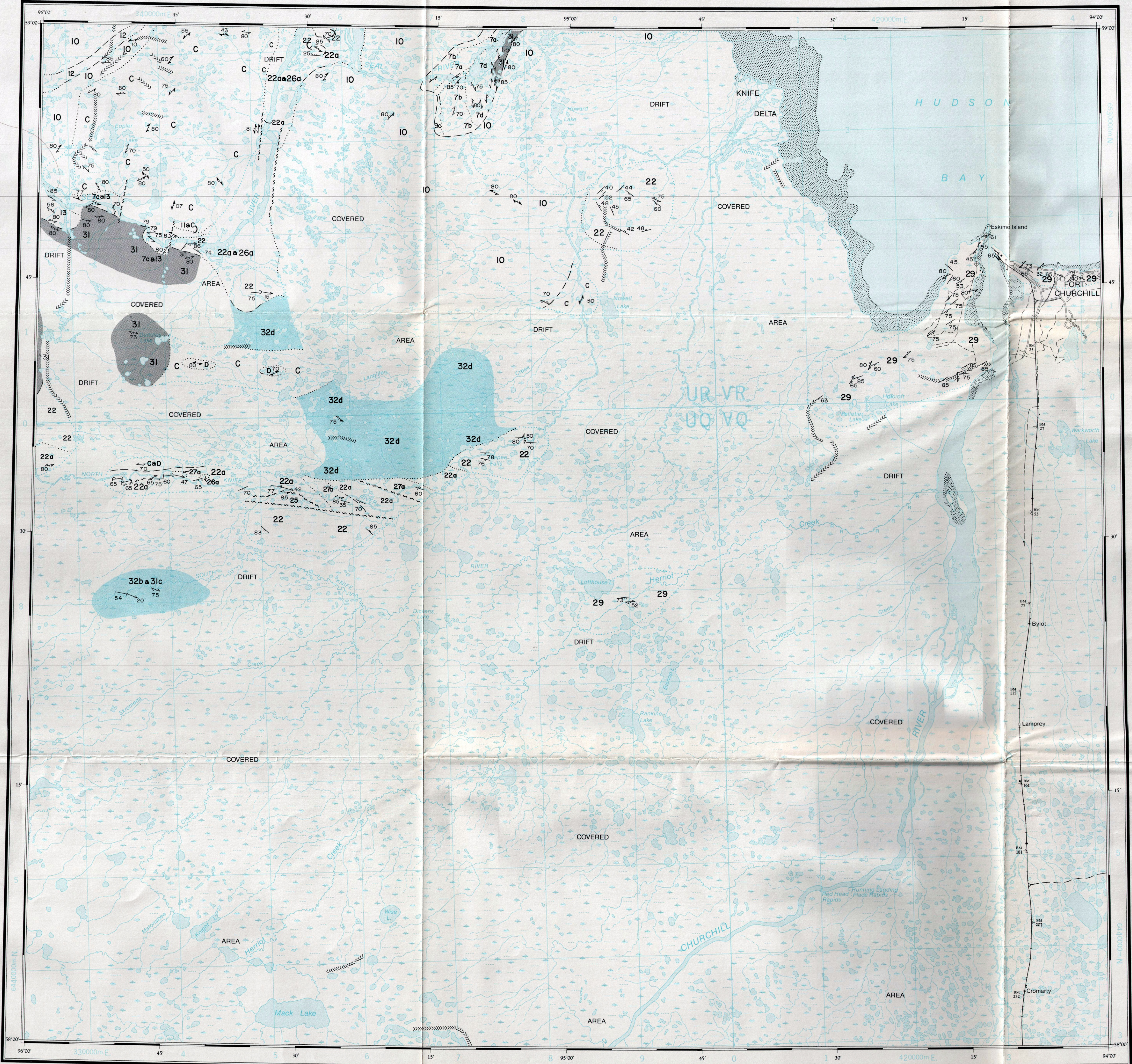


LEGEND

Post-Hudsonian	33	Diabase			
	32	Pink porphyritic quartz monzonite; 32a) pink and/or white granite pegmatite; 32b) pink fluorite-bearing quartz monzonite; 32c) White fluorite-bearing quartz monzonite; 32d) Red granite, coarse grained to pegmatitic ± fluorite; 32e) Quartz-feldspar porphyry			
	31	Quartz monzonite, medium- to coarse-grained, massive to foliated ± apilite ± pegmatite zones			
	31a,b,c,d	31a) Hybrid quartz monzonite; 31b) Pink apilite ± hornblende; 31c) Well foliated biotite ± magnetite granite gneiss; 31d) Hybrid gneiss			
Hudsonian Intrusive and Hybrid Rocks	30	White granite to trondhjemite, medium grained, cordierite-bearing ± tourmaline; 30a) Porphyritic white granodiorite			
SEQUENCE I					
	20	Meta-arkose; derived arkosic gneiss with metatextite	29	"Churchill quartzite"	
	19	Feldspathic quartzite with faserkiesel of muscovite-sillimanite-quartz	GREAT ISLAND GROUP		
	18	Quartzite ± andradite ± diopside ± epidote	28	Metasiltstone and meta-argillite	
	17	Calc-silicate rocks; 17a) Marble ± quartz ± tremolite; 17b) Albite-pyroxene rock	27	Metagreywacke	
	16	Biotite psammite gneiss ± calc-silicate lenses			27a (North Knife River) Interlayered red and/or green metagreywacke and green phyllite
Archean			26	Garnet amphibole schist (iron formation) ± pyrrhotite ± magnetite; 26a) Black pyritic meta-argillite ± black acicular amphibole-garnet	
					25 (North Knife River) Black meta-argillite with quartz pebbles
			24	Dolomitic marble ± quartz ± clinocllore	
					23 (Tadoule Lake) Metaconglomerate with muscovite-biotite-quartz siltstone matrix with quartzite clasts; interlayered grey siltstone with pebble beds
