

GEOLOGICAL SURVEY OF CANADA

DEPARTMENT OF ENERGY,
MINES AND RESOURCES

PAPER 68-47

FORMATION, A NEW LOWER CAMBRIAN
FORMATION IN THE SOUTHERN MACKENZIE
MOUNTAINS, DISTRICT OF MACKENZIE

(95 L, 105 I, 105 P)

(Report and 4 figures)

R. C. Handfield

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SEKWI FORMATION, A NEW LOWER CAMBRIAN FORMATION IN THE SOUTHERN MACKENZIE MOUNTAINS, DISTRICT OF MACKENZIE (95 L, 105 I, 105 P)

R. C. Handfield

DEPARTMENT OF ENERGY, MINES AND RESOURCES

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## ABSTRACT

The name Sekwi Formation is proposed for a distinct fossiliferous carbonate unit of Early Cambrian age that outcrops in a northwest-trending belt, 160 miles by 60 miles, near the boundary between Mackenzie and Selwyn Mountains in southwest District of Mackenzie. At the type section in the Sekwi Range the formation consists of 2,525 feet of orange and grey weathering limestone, dolostone and sandy dolostone. Argillaceous sandstone, at least partly of Early Cambrian age, conformably underlies the Sekwi Formation. The Sekwi Formation is disconformably overlain in places by late Middle Cambrian calcareous shale and in other places by Upper Cambrian limestone. Eastward the Sekwi changes facies to sandstone whereas southwestward it apparently changes to argillite and shale.

Early Cambrian fossils found in the Sekwi Formation include aff. Fallotaspis sp., aff. Holmia sp., Olenellus sp., and abundant Archaeocyatha.

SEKWI FORMATION, A NEW LOWER CAMBRIAN FORMATION IN THE SOUTHERN MACKENZIE MOUNTAINS, DISTRICT OF MACKENZIE

#### INTRODUCTION

The Precambrian and Cambrian sequence of the southern Mackenzie Mountains and adjacent Selwyn Mountains includes several easily defined stratigraphic units. One of these, a brightly coloured carbonate unit entirely of Early Cambrian age is herein described and named the Sekwi Formation. Strata assigned to it have been mapped as numbered units by Green and Roddick (1961), Blusson (1966, 1968a, b) and Gabrielse et al. (1965). Early Cambrian faunas from near the type section of the Sekwi Formation — important because they are stratigraphically allocated in a single section — are now being described by W.H. Fritz, Geological Survey of Canada. A doctoral thesis on the Archaeocyatha from the Sekwi is being written by the author. Although the entire southern part of the Mackenzie Mountains east of the Sekwi Formation (Fig. 1) have been mapped, no other fossiliferous Lower Cambrian rocks have been recognized between the area under discussion and the Mackenzie River, 160 miles to the east (Douglas and Norris, 1960, 1961, 1963).

Grateful acknowledgment is made to H. Gabrielse and S.L. Blusson, Geological Survey of Canada, under whose supervision the field work was done. The manuscript was critically reviewed by S.L. Blusson, W.H. Fritz and H. Gabrielse.

#### DISTRIBUTION AND TYPE SECTION

The Sekwi Formation is well exposed in Sekwi Mountain (105P), Nahanni (105I) and Glacier Lake (95L) map-areas, Mackenzie Mountains, District of Mackenzie. Rocks referable to the Sekwi Formation also occur in Wrigley Lake (95M), Flat River (95E) and Frances Lake (105H) map-areas.

The name is taken from the Sekwi Range in which a well-exposed section on the first ridge (lat. 63°33'N, long. 128°44'W) immediately north of June Lake is designated the type section (Fig. 1, section 2). The section there is overturned and dips 65° west (Fig. 3).

The best exposures of the Sekwi Formation are in an arcuate belt running from the northeastern part of the Nahanni map-area to the northwest-ern part of Sekwi Mountain map-area (map-unit 14, Blusson, (1968). Throughout the central part of this belt the rocks outcrop in a faulted anticline overturned to the east.

