GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

Compiled by J. Wm. Kerr, 1961, 1962

To accompany GSC Paper 67-27, Part II by J. Wm. Kerr

			FRANKLINIAN MIOGEOSYNCLINE									CENTRAL STABLE REGION		
			NORTHWESTERN (COMPOSITE)			CENTRAL (COMPOSITE)			SOUTHEASTERN (COMPOSITE)			BACHE PEN. – E. IRENE BAY (Troelsen, Christie, Kerr)		
			FORMATION (AND GROUP)	LITHOLOGY	THICKNESS (FEET)	FORMATION (AND GROUP)	LITHOLOGY	THICKNESS (FEET)	FORMATION (AND GROUP)	LITHOLOGY	THICKNESS (FEET)	FORMATION	LITHOLOGY	THICKNESS (FEET)
SILURIAN		LLANDOVERIAN	Cape Rawson Group	*Siltstone, sandstone, conglomerate*		Cape Phillips								
ORDOVICIAN	UPPER CINCINNATIAN	RICHMONDIAN	*Facies change* Cape Phillips	*Shale, calcareous quartz siltstone, argillaceous limestone; graptolitic*		*Facies change* Allen Bay	*Dolomite, minor limestone, bluff-forming*		Allen Bay	*Dolomite, minor limestone, bluff-forming*				
		MAYSVILLIAN												
		EDENIAN	CORNWALLIS GROUP Irene Bay	*Limestone, shaly interlayers, dark grey, cherty, sparse fossils*	675—?	CORNWALLIS GROUP Irene Bay	*Limestone, shaly, weathers greenish; recessive, fossiliferous*	140—1050	CORNWALLIS GROUP Irene Bay	*Limestone, shaly, weathers greenish; recessive, fossiliferous*	120—270			
		BARNEVELD	CORNWALLIS GROUP Thumb Mountain	*Limestone, dark grey, bluff-forming,*	?—1800	CORNWALLIS GROUP Thumb Mountain	*Limestone, partly dolomite, dark grey-brown, thick-bedded, slightly rusty; weathers medium grey, bluff-forming*	850—2300	CORNWALLIS GROUP Thumb Mountain	*Limestone, partly dolomite, dark grey-brown, thick-bedded, slightly rusty; weathers medium grey, bluff-forming*	1100—1650		?	
	MIDDLE MOHAWKIAN	WILDERNESS	CORNWALLIS GROUP Bay Fiord	*Limestone, shaly and sandy, dark grey to light grey; recessive*	1450—2000 +	CORNWALLIS GROUP Bay Fiord	*Limestone, silty and sandy, and shaly; dolomite in southern sections, anhydrite common; recessive*	780—1800	CORNWALLIS GROUP Bay Fiord	*Limestone, thin-bedded, silty, sandy and shaly; lower part commonly anhydritic; recessive*	900—1700			
		PORTERFIELD												
		ASHBY		LLANDEILLIAN										
		MARMOR		LLANVIRNIAN										
		WHITEROCK												
	LOWER	CANADIAN	Eleanor River	*Limestone, shaly and silty, thick-bedded, bluff-forming*	?—775	Eleanor River	*Limestone, medium grey, buff-weathering, thick-bedded, bluff-forming,*	775—2000 +	Eleanor River	*Limestone, medium grey, buff-weathering, thick-bedded, resistant bluff*	700—2600	Eleanor River	*Limestone, dolomite, bioclastic limestone, intraformational conglomerate*	500 +
		ARENIGIAN	Disconformity ? Erosion or non-deposition ?			Baumann Fiord	C *gypsum-anhydrite, white* B *limestone, resistant* A *gypsum-anhydrite, white*	0—2560	Baumann Fiord	C *gypsum-anhydrite, white* B *limestone, resistant* A *gypsum-anhydrite, white*	100—970	Baumann Fiord	C *gypsum-anhydrite* B *limestone,* A *gypsum-anhydrite*	650
		TREMADOCIAN	Copes Bay	*Limestone, shaly and sandy, sandy dolomite, no gypsum*	2825	Copes Bay	*Limestone shaly and silty, minor gypsum, flat-pebble conglomerate, mud cracks, ripple marks,*	2350 +	Copes Bay	*Limestone, silty and shaly, often gypsiferous, flat-pebble conglomerate common*	1800—4800	Map-unit 6	*Limestone, quartz sandstone, recessive*	
												Cape Clay	*limestone, thin-bedded, anhydrite nodules, bluff*	220—250
												Cass Fiord	*Limestone, thin-bedded, flat-pebble conglomerate, shaly; recessive*	1000—1600
CAMBRIAN		UPPER	Disconformity Erosion or non-deposition											

Published, 1968

Table I. Correlation of Ordovician rock units of central and eastern Ellesmere Island. The equivalence of North American and European time units as shown on the left is after Fisher (1962), Whittington and Williams (1964), and is that used by Norford et al. (in press).