Archean and Possible Archean			22	Quartzite and interlayered pale green phyllite to biotite-muscovite schist ± garnet; 22a) Grey to grey-green phyllite ± andalusite ± biotite poikiloblasts	
			21a	Conglomerate oligomictic	
			21b	Conglomerate polymictic	
	15	Metagabbro in part noritic; metabasic rocks	14	Quartz porphyry	
			13	Pink to grey, very fine grained feldspar porphyry	Seal River Volcanic Rocks
			12	Ultramafic and serpentinite	
			11	Gabbro	
			10	Granodiorite to porphyritic quartz diorite	
	6	Semi-pelitic paragneiss to metatextite ± muscovite ± cordierite ± garnet ± sillimanite ± andalusite ± hypersthene; 6a) Semi-pelitic paragneiss to schist and interlayered, impure quartzite; 6b) Impure quartzite to quartzite; 6c) Augen gneiss; 6d) Biotite-feldspar gneiss with granodiorite <i>lens</i>	9a	Conglomerate, volcanic derived	Seal River Intrusive Rocks
			9b	Conglomerate and greywacke	
			9c	Metasiltstone (± uvarovite)	
			8	Amphibolite	
			7a,b,c,d	7a) Andesite and minor basalt; 7b) Inter-layered tuff and pillowed andesite; 7c) Intermediate tuff, lapilli tuff and interlayered siliceous metasedimentary rocks, local rhodacite and andesite flows; 7d) Rhyolite to rhodacite	
Archean and Probable Archean Rocks	5	Foliated quartz monzonite			
	4	Foliated alaskite			
	3	Metadiorite to amphibolite and magnetite-biotite-hornblende schist			
	2a,b,c	2a) Hypersthene-quartz diorite; 2b) Hypersthene trondhjemite; 2c) Hypersthene-quartz monzonite (monzocharnockite)			
	1	Hypersthene gneiss			
Rocks of Uncertain Affinity	A	Grey tonalitic to granodioritic gneisses			
	B	Foliated to lineated biotite granodiorite to tonalite			
	C	Granodiorite diatextite to biotite metatextite ± garnet			
	D	Amphibolite			