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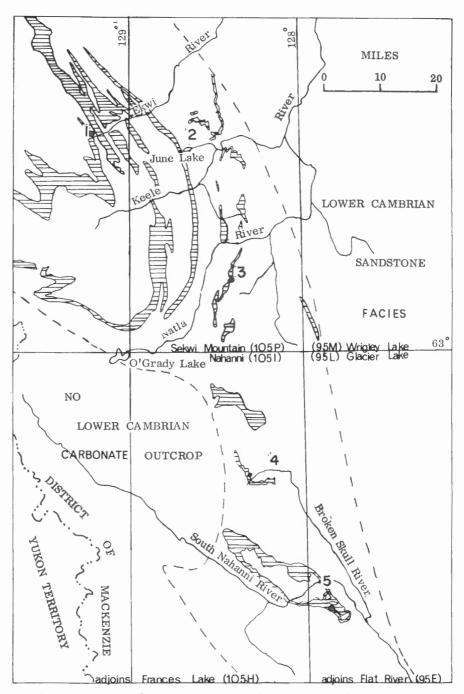
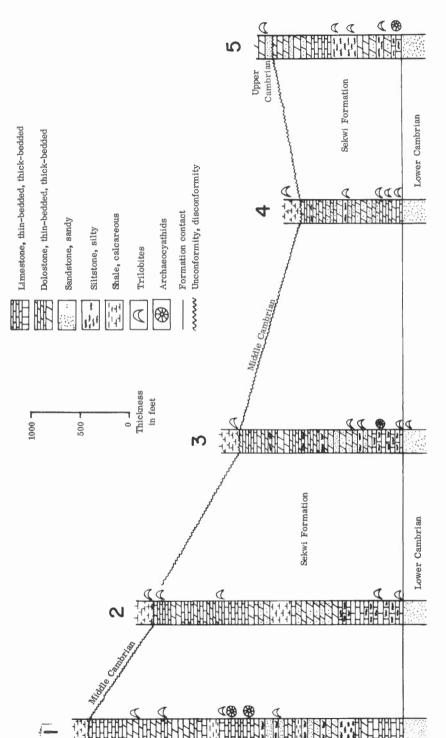


Figure 1. Index map of southwestern Mackenzie Mountains showing outcrop areas of Sekwi Formation (shaded) and locations of measured sections (numbered). From Blusson (1968 a, b) and Gabrielse, et al. (1965).



Stratigraphic cross-section of Sekwi Formation in southwestern Mackenzie Mountains. Numbers refer to localities in Figure 1. Figure 2.

## LITHOLOGY

The Sekwi Formation, in striking contrast to the drab uniformity of underlying and overlying rocks, consists primarily of orange, yellow, red, and grey weathering dolostone and limestone. Sandy dolostone and sandstone are common in the middle part of the formation. Variegated shales and silt-stones occur in minor amounts throughout the formation (see Fig. 2 for generalized lithology at each section and appendices for details of sections 2, 4 and 5).

The alternation of bright colours (revealed by conspicuous banding in Fig. 3) combined with the overall resistant character of the formation makes the Sekwi Formation easily recognizable for great distances. Strata immediately overlying the Sekwi Consist of at least 1,000 feet of dark grey, recessive calcareous shale. The underlying rocks comprise 1,000 or more feet of sandstone, the upper 500 feet of which are recessive and weather dark brown.

The lower part (approximately 700 feet) of the Sekwi Formation at the type section includes abundant mottled brown and grey limestone. This mottled limestone consists of pods and discontinuous layers of grey weathering, fine-grained limestone within a brown weathering silty and dolomitic matrix. The limestone pods and layers are generally 1/2 inch to 2 inches thick, 2 to 24 inches long, and are spaced from 1/2 inch to 3 inches apart. This structure has been informally called 'Swiss-cheese' limestone by Green and Roddick (1961). Less abundant grey weathering limestone, orange weathering dolostone and minor amounts of shale are interbedded with the mottled limestone.

Elsewhere in Sekwi Mountain map-area (Fig. 2, sections 1 and 3) 'Swiss-cheese' limestone is of minor importance whereas grey weathering limestone and dolostone predominate. At section 4 dolostone is abundant and 'Swiss-cheese' limestone is absent. In southern Nahanni map-area and northern Frances Lake map-area 'Swiss-cheese' limestone is well developed (200 ± feet) (see section on correlation below). At section 5 siltstone and dolostone are more abundant than the 'Swiss-cheese' limestone. The Sekwi Formation at section 5 was included in map-unit 19 by Gabrielse et al. (1965).

