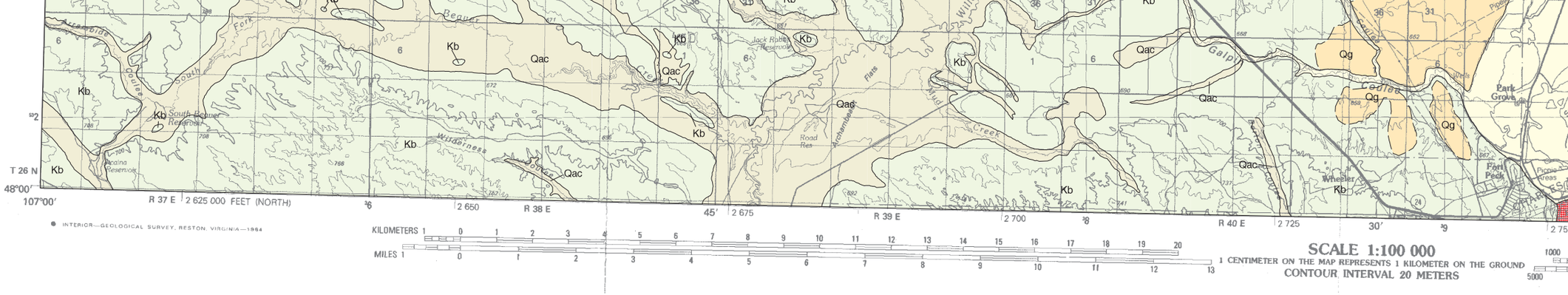




Tampico
Landing Strip
Paisley
Glasgow
INTERNATIONAL AIRPORT
Vandalia
Hosp
Wagon Trap Reservoir
Mahon and Hoyt Reservoir
Two Butte Reservoir
Sage Hen Res No 2
Upham Reservoir
Milton Reservoir
Jordan Reservoir
Fort Lake
Saging
Whatley
BURLINGTON NORTHERN
JEEP TRAIL
Milk River
Antelope Creek
Brazil Creek
Little Brazil Creek
Hay Coulee
Miller Coulee
Sage Hen Creek
Chapman Coulee
Mooney Coulee
Richardson Coulee
Cherry Creek
Foss Coulee
Spring Coulee
Hawk Coulee
Fork Coulee
Canal
Aqueduct
Pipeline
Gravel Pit
Well
Springs
T 29 N
T 28 N
T 27 N
15′
475
450
425
400 000 FEET (NORTH)
Kjr
Kb
Qac
Qal
Qg
(Kjr)
(Kb)



FORT PECK
INDIAN RESERVATION
Qac
Qal
Kb
Tf
Khc
Kfh
Qg
Nashua
Airport
Landing Strip
Horgan Reservoir
Dubbe Reservoir
Kintyre
BURLINGTON
NORTHERN
OLD RAILROAD GRADE
Milk River
Porcupine Creek
Little Porcupine Creek
Johnson Coulee
Ivy Coulee
Kintyre Creek
Charley Creek
West Fork
Powerline
Pipeline
Spring
Well
T 29 N
T 28 N
T 27 N
500
450
425
15′



