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FIFTEEN STRATIGRAPHIC SECTIONS FROM THE LOWER CAMBRIAN
OF THE MACKENZIE MOUNTAINS, NORTHWESTERN CANADA

by

W.H. Fritz

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assurance, but the correlation of younger beds in the half-cycle remains tentative.

The fourth half-cycle closed with the deposition of dark shale and platy limestone over the shelf deposits during middle and late Bonnia-Olenellus Zone time. Deposition of these strata continued at an uneven rate throughout the rest of the Cambrian (Middle and Upper) and later. A sub-Upper Cambrian unconformity is present in the northwestern part of the area, and a sub-Ordovician unconformity at the nearby edge of the area cuts down as far as the first half-cycle.

This paper describes 333 lithologic units, 304 fossil localities, and locates 1,571 geochemical samples that will be studied by others.

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FIFTEEN STRATIGRAPHIC SECTIONS FROM THE LOWER CAMBRIAN OF
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INTRODUCTION

This is the second of a series of three papers designed to present a number of lower Cambrian reference sections from the Mackenzie Mountains. Data in the three papers are intended for immediate use by companies currently searching for stratiform lead-zinc deposits in the area. The information will eventually be used by the writer in the construction of a Lower Cambrian depositional model and to document paleontological studies.

Figures 1-3 contain 15 stratigraphic sections that summarize the present stratigraphy and correlations. Lithologic units and fossil localities have been given numbers on the sections that correspond with those accompanying written descriptions of the units and localities in the appendix. In all, 333 stratigraphic units and 304 fossil localities are described.

Figure 4 is a fence diagram that emphasizes facies distribution, and was made by reducing and replotting data pertaining to grand cycles and depositional belts that are shown on Figures 1-3. Data from 10 previously described sections (Fritz, 1976b) have also been integrated with the present information, so that Figure 4 summarizes facies information from all of the 25 stratigraphic sections studied thus far. Definitions of depositional belts and grand cycles and an explanation of the use of these concepts in the Mackenzie Mountains have been given earlier (Fritz, 1975, p. 533-538; 1976a, p. 8-11; 1976b, p. 1, 2).

Geochemical samples were collected at 20-foot intervals from 10 of the present sections. The collecting horizon of each outcrop sampled is marked by a short horizontal line (—) located next to the appropriate

section. A similar line crossed by a vertical line (+) indicates a float sample. A second sample was collected along with the first at numerous 100-foot intervals. The second sample was taken approximately 20 feet along strike from the first and is plotted next to the first at the same horizon on the section. The 1,571 samples plotted on the sections, plus 79 samples plotted on sections not shown, were delivered to I.R. Jonasson of the Geological Survey of Canada in September, 1975 for study.

PREVIOUS WORK AND ACKNOWLEDGMENTS

Previous work on the Lower Cambrian in the Mackenzie Mountains has been cited in the first paper of this series (Fritz, 1976b, p. 1). Since then F.F. Krause and A.E. Oldershaw have published two abstracts on the subject (1976, 1977).

Field data on the sections were collected in 1974 (section 23) and 1975 (remaining sections). Section 14 is reconstructed from information supplied by K.B. McHale, who kindly hosted the writer in his camp in 1975 and gave directions that permitted a traverse over the best outcrops. Other geologists who provided guidance and assistance in the field are A. Kulan, P. Tegart, R. Darney, and A.G. Harman. Work in 1975 was greatly facilitated by D.K. Tempelman-Kluit, who provided twice-daily radio contact and organized aircraft for weekly camp moves. Assistance in measuring sections in 1975 was given by J. Harper, who was particularly helpful in gathering geochemical samples. Assistance in drafting Figures 1-4 was rendered by J. Gagnon, J. Harper, and L.M. Spence.

GRAND CYCLES

Grand cycle A, lower half-cycle (A1)

An earlier precedent (Fritz, 1976a, p. 11) is followed here in assigning Blusson's (1971) map-units 12, 13, and the lower part of the Sekwi Formation to this half-cycle. The dark siltstone and very fine grained sandstone of map-unit 13 was measured at all sections where exposures are present. The light coloured quartzite of map-unit 12 was not measured in full because at most sections it is either not exposed or it was found to be extensively faulted. For this reason the choice of the base of map-unit 12 as the base of grand cycle A is somewhat arbitrary and may be subject to change by later workers.

At least part of map-unit 12 and all of map-unit 13 underlies the Sekwi Formation at sections 11, 13, 21-24, and map-unit 13 underlies the Sekwi at sections 15 and 20. Correlation from nearby section 7 (Fritz, 1976b) indicates that at section 25 the Sekwi should be immediately underlain in the subsurface by the equivalent of map-unit 13 (upper part of Blusson's map-unit 10, 1971, p. 9). At section 12 the Sekwi is probably underlain by map-units 12 and 13, although the true stratigraphic relationship is obscured by a fault (covered) that may juxtapose map-unit 12 against lower Sekwi strata. Since thick-bedded dolomite assigned to the Sekwi Formation at section 14 is reported (oral communication, K.B. McHale) to rest on thin-bedded dolomite with collapse structures, the writer has speculated (Figure 1) that at least map-units 12 and 13 have been removed by erosion and that the Sekwi was deposited on older strata. No strata older than the Sekwi Formation crops out in the immediate vicinity of section 19.

In sections 16-18 (Fig. 2) an unconformity has been questionably placed between the Sekwi Formation and an underlying unnamed quartzite. Since the unnamed quartzite is thought to represent the lateral equivalent of map-unit 12, and perhaps part of map-unit 13, pre-Sekwi erosion is not believed to have cut deeply into the local section. However, examination of the pre-Sekwi quartzite suggests that deeper erosion might be found to the north and northeast. This is suggested by the quartzite's immature, poorly sorted, medium and coarse grains and by cross-beds that are oversteepened (Plate 2, Figs. 3, 4) in the south and southwest direction of paleocurrent flow. A lack of reverse cross-bedding and burrowing suggests ^a fluvial rather than marine environment. The nearby paleorelief indicated by the quartzite is thought to have been lowered by erosion before Sekwi deposition, as deposition of the basal ^{Sekwi} beds was nearly synchronous over the whole study area, ~~the beds~~ are of similar lithology, and they are almost totally lacking in medium and coarse grained clastics.

At least some thickness of the lower Sekwi Formation has been assigned to the upper part of this half-cycle in sections 11-13 and 15-25. The Sekwi part of the half-cycle consists mainly of limy siltstone that often contains scattered limestone nodules. ^(Plate 4, fig. 2) The top of the half-cycle is located at the approximate horizon where limestone (above) predominates over siltstone (below). This criterion is not followed at section 11 where 218 feet of limestone (units 1, 2) is considered to represent a tongue extending into the limy siltstone. Here the top of the half-cycle is placed above the overlying siltstone. The top of the half-cycle was traced north-eastward (Figure 2) from the middle carbonate belt in sections 18-20 into the inner detrital belt in sections 16 and 17, but this same boundary could

not be traced from the middle carbonate belt southwestward (Figure 3) into folded slope siltstone and penecontemporaneously brecciated slope limestone of the outer detrital belt in sections 24 and 25.

It has been mentioned earlier that the Sekwi Formation at section 14 is thought to be underlain by an unconformity. Here carbonate assigned to the overlying half-cycle (A2) is considered to rest directly on strata older than that assigned to map-units 12 and 13. The lack of limy siltstone in the basal part of the Sekwi is attributed to non-deposition above a local high or removal during a brief uplift.

At section 15 approximately 100 feet of limy siltstone at the base of the Sekwi Formation has been assigned to the half-cycle. The remainder of the half-cycle (A1), the next two half-cycles (A2, B1), and part of the following half-cycle (B2) have their equivalents in the overlying soft shale and interbedded limestone breccia beds (unit 2) and in the platy limestone beds (units 3-5), all of which have been assigned to the outer detrital belt. No criterion could be found to locate half-cycle boundaries within outer detrital belt strata in section 15.

Grand cycle A, upper half-cycle (A2)

Carbonates deposited mainly in the middle carbonate belt and belonging to the Nevadella Zone constitute this half-cycle. In a typical section the basal limestone in the half-cycle is in thin wavy beds that weather medium to medium dark grey. This limestone grades upwards into thicker bedded, medium to light grey weathering limestone or into light orange weathering dolomite. "Floating" quartz sand is locally abundant in the dolomite.

At section 11 strata assigned to this and younger half-cycles have been eroded before the deposition of a thick-bedded carbonate map-unit which

Blusson (1974) has assigned to the Ordovician-Devonian. It has been mentioned earlier that at section 15 this and some other half-cycles could not be identified in the outer detrital belt strata there. The half-cycle is only weakly developed at sections 16 and 17 where all three of the lower half-cycles (A1, A2, B1) are in the inner detrital belt. Here thick-bedded intervals of limy, very fine grained sandstone serve to locate half-cycle A2.

Section 20 is one of the few sections within the middle carbonate belt where the clastics of the overlying half-cycle (B1) fail to clearly mark the top of half-cycle A2. At section 20 the writer expected to find the top boundary at the top of a thick-bedded to massive limestone unit (Figure 2, unit 9; Plate 4, fig. 3). Overlying the unit, however, is a succession of medium and thick-bedded limestone (Figure 2, units 10, 11, lower half of 12) that is believed to represent a local carbonate buildup that has laterally displaced clastics of half-cycle B1. Two factors may have favoured the growth of a carbonate "buildup" in this position. The first is a sinking rate that was approximately twice that elsewhere over the carbonate *platform* during half-cycle B1 time. The second is ^a*platform*-edge position where deep channels may have allowed clastics to bypass the buildup at its margins while shallow waters over the buildup remained relatively clear for near-optimum limestone growth.

