

Section	Year	Section Location	Measured Thickness	Thickness/ Stratigraphic Interval	# Lithologic Samples	# Thin Sections	# Conodont Samples
BC	2002	N68°59'23.1", W146°14'40.5"	265 m	104 m (?) Kayak Shale, 95 m WL (?), 66 m AL (?)	113	99	5
EF	2000	N68°43.3', W146°34.9'	105 m	91 m WBLM, 14 m ALM	81	24	6
EF2	2000/ 2001	N68°43.929', W146°38.099'*	509 m	32 m WBLM, 111 m ALM, 71 m AMM, 262 m AUM, 33 m RL, SG	226 (2000) & 72 (2001) = 290 total	151	12
FC**	2000	N68°44.356', W146°38.660'*	135 m	22 m ALM, 110 m AMM, 3 m AUM	94	0	4
FW***	2000	N68°44.222', W146°38.191'*	178 m	17 m AMM, 133 m AUM, 28 m RL, SG	108	0	10
MF	2000	N68°43.130', W146°10.607'*	383 m	70 m WCLM, 136 m WMM, 134 m WBLM, 36 m ALM	295	146	10
MF2	2000	N68°43.109', W146°11.175'*	228 m	112 m WMM, 116 m	164	0	7
MF3	2001	N68°43'55.2", W146°11'49.9"	161 m	102 m WMM, 59 m WBLM	152	58	4
NF	2001	N68°44'23.4", W146°37'56.6"	140 m	129 m AUM, 11 m RL, SG	117	84	2
NP1	2001	N68°48'18.1", W146°39'54.9"	47 m	44 m Alapah (?), SG	45	48	5
WF	2001	N68°44'45.5", W146°40'6.5"	402 m	42 m WBLM, 115 ALM, 67 m AMM, 180 m AUM	314	165	10

Table 1. Summary of outcrop data. Sections are arranged alphabetically. WL = Wachsmuth Limestone, AL = Alapah Limestone, WCLM = Wachsmuth crinoidal limestone member, WMM = Wachsmuth middle member, WBLM = Wachsmuth banded limestone member, ALM = Alapah lower member, AMM = Alapah Middle Member, AUM = Alapah upper member, RL = rubbly limestone, and SG = Sadlerochit Group. *Latitude and Longitude determined from DeLorme 3-D TopoQuads map software. **Section crosses a normal fault several times causing an abnormally high thickness in the AMM. ***Numerous normal faults occur in this section. Above 120 m, the section was only measured because the displacement along the faults becomes undeterminable.

FACIES	DIAGENETIC FEATURES/ SEDIMENTARY STRUCTURES	SKELETAL/NON-SKELETAL GRAINS	DEPOSITIONAL ENVIRONMENT
1. Dolostone	Recrystallization	Crinoids, bryozoans, peloids, shell frags., sponge spicules, ostracods	Diagenetic
2. Wackestone/Banded Black Chert	Banded black chert, minor dolomite	Crinoids, peloids, fenestrate bryozoans, shell frags., sponge spicules, ostracods	Restricted Platform
3. Peloid-Calcisphere Wackestone/Packstone	Nodular black chert, coarsening-up beds	Peloids, calcispheres, crinoids, fenestrate bryozoans, skeletal and shell fragments, ostracods, minor sponge spicules and forams	Open Platform
4. Peloid-Brachiopod-Calcisphere-Ostracod Wackestone/Packstone	Coarsening-up beds, brachiopods occur in bed tops	Peloids, brachiopods, calcispheres, ostracods, crinoids, fenestrate bryozoans, minor forams and sponge spicules	Open Platform
5. Bioclastic-Peloid Packstone/Grainstone	Grain micritization	Peloids, skeletal frags., fenestrate bryozoans, crinoids, minor ostracods	Shoal to Near Shoal
6. Bioclastic Grainstone/Rudstone	Syntaxial overgrowth cement, rare planar- and cross-laminations	Crinoids, fenestrate bryozoans, skeletal frags., minor forams, solitary rugose corals, brachiopods	Shoal to Near Shoal
7. Peloid Packstone/Grainstone	Abundant black chert nodules, rare planar laminations	Peloids, crinoids, bryozoans, and minor solitary rugose corals, ostracods, sponge spicules	Open Marine – Above Fair-Weather Wave Base
8. Peloid-Coral-Brachiopod Wackestone/Packstone	Abundant black chert nodules, rare phosphate in bryozoan zoecia, rare planar laminations	Peloids, colonial corals, solitary rugose corals, brachiopods, crinoids, skeletal frags., ostracods	Open Marine – At or Above Fair-Weather Wave Base

Table 2. Summary of lithofacies identified in the Porcupine Lake Valley.

FACIES	DIAGENETIC FEATURES/ SEDIMENTARY STRUCTURES	SKELETAL/NON-SKELETAL GRAINS	DEPOSITIONAL ENVIRONMENT
9. Coral Wackestone/ Packstone/Grainstone	Rare nodular to lenticular black chert	Colonial corals, solitary rugose corals, peloids, fenestrate bryozoans, crinoids, ostracods, skeletal frags., minor brachiopods, rare gastropods, sponge spicules, forams, ramose bryozoans, calcispheres	Open Platform (Quiet Areas Behind Shoals) and/or Open Marine – At to Above Fair-Weather Wave Base
10. Brachiopod Wackestone/ Packstone/Grainstone	Rare black chert nodules	Brachiopods, crinoids, skeletal frags., minor colonial corals, calcispheres, ostracods	Open Marine – At to Above Fair-Weather Wave Base
11. Solitary Rugose Coral Wackestone/Packstone	Minor banded black chert, dolomite	Solitary rugose corals, crinoids, skeletal frags., crinoids, fenestrate bryozoans, peloids, minor forams brachiopods, ramose bryozoans	Open Marine – At or Above Fair-Weather Wave Base
12. Peloid-Skeletal Wackestone/Packstone	Black Chert Nodules	Peloids, skeletal and shell frags., sponge spicules, ostracods, crinoids, forams, fenestrate bryozoans, minor solitary rugose corals	Open Marine – At or Above Fair-Weather Wave Base
13. Skeletal Wackestone/ Packstone	Rare black chert nodules, rare normal graded beds	Skeletal and shell frags., crinoids, fenestrate bryozoans, rare forams	Open Marine – At or Above Fair-Weather Wave Base
14. Foram Wackestone/ Packstone	Abundant nodular black chert, minor banded black chert	Forams, peloids, skeletal and shell frags., ostracods, minor sponge spicules, crinoids, fenestrate bryozoans	Open Marine – Below Fair-Weather Wave Base
15. Crinoid-Solitary Rugose Coral Floatstone	Erosive base, fine-upward	Crinoids, solitary rugose corals, forams, ostracods, brachiopods, skeletal frags.	Open Marine – At to Above Storm Wave Base
16. Calcareous Shale	Black nodular to lenticular chert, planar laminations	Rare crinoids, fenestrate bryozoans, forams, brachiopods	Open Marine – Below Storm Wave Base

Table 2 (continued). Summary of lithofacies identified in the Porcupine Lake Valley.