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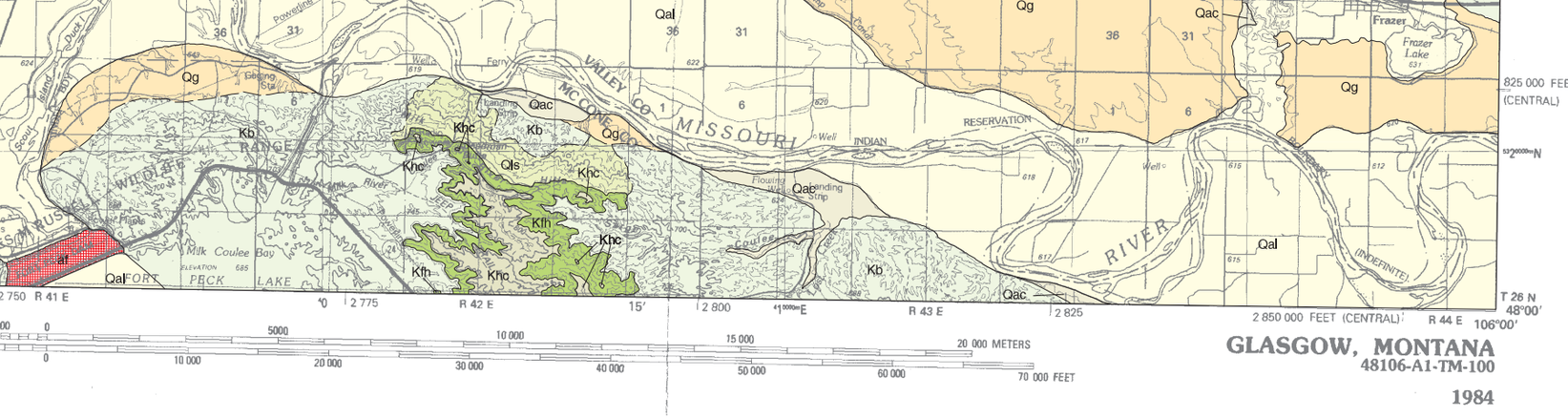
Partial support has been provided by the STATE
Mapping Programof the U.S.Geological Survey



GLASGOW, MONTANA

48106-A1-TM-100

1984

MAP UNITS

Qal	Alluvium of modern channels and floodplains
Qac	Alluvium-colluvium
Qg	Glacial deposits, undivided
Qls	Landslide deposit
Tf	Flaxville Formation
Khc	Hell Creek Formation
Kfh	Fox Hills Formation
Kb	Bearpaw Shale
Kjr	Judith River Formation
Kcl	Claggett Shale
af	Artificial fill - large dams, freeway interchanges

N

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Since 1919
Earth Science Information