Sections 24 and 25 are also believed to have occupied positions close to the *platform* edge at the close of half-cycle A2 deposition. Here, at section 24, upper segment, unit 9, a thick-bedded to massive limestone succession is present (Plate 7, fig. 3; Fritz, 1976^a, Plate 1, fig. 3) in the uppermost part of the half-cycle that is almost identical to the

massive limestone (unit 9) of the same age at section 20. During this time optimum limestone growth is believed to have taken place along a narrow ^{northwest trending} band that included the upper segment of section 24. A mile and a half landward (northeast) of this band (section 24, lower segment, unit 8) fine grained limestone was being deposited in medium beds that display cross-bedding and cut and fill structures. Five and a half miles seaward (southwest) of the massive limestone, at unit 2 in section 25, is an outcrop of coeval strata consisting of dark, platy limestone (Plate 7, fig. 5; Fritz, 1976a, Plate 2, fig. 4) believed to have been deposited under deep slope or basin conditions. If the above correlations are correct, then the band of optimum limestone deposition ^(unit 9) has a width of far less than five and a half miles, and the outer edge of the platform lies between the upper segment of section 24 and the lower segment of section 25.

Grand cycle B, lower half-cycle (B1)

Strata assigned to this half-cycle are composed of light brown quartzite, of brown, maroon, light green shale and siltstone, and of orange weathering finely laminated dolomite. Interbeds of trilobite hash, abundant ripple marks and mudcracks, Scolithos in the quartzite, and the bright weathering colours suggest that the unit was deposited under shallow waters that were at least partly marine. It is believed that this half-cycle represents a clastic sheet that migrated rapidly across the carbonate platform and also formed a thick, unstable slope against the platform's outer margin (Fritz, 1976a, p. 19; 1976b, p. 2).

The boundary between the Nevadella Zone and the Bonnia-Olenellus Zone can definitely be located within the half-cycle in sections 2, 3, and 8 (Fritz, 1976b, p. 2) and in sections 13 and 23 (Figures 1 and 3).

Fossil collections in other sections are not spaced closely enough to locate the boundary within the half-cycle. However, the ages of these other collections are consistent with the concept that the boundary lies within the half-cycle, as no Nevadella Zone fossils have been collected above it and no Bonnia-Olenellus Zone fossils have been found below.

Sections 13-15 are located near the platform-slope boundary where the lithology of the half-cycle changes rapidly from that described above to the more uniform shales and dark limestones of the outer detrital belt. Section 13 (Figure 1, units 7-10) is believed to have been deposited *over* the platform as it contains mudcracks and strata that are maroon, purple and light green in colour. Even the coarser sand fraction (Plate 1, figs. 3, 4) is concentrated at one position within the half-cycle as it is in other sections deposited *over* the platform. Here, as in the other sections mentioned, deposition is believed to have kept pace with subsidence, and only the greater thickness (twice normal) suggests that the platform edge is nearby.

At section 14 the half-cycle has passed from a platform facies into a thick slope facies of uniform silty shale that contains an irregular subunit of penecontemporaneous limestone breccia (Plate 1, figs. 5, 6). The base of the half-cycle (base of unit 3) is at the shale contact with the underlying thick dolomite succession assigned to half-cycle A2. No correlations within half-cycle B1 are attempted as the shale contains neither highly coloured beds nor the quartzite subunit. A sub-Ordovician unconformity truncates the shale succession (Blusson, 1974) precluding an inspection of a "normal" upper boundary of half-cycle B1. The coarser shale (silty shale) at section 14 as contrasted to that in section 15

suggest that section 14 occupied a higher position on the slope during half-cycle B1 time.

Section 19 and 20 are also believed to have been deposited high on the slope during half-cycle B1 time. It was mentioned earlier that at section 20, units 10, 11, and the lower part of 12 are thought to represent a local carbonate buildup. Equivalent strata at nearby section 19 are composed of shale that closely resembles that at section 14. Here sparse interbeds of limestone are present, and at one level the interbeds contain small archaeocyathid-bearing mounds. No penecontemporaneous limestone breccia was seen.

Section 24 and 25 help to define the platform-slope boundary in a third area. During the first third of half-cycle B1 section 24 was located on the outer edge of the platform. At the lower segment of section 24 (unit 9), fine grained limestone in thin brightly coloured beds was being deposited landward of a carbonate bank (upper segment, unit 9) that was formed earlier during half-cycle A2 time. During the middle third of half-cycle B1 a sudden influx of sand covered the carbonates at both segments, and the sand in turn was succeeded by silt deposited during the closing third of the half-cycle.

Five and a half miles to the southwest, at units 3-7 in section 25 (and at units 6-11 in nearby section 7), all of the half-cycle was deposited on the slope. Penecontemporaneously folded siltstone and some sandstone interbeds (Plate 7, fig. 6) are the predominant lithologies. Some medium (section 25, unit 3) and large (section 7, units 7, 9) archaeocyathid-bearing limestone mounds are present.

Grand cycle B, upper half-cycle (B2)

The base of this half-cycle is marked by relatively clean limestone (B2a) that forms cliffs above the recessive clastics of half-cycle B1. Although the limestone is commonly thin bedded, at numerous outcrops these beds pass laterally into limestone mounds. The greatest abundance of archaeocyathids within the Sekwi Formation is in and around these mounds.

The top of the half-cycle and ^{of} the Sekwi Formation is placed at the top of the highest middle carbonate bed (Fritz, 1976b, p. 2). In most sections this is the top of a wavy, thin-bedded limestone succession, but in sections 4, 7, 16, 17, 24, and 25 a thick dolomite succession extends to, or nearly to the top of the half-cycle. At a typical section the half-cycle is overlain by a recessive dark siltstone and shale that contain limestone in dark platy ^{interbeds} \wedge . An unconformity indicating erosion into the half-cycle at sections 4, 12 and possibly 16, precludes inspection of a "normal" upper contact at these sites.

In the previous paper (1976b, Figures 1-3) intervals containing carbonates and clastics in half-cycle B2 were tentatively correlated between sections in an attempt to subdivide the half-cycle into clastic-carbonate pairs or subcycles. A similar and likewise tentative attempt is made in Figures 1-4 of the present paper. It can now be speculated that secondary half-cycles B2a ^{and B2b of this and the} \wedge of the \wedge previous paper are indeed a single, continuous unit because of supporting correlations *using* the present sections. The lithology, thickness, and distance above the B1-B2a contact remain fairly uniform through the various sections located in the middle carbonate belt. The correlation of secondary half-cycles B2c-g remains highly

speculative despite an attempt to extend these half-cycles into the present sections.

Lithologies other than siltstone and shale have thus far proved to be of little use for correlation within half-cycle B2. Sandstone is generally rare, and where a thick succession was noted in section 17 (figure 2, units 18, 19) it did not prove to be laterally extensive. Wavy, thin-bedded limestone is too common and occurs at too many levels to be useful for correlation except when paired as sub-half-cycles with the more extensive siltstone and shale units. Dolomite, when present, predominates in some sections and is nearly absent in others. An example of major lateral change, and hence the limited use of dolomite for correlations, can be seen in a comparison of half-cycle B2 in sections 24 and 23 (Figure 3). At section 24 the half-cycle is composed almost wholly of dolomite while at section 23 it is composed almost wholly of limestone. Only a limited amount of light coloured limestone in thick beds and mounds (Figure 3, units 16, 18, 20; Plate 6, figs. 5, 6) is present at section 23 to suggest that a barrier may have controlled the deposition of the thick succession of dolomite at nearby section 24.

POST-SEKWI DARK SHALE AND PLATY LIMESTONE

The lower portion of this map-unit was measured in an attempt to position the Lower-Middle Cambrian boundary and to locate younger Cambrian faunas. The dark shale and thin-bedded limestone are typically recessive (Plate 6, figs. 1, 5), and outcrops are confined to rare, sharp ridges (Plate 3, fig. 3; Plate 5, fig. 4) or to narrow gullies. While fossils are locally abundant, they were found in a limited number of horizons, and therefore time-stratigraphic boundaries could be only roughly located. The

horizon commonly used for the Lower-Middle Cambrian boundary is the base of the first thick succession of black, non-limy shale above the highest Lower Cambrian fossil locality. Except for sponge spicules, no fossils were found in the black shale. Most of the fossils from the first significant localities above the black shale belong to either the late Middle Cambrian or to the early Upper Cambrian.

The widespread distribution of this map-unit is attributed to a regional increase of water depth and a resulting change in carbonate deposition from nodular limestone and laminated dolomite (Sekwi Formation) to dark shale and platy limestone (this map-unit). The change in environment is believed to be from the platform or shelf to the slope and basin. This change took place during the last half of the Bonnia-Olenellus Zone time (Fritz, 1976^b, p. 2).

At section 19 the basal contact of the map-unit differs from that described above in that it is closely underlain by 231 feet of light grey limestone in thick beds (Plate 4, figs. 1, 4; Figure 2, unit 25). Here the light coloured strata is thought to mark a local area in which limestone deposition briefly matched the rapid sinking rate.