In the middle part of the type section, sandy, orange weathering dolostones, generally medium— to thick-bedded, are predominant. Pure quartz sandstone beds are not abundant. The sand grains are well-rounded and range from fine to coarse with no constant vertical gradation in size. In the dolostones, the quartz grains are usually 'floating' in a matrix of fine-to medium—grained dolomite although all gradations exist between slightly sandy dolostone and pure sandstone. The sandstones and especially the sandy dolostones commonly display well-developed crossbedding. This member is

remarkably uniform throughout the area investigated and is 500 to 700 feet thick except at section 5 where the dolostones are for the most part less sandy than to the north.

The upper part of the type section is a heterogeneous unit comprising 1,000 feet of orange, grey and brown weathering limestone and dolostone. The limestone is locally onlitic and, in part, bioclastic. South of the type section, limestone is less abundant than dolostone, partly because pre-Middle Cambrian erosion has removed the upper limestone and partly because dolomitization has affected the beds irregularly so that limestones in one area may grade into dolostones in another.

It should be emphasized that these gross lithologic units are recognizable only in a general way and are not mappable as distinct units thoughtout most of the area being considered.

Archaeocyathid bioherms up to 10 feet thick have been found in several places within the Sekwi Formation. At section 1 two of such buildups were observed 1,550 and 1,700 feet above the base. Abundant Archaeocyatha were also found 10 miles southwest of section 1 and 12 miles northwest of O'Grady Lakes.

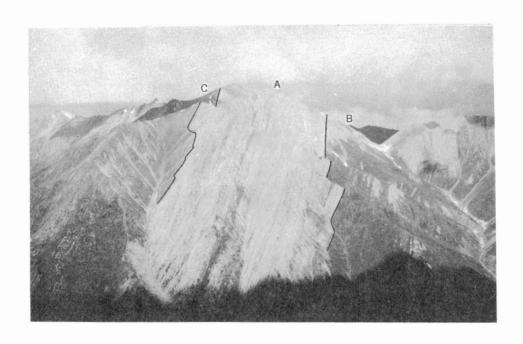
# BOUNDARIES AND CONTACT RELATIONSHIPS

The Sekwi Formation is underlain, apparently conformably, by 500 feet of recessive, brown weathering, fine-grained sandstone. One fossil, an olenellid trilobite, was found about 30 feet below the top of this unit indicating that it is at least partly of Early Cambrian age. The lower boundary of the Sekwi Formation is placed at the base of the first limestone above this recessive sandstone, a contact which is easily recognizable throughout most of Sekwi Mountain map-area (sections 1, 2 and 3). At sections 4 and 5 the Sekwi is underlain by sandstone that is less recessive, but which, however, still presents a marked contrast to the Sekwi Formation.

The upper boundary of the Sekwi Formation, at the type section, is drawn at the top of the uppermost, moderately resistant, brown weathering, dark grey, fossiliferous limestone. This limestone is overlain by recessive, dark grey weathering, thin-bedded, limy shale of Middle Cambrian age. At sections 3 and 4 the upper boundary is particularly prominent as the dark grey Middle Cambrian beds rest directly on yellow or orange dolostone of the Sekwi Formation. Although the Middle Cambrian strata appear conformable on the Sekwi Formation at sections 1, 2, 3 and 4, the paleontology confirms the significant unconformity suggested by the regional stratigraphy. Near the type section late Middle Cambrian fossils belonging to the Bolaspidella Zone (W.H. Fritz, personal communication) occur only 70 feet above the top of the Sekwi. Thus four Middle Cambrian zones appear to be missing at this

Figure 3. Air view north from June Lake showing the type section (section 2, overturned) of the Sekwi Formation: A-Sekwi Formation; B-recessive Middle Cambrian strata; note abundance of vegetation on these beds in contrast to the Sekwi Formation; C-recessive brown weathering finegrained sandstone.

Figure 4. View northwest of section 5 showing upper part of Sekwi Formation: A-top of Sekwi here overlain unconformably by Upper Cambrian maroon sandstone.





locality. At section 5 (Fig. 3) Upper Cambrian (mid-Franconian) maroon sandstones lie with angular unconformity on the Sekwi Formation.