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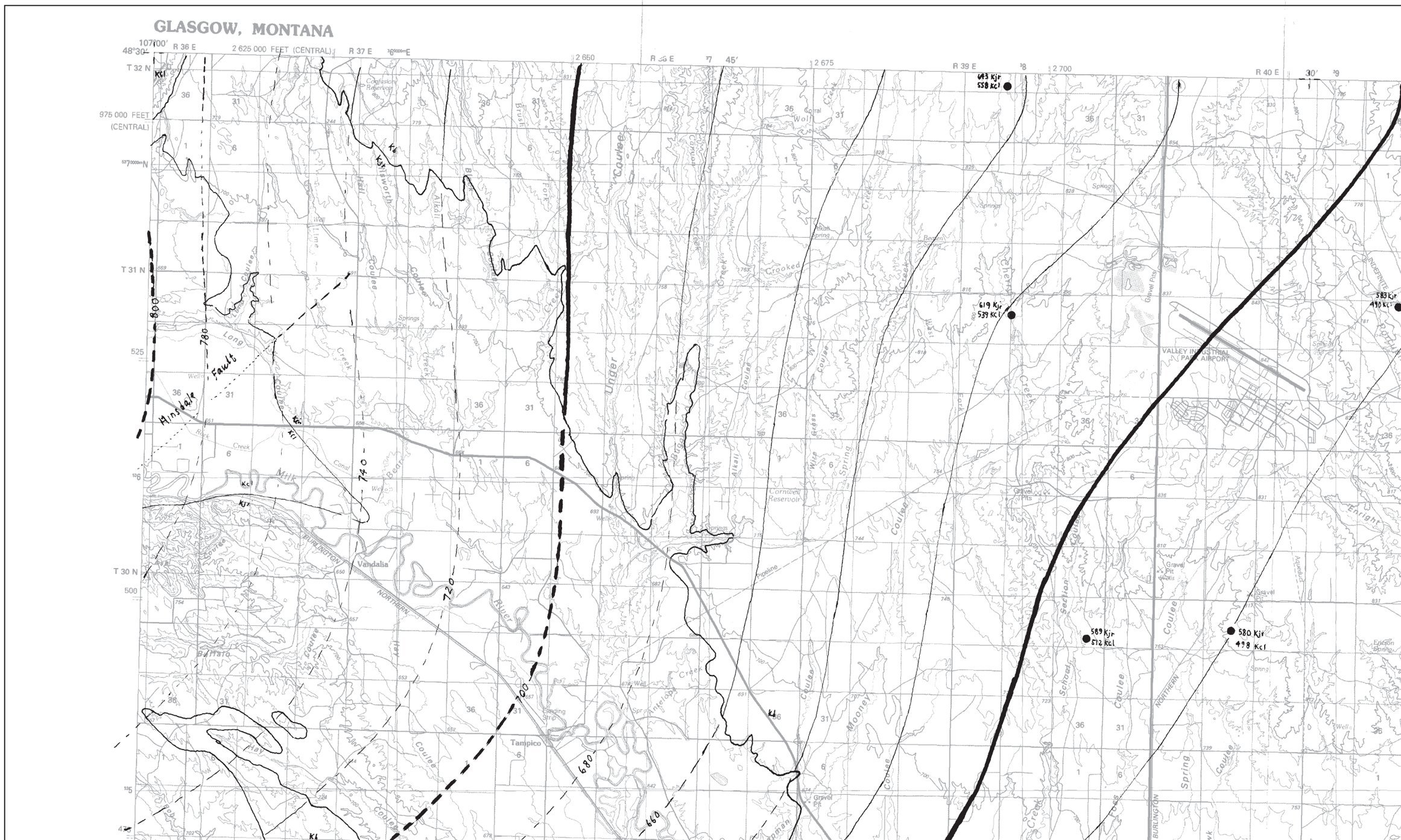
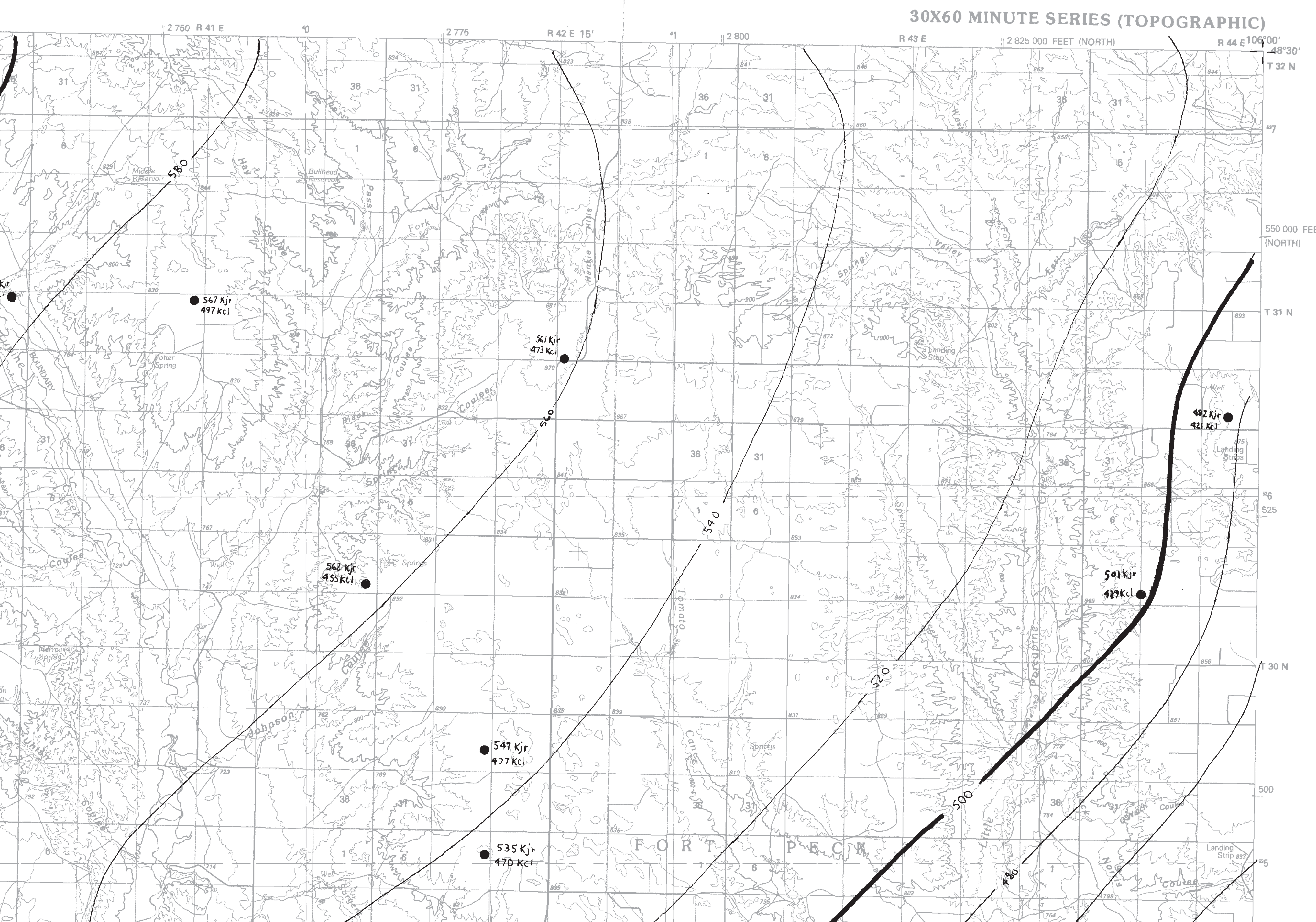
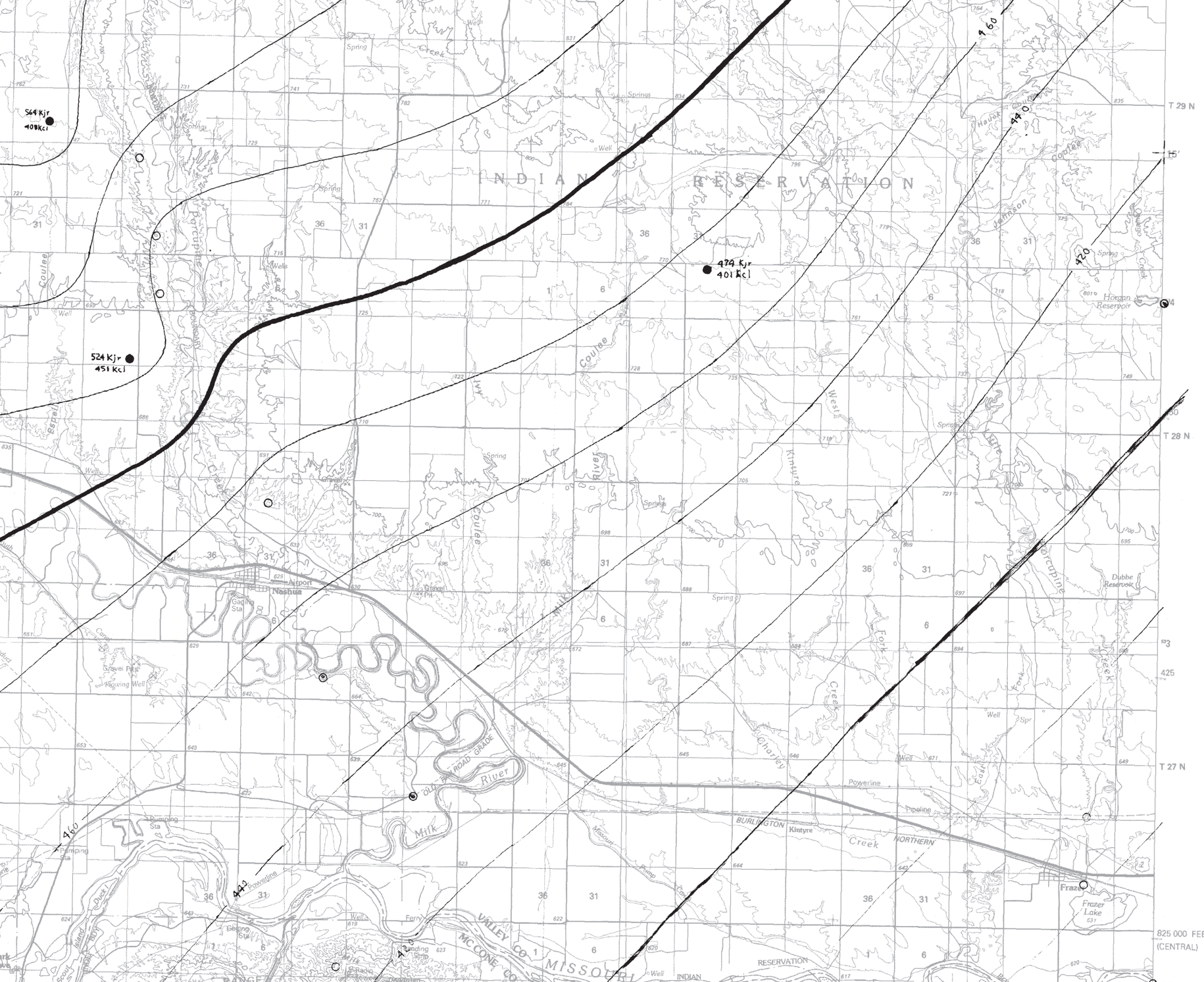
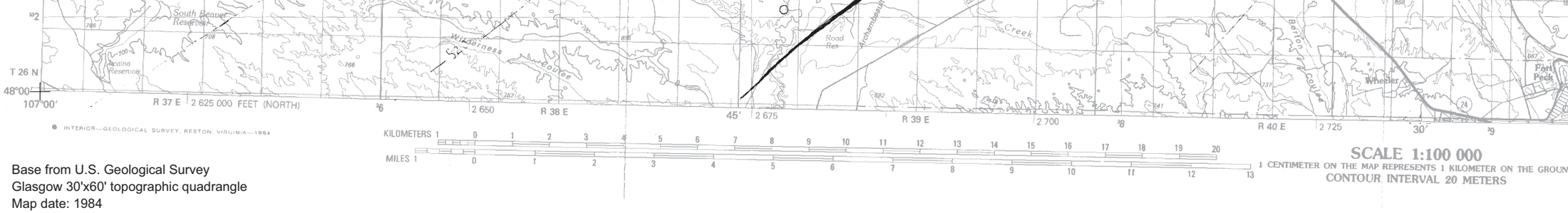
TEMAP component of the National Cooperative Geologic
ey under Contract Number 98-HQ-AG-2080.


