

AGE Millions of years before present	ERA	PERIOD	EPOCH	FORMATION	MEMBER	MAX. THICK (m)	BASIC LITHOLOGY		
50	CENOZOIC	QUATER-NARY	RECENT				TOP SOIL AND DUNE SANDS.		
			PLEISTOCENE	GLACIAL DRIFT		140	CLAY, SAND, GRAVEL, BOULDERS AND PEAT.		
		TERTIARY	PLIOCENE						
			MIOCENE OLIGOCENE EOCENE						
65		PALEOCENE	TURTLE MOUNTAIN	PEACE GARDEN GOODLANDS	120	SHALE, CLAY, SAND, LIGNITE BEDS. LOCATED ONLY IN TURTLE MOUNTAIN.			
100	MESOZOIC	CRETACEOUS	UPPER	BOISSEVAIN		30	SAND AND SANDSTONE, GREENISH-GREY. LOCATED ONLY IN TURTLE MOUNTAIN.		
				PIERRE SHALE	COULTER ODANAH MILLWOOD PEMBINA GAMMON FERRUGINOUS	340	SHALES, GREY, NON-CALCAREOUS, LOCAL IRONSTONE, BENTONITE NEAR BASE, GAS SHOW.		
					BOYNE	75	SHALE, DARK GREY, CALCAREOUS, NON-CALCAREOUS, BENTONITIC BANDS.		
					MORDEN	55	SHALE, GREY SPECKLED, CALCAREOUS, BENTONITIC, SLIGHTLY PETROLIFEROUS.		
				FAVEL	ASSINIBOINE KELD	40	SHALE, DARK GREY, NON-CALCAREOUS, RARE IRONSTONE CONCRETIONS, LOCAL SAND AND SILT.		
			ASHVILLE	BELLE FOURCHE WESTGATE NEWCASTLE (ASHVILLE) SKULL CREEK	115	SHALE, DARK GREY, NON-CALCAREOUS, FINE-GRAINED QUARTZ SANDSTONE OR SAND "ZONE".			
			LOWER	SWAN RIVER		75	SANDSTONE AND SAND, FINE-GRAINED WITH SILTS AND GREY, NON-CALCAREOUS CLAYS, PYRITIC, GLAUCONITIC.		
			150	JURASSIC	UPPER JURASSIC	WASKADA		200	BANDED, GREEN BENTONITIC SHALE AND CALCAREOUS, GLAUCONITIC SANDSTONE.
						MELITA	UPPER LOWER	*	BANDS OF SANDY LIMESTONE, VARI-COLOURED SHALE AND SANDSTONE. OIL PRODUCING
					MIDDLE JURASSIC	RESTON		45	LIMESTONE, BUFF AND SHALES, GREY.
AMARANTH	UPPER: EVAPORITE LOWER: RED BEDS	45 40				ANHYDRITE AND/OR GYPSUM, WHITE AND BANDED DOLOMITE AND SHALE. * SHALE, RED TO SILTSTONE, DOLOMITIC. OIL PRODUCING			
TRIASSIC									
250	PERMIAN	(?)	ST. MARTIN COMPLEX		300	CARBONATE BRECCIA AND TRACHYANDESITE (CRYPTO-EXPLOSION STRUCTURE).			
	PENNSYLVANIAN								
300	MISSISSIPPIAN		MADISON GROUP	CHARLES	DANDO EVAP.	20	MASSIVE ANHYDRITE AND DOLOMITE.		
				MISSION CANYON	MC-3 MC-3b MC-3a	120	*	LIMESTONE, LIGHT BUFF, OOLITIC, FOSSILIFEROUS, FRAGMENTAL, CHERTY, BANDS OF SHALE AND ANHYDRITE. OIL PRODUCING	
					MC-2 MC-1				
				LODGEPOLE	FLOSSIE LAKE WHITWATER LAKE VIRDEN	185	*	LIMESTONE AND ARGILLACEOUS LIMESTONE, LIGHT BROWN AND REDDISH MOTTLED, SHALEY ZONES, OOLITIC, CRINOIDAL AND CHERTY. OIL PRODUCING	
					SCALLION ROUTLEDGE				
BAKKEN	UPPER MIDDLE LOWER	20	*	TWO BLACK SHALE ZONES SEPARATED BY SILTSTONE. OIL PRODUCING					
350	DEVONIAN		THREE FORKS	THREE FORKS		35	* SILTSTONE AND SHALE, RED, DOLOMITIC. OIL PRODUCING		
				BIRDBEAR		40	● LIMESTONE AND DOLOMITE, YELLOW-GREY, FOSSILIFEROUS, POROUS, SOME ANHYDRITE.		
				DUPEROW		170	● LIMESTONE AND DOLOMITE, ARGILLACEOUS AND ANHYDRITIC IN PLACES.		
				SOURIS RIVER (FIRST RED)		120	● CYCLICAL SHALE, LIMESTONE, DOLOMITE AND ANHYDRITE.		
				DAWSON BAY (SECOND RED)		65	● LIMESTONE AND DOLOMITE, ANHYDRITIC. LOCAL RED AND GREEN SHALE.		
				WINNIPEGOSIS	PRAIRIE EVAP.	120	HALITE, POTASH, ANHYDRITE AND DOLOMITE INTERBEDDED.		
					UPPER (REEF)	75	● DOLOMITE, LIGHT YELLOWISH-BROWN, REEFOID.		
				ELM POINT	LOWER (PLATFORM)		12	LIMESTONE, FOSSILIFEROUS, HIGH-CALCIUM.	
				ASHERN			12	DOLOMITE AND SHALE, BRICK RED TO VARIGATED GREEN.	
				400	SILURIAN		INTERLAKE GROUP		135
ORDOVICIAN		STONEWALL	UPPER LOWER WILLIAMS		20	DOLOMITE, GREYISH-YELLOW, BEDDED.			
		STONY MOUNTAIN	GUNTON		25	DOLOMITE, YELLOWISH-GREY, SHALY.			
			PENITENTIARY GUNN		20	● DOLOMITE, DUSKY-YELLOW, FOSSILIFEROUS. ● SHALE, RED-GREEN, FOSSILIFEROUS LIMESTONE INTERBEDS.			
		RED RIVER	FORT GARRY SELKIRK CAT HEAD DOG HEAD		170	● DOLOMITIC LIMESTONE, MOTTLED AND MOTTLED DOLOMITE.			
WINNIPEG	UPPER SHALE LOWER SANDSTONE	60	SHALE, GREEN, WAXY, AND INTERBEDDED SANDSTONE. ● SAND AND SANDSTONE, QUARTZOSE.						
500	CAMBRIAN		DEADWOOD		60	SAND, BLACK TO GREEN-GREY, WAXY, GLAUCONITIC SILTSTONE AND SHALE, GREEN-GREY TO BLACK, LOCATED ONLY IN EXTREME SOUTHWEST CORNER OF MANITOBA.			
550									
	PRECAMBRIAN						ACID AND BASIC CRYSTALLINES AND METAMORPHICS.		

* productive intervals

● documented oil & gas shows

Manitoba geologic column, showing productive intervals and documented oil and gas shows.