#### FOSSILS, AGE AND CORRELATION

Fossils found throughout the Sekwi Formation (localities shown on Fig. 2) indicate that the entire formation is Early Cambrian in age. At the base of sections 2, 3 and 4 aff. Fallotaspis sp. A was found. In the immediately overlying rocks aff. Holmia sp. A was found. These genera are considered to be of early and middle Early Cambrian age. Near the top of section 1 and at the top of section 2 Bonnia sp. is present. Crassifimbra sp. and cf. Inglefieldia sp. are associated with Bonnia sp. at the top of section 2. This assemblage is considered to be late Early Cambrian in age. Other fossils found in the upper part of the Sekwi include Paedeumias sp. and Salterella sp.

At section 1, near the middle of the section, the following Archaeocyatha occur: cf. Bacatocyathus sp., Clarucyathus sp., Coscinocyathus sp., Dictyocyathus sp., Metaldetes sp., aff. Porocyathus sp., and Pycnoidocyathus spp. This assemblage seems to indicate a middle Early Cambrian age on the basis of correlation with standard sequences in Siberia, the only place where the succession of archaeocyathids is known in any detail. The genera Coscinocyathus and Dictyocyathus are confined to the Aldan and lower Lena Stages in Siberia. Bacatocyathus is found only in the lower Lena Stage. Beds in Australia containing Pycnoidocyathus – the only occurrence of this genus outside of North America – have been correlated by Zhuravleva (1960) with the lower Lena Stage. Although Clarucyathus is restricted to the upperhalf of the Lena Stage, the lack of other characteristic upper Lena forms such as Archaeocyathus and colonial forms (e.g. Erbocyathus) in this fauna suggests the best correlation is with the lower Lena Stage.

To the south near the mutual corner of the four map-areas - Nahanni (105I), Frances Lake (105H), Flat River (95E), and Glacier Lake (95L) - strata referred to various numbered map-units by other workers are here included in the Sekwi Formation. These are map-units 4 and 5 of Green and Roddick (1961), Blusson (1966, 1968a, b) and map-units 15a and 15b of Gabrielse et al. (1965). These strata were briefly examined by the author in 1966. Map-unit 4 includes 'Swiss-cheese' limestone and dolostone whereas map-unit 5 is mainly sandy dolostone and dolostone. These strata are of Early Cambrian age. Included provisionally, on account of correlation uncertainties, are map-units 6 and 7 of Blusson (1966) and 16a and 16b of Gabrielse et al. (1965). Because of the limited extent of these rocks as discrete units they are here regarded informally as members of the Sekwi Formation. Gabrielse (in preparation) has done likewise.

Correlation Chart of Lower Cambrian and Precambrian (?) Formations and map-units of Sekwi Mountain, Nahanni and adjacent map-areas. TABLE 1

	Sekwi Mtn.	Nahanni map-area	nap-area	Frances Lake map-area	e map-area	Flat River	Glacier Lake map-area	e map-area	Wrigley La	Wrigley Lake map-area
Locality	map-area	north	south	north-east remainder	remainder	map-area	west	central	west	central
overlying	Middle	Middle	Middle and/or	Middle and/or		Middle and/or	Upper	Middle	Middle	
peds	Cambrian (15)	Cambrian (6)	Cambrian (6)	Cambrian (9)		Cambrian (18)	Cambrian Cambrian	Cambrian Cambrian	Cambrian (14)	orian (17)
					••••					
				~~~	~~~		•		~~~~	
							~~~		·	
Lower	Sekwi	Sekwi	Sekwi	Sekwi	(8)	Sekwi	Sekwi	(13a)	Sekwi	(13a)
	(14)	(5a)	(4, 5)	(4, 5) (6? 7?)		(15a, 15b) (16a? 16b?)	part of (19)		part of (21a)	
¢	(13)	(3)	(3)	(3)	(3)	(13c)	(13c)		(13a)	
Precambrian	(12).									

Across the Flat River Valley in northeastern Frances Lake maparea, units 5, 6 and 7 of Blusson (1966) change facies to dark brown and black calcareous argillite, slate, and shale which is, in turn, bevelled westward by an unconformity beneath Middle and/or Upper Cambrian strata (Blusson, personal communication).