GLASGOW, MONTANA
107°00'
48°30'
R 36 E
2 625 000 FEET (CENTRAL)
R 37 E
2 650
R 38 E
7 45'
2 675
R 39 E
2 700
R 40 E
30'
T 32 N
975 000 FEET (CENTRAL)
T 31 N
T 30 N
800
780
740
720
700
680
660
Faults
Kjf
Kcl
693 Kjr
558 Kcl
619 Kjr
539 Kcl
583 Kjr
490 Kcl
589 Kjr
512 Kcl
580 Kjr
498 Kcl
Hinsdale
Vandalia
Tampico
Buffalo
Unger Coulee
Cornwell Reservoir
VALLEY INDUSTRIAL PARK AIRPORT
BURLINGTON NORTHERN
Pipeline
Gravel Pits
Landing Strip


30X60 MINUTE SERIES (TOPOGRAPHIC)
R 41 E
R 42 E 15′
R 43 E
R 44 E 106°00′
48°30′
T 32 N
T 31 N
T 30 N
2 825 000 FEET (NORTH)
550 000 FEET
(NORTH)
580
560
540
520
500
480
567 Kjr
497 Kcl
561 Kjr
473 Kcl
562 Kjr
455 Kcl
547 Kjr
477 Kcl
535 Kjr
470 Kcl
501 Kjr
427 Kcl
482 Kjr
421 Kcl
FORT PECK
Johnson
Tomato
Porcupine
Creek
Little
Landing Strip
Springs
Potter Spring
Middle Reservoir
Bullhead Reservoir

