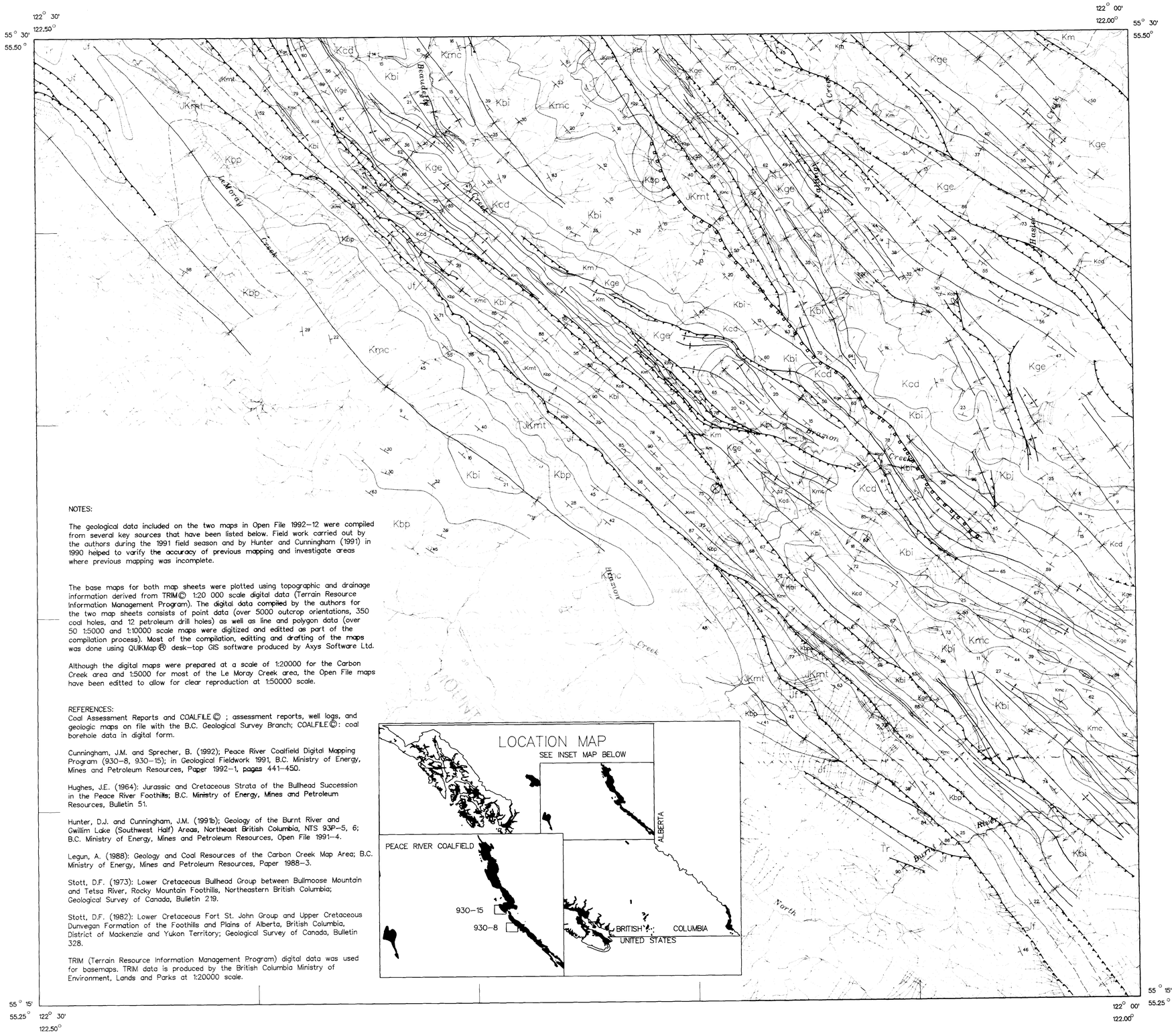


NOTES:

The geological data included on the two maps in Open File 1992–12 were compiled from several key sources that have been listed below. Field work carried out by the authors during the 1991 field season and by Hunter and Cunningham (1991) in 1990 helped to varify the accuracy of previous mapping and investigate areas where previous mapping was incomplete.