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APPENDIX

Section 11

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>map-unit 13, 400+ feet (unmeasured)</u>			
1	Quartzite, 1/2 and siltstone, 1/2. Quartzite light brown to greenish brown weathering and fresh, some rust weathering, thick to thin bedded, fine grained. Siltstone, same colour as quartzite, some also khaki. Burrows and trails present	400±	400±
<u>Sekwi Formation, 473 feet</u>			
1	Limestone, brick red and pink on weathered and fresh surfaces, medium and thin bedded, thick parting, finely crystalline, glauconitic. GSC loc. 92633, 3-6 feet above base of unit, <u>Parafallotaspis</u> sp.	13	13
2	Limestone, 2/3 medium blue-grey weathering, bedding thin, wavy, fresh surface medium to medium dark grey, finely crystalline; and 1/3 light brown to light orange-brown weathering, thin bedded, wavy, and nodular, fresh surface light brownish grey, argillaceous. GSC loc. 92634, 47 feet above base, float, cf. <u>Holmia</u> sp. Fritz, 1973. GSC loc. 92635, 50 feet above base, float, cf. <u>Holmia</u> sp. Fritz, 1973, <u>Pagetides</u> sp. GSC loc. 92636, 52 feet above base, float, olenellid fragment. GSC loc. 92637, 110 feet above base, <u>Holmia?</u> sp., <u>Nevadia?</u> sp., <u>Pagetides</u> sp. GSC loc. 92638, 141 feet above base, <u>Holmia?</u> sp.	205	218

Section 11

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3	Siltstone(?) 1/2, weathering to light brown soil; and interbedded limestone 1/2. Limestone thin bedded, finely crystalline, interval 0-14 feet light brown weathering, medium dark grey fresh, argillaceous; interval 23 1/2 - 97 feet medium grey weathering, medium dark grey fresh; interval 97-128 feet light orange-brown weathering, platy, medium dark grey fresh. Interval 14 - 23 1/2 feet contains sandstone, light orange-brown weathering, thick bedded, light brown fresh, fine grained. Burrows common in lower part of unit, large <u>Holmiella</u> sp. spines common in upper part. GSC loc. 92639, 56 feet above base, float, <u>Holmiella</u> sp., <u>Mickwitzia</u> sp., <u>Nevadella</u> sp.	128	346
4	Limestone 2/3, medium grey and light orange-brown weathering, thin bedded, platy, fresh surface medium dark grey and finely crystalline; and shale 1/3, weathering to light brown soil. Interval 47-74 feet above base contains some nodular limestone. Burrows and <u>Holmiella</u> sp. present 19 feet above base	74	420
5	Limestone 2/3, light brown and light orange-brown weathering, mainly thin bedded, fresh surfaces medium grey and light brown, argillaceous. <u>Holmiella</u> sp. present 20 feet above base	53	473

Section 11

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
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unnamed Ordovician-Silurian dolomite unit

(unmeasured)

- 1 Dolomite, light grey and some medium light grey weathering, thick bedded, fresh surfaces medium grey and finely crystalline. GSC loc. 93640, 28 feet above base of unit, float, halysitid coral.....

Section 12

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>map-unit 12 (unmeasured)</u>		
1	Quartzite, rust weathering, medium and thick bedded, fresh surfaces light brown, light grey, fine grained.		
	<u>Sekwi Formation, 1870 feet</u>		
1	Siltstone, light orange weathering, fresh surface medium light grey-brown, limy. Limestone nodules present in intervals 45-107 feet (40%) and 128-193 feet (50%) above base, medium grey weathering, fresh surface medium dark grey and finely crystalline. Interval 107-128 feet contains limestone, medium blue-grey weathering, thin bedded, wavy, light orange partings, fresh surfaces medium and medium dark grey, finely crystalline. GSC loc. 92642, 112 feet above base of unit, <u>Holmia?</u> sp. GSC loc. 92643, 115 feet above base, <u>Holmiella</u> sp.	193	193
2	Siltstone and limestone. Siltstone, interval 0-24 feet 3/4 siltstone as in unit 1; interval 47-87 feet 2/3 siltstone weathering to light brown soil; interval 103-137 feet, limy siltstone, bright orange weathering, weathering to mainly thin slabs, fresh surface medium light grey. Limestone, interval 20-47 feet medium dark grey weathering and fresh, thin, wavy bedded and some thin to thick blocky beds, finely crystalline		

Section 12

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	and some fine grained; 47-87 feet 1/3 limestone, light orange to medium grey weathering, thick and medium bedded, fresh surface medium dark grey, finely crystalline and medium grained; interval 87-102 feet, medium grey weathering, medium bedded, planar laminated, fresh surface medium dark grey, finely crystalline. Interval 0-24 feet contains 1/3 sandstone, orange weathering, thick and medium bedded, fresh surfaces medium grey and light brown, fine grained....	137	330
3	Limestone, orange to yellow-orange weathering, thin bedded, platy, fresh surfaces medium grey to medium brownish grey, argillaceous; interval 65-72 feet medium light grey weathering, thin bedded, wavy, fresh surface medium grey, some algal mounds 1 1/2 feet high, 3 feet wide	170	500
4	Limy sandstone, light yellowish orange weathering and fresh, weathers to irregular slabs..	70	570
5	Dolomite, light grey to light pinkish grey, thick bedded, light grey on fresh surface ; interval 60-77 feet thin bedded, laminated...	77	647
6	Dolomitic siltstone and shale, light orange-yellow weathering, thin bedded, platy, fresh surface cream coloured, slightly limy. Interval 45-53 feet contains 60% maroon weathering and fresh siltstone	68	715

Section 12

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
7	Mudstone, light brown weathering, fresh surface light greenish brown. Interval 54-80 feet contains mostly maroon weathering and fresh siltstone. Intervals 0-1/2 foot, 12-14 1/2 feet, 25-28 feet contain quartzite, rust weathering, mainly thick bedded, fresh surface light brownish grey, fine grained. Bed of <u>Olenellus</u> hash 58 feet above base of unit. GSC loc. 92644, 59 feet above base, float, <u>Olenellus</u> sp.	93	808
8	Limestone; interval 0-22 feet dark grey weathering and fresh, bedding irregular, medium and thick, finely crystalline and fine and medium grained; interval 22-62 feet medium grey weathering, thin bedded, wavy, medium dark grey fresh, finely crystalline. Limestone mound 2 1/2 feet high, 3 1/2 feet wide with archaeocyathids 10 feet above base; mound 1 foot by 2 feet without archaeocyathids 32 feet above base	62	870
9	Limestone, medium grey weathering, thick and medium bedded, fresh surface medium dark grey, finely crystalline; interval 42 1/2 - 46 1/2 feet thin bedded; intervals 71-101 feet and 106-119 feet contain irregular beds that change from very thick (up to 30 feet) to thin along strike and contain elongate (1/2 inch x 8 inch) limestone "fragments" with gradational boundaries. <u>Girvanella</u> sp. abundant at base of unit.	210	1080

Section 12

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
10	Siltstone, 3/4 yellow-orange weathering, fresh surface light greenish grey; 1/4 maroon weathering and fresh; and some dolomitic siltstone, orange-yellow weathering, in thin plates, fresh surface light grey. Interval 0-15 feet contains dolomite, cream to light orange weathering, thick and medium bedded, fresh surface medium dark grey, finely crystalline	158	1238
11	Limestone; interval 0-12 feet dark grey weathering and fresh, medium bedded, red mottling on partings, medium and coarse grained; interval 12-37 feet medium and light grey mottled on weathered and fresh surfaces, thick bedded, fine grained.....	37	1275
12	Siltstone, shale, dolomite and limestone. Shale, interval 8-25 feet light orange-brown weathering, thin bedded, platy, fresh surface medium grey, limy; interval 39-50 feet covered by brown soil weathering from shale(?); interval 103-112 feet light yellow-brown to light orange weathering, in thin, irregular beds, fresh surface light brownish grey. Shale, interval 52-77 feet olive grey weathering and fresh; interval 116-138 light brown to light grey weathering, fresh surface light to medium grey. Dolomite, interval 0-8 feet light yellow-orange weathering, bedding medium and thick, fresh surface medium grey, argillaceous; interval 25-39 feet yellow-orange weathering, thick bedded, planar laminated, fresh surface medium dark grey; interval 89 1/2-103 medium dark grey weathering		

Section 12

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	and fresh, thick bedded, small spheres present (altered <u>Girvanella</u> sp.), upper 3 feet weathers bright orange. Limestone; interval 50-52 feet light yellow-orange weathering, thin bedded, platy, ripple marked, mud cracks present, fresh surface medium grey; intervals 77-89 1/2 feet and 112-116 feet as in unit 13. GSC loc. 92645, 60 feet above base, <u>Olenellus</u> sp., <u>Poulsenia</u> sp., <u>Wanneria</u> sp. GSC loc. 92646, 78 feet above base, <u>Proliostracus</u> sp., <u>Variopelta</u> sp.	138	1413
13	Limestone, medium to medium dark grey weathering, bedding thin, wavy, fresh surface medium dark grey and finely crystalline; interval 0-62 feet has light orange parting surfaces, argillaceous, burrowed; interval 78-105 feet thick to thin parting, rare oolitic beds present, <u>Girvanella</u> sp. present. Interval 62-78 feet covered ^{and interval} 157-241 feet 40 per cent covered by light brown soil (siltstone?). Interval 105-135 feet contains limestone, medium grey to medium light grey weathering and fresh, thick bedded, finely crystalline and fine grained. GSC loc. 92647, 42 feet above base, <u>Bonnia</u> sp., <u>Helcionella</u> sp., <u>Olenellus</u> sp., <u>Poulsenia</u> sp. GSC loc. 92648, 223 feet above base, <u>Bonnia laterispina</u> Fritz, <u>Helcionella</u> sp., <u>Salterella</u> sp.	241	1654
14	Limestone; dull medium grey weathering, bedding thin some medium, wavy, some red mottling on		

Section 12

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	partings, fresh surface medium dark grey, finely crystalline and medium grained. GSC loc. 92649, 60 feet above base, <u>Bonnia</u> sp., <u>Wanneria</u> sp.	132	1786
15	Shale and siltstone. Shale, 0-14 feet, 52-57 feet? (covered), 59-84 feet, olive grey weathering and fresh. Siltstone, 17 1/2-44 1/2 feet, light brown weathering, medium grey fresh, limy, highly burrowed. Intervals 44 1/2-52 1/2 feet and 57-59 feet contain sandstone, medium bedded, thick parting, fresh surface light orange-brown, very fine grained, highly burrowed. Interval 14-17 1/2 feet contains limestone, medium grey weathering, thick bedded (14-15 1/2 ft.) and light yellow weathering, nodular (15 1/2-17 1/2 ft.)....	84	1870
	<u>Ordovician-Devonian dolomite</u> (not measured)		
1	Dolomite, thick bedded, finely crystalline; interval 0-75 feet medium light brownish grey weathering, medium to light grey fresh; above 75 feet, light grey weathering and fresh	75+	75+