Lower Cambrian rocks have been studied by the author in CoalRiver map-area 200 miles southeast of the Sekwi Formation type section (Handfield, 1967). Trilobites found there (including aff. Fallotaspis sp. A and aff. Holmia sp. A) indicate an age comparable to that of the Sekwi but the lithology is distinct enough to exclude these beds from the Sekwi Formation.

Quartzites of suspected Early Cambrian age were described by Gabrielse et al. (1965, map-unit 13a) from Wrigley Lake and Glacier Lake map-areas. Since then Early Cambrian fossils have been found in two localities at the top of this unit (Gabrielse, 1966). According to W.H. Fritz (written comm.) these fossils are typical of those found near, but not right at, the top of the Lower Cambrian in Western Canada. The presence of these fossils suggests that the upper part of unit 13a is equivalent to at least part of the Sekwi Formation.

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# APPENDICES

Description of measured sections



# APPENDIX I

DESCRIPTION OF THE TYPE SECTION OF SEKWI FORMATION AT LAT.  $63\,^\circ\!33\,^!\mathrm{N.}$  , LONG.  $128\,^\circ\!44\,^!\mathrm{W.}$ 

		Thickne	ss (feet)
Unit	Lithology		from
		Unit	base
	Underlying beds are brown, recessive, fine-grained sandstone.		
	SEKWI FORMATION		
1	Limestone, greenish grey, fine-grained; thin- bedded; weathers light brown; moderately resistant; aff. Fallotaspis sp. A.	37	37
2	Shale, calcareous, brown; thin-bedded; weathers light brown; recessive.	10	47
3	Limestone, medium grey, fine-grained; thin- bedded; weathers brown with grey mottling; moderately resistant; aff. Holmia sp. A.	148	195
4	Limestone, medium grey, fine-grained; thin- bedded; weahters medium grey; recessive.	55	250
5	Limestone, medium grey, fine-grained; thin- bedded; weathers brown with grey mottling; moderately resistant.	145	395
6	Limestone, medium to dark grey, fine-grained; thin- to medium-bedded; weathers medium grey; moderately resistant.	230	625
7	Limestone, medium grey, fine-grained; thin- bedded; weathers light brown with grey mottling; moderately resistant.	33	658
8	Dolostone, light grey, medium-grained; medium-bedded; weathers orange to brown; resistant.	12	670
9	Dolostone, sandy, light grey, fine-grained; thick-bedded; sand forms resistant laminae, weathers orange; resistant.	134	804

Unit	Lithology	Thickne	ss (feet)
	Lithology	Unit	base
10	Dolostone, sandy, light grey, medium- to coarse-grained; medium-bedded; 'floating' quartz grains moderately to well-rounded; weathers orange; resistant.	159	963
11	Orthoquartzite, white, fine-grained; medium- bedded, weathers white to light grey; strongly resistant.	14	977
12	Covered interval.	82	1059
13	Dolostone, sandy, medium grey, medium- to coarse-grained; medium-bedded; minor thin interbeds of shale; weathers orange; resistant.	30	1098
14	Limestone, medium grey, fine-grained; thin- to medium-bedded; weathers brown; moderately resistant.	47	1145
15	Dolostone, sandy, light grey, fine-grained; medium-bedded; weathers orange; interbedded with coarse-grained orthoquartzite; resistant.	36	1181
16	Covered interval.	121	1302
17	Shale, calcareous, yellow; thin-bedded; weathers yellow; recessive.	9	1311
18	Limestone, light grey, fine-grained; thin- bedded; weathers grey; strongly resistant.	36	1347
19	Dolostone, light grey, fine-grained; medium- bedded; weathers red; strongly resistant.	9	1356
20	Dolostone, sandy, light grey, fine-grained; medium-bedded; weathers orange; strongly resistant.	17	1373
21	Limestone, light grey, fine-grained; thin- bedded; locally oolitic; weathers grey; slightly resistant.	35	1408