The base maps for both map sheets were plotted using topographic and drainage information derived from TRIM© 1:20 000 scale digital data (Terrain Resource Information Management Program). The digital data compiled by the authors for the two map sheets consists of point data (over 5000 outcrop orientations, 350 coal holes, and 12 petroleum drill holes) as well as line and polygon data (over 50 1:5000 and 1:10000 scale maps were digitized and edited as part of the compilation process). Most of the compilation, editting and drafting of the maps was done using QUIKMap® desk–top GIS software produced by Axys Software Ltd.

Although the digital maps were prepared at a scale of 1:20000 for the Carbon Creek area and 1:5000 for most of the Le Moray Creek area, the Open File maps have been editted to allow for clear reproduction at 1:50000 scale.

REFERENCES:
Coal Assessment Reports and COALFILE© ; assessment reports, well logs, and geologic maps on file with the B.C. Geological Survey Branch; COALFILE©: coal borehole data in digital form.

Cunningham, J.M. and Sprecher, B. (1992); Peace River Coalfield Digital Mapping Program (930–8, 930–15); in Geological Fieldwork 1991, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1992–1, pages 441–450.

Hughes, J.E. (1964): Jurassic and Cretaceous Strata of the Bullhead Succession in the Peace River Foothills; B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 51.

Hunter, D.J. and Cunningham, J.M. (1991b); Geology of the Burnt River and Gwillim Lake (Southwest Half) Areas, Northeast British Columbia, NTS 93P–5, 6; B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1991–4.

Legun, A. (1988): Geology and Coal Resources of the Carbon Creek Map Area; B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1988–3.

Stott, D.F. (1973): Lower Cretaceous Bullhead Group between Bullmoose Mountain and Tetsa River, Rocky Mountain Foothills, Northeastern British Columbia; Geological Survey of Canada, Bulletin 219.

Stott, D.F. (1982): Lower Cretaceous Fort St. John Group and Upper Cretaceous Dunvegan Formation of the Foothills and Plains of Alberta, British Columbia, District of Mackenzie and Yukon Territory; Geological Survey of Canada, Bulletin 328.

TRIM (Terrain Resource Information Management Program) digital data was used for basemaps. TRIM data is produced by the British Columbia Ministry of Environment, Lands and Parks at 1:20000 scale.

BC
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources

Geological Survey Branch
OPEN FILE 1992–12
(SHEET 1 OF 2)