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>map-unit 12 (not measured)</u>			
1	Quartzite, light brown weathering, thick and medium bedded, fresh surface light brown, fine grained.		
<u>map-unit 13, 500 feet</u>			
1	Siltstone, black on weathered and fresh surface, hard; and some ^{thin} quartzite interbeds, as in unnamed quartzite below.....	474	474
2	Quartzite, rust to medium brownish grey weathering, thick bedded, fresh surface light brown and fine grained; and 10 per cent siltstone as in unit 1.	26	500
<u>Sekwi Formation, 2735 feet</u>			
1	Limy siltstone, light orange, some pinkish brown weathering and fresh; and scattered (15%) limestone nodules. Interval 0-15 feet contains limestone, orange weathering, medium bedded, "lumpy", fresh surfaces light pink, orange and grey, burrowed. Interval 115-140 feet contains 1/2 silty limestone, orange weathering, thin and medium bedded, fresh surfaces light brown and medium grey; and 1/2 siltstone, light brownish grey on weathered and fresh surfaces. GSC loc. 92650, 135 feet above base, local float, fallotaspid trilobite. GSC loc. 92651, 140 feet above base, local float, <u>Helcionella</u> sp., <u>Holmia?</u> sp., <u>Keeleaspis</u> sp.	140	140

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
2	Limestone 1/2, light orange weathering, thin and medium bedded and in nodules, fresh surface medium brownish grey to dark grey; and siltstone 1/2, medium brown weathering, fresh surface light brownish grey, limy	95	235
3	Limestone, light brownish grey weathering, thin bedded, blocky, soft, dark grey on fresh surface, argillaceous. At 13 feet penecontemporaneous fold 5 feet high. GSC loc. 92652, 25 feet above base, local float, cf. <u>Holmiella</u> sp. or <u>Esmeraldina</u> sp., <u>Nevadella</u> sp. GSC loc. 92653, 35 feet above base, local float, cf. <u>Holmiella</u> sp. or <u>Esmeraldina</u> sp., <u>Nevadella</u> sp.	120	355
4	Limestone, dark grey weathering and fresh, light brown and some light orange on partings, thin bedded, thin to thick parting, finely crystalline. GSC loc. 92654, 13 feet above base, <u>Holmia?</u> sp. and <u>Nevadella</u> sp. GSC loc. 92655, 33 feet above base, <u>Holmia?</u> sp., aff. <u>Nevadella</u> sp. 1 Fritz, 1972	69	424
5	Limestone and siltstone. Limestone orange weathering; interval 0-72 feet 1/2 limestone, thin to thick bedded, fresh surface medium dark grey and finely crystalline, subinterval 22-27 feet dark grey weathering and fresh with slight purple cast, thin bedded, wavy and platy. Interval 72-191 feet 2/3 limestone, thin and medium bedded, as in 0-72 feet interval;		

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	interval 191-248 feet orange to medium light brown weathering, thin bedded, wavy, fresh surface medium dark grey, finely crystalline, argillaceous. Siltstone; interval 0-22 feet (1/2) orange weathering, medium dark grey fresh, limy; 27-72 feet (1/2) weathering to light brown soil; interval 72-191 feet (1/3) medium brown weathering and fresh, limy. GSC loc. 92656, 76 feet above base of unit, float, <u>Nevadella</u> sp. GSC loc. 92657, 206 feet above base, float, <u>Holmiella</u> sp.....	248	672
6	Limestone, 1/2 light orange-brown and 1/2 medium blue-grey weathering, fresh surfaces medium and medium dark grey, interval 0-58 feet thin bedded and nodular, interval 58-188 feet thin bedded, broadly wavy, thick parting. Limestone in interval 108-188 feet grades laterally into dolomite, orange weathering, thick parting, blocky, fresh surface medium dark grey and finely crystalline. At 34 feet limestone mound present, 3 feet high, 20 feet wide, light grey weathering, medium grey fresh	188	860
7	Dolomite 3/4, light orange to yellow-orange weathering, thin and some medium bedded, fresh surface light brown, mudcracks and ripple marks present. Siltstone 1/4, light brown weathering, fresh surface light greenish grey, dolomitic. Interval 48-95 feet contains 1/4 sandstone, orange weathering, thin bedded, fresh surface light brown, fine grained.....	138	998

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
8	Siltstone; interval 0-93 1/2 feet light orange weathering, fresh surface light greenish grey, dolomitic, some purple weathering and fresh present 5 feet above base; interval 93 1/2 - 112 feet light brown weathering, light greenish grey fresh, shaly; interval 112-135 feet 1/2 light greenish grey weathering and fresh and 1/2 maroon weathering and fresh. GSC loc. 92658, 106 feet above base, <u>Nevadella eucharis</u> (Walcott), <u>Mickwitzia</u> sp. GSC loc. 92659, 122 feet above base, <u>Nevadella</u> sp.....	135	1133
9	Shale; interval 9-42 feet light grey weathering and fresh with slight greenish hue; interval 42-83 feet maroon weathering and fresh. Interval 0-9 feet contains quartzite, rust to dark grey weathering, medium and thick bedded, fresh surface medium greenish grey, fine grained. GSC loc. 92660, 23 feet above base, <u>Olenellus?</u> sp.	83	1216
10	Shale and minor carbonate. Shale, intervals 0-1 1/2 and 3-44 feet light brown weathering, fresh surface light greenish grey, limy, soft; interval 51-53 feet light greenish grey weathering and fresh; interval 63-173 light yellow-brown weathering, light brown fresh, upper 1/3 olive brown weathering and fresh. Interval 1 1/2-3 feet contains dolomite, bright orange weathering, thick bedded, fresh surface medium grey. Interval 44-51 and 53-63 feet contain limestone, medium		

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	grey weathering and fresh, thin bedded, wavy, thick parting. Interval 63-173 feet contains 1/10 silty limestone, medium brown weathering, thin bedded (1/4 inch), fresh surface light brown, olenellid trilobites and <u>Salterella</u> sp. abundant. GSC loc. 92661, 12 feet above base, local float, aff. <u>Bristolia</u> sp. GSC loc. 92663, 94 feet above base, local float, cf. <u>Fremontella</u> sp., <u>Olenellus</u> sp.	173	1389
			GSC loc 92662, 30 feet above base, <u>Laudonia</u> sp.
11	Limestone, medium blue-grey weathering, yellow-orange mottling on partings, thin bedded and nodular, thick parting, fresh surface medium dark grey, finely crystalline. Interval 91-96 feet contains limestone mounds 1 1/2 feet high, 2 1/2 feet wide; interval 131-132 1/2 ^{feet} contains similar mounds, archaeocyathis in mounds at both levels	151	1540
12	Limestone, medium light grey weathering, thick bedded to massive, fresh surface medium dark grey, finely crystalline	65	1605
13	Limestone; interval 10-42 feet dull medium light grey weathering, thin to thick bedded, fresh surface medium to medium dark grey, medium grained; interval 65-94 feet medium dark grey weathering and fresh, thin bedded, broadly wavy, finely crystalline; interval 94-110 feet light grey weathering, thick bedded (large mounds?), fresh surface medium dark grey, finely crystalline. Intervals 0-10 feet		

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	and 42-65 feet covered by brown soil (siltstone?) and some thin limestone plates, light brown weathering and fresh. Flat-pebble conglomerate present in 2 inch bed located 1 foot above base of unit. GSC loc. 92664, 5 feet above base, local float, <u>Laudonia</u> sp., <u>Olenellus</u> sp.	110	1715
14	Limestone; intervals 0-27 feet and 37-55 feet medium dark grey weathering and fresh, parts mottled medium brown, thin bedded, broadly wavy, finely crystalline; interval 27-37 feet cream weathering, thin bedded, fresh surface medium dark grey, fine grained; interval 55-74 feet medium light grey weathering, medium thick bedded, fresh surface medium grey, finely crystalline and medium grained; interval 74-104 feet 1/2 (lower) light blue-grey weathering, thin, wavy bedded, medium grey fresh, finely crystalline, 1/2 (upper) orange weathering, thin bedded, platy, fresh surface cream to light brown, finely crystalline, dolomitic. GSC loc. 92665, 79 feet above base, <u>Proliostracus</u> sp.	104	1819
15	Shale in intervals 0-48 feet and 81-88 feet, maroon weathering and fresh. Siltstone in intervals 48-81 feet and 88-158 feet light yellow-brown weathering and fresh, limy; and 1/10 limy siltstone, light orange weathering and fresh, in plates averaging 1/4 inch thick	158	1977

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
16	Limestone; interval 0-9 feet and 13-25 feet light orange to cream weathering, thin bedded, platy, fresh surface cream coloured, silty; intervals 9-13 feet and 25-28 feet medium grey on weathered and fresh surfaces, bedding thin, wavy and nodular, finely crystalline; interval 28-48 feet medium grey weathering, very thin (1/8 inch) bedded, platy, fresh surface dark grey and finely crystalline; interval 48-98 feet dull medium grey weathering and fresh, thick to very thick bedded, medium grained. GSC loc. 92666, 43 feet above base, local float, cf. <u>Olenellus paraoculus</u> Fritz, <u>Proliostracus</u> sp.	98	2075
17	Limestone; intervals 45-85 feet and 100-120. feet medium dark grey on weathered and fresh surfaces, bedding thin, wavy and nodular, some light yellow-orange in partings, finely crystalline; intervals 85-100 feet and 120- 129 feet as just described, but with 20% siltstone; interval 25-30 feet medium grey weathering, thin bedded. fresh surface medium dark grey, argillaceous; interval 30-45 feet medium grey weathering, thin to thick bedded, thick parting, fresh surface dark grey, fine grained. Interval 0-25 feet dolomite, cream to light orange weathering, thin bedded, platy, fresh surface medium grey, finely crystalline.		

