

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		340	SHALES, GREY, NON-CALCAREOUS, LOCAL IRONSTONE, BENTONITE NEAR BASE, GAS SHOW.
					ODANAH			
					MILLWOOD			
					PEMBINA			
			GAMMON FERRUGINOUS			SHALE, DARK GREY, CALCAREOUS, NON-CALCAREOUS, BENTONITIC BANDS.		
			NIORARA		75	SHALE, GREY SPECKLED, CALCAREOUS, BENTONITIC, SLIGHTLY PETROLIFEROUS.		
				MORDEN SHALE		55	SHALE, DARK GREY, NON-CALCAREOUS, RARE IRONSTONE CONCRETIONS, LOCAL SAND AND SILT.	
			FAVEL	ASSINIBOINE		40	SHALE, GREY WITH HEAVY CALCAREOUS SPECKS, LIMESTONE BANDS AND BENTONITE.	
				KELD				
ASHVILLE	BELLE FOURCHE		115	SHALE, DARK GREY, NON-CALCAREOUS, FINE-GRAINED QUARTZ SANDSTONE OR SAND "ZONE".				
	WESTGATE							
		NEWCASTLE (ASHVILLE)						
		SKULL CREEK						
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. OIL PRODUCING		
250	TRIASSIC							
	PERMIAN	(?)	ST. MARTIN COMPLEX		300	CARBONATE BRECCIA AND TRACHYANDESITE (CRYPTO-EXPLOSION STRUCTURE).		
300	PENNSYLVANIAN							
	MISSISSIPPIAN			MADISON GROUP	CHARLES	DANDO EVAP.	20	MASSIVE ANHYDRITE AND DOLOMITE.
* MISSION CANYON					MC-3	MC-3b	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					
350	* BAKKEN	UPPER		20	TWO BLACK SHALE ZONES SEPARATED BY SILTSTONE. OIL PRODUCING			
		MIDDLE						
		LOWER						
400	DEVONIAN			QU/APPALACHIAN GROUP SASK. GROUP MAN. GROUP ELK POINT GROUP	THREE FORKS		35	SILTSTONE AND SHALE, RED, DOLOMITIC.
					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.
					PRAIRIE EVAP.		120	HALITE, POTASH, ANHYDRITE AND DOLOMITE INTERBEDDED.
					WINNIPEGOSIS	UPPER (REEF)	75	● DOLOMITE, LIGHT YELLOWISH-BROWN, REEFOID.
					ELM POINT	LOWER (PLATFORM)		LIMESTONE, FOSSILIFEROUS, HIGH-CALCIUM.
					ASHERN		12	DOLOMITE AND SHALE, BRICK RED TO VARIGATED GREEN.
					450	SILURIAN		
LOWER	WILLIAMS	20	DOLOMITE, GREYISH-YELLOW, BEDDED.					
GUNTON		25	DOLOMITE, YELLOWISH-GREY, SHALY.					
PENITENTIARY		20	● DOLOMITE, DUSKY-YELLOW, FOSSILIFEROUS.					
GUNN		20	● SHALE, RED-GREEN, FOSSILIFEROUS LIMESTONE INTERBEDS.					
FORT GARRY SELKIRK		170	DOLOMITIC LIMESTONE, MOTTLED AND MOTTLED DOLOMITE.					
CAT HEAD DOG HEAD								
500	ORDOVICIAN			UPPER SHALE		60	SHALE, GREEN, WAXY, AND INTERBEDDED SANDSTONE.	
					LOWER SANDSTONE		60	● SAND AND SANDSTONE, QUARTZOSE.
550	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.	
	PRECAMBRIAN						ACID AND BASIC CRYSTALLINES AND METAMORPHICS.	

* productive intervals

● documented oil shows

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