GEOLOGY OF THE LE MORAY CREEK AND CARBON CREEK AREAS, NORTHEASTERN BRITISH COLUMBIA

NTS 930–8, 15

by J.M. Cunningham and B. Sprecher

Scale 1:50 000
Transverse Mercator Projection NAD83

0 Km. (kilometres) 5 Km.

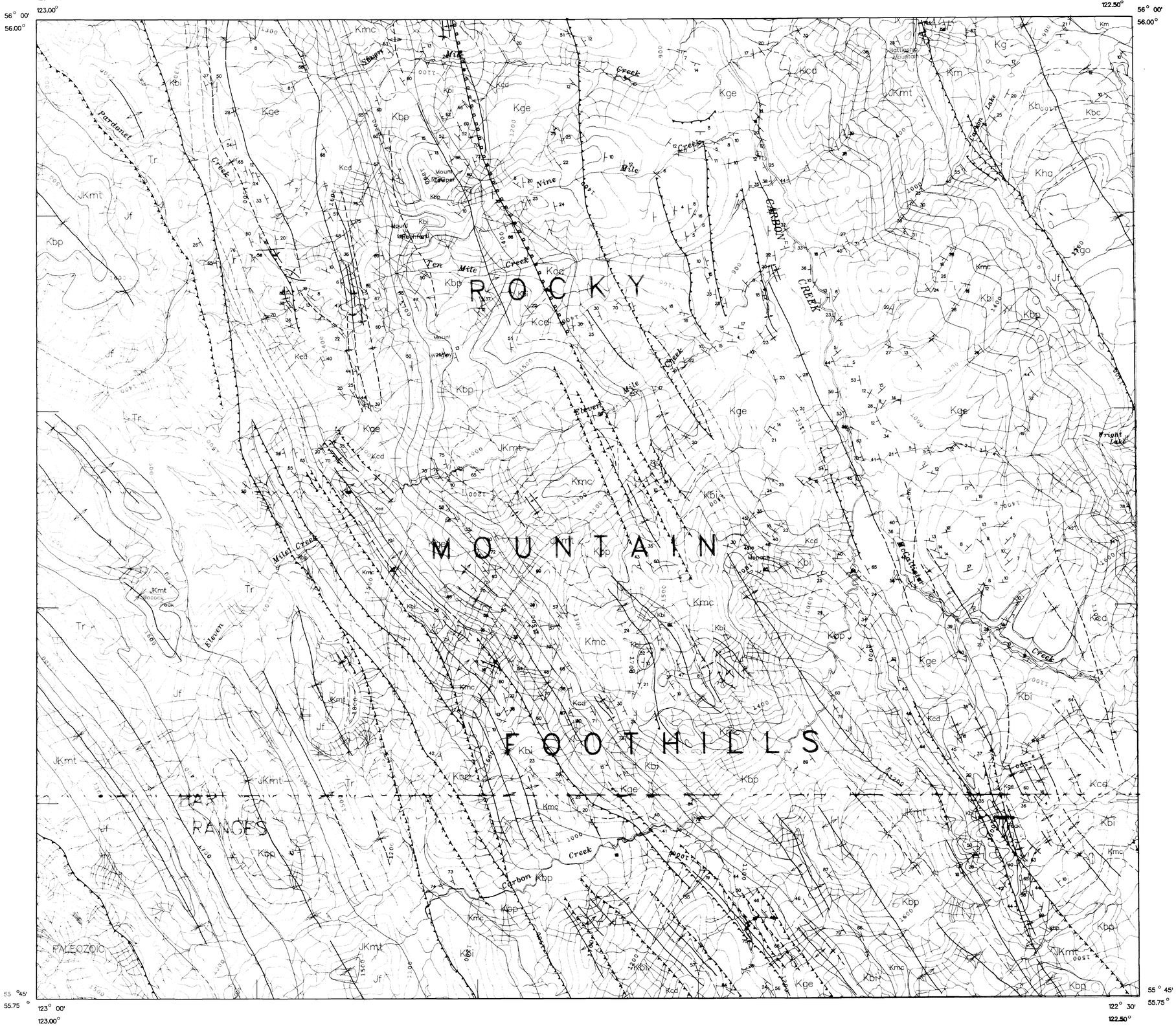
LE MORAY CREEK 930/8

BRITISH COLUMBIA

DIPS – UPRIGHT, OVERTURNED, HORIZONTAL, VERTICAL
THRUST FAULT–CERTAIN,UNCERTAIN
NORMAL FAULT–CERTAIN,UNCERTAIN
CONTACT – CERTAIN,UNCERTAIN
FOLDS – ANTICLINE, SYNCLINE