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p><u>Salterella</u> sp. present at top of unit.</p> <p>GSC loc. 92667, 55 feet above base, local float. <u>Proliostracus annosus</u> Fritz. GSC loc. 92668, 101 feet above base, <u>Olenellus</u> sp., <u>Variopelta laevis</u> Fritz.</p>	129	2204
18	<p>Limestone and shale. Interval 0-26 feet 1/2 limestone, medium brown to orange-brown weathering, in thin beds and lenses, fresh surface medium dark grey and finely crystalline, some flat-pebble conglomerate present; and 1/2 shale weathering to light brown soil. Interval 26-62 feet limestone, medium dark grey on weathered and fresh surfaces, partings mottled light orange-brown, bedding thin, wavy, parting thick (26-55 ft.) and very thick (55-62 ft.). Interval 62-76 feet limestone, medium grey weathering, thin, irregular bedded, fresh surface medium dark grey, fine grained. GSC loc. 92669, 21 feet above base, local float, aff. <u>Olenellus</u> sp. 1 Fritz, 1972, <u>Salterella</u> sp.</p>	76	2280
19	<p>Limestone, medium dark grey weathering and fresh, orange-brown mottling on partings, bedding thin, wavy, finely crystalline. Interval 0-34 feet 2/3 limestone, medium grey weathering and fresh, thin bedded, platy; and 1/3 siltstone(?) weathering to light brown soil. Interval 79-103 feet and 124-130 feet 4/5 siltstone(?) weathering to light brown soil; and 1/5 limestone, medium brown weathering, thin bedded, fresh surfaces medium and medium dark grey.</p>		

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	Interval 215-240 feet, 2/3 limestone, medium dark grey weathering and fresh, bedding thin, wavy, and nodular, finely crystalline; and 1/3 siltstone(?) weathering to light brown soil. Limestone mounds 2 feet high present 157 feet and 169 feet above base of unit; similar mounds 4 feet high present 171 feet and 183 feet above base. Fault present at top of unit. <u>Bonnia</u> sp. present 270 feet above base. GSC loc. 92670, 40 feet above base, local float, <u>Variopelta?</u> sp., cf. <u>Olenellus paraoculus</u> Fritz. GSC loc. 92671, 61 feet above base, local float, <u>Olenellus</u> sp., <u>Wanneria logani</u> (Walcott). GSC loc. 92672, 125 feet above base, <u>Olenellus</u> sp. GSC loc. 92673, 159 feet above base, <u>Kutorgina</u> sp., <u>Poulsenia</u> sp. GSC loc. 92674, 274 feet above base, local float, aff. <u>Olenellus puertoblancoensis</u> (Lochman). GSC loc. 92675, 282 feet above base, <u>Helcionella</u> sp., <u>Proliostracus contractus?</u> Fritz.	287	2567
	<u>post-Sekwi dark shale and platy limestone, 977 feet</u>		
1	Limestone 1/2, medium brown to brownish orange weathering, bedding thin and medium, wavy, fresh surface medium dark grey; and siltstone(?) 1/2, weathering to medium brown soil. Burrows numerous throughout unit.....	203	203
2	Siltstone(?) weathering to medium brown soil.....	100	303
3	Limestone 4/5, light brown to orange-brown weathering, medium and thin bedded, planar laminated,		

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	fresh surface medium brown to medium grey, very argillaceous; and siltstone(?) weather- ing to brown soil. GSC loc. 92676 located on strike 300 feet south of section and near top of this unit, <u>Olenellus</u> sp.....	150	453
4	Shale, weathering to medium brown soil.....	115	568
5	Limestone, medium brown and medium grey weather- ing, in large nodules, fresh surface medium dark grey, finely crystalline. Trilobite fragment at base has strong <u>Wanneria</u> -like pattern.	48	616
6	Shale, weathering to dark grey and black soil; and limestone interbeds (1/5), light to medium brown and light to dark grey weather- ing, thin and medium bedded, planar laminated, fresh surface dark grey to black, argillaceous, soft. GSC loc. 92677, 19 ^{feet above base of unit} <u>Bonnia fieldensis?</u> (Walcott), <u>Olenellus</u> sp., <u>Onchocephalus</u> sp., <u>Piaziella</u> sp., <u>Wenkchemnia</u> sp. GSC loc. 92678, 22 feet above base, <u>Pachyaspis</u> sp. <u>Pagetides</u> sp., <u>Olenellus</u> sp. GSC loc. 92679, 122 feet above base, local float, <u>Bonnia?</u> sp. <u>Olenellus?</u> sp., <u>Pagetides?</u> sp.	195	811
7	Sandstone, buff to light orange weathering, thin to thick bedded, planar laminated, fresh surface light brown to medium light grey, very fine and fine grained	49	860

Section 13

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
8	Shale weathering to dark grey soil. Interval 0-15 feet contains 1/2 shale as described and 1/2 sandstone, thin bedded, as in unit 7. GSC loc. 92680, 57 feet above base, float; <u>Bienella?</u> sp., <u>Blountia?</u> sp., <u>Lonchocephalus</u> sp.	117	977

Upper Cambrian-Devonian carbonate and shale

(not measured)

- 1 Limestone, light grey weathering, thick bedded,
fresh surface medium grey and finely crystal-
line. Basal 4 feet contains sandstone, light
brown to medium grey weathering, thin and
medium bedded, fresh surface medium grey,
fine grained, limy. Interval 4-6 feet contains
limestone breccia .

Section 14

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>unnamed siltstone (not measured)</u>		
1	Shale and siltstone 4/5 and quartzite 1/5, medium bedded.		
	<u>unnamed dolomite, 600 feet[±]</u>		
1	Dolomite, thin bedded, possible solution breccia in lower 100 feet.....	600 [±]	600 [±]
	<u>Sekwi Formation, 4300 feet</u>		
1	Dolomite, light grey weathering and fresh, thick bedded, fine and medium crystalline; quartzite and sandstone in subinterval 100-600 feet thick located 400 feet or less from top of unit, quartz grains fine and medium sized...	2200 [±]	2200 [±]
2	Dolomite, buff weathering and fresh, thick bedded.....	500 [±]	2700 [±]
3	Siltstone and shale, medium brown weathering; limestone present in interval averaging 50 feet thick, located 40 to 100 feet above base, composed of penecontemporaneous lime- stone breccia. GSC loc. 92682, in limestone breccia subunit, <u>Gelasene</u> sp.....	1600 [±]	4300 [±]
	<u>Ordovician-Silurian carbonate</u> (not measured)		
1	Carbonate, thick bedded.		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
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map-unit 13? (not measured)

- 1 Siltstone, rust and orange-brown weathering, medium grey fresh; and quartzite (1/4), same colour as siltstone, thin and medium bedded, fine grained.

Sekwi Formation, 3443± feet

- 1 Siltstone, orange, brownish orange weathering, medium grey fresh, limy; and limestone nodules (1/5), medium grey weathering, medium dark grey fresh, finely crystalline..... 100± 100±
- 2 Shale, silvery light grey weathering; several thick beds of limestone present, beds contain penecontemporaneous limestone breccia (Pl. fig.)..... 1200± 1300±
- 3 Limestone, medium dark grey weathering, bedding thin and medium (3-4 inches thick), broadly wavy, thin coating of red on partings, fresh surface dark grey and finely crystalline. GSC loc. 92683, 8 feet above base, Olenellus sp., undetermined trilobite cf. Nelson, 1966, Pl. 6, figs. 6-9, 12-13. GSC loc. 92684, 85 feet above base, float, Bonnia sp., undetermined trilobite as in GSC loc. 92683..... 127 1427±
- 4 Limestone, medium dark grey weathering, thin bedded, broadly wavy, yellow-orange mottling on partings, fresh surface dark grey, finely crystalline; and interbedded shale (1/10), black weathering and fresh. Penecontemporaneous

Section 15

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	slump breccia present in intervals 0-46 feet and 126-128 feet. Subinterval 137-168 feet contains limestone, medium dark grey weather- ing and fresh, bedding medium and thin, wavy, thick parting, medium grained. GSC loc. 92685, 173 feet above base, local float, undetermined trilobite as in ^{GSC loc.} 92683.....	188	1615±
5	Limestone, dull medium dark grey weathering and some light brown weathering, thin bedded, platy, planar laminated, fresh surface dark grey and finely crystalline; uppermost 20 feet medium grey weathering and fresh, thin and medium bedded, finely crystalline.....	525	2140±
6	Limestone, lower part medium grey weathering, thin bedded, wavy, thick parting, fresh surface dark grey, finely crystalline, gradational transition into overlying lime- stone; upper part medium light grey weather- ing, thick bedded, crossbeds up to 1 foot high, fresh surfaces light grey, fine grained, powdery fracture	77	2217±
7	Limestone, medium grey weathering, bedding thin, wavy, parting thin (9-49 ft.) and medium (49-183 ft.), light orange-brown mottling on		

Section 15

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	partings, fresh surface medium dark grey, finely crystalline. Interval 34-49 feet contains siltstone 3/4, medium brown weather- ing, fresh surface medium dark grey; and limestone ^{1/4} as described. GSC loc. 92686, 18 feet above base, <u>Olenellus</u> sp.	183	2400±
8	Shale, light silvery grey weathering, fresh surfaces light grey (10-49 ft.) and medium light grey (76-140 ft.). Interval 0-10 feet contains siltstone, olive grey weathering and fresh. Interval 49-76 feet contains limestone, medium grey weathering, bedding thin, wavy and nodular, parting surface orange-brown mottled, parting medium and thick, fresh surface medium dark grey, finely crystalline	140	2540±
9	Limestone, medium blue-grey weathering, bed- ding thin, wavy, light orange mottled, fresh surface medium dark grey, finely crystalline, brachiopods abundant. GSC loc. 92687, 9 feet above base, <u>Bonnia</u> sp., <u>Olenellus</u> sp., <u>Proliostracus</u> ? sp. GSC loc. 92688, 21 feet above base, <u>Ogygopsis</u> ? sp., <u>Olenellus</u> sp., <u>Syspacephalus</u> ? sp.	47	2587±