T 29 N
T 28 N
T 27 N
400 000 FEET
(NORTH)
Glasgow
INTERNATIONAL
AIRPORT
Paisley
Wagon Top
Reservoir
Mahan and Hoyt
Reservoir
Two Butte
Reservoir
Sage Hen
Res No 2
Wilson
Reservoir
Jack Rabbit
Reservoir
Lost
Res
BURLINGTON
NORTHERN
Vandalia
Tiger
Butte
Whatley
Park
Grove
Milk
River
Miller
Coulee
Brazil
Beaver
Galpin
640
620
600
580
560
540
520
500
480
630 Kjr
552 Kcl
568 Kjr
507 Kcl
484 Kjr (?)
492 Kjr


564 Kjr
408 Kcl
524 Kjr
451 Kcl
474 Kjr
401 Kcl
460
440
420
T 29 N
T 28 N
T 27 N
INDIAN RESERVATION
Nashua
Airport
Gaging Sta
Gravel Pit
Flowing Well
Pumping Sta
Old Bear Paw Road Grade
Milk River
Powerline
Pipeline
BURLINGTON NORTHERN
Kintyre Creek
Frazer
Frazer Lake
Horgan Reservoir
Dubbe Reservoir
Ferry
Landing
VALLEY CO.
MCCONE CO.
MISSOURI
RESERVATION
825 000 FEET
(CENTRAL)



Base from U.S. Geological Survey
Glasgow 30'x60' topographic quadrangle
Map date: 1984
Projection: UTM zone 13; 1927 NAD

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Open File 390

Structure Contour Map of the Glasgow 30' x 60' Quadrangle, Northeast Montana

Robert N. Bergantino

1999

SOURCES

Jensen, F.S., and Varnes, H.D., 1964, Geology of the Fort Peck area, Garfield, McCone and Valley Counties, Montana: U.S. Geological Survey Professional Paper 414-F, 49 p., Plate 2, Bedrock geologic map and columnar section, scale 1:96,000.

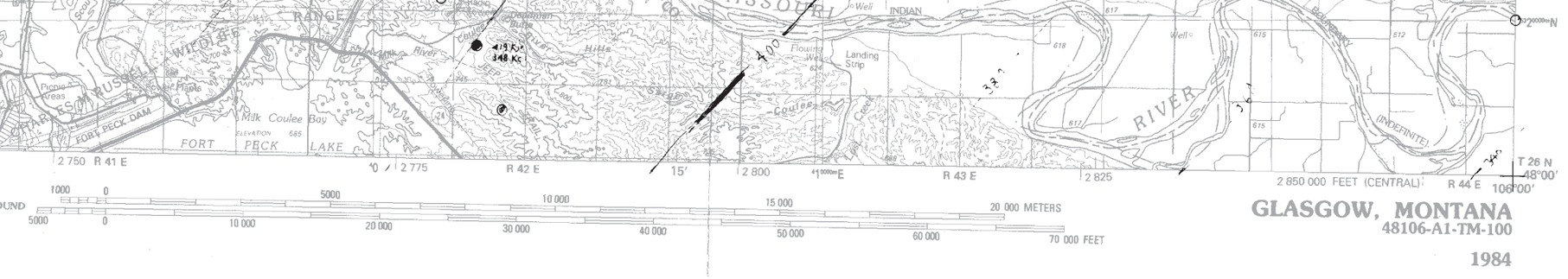
Feltis, R.D. and others, 1981, Selected geologic data from the northern Great Plains area of Montana: U.S. Geolgical Survey Open-file Report 81-415.

Additional contour information from:

Collier, A.J., 1917, The Bowdoin dome: U.S. Geolgical Survey Bulletin 661, p. 193-209, plate 9, map scale1:375,000.

Erdmann, C.E. and Schwabrow, J.R.,1932, Structural contour map of the central part of the Bowdoin dome, [unpublished map]: U.S. Geological Survey, map scale 1:125,000

Partial support has been provided by the STAT
Mapping Programof the U.S.Geological Surve



GLASGOW, MONTANA
48106-A1-TM-100
1984

LEGEND

- Kb Bearpaw Shale
- Kjr Judith River Formation
- Kcl Claggett Shale

- ○ Control point from U.S. Geological Survey Professional Paper 414-F, data not supplied
- ● Control point from U.S. Geological Survey Open-file Report 81-415

Contour Interval: 20 meters

Judith River Formation, "restored" contours

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