77	T.Jah.a.I.	Thickne	
Unit	Lithology	Unit	from base
22	Dolostone, calcareous, light grey, fine- grained; medium-bedded; weathers orange; moderately resistant.	51	1459
23	Limestone, light grey, fine-grained; thin- bedded; weathers grey; moderately resistant.	50	1509
24	Dolostone, calcareous, light to medium grey, fine-grained; thin-bedded; weathers orange; moderately resistant.	60	1569
25	Limestone, light grey, fine-grained; thin- bedded; laminated; weathers brown; moderately resistant.	22	1591
26	Limestone, dolomitic, medium grey, medium- grained; thin-bedded; weathers orange; strongly resistant.	14	1605
27	Limestone, dolomitic, light grey, coarse- grained; medium-bedded; weathers brown; strongly resistant.	51	1656
28	Limestone, light grey, fine-grained; thin- bedded; weathers light grey to orangish brown; moderately resistant; Salterella rugosa; Paedeumias sp. and other olenellid trilobites.	195	1851
29	Dolostone, light grey, fine- to medium-grained; medium-bedded; weathers brown; strongly resistant.	141	1992
30	Limestone, light grey, fine-grained; medium- bedded; weathers medium grey with brown mottling; moderately resistant.	67	2059
31	Dolostone, calcareous, medium grey, fine- grained; thin-bedded; weathers light brown; moderately resistant.	63	2122
32	Limestone, light to medium grey, fine- grained; thin-bedded; weathers grey; moderately resistant.	121	2243

		Thickness	
Unit	Lithology		from
		Unit	base
33	Dolostone, light grey, fine-grained; thin- bedded; weathers light brown; moderately resistant.	20	2263
34	Dolostone, light grey, fine-grained; medium- bedded; weathers orangish grey; moderately resistant.	93	2356
35	Covered interval.	53	2409
36	Limestone, fossiliferous, medium to dark grey, fine-grained; thin-bedded; weathers light brown; moderately resistant; Bonnia sp., Crassifimbra sp., and Inglefieldia sp.	116	2525
	Overlying beds are dark grey, recessive, limy shale.		

## APPENDIX 2

DESCRIPTION OF SECTION 4, NORTHEAST NAHANNI MAP-AREA AT LAT. 62°41'N, LONG. 128°17'W.

		Thickne	ess (feet)
Unit	Lithology		from
		Unit	base
	Underlying beds are brown weathering, weakly resistant, fine-grained sandstone.		
	SEKWI FORMATION		
1	Limestone, greenish grey, fine-grained; thin- bedded; weathers brown; slightly resistant; aff. Fallotaspis sp. A.	5	5
2	Dolostone, silty, calcareous, medium grey; fine-grained; thin- to medium-bedded; weathers orange; resistant.	47	52
3	Covered interval.	25	77
4	Dolostone, medium grey, fine-grained; thin- bedded; weathers brown; slightly resistant; aff. Holmia sp. A.	3	80
5	Dolostone, silty, medium grey, fine-grained; thin-bedded; weathers orange; resistant.	37	117
6	Covered interval.	26	143
7	Dolostone, light grey, medium-grained; medium-bedded; weathers light grey; moderately resistant; Nevadella sp.	71	214
8	Dolostone, sandy, light grey, fine-grained; medium-bedded; floating quartz grains well rounded; weathers light grey; strongly resistant.	50	264
9	Dolostone, sandy, light grey, fine-grained; thick- bedded; floating quartz grains well rounded; weathers orange; strongly resistant.	55	319

		Thickne	ess (feet)
Unit	Lithology	Unit	from base
-10	Dolostone, sandy, light grey, medium grained; medium-bedded; weathers light grey; strongly resistant.	49	368
11	Dolostone, sandy, light grey, fine-grained; thick-bedded; sand medium- to coarse-grained; weathers orange; strongly resistant.	20	388
12	Orthoquartzite, white, fine- to medium-grained; medium-bedded; weathers white; strongly resistant.	7	395
13	Dolostone, sandy, light grey, fine-grained; thin- bedded; weathers light orange; interbedded with fine-grained orthoquartzite; moderately resistant.	13	408
14	Dolostone, grey, medium-grained; medium- bedded; weathers light grey; recessive.	20	428
15	Dolostone, sandy, light grey, medium-grained; medium- to thick-bedded; weathers light orange; moderately resistant.	45	473
16	Covered interval.	15	488
17	Dolostone, sandy, light orange, fine-grained; medium-bedded; 'floating' quartz grains well rounded; weathers orange; some thin interbeds of non-sandy dolostone; strongly resistant.	67	555
18	Mudstone, dolomitic, brown; thin-bedded; weathers brown; slightly resistant; Olenellus sp. A.	28	583
19	Dolostone, sandy, light grey, fine-grained; medium- to yellow; some interbedded quartz sandstone; strongly resistant.	155	738
20	Dolostone, sandy, purple; thin-bedded; weathers purple; strongly resistant.	20	758