Section 15

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
10	Sandy limestone, light orange weathering, thin bedded, platy, planar laminated, fresh surface medium grey, very fine grained	33	2620±
11	Shale, light brown weathering, fresh surface medium dark grey to medium brownish grey; and scattered limestone nodules (3%, average 3/8 inch high by 1 1/2 inches wide), medium grey weathering, medium dark grey on fresh surface. Interval 0-7 feet contains lime- stone, medium light grey weathering, medium and thick bedded, fresh surface medium dark grey, fine grained	73	2693±
12	Limestone, medium blue-grey weathering, bedding thin, wavy, thin to thick parting, fresh surfaces medium grey (0-106 ft.) and dark grey (117-205 ft.), finely crystalline; interval 205-260 feet medium to dark grey weathering, bedding thin but very irregular, fresh surface dark grey; interval 106-117 feet light brown weathering, bedding thin, slightly wavy, fresh surface medium grey. Some siltstone (1/4) may be present in subinterval 71-89 feet (covered). GSC loc. 92689, 207 feet above		

Section 15

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	base, aff. <u>Bonnia laevigata</u> Rasetti, <u>Olenellus</u> sp. GSC loc. 92690, 210 feet above base, local float, <u>Ogygopsis</u> sp.	260	2953+
13	Limestone, dull orange-brown weathering, bedding thin, broadly wavy, fresh surface medium dark grey, finely crystalline. Interval 0-40 feet contains shale, light brown weathering, fresh surface medium light to medium grey, limy. Burrows present in 40-194 foot interval, 1/4 inch wide, broadly curved	194	3147+
14	Limestone, medium dark blue-grey weathering, bedding thin, wavy, light orange-brown mottled, thick parting, fresh surface dark grey; grades upward to become dull medium grey weathering near top of interval, here mottling light brown, some upper beds fine grained. GSC loc. 92691, 216 feet above base, cf. <u>Bonnia laterispina</u> Fritz, 1972. GSC loc. 92692, 291 feet above base, local float, <u>Bonnia</u> sp., <u>Olenellus</u> sp.	296	3443+

Section 15

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	post-Sekwi dark shale and platy limestone, 1010+ <u>1010+ feet</u>		
1	Shale, light brown to olive brown weathering, fresh surface olive brown. GSC loc. 92693, 40 feet above base, local float, <u>Ogygopsis?</u> sp.	80	80
2	Shale, medium light brown weathering, fresh surface light brown to medium grey, limy; and some limestone interbeds, brown weather- ing, bedding thin, platy, fresh surface medium grey; scattered limestone nodules near top. GSC loc. 92694, 40 feet above base, local float, <u>Olenellus</u> sp., <u>Paterina</u> sp., <u>Zacanthopsis</u> sp. GSC loc. 92695, 383 feet above base, <u>Bonnia</u> sp., <u>Kootenia</u> sp., <u>Olenellus</u> sp., <u>Oryctocephalus</u> sp., <u>Paterina</u> sp., <u>Zacanthopsis</u> sp.	930	1010
3	Shale, black weathering and fresh and some resistant limestone interbeds 75 feet (estimated) above base.....	(not measured)	

Section 16

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>Unnamed quartzite, 720+ feet</u> (lower segment of section, base of unnamed quartzite covered)			
1	Quartzite, light brown weathering, beds thick, wedge-shaped in cross-section, cross-bedded, small (1/10 inch in diameter) brown limonite spots scattered through ^{out} rock, fresh surfaces white to light brown, mainly medium grained but coarse grained layers common. Current directions indicated by festoon cross-beds and distance above lowest exposure of unit are as follows: S 80°W, 45 ft.; S 80°W, 50 ft.; S 70°W, 50 ft.; N 75°W, 90 ft.; S 40°W, 95 ft.; S 80°W, 105 ft.; S 60°W, 295 ft.; S 70°W, 300 ft. Cross beds outlined by relief of medium grained quartzite layers against alternate, recessive layers of coarse grained sandstone, layers in uppermost part of many cross-beds are overturned (penecontemporaneous slumping?) to the southwest (Plate Z, figure 3 \.....	630	630
2	Quartzite as below, 70%; and siltstone, and sandy siltstone 30%, light greenish grey on weathered and fresh surfaces, sand mixed with silt is very fine grained.....	90	720
<u>Sekwi Formation, 2560+ feet</u> (exposed in upper segment of section, upper part of formation not measured, covered by snow)			
1	Siltstone, medium maroon-brown weathering, fresh surfaces medium grey; and some interbedded olive grey weathering and fresh siltstone.		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>Quartzite, 8 %, present in thin interbeds, orange weathering, fresh surfaces light greenish grey, very fine grained. GSC loc. 92612, float 9 ft. above base, <u>Parafallotaspis?</u> sp., GSC loc. 92613, 14 ft. above base, <u>Parafallotaspis?</u> sp. GSC loc. 93076, float 5 ft. above base of this unit but at site of lower segment of section, <u>Parafallotaspis grata?</u> Fritz, 1972, <u>Salterella</u> sp.</p>	26 1/2	26 1/2
2	<p>Quartzite, 75%, weathers light grey-brown, orange, medium brown, bedding thick (0-74 1/2 ft.) and thin to medium (74 1/2 - 153 1/2 ft.), base of beds wavy resulting from scowering, 1 inch local relief into underlying siltstone, fresh surfaces light greenish grey, some light orange-brown, very fine grained. Siltstone, 25%, present in brownish grey to olive grey weathering interbeds, fresh surface olive grey. Some purple weathering siltstone present in interval 33 1/2 - 95 1/2 ft. above base. Interval 135 1/2 - 137 1/2 feet above base contains dolomite, orange weathering, in pods 3 feet thick, fresh surfaces light brown, fine to medium crystalline.....</p>	153 1/2	180
3	<p>Dolomite, orange weathering, thin and medium-bedded (0-33 ft.), medium and thick bedded (33-120 ft.) and thick bedded (120-130 ft.), fresh surfaces light grey and finely crystalline. Abundant fine grained quartz sand present in dolomite, basal beds consist of dolomitic sandstone, quartz sand progressively</p>		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	decreases up to 120-foot level. Top 10 feet of unit is mottled dolomite, medium dark grey weathering and fresh and light grey weathering and fresh, basal beds in mottled ^{dolomite} contain 20% siltstone, light brownish grey weathering and fresh, burrowed	130	310
4	Quartzite, light orange to light grey weathering, thick bedded, fresh surfaces light grey to very light brownish grey, very fine grained to fine grained	64	374
5	Shale (0-6 ft., 37-51 ft., 56-83 ft.), olive grey on weathered and fresh surfaces; and quartzite (6-11 ft., 51-56 ft.), dull reddish to brownish grey to orange weathering, medium and thick bedded, fresh surface light grey, grains up to grit sized; and dolomite (11-37 ft.), light orange and medium grey weathering, thin to thick bedded, fresh surface light grey and finely crystalline. GSC loc. 92614, float 58 ft. above base <u>Laudonia?</u> sp.	83	457
6	Limestone, thin bedded; interval 0-28 feet above base weathers orange and medium light blue-grey (mottled), thick parting, fresh surface medium light grey, dense; interval 28-88 feet weathers dark blue-grey with light orange partings, thick parting, fresh surface dark grey, finely crystalline to dense; intervals 88-96 feet and 101-121 feet light orange-yellow and light blue-grey weathering (mottled), bedding planar to broadly wavy,		

Section 16

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	fresh surface medium light grey and dense. Thin interval (96-101 ft.) covered by brown dirt, may be <i>derived from</i> siltstone.....	121	578
7	Dolomite, light orange-yellow weathering, thin bedded, fresh surface light grey, finely crystalline; basal 10 feet light orange and medium grey weathering, thick bedded, vugs 1/4-1/2 inches in diameter present, fresh surfaces medium and medium dark grey, finely crystalline. Interbedded siltstone present in intervals 10-60 feet (30%) and 66 1/2 - 124 feet (40%) above base, light yellow-grey and light brownish grey weathering, fresh surfaces light brownish grey and light grey. Siltstone present in interval 124-160 feet (60%) and 160-182 feet (?covered), light greenish grey to olive-grey weathering and fresh. Limestone in 62-66 1/2 foot interval, medium grey weathering, thick and medium bedded, fresh surface medium dark grey and finely crystalline	182	760
8	Limestone, thin bedded, thick parting; interval 0-36 feet medium blue-grey and light orange-yellow weathering, bedding wavy to planar, fresh surface dark grey and finely crystalline; intervals 55- 81 feet and 96-137 feet medium dark grey weathering and fresh, wavy bedded, orange mottled, finely crystalline. Interval 36-55 feet above base contains dolomite, orange-yellow weathering, thick bedded, medium light grey on fresh surface and finely crystalline. Interval 81-96 feet above base contains		

Section 16

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	shale, olive grey on fresh and weathered surface. <u>Salterella</u> sp. present 83 and 105 feet above base of unit.	137	897
9	Shale, intervals 0-21 feet (70%) and 28 1/2 - 37 feet (80%) olive grey weathering and fresh; interval 37-47 feet, light yellowish grey weathering and slightly darker fresh, limy. Limestone, interval 0-21 feet (30%), medium brownish orange weathering, thin bedded, platy; light grey fresh; and orange and medium grey weathering, thin, wavy bedded medium dark grey fresh; interval 21-28 1/2 feet medium orange-brown and medium grey weathering, thin, wavy bedded, medium dark grey on fresh surface and fine grained; interval 28 1/2 - 37 feet (20%) orange weathering, thin bedded, platy, medium grey on fresh surface and finely crystalline. <u>Salterella</u> sp. abundant 28 1/2 feet above base	47	944
10	Limestone (0-24 ft.) and dolomite (24-71 ft.), thin bedded and platy; limestone medium light blue-grey weathering, fresh surface medium grey and finely crystalline; dolomite 1/2 orange weathering, light grey on fresh surface, and 1/2 light yellowish grey and greenish grey weathering, fresh surface greenish grey, silty.....	71	1015
11	Limestone, medium grey weathering, thin bedded, medium dark grey fresh, intervals 0-56 feet, 72-94 feet and 110 1/2-125 feet mainly thick parting; interval 58-72 feet weathers to very thin plates (2/3) averaging 1/8 inch in thickness and to nodules (1/3); interval 125-156 very thin bedded, wavy, laminated	156	1171