LEGEND

FORT ST. JOHN GROUP			
uKcr	CRUISER FORMATION:	dark grey marine shale	U.CRETACEOUS
Kgo	GOODRICH FORMATION:	marine and nonmarine sandstone, shale and mudstone	U.CRETACEOUS
Kha	HASLER FORMATION:	dark grey marine shale	U.CRETACEOUS
Kbc	BOULDER CREEK FORMATION:	massive conglomerate, sandstone, shale and coal	U.CRETACEOUS
Kh	HULCROSS FORMATION:	dark grey marine shale	U.CRETACEOUS
Kg	GATES FORMATION:	marine and nonmarine sandstone, conglomerate, shale and coal	U.CRETACEOUS
Km	MOOSEBAR FORMATION:	dark grey marine shale	U.CRETACEOUS
BULLHEAD GROUP			
Kge	GETHING FORMATION:	marine and nonmarine sandstone, shale, conglomerate and coal	LOWER CRETACEOUS
Kcd	CADOMIN FORMATION:	massive conglomerate, sandstone, shale and minor coal	LOWER CRETACEOUS
MINNES GROUP			
Kbi	BICKFORD FORMATION:	nonmarine sandstone, shale and coal	LOWER CRETACEOUS
Kmc	MONACH FORMATION:	massive quartzose sandstone and sandstone	LOWER CRETACEOUS
Kbp	~~BEATTIE PEAKS~~ FORMATION:	~~marine~~ sandstone, silty shale and shale	LOWER CRETACEOUS
JKmt	MONTEITH FORMATION:	quartzose sandstone and sandstone	LOWER CRETACEOUS
Jf	FERNIE FORMATION:	black marine shale, minor sandstone and siltstone	JURASSIC
SCHOOLER CREEK GROUP			
Tr	(UNDIVIDED)	limestone, dolomite, calcareous siltstone and sandstone, some anhydrite	TRIASSIC



BC Geological Survey Branch
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
OPEN FILE 1992-12
(SHEET 2 OF 2)

GEOLOGY OF THE LE MORAY CREEK AND CARBON CREEK AREAS, NORTHEASTERN BRITISH COLUMBIA

NTS 930-8, 15

by J.M. Cunningham and B. Sprecher

Scale 1:50 000
Transverse Mercator Projection NAD83

0 Km. (kilometres) 5 Km.

CARBON CREEK 930/15

BRITISH COLUMBIA

DIPS – UPRIGHT, OVERTURNED, HORIZONTAL, VERTICAL

THRUST FAULT–CERTAIN,UNCERTAIN

NORMAL FAULT–CERTAIN,UNCERTAIN

CONTACT – CERTAIN,UNCERTAIN

FOLDS – ANTICLINE, SYNCLINE (MONOCLINE) (MONOCLINE)

LEGEND

	FORT ST. JOHN GROUP		UCRETACEOUS
uKcr	CRUISER FORMATION:	dark grey marine shale	
Kgo	GOODRICH FORMATION:	marine and nonmarine sandstone, shale and mudstone	
Kha	HASLER FORMATION:	dark grey marine shale	
Kbc	BOULDER CREEK FORMATION:	massive conglomerate, sandstone, shale and coal	
Kh	HULCROSS FORMATION:	dark grey marine shale	
Kg	GATES FORMATION:	marine and nonmarine sandstone, conglomerate, shale and coal	
Km	MOOSEBAR FORMATION:	dark grey marine shale	
	BULLHEAD GROUP		LOWER CRETACEOUS
Kge	GETHING FORMATION:	marine and nonmarine sandstone, shale, conglomerate and coal	
Kcd	CADOMIN FORMATION:	massive conglomerate, sandstone, shale and minor coal	
	MINNES GROUP		
Kbi	BICKFORD FORMATION:	nonmarine sandstone, shale and coal	
Kmc	MONACH FORMATION:	massive quartzose sandstone and sandstone	
Kbp	BEATTIE PEAKS FORMATION:	marine sandstone, silty shale and shale	
JKmt	MONTEITH FORMATION:	quartzose sandstone and sandstone	
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Tr	(UNDIVIDED)	limestone, dolomite, calcareous siltstone and sandstone, some anhydrite	TRIASSIC