	****	Thickne	ss (feet)
Unit	Lithology	Unit	from base
21	Dolostone, pale green, fine-grained; thin- bedded; weathers green; slightly resistant.	10	768
22	Dolostone, purple, fine-grained; thin-bedded; weathers purple; some interbedded orange-weathering dolostone; recessive.	65	833
23	Covered interval.	22	855
24	Dolostone, light grey, fine-grained; thin- bedded; weathers orange; resistant.	38	893
25	Covered interval.	15	908
26	Dolostone, medium grey, fine-grained; medium- bedded; weathers grey; resistant.	65	973
27	Covered interval.	30	1003
28	Dolostone, yellow, fine-grained; thin-bedded; weathers yellow; recessive.	5	1008
	Overlying beds are dark grey, pyritic, recessive	,	

limy shale.

APPENDIX 3

DESCRIPTION OF SECTION 5, SOUTHWEST GLACIER LAKE MAP-AREA AT LAT.  $62\,^{\circ}19\,^{\circ}N.$ , LONG.  $127\,^{\circ}52\,^{\circ}W.$ 

Unit	Lithology	Thickness	(feet) from
		Unit	base
	Underlying beds are green to brown weathering, medium-bedded, resistant fine-grained sandstone and siltstone.		
	SEKWI FORMATION		
1	Limestone, silty, medium grey, fine-grained; thin- to medium-bedded; weathers brown with grey mottling; resistant; olenellid trilobites, archaeocyathids.	100	100
2	Dolostone, sandy, light grey, fine-grained; thick-bedded; weathers light grey; strongly resistant.	90	190
3	Siltstone, greenish grey; thin-bedded; weathers brown; recessive; Olenellus sp.	66	256
4	Dolostone, sandy, light grey, fine-grained; medium-bedded; weathers brownish grey; moderately resistant.	45	331
5	Dolostone, purple-grey, fine-grained; medium- to thick-bedded; weathers orange; minor sandy interbeds; strongly resistant.	124	455
6	Siltstone, greenish grey; thin-bedded; weathers yellow to light brown; some purple weathering interbeds; recessive; Olenellus sp.	270	725
7	Limestone, medium-grey, fine-grained; thin- to medium-bedded; weathers brown; moderately resistant.	150	875
8	Dolostone, medium grey, fine-grained; thick- bedded; weathers orange; strongly resistant.	25	900

		Thickness (feet)	
Unit	Lithology	Thicknes	from
		Unit	base
9	Limestone, medium grey, fine-grained; thin- to medium-bedded; weathers brown; strongly resistant.	25	925
10	Dolostone, grey, fine-grained; medium-bedded; weathers brown; slightly resistant.	50	975
11	Dolostone, silty, light grey, fine-grained; medium-bedded; weathers orange; moderately resistant.	20	995
12	Siltstone, sandy, purple; thin-bedded; weathers purple; recessive.	17	1012
13	Dolostone, light grey, fine-grained; medium- to thick-bedded; weathers orange; some sandy interbeds; moderately resistant.	93	1105
14	Orthoquartzite, light purple, medium-grained; thick-bedded; weathers light purple; strongly resistant.	51	1156
15	Dolostone, sandy, light grey, fine-grained; thick-bedded; weathers orange; 'floating' sand grains well-rounded; moderately resistant.	34	1190
16	Dolostone, light grey, fine-grained; thick- bedded; weathers orange; some purple- weathering siltstone interbeds; moderately resistant.	50	1240
17	Dolostone, light grey, fine-grained; medium- bedded; weathers orange; moderately resistant.	45	1285
	Overlying beds of maroon weathering, resistant, silty sandstone, rest with angular unconformity on Sekwi Formation.		