Section 16

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
12	Dolomite, intervals 0-29 1/2 feet, 39-54 1/2 feet, 66 1/2-79 1/2 feet, 79 1/2-111 1/2 feet, 123 1/2 - 129 feet, light yellowish grey and light grey weathering, thin to thick bedded, laminated, medium dark grey on fresh surface, finely crystalline, limy; interval 29 1/2-39 feet, medium light pinkish grey weathering, thick bedded, containing sparse vugs 1/4-1/2 inch in diameter, fresh surfaces medium light grey and medium crystalline; interval 111 1/2-123 1/2, medium light grey on weathered and fresh surfaces, thin bedded, thick parting, finely crystalline, upper 5 feet dolomitic limestone. Limestone in intervals 54 1/2-66 1/2 feet, light yellow and grey weathering, and 129-139 feet, medium grey weathering, ^{all is} dark grey on fresh surface, finely crystalline....	139	1310
13	Shale, interval 26-70 feet, olive grey weathering and fresh; and dolomitic limestone (15%), orange weathering, medium bedded, medium dark grey on fresh surface, containing <u>Salterella</u> sp. Interval 88-101 feet covered, float is dolomitic shale, light brownish grey weathering, medium grey fresh. Dolomite, intervals 0-26 feet and 70-88 feet, light yellowish orange weathering, thin and medium bedded, medium grey on fresh surfaces and finely crystalline.....	101	1411
14	Dolomite; interval 0-34 1/2 feet thick and medium bedded, 1/2 light brownish yellow to light orange weathering, fresh surfaces medium light grey and finely crystalline, 1/2 orange weathering, fresh surfaces medium		

Section 16

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	grey and finely and medium crystalline; interval 34 1/2-104 feet weathers light orange, light brownish grey to light yellowish orange, bedding thin and medium, fresh surfaces medium and medium dark grey, finely crystalline; interval 104-131 feet cream to light orange weathering, thick bedded, fresh surfaces medium dark grey, finely and medium crystalline.....	131	1542
15	Dolomite; float from covered intervals 0-7 feet, 13-20 feet, and 28 1/2-38 feet dark grey on weathered and fresh surfaces, thin bedding, finely crystalline; intervals 20- 28 1/2 feet and 53-83 feet cream to light orange weathering, thin to thick bedded, fresh surfaces medium and light grey; intervals 7-13 feet, 38-53 feet, and 83- 138 feet, medium brownish grey weathering, thin and medium bedded, fresh surfaces medium dark grey and dark grey, finely crystalline. Several thin (1 inch) layers of "floating" quartz sand present immedi- ately below 28 1/2-foot level, up to coarse sized.	138	1680
16	Dolomite, interval 0-70 feet cream to light orange-yellow weathering, thick bedded, some thin lamination present, fresh surfaces light and medium light grey, finely and medium crystalline, some limonite present in cracks and vugs; interval 70-155 feet as below, but almost all finely laminated and finely crystalline	155	1835

Section 16

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
17	Dolomite, 1/2 as in 70-155 foot interval in unit 16, but medium bedded; and 1/2 medium dark grey weathering with brownish hue, thin and medium bedded, fresh surface dark grey and finely crystalline	45	1880
18	Dolomite, medium dark grey to brownish grey weathering, thick and medium bedded, fresh surface dark grey and finely crystalline, "blue bird" abundant. <u>Girvanella?</u> sp. indicated by both cross section in rock and by olive-sized weathered cavities.....	210	2090
19	Dolomite, cream, pinkish cream and light grey weathering, medium and thick bedded, some laminae present, fresh surfaces medium and light grey, finely crystalline	175	2265
20	Dolomite, thick and medium bedded, finely crystalline; 1/2 medium brownish grey weathering, fresh surface medium dark grey; 1/2 medium light weathering, fresh surface medium grey	295	2560

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>Unnamed quartzite, 510+ feet</u>			
1	Quartzite, very light orange to light grey on weathered and fresh surfaces, thick bedded, medium grained, faulted, lower part of unit covered	35+	35+
2	Mainly covered; quartzite in interval 65-115 feet above base; light orange-brown weathering, thin bedded, light greenish grey on fresh surface, fine grained.....	140	175+
3	Quartzite, very light grey to light orange weathering, thick bedded, fresh surface light grey to white, interval 0-55 feet above base mainly medium grained, interval 55-240 feet fine and medium grained with isolated coarse grains	240	415+
4	Quartzite, as in unit 3 below, thin to thick bedded, fine and medium grained; and interbeds (2%) of micaceous siltstone, greenish grey on fresh and weathered surfaces	95	510+
<u>Sekwi Formation, 2338 feet</u>			
1	Quartzite, rust to orange-rust weathering, medium and thick bedded, planar laminated, fresh surface greenish grey, fine grained. Silty, very fine grained quartzite present in 0-40 foot interval (10%) and 40-88 foot interval (20%), light greenish grey weathering and fresh. Some maroon weathering and fresh quartzite located 62 feet above base. Burrows common throughout unit.....	88	88

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
2	Quartzite. Interval 0-11 feet maroon weathering and fresh, thick bedded, irregular surface at base (channeled?), fine grained. Interval 11-37 feet 80% quartzite in thin to thick beds, fine grained, 1/2 maroon weathering and fresh and 1/2 rust weathering, light greenish grey fresh; and 20% silty, very fine grained sandstone, light greenish grey weathering and fresh.....	37	125
3	Quartzite and silty sandstone. Interval 0-38 feet, 1/2 quartzite, fine grained, maroon weathering and fresh (1/3 of quartzite) and medium orange-brown weathering and light greenish grey fresh (2/3 of quartzite); and 1/2 silty sandstone, light yellowish brown to light green weathering, light greenish grey fresh, limy. Interval 38-115 feet; 2/3 quartzite, orange-brown weathering, thin bedded, light greenish grey fresh, fine grained; and 1/3 silty sandstone, light brownish grey weathering, light greenish grey fresh, sparse maroon interbeds in this interval. <u>Salterella</u> sp. present 38 1/2 feet above base of unit.....	115	240
4	Dolomite and sandy dolomite. Interval 0-22 feet dolomitic sandstone, orange weathering, thin to thick bedded, 4 inch cross beds present, fresh surfaces light brownish grey. Interval 22-59 feet dolomite, medium brownish		

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	grey weathering, medium and thick bedded, oolites present near base and in sub-interval 35-59 feet. Interval 59-78 feet dolomite, medium dark green weathering and fresh, very thick bedded, vugs 3/4-1 1/2 inches in diameter common, finely crystalline. Interval 78-116 feet dolomite, light orange-grey, light pink, light orange-brown weathering, thick bedded, fresh surface light grey, finely crystalline, contains fine quartz sand layers subparallel to bedding (subinterval 78-100 feet) and in 1-foot cross beds (subinterval 100-116)....116		356
5	Dolomite, orange weathering, bedding thin, wavy, nodular, semi-platy, parting thick, fresh surfaces light grey and pink, finely crystalline. Some (1/5) maroon weathering and fresh dolomite present; and some layers of quartz sand, orange weathering, light brownish grey fresh, fine grained	39	395
6	Quartzite, sandstone and dolomite. Interval 0-80 feet, 1/2 sandstone, orange weathering, medium and thick bedded, fresh surfaces light grey and light brown, grains medium to grit sized; and 1/2 dolomite, orange weathering, in thin, platy and wavy beds, fresh surfaces light grey and light greenish grey, finely crystalline, near top of interval dolomite is maroon coloured and argillaceous. Interval 80-104 feet, quartzite,		

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	light brownish orange to rust weathering, thick bedded, fresh surfaces light grey, light maroon, light greenish grey, medium grained, <u>Skolithos</u> present	104	499
7	Shale, olive grey weathering and fresh. Interval 0-1 1/2 feet contains argillaceous dolomite, light orange weathering, thin bedded, wavy, fresh surface light brown. Interval 11-12 feet, quartzite, light brown on weathered and fresh surfaces, fine grained. Interval 21-39 feet, limestone, medium blue-grey weathering, thin and medium bedded, wavy, fresh surface medium grey and finely crystalline. Interval 100-102 feet dolomitic sandstone, orange weathering, thick bedded, fresh surface light brown, fine grained and in part bioclastic. GSC loc. 92619, 19 feet above base, <u>Olenellus?</u> sp. GSC loc. 92620, float 55 feet above base, <u>Olenellus</u> sp. GSC loc. 92621, local float 81 feet above base, trilobite fragment with strong <u>Wanneria</u> -like pattern. GSC loc. 92622, float 86 feet above base, <u>Olenellus laxoculus?</u> Fritz...	113 1/2	612 1/2
8	Limestone, medium blue-grey weathering, partings have heavy orange coating, bedding thin, wavy, thick parting, fresh surfaces medium and medium dark grey, finely crystalline. GSC loc. 92623, 5 feet above base, <u>Bonnia</u> sp. and cf. <u>Olenellus</u> sp. 1 Fritz, 1972. GSC loc. 92624, 33 1/2		

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	feet above base, <u>Laudonia</u> sp., trilobite fragment with strong <u>Wanneria</u> -like pattern, ptychoparioid trilobite with strong preglabellar ridge.....	79 1/2	692
9	Covered, float is siltstone, light greenish yellow weathering, medium light greenish grey fresh, limy	118	810
10	Limestone, medium dark grey weathering and fresh, finely crystalline; intervals 0-92 1/2 feet and 148-185 feet wavy bedded and nodular, some beds argillaceous, light yellow to medium dark grey weathering, brownish grey on fresh surface; interval 92 1/2-148 feet 1/2 thin bedded, planar laminated, thick parting, grading laterally into 1/2 dolomite, bright light orange weathering, medium grey on fresh surface. GSC loc. 92625, local float 153 feet above base of unit, cf. <u>Olenellus paraoculus</u> Fritz. <u>Salterella</u> sp. abundant 148-155 feet above base	185	995
11	Limestone and shale. Interval 0-59 feet; 1/3 limy shale, light brownish grey weathering, medium grey fresh; 1/3 limestone, same colour as limy shale, in thin (1/4") beds and lenses; 1/3 limestone, medium dark grey weathering and fresh, bedding thin, wavy, finely crystalline. Interval 59-112 feet, silty shale, medium dark grey weathering and fresh, limy,		