Units occurring on this map are indicated in heavy type



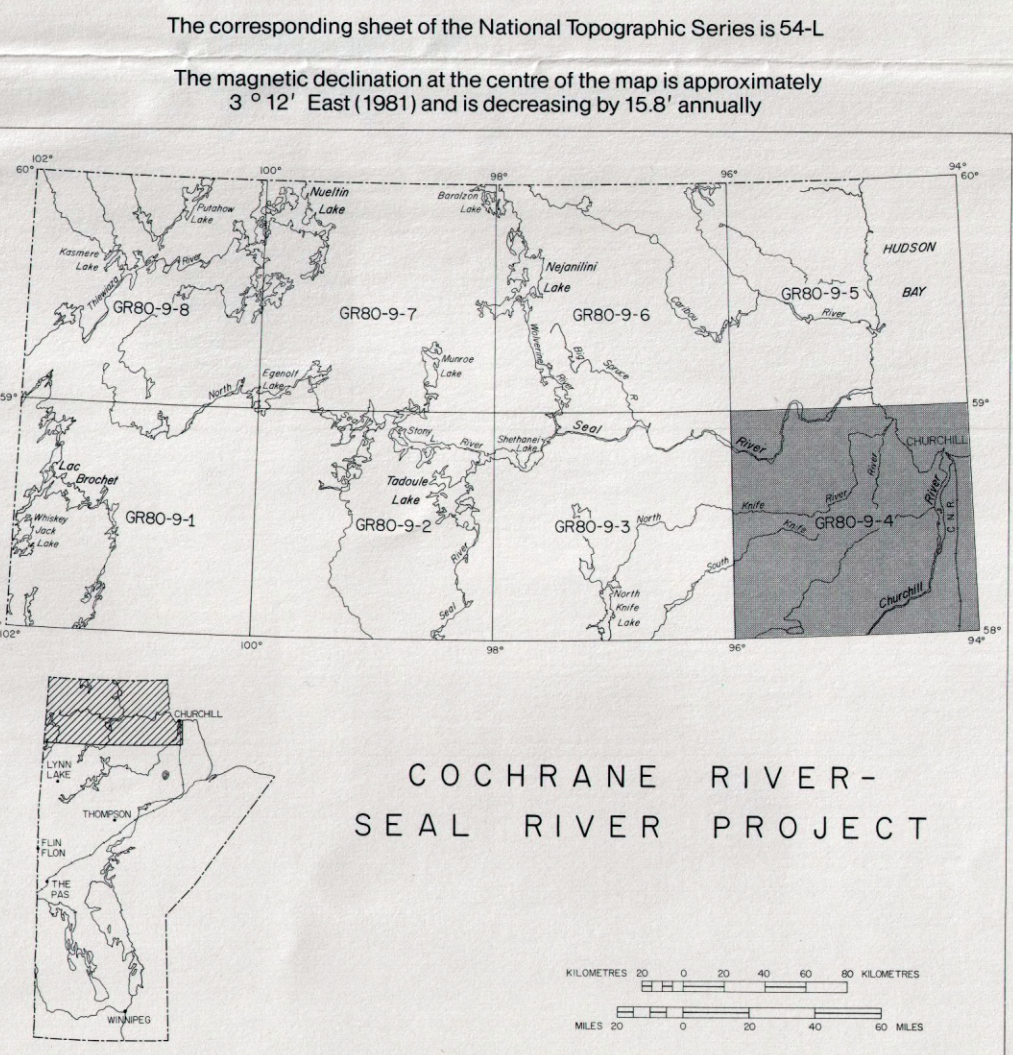
SYMBOLS

- Geological boundary (defined, approximate, assumed, underwater, gradational)
- Bedding, tops known (inclined, vertical, overturned)
- Bedding, tops unknown (inclined, vertical, dip unknown)
- Bedding, tops unknown and parallel schistosity (inclined)
- Metamorphic layering (inclined, vertical, amount of dip unknown)
- Inclusion layering (inclined)
- Igneous layering, tops unknown (inclined)
- Igneous layering, tops unknown (inclined, dip unknown)
- Pillow, tops known (inclined)
- Pillow, tops unknown (inclined)
- Metamorphic layering and parallel gneissosity (inclined, vertical, amount of dip unknown)
- Metamorphic layering and parallel schistosity (inclined)
- Gneissosity (inclined, vertical, dip unknown)
- Schistosity (inclined, vertical, dip unknown)
- Cataclastic foliation (inclined)
- Fracture cleavage—strain slip cleavage (inclined)
- Mineral lineation (plunge indicated)
- Boudin axes (inclined)
- Rodding, mullion structure (inclined)
- Minor folds:
 - axis (inclined)
 - axial plane (inclined)
 - symmetry (asymmetrical Z-shaped, asymmetrical S-shaped, symmetrical)
- Fault (assumed, approximate)
- Sheared zone
- Esker
- Limit of drift covered area

Geological Services Branch, Mineral Resources Division, Winnipeg
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MARK TIMCOE

INDEX MAP



MAP GR80-9-4

CHURCHILL