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	subinterval 93-101 contains limestone, medium dark grey weathering and fresh, bedding thin, wavy, trilobite fragments abundant. <u>Salterella</u> sp. abundant in 0-59 foot interval. GSC loc. 92626, local float 93 feet above base of unit <u>Olenellus</u> sp., <u>Wanneria</u> sp.	112	1107
12	Limestone, medium dark grey weathering and fresh, bedding thin and wavy, bedding surface has light brown mottling, fossil fragments abundant, flat pebble conglomerate present 33 feet above base	48	1155

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
13	Siltstone, light orange weathering and fresh, in thin to thick parting slabs, limy. Interval 0-6 feet contains siltstone (0-2 ft.), light yellowish grey weathering; and sandstone (2-6 ft.), light orange weathering and fresh, fine and medium grained. Interval 60-85 feet contains limestone as in unit 12. Top of this unit is top of lower segment in section 12	85	1240
14	Limestone, medium dark grey weathering and fresh, bedding thin and broadly wavy, finely crystalline; intervals 62-72 feet, 104-130 feet, and 138-150 feet. dull medium grey weathering, in thin irregular plates, medium dark grey fresh, finely crystalline. Interval 130-138 feet contains dolomitic limestone, bright orange weathering, medium and thick bedded, medium dark grey on fresh surface, finely crystalline. Mudcracks present at top of unit, and <u>Salterella</u> sp. present 40 feet above base	170	1410
15	Limestone, medium and medium light grey weathering, thin to thick bedded, platy and blocky; interval 0-42 feet contains some small (3/8 inch diameter) vugs partially filled with limonite weathering from pyrite, fresh limestone surfaces medium grey and finely crystalline, some beds are bright orange weathering and medium dark grey on fresh surfaces; interval 42-68 feet is medium bedded, fresh surface light grey, finely		

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	and medium crystalline; interval 73-130 feet 1/2 limestone as in 0-42 feet interval, 1/4 limestone, orange weathering, thin and medium bedded, fresh surface light grey and finely crystalline, 1/4 shale, light grey weathering and fresh, limy; interval 130-140 feet limestone as in 0-42 foot interval, thin bedded, semiplaty. Interval 68-73 feet contains shale, light grey weathering and fresh	140	1550
16	Limestone, thin bedded; interval 0-27 feet medium and light grey weathering with some yellow on partings, fresh surfaces medium and medium dark grey, finely crystalline, <u>Salterella</u> sp. abundant; interval 27- 27 1/2 feet contains algal mounds 6 inches high, 12 inches wide; interval 27 1/2-49 feet, medium dark grey weathering, beds irregular, fresh surface medium dark grey, finely crystalline. Interval 49-86 feet, lower 1/2 contains limestone, medium dark grey weathering and fresh, platy and some shale interbeds, <u>Salterella</u> sp. abundant; upper 1/2 shale, medium brown weathering and fresh	86	1636
17	Shale, light brown weathering, medium brown fresh; and 1/8 limestone, light brown to orange-brown weathering, in dispersed nodules, fresh surface medium dark grey and finely crystalline. Interval 0-3 feet contains sandstone, orange weathering,		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>medium bedded, fresh surface light brown, medium and fine grained, dolomitic.</p> <p>Interval 51-61 feet contains limestone, orange-brown weathering, thin bedded, wavy, fresh surface medium brown. Interval 61-80 feet contains shale, olive grey weathering and fresh. Top of this unit is top of middle segment in section 12. GSC loc. 92627, local float 19 feet above base of unit, <u>Olenellus</u> sp.</p>	83	1719
18	<p>Quartzite, orange weathering, thick bedded, light grey fresh, fine and medium grained. Interval 81 1/2-99 feet contains sandstone, cream to light orange weathering, thin and medium bedded, fresh surface light grey to light brownish grey, fine grained. Interval 99-181 feet contains some coarse grains in mainly fine grained matrix. Vugs 3/4 inch in diameter present 124 feet above base, partially filled with limonite. Basal quartzite beds of this unit at site of lower segment of section 12 contain "floating" limestone plates</p>	181	1900
19	<p>Sandstone, orange weathering, medium bedded, fresh surface medium light grey, fine grained, limy and dolomitic; intervals 0-7 feet and 48-54 feet medium light grey weathering and fresh, limy, fine to coarse grained (0-7 ft.) and very fine grained (48-54 ft.). Interval 41-45 feet contains shale, medium light grey weathering and fresh</p>	54	1954

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
20	Dolomite, cream, light pink, light orange weathering, thick bedded, fresh surfaces light grey, finely crystalline and some medium crystalline	96	2050
21	Mainly covered, float is dark grey soil weathering from siltstone(?). Dolomite present in various intervals; 25-32 feet and 80-100 feet medium brown to orange-brown weathering, medium bedded, fresh surfaces finely crystalline, dark grey and medium dark brownish grey; 38-47 feet light orange to medium grey weathering, thick bedded, fresh surfaces medium dark grey, finely crystalline, limy	100	2150
22	Dolomite, medium light brownish grey, orange, cream weathering, thick bedded, fresh surface medium light grey, finely crystalline	100	2250
23	Dolomite and shale(?). Intervals 25-61 1/2 feet and 78-88 feet contain dolomite, cream to light orange weathering, medium and thick bedded, fresh surface medium dark grey, finely crystalline, slightly limy, thickness of units may change laterally over short distance. Intervals 0-25 feet and 61 1/2-78 feet covered by dark grey ^{soil} weathering from shale(?)	88	2338

Section 17

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>post-Sekwi dark shale and platy limestone, 1552⁺ feet</u>			
1	Siltstone, dark grey to black weathering, fresh surface black, slightly limy. GSC loc. 92628, float 50 feet above base, <u>Protospongia</u> sp.	92	92
2	Limestone, light brownish grey to dark grey weathering, thin bedded, platy, fresh surfaces dark grey to black. Penecontemporaneous limestone breccia present in intervals 0-3 feet, 395-396 feet, 425-426 1/2 feet above base of unit. GSC loc. 92629, local float, 435 feet above base, <u>Glyptagnostus stolidotus?</u> Opik. GSC loc. 92630, local float, 460 feet above base, <u>Crepicephalus?</u> sp. GSC loc. 92632, <u>Crenuolimbus?</u> sp., <u>Dunderbergia</u> sp., <u>Elbergia</u> sp., <u>Kinbladia</u> sp., <u>Micromitra</u> sp., <u>Pseudagnostus</u> sp.	1460+	1552 ⁺

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>unnamed quartzite</u> ⁺ 79 feet		
1	Quartzite, medium brownish and greenish grey weathering, thick and medium bedded, fresh surface light brownish grey, very fine grained. Only upper part of unit exposed.....	79	79
	<u>Sekwi, Formation</u> ⁺ 343 feet		
1	Siltstone, medium greenish grey weathering and fresh, limy; and scattered limestone nodules, orange weathering, medium grey fresh, finely crystalline, increasing to 1/5 of rock near top of unit. Siltstone in interval 0-5 feet orange weathering; interval 5-23 feet medium purple weathering; interval 23 23-45 feet contains sparse purple beds. GSC loc 92810, base of unit, float, <u>Fallotaspis</u> sp. GSC loc. 92811, 23 feet above base of unit, <u>Parafallotaspis?</u> sp., GSC loc. 92812, 70 feet above base, <u>Esmeraldina?</u> sp., <u>Nevadella</u> sp. GSC loc. 92813, 110 feet above base, float, <u>Esmeraldina?</u> sp.....	165	165
2	Limestone (intervals 0-15 feet, 1/3; 15-108 feet, slightly more than 1/2; 108-165 ^{feet} , more than 2/3), medium light grey weathering, bedding thin, wavy and nodular, fresh surface medium grey, finely crystalline; and siltstone, light orange weathering, medium grey fresh,		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	limy. GSC loc. 92814, 25 feet above base		
	of unit, float, <u>Esmeraldina?</u> sp.....	251	416
3	Dolomite, orange weathering, thick bedded, blocky, fresh surfaces medium grey and medium dark grey, finely crystalline; interval 67-95 feet light orange weathering, thin and medium bedded, fresh surface dark grey, finely crystalline. Interval 67-95 also contains interbedded siltstone (1/8), medium dark grey weathering and fresh.....	95	511
4	Dolomite, light orange, cream, light grey weathering, bedding thick, some (30-54 ft.) thin to thick, fresh surface light brown to light grey; numerous thin layers of floating fine quartz sand in dolomite, layers parallel bedding ^{and} outline some cross-beds, quartz sand also concentrated in interval 69 $\frac{1}{2}$ -72 ^{feet} forming thick bed of dolomitic sandstone.....	78	589
5	Dolomite, light orange weathering, bedding thin, platy to semi-platy, fresh surface light grey, finely crystalline; interval 111-171 feet light yellow-orange weathering, bedding thin, platy, fresh surface light grey and light greenish grey, with interbedded maroon weathering ^{and} fresh dolomite, mudcracks common. Interval 32-81 feet 1/2 sandstone, light to medium grey weathering, thin bedded, fresh surface light brown, fine grained; maroon		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	weathering and fresh siltstone in 1-foot bed present at top of interval.....	239	828
6	Quartzite, thick bedded, fine grained, interval 0-30 feet rust to light brown weathering, fresh surface light brown, fine to course grained; interval 39-52 feet dark maroon weathering, light maroon fresh; interval 52-117 rust, light brown, light grey weathering, fresh surfaces medium greenish grey, light brown. Interval 30-39 feet siltstone, brownish grey weathering and fresh. <u>Scolithos</u> present in 0-30 foot interval and in bed 77 feet above base of unit.....	117	945
7	Siltstone, interval 0-8 feet rust to greenish grey weathering, greenish grey fresh; interval 20-40 feet and 1/2 interval 40-50 ^{feet} medium brown weathering and fresh. Interval 8-20 feet 1/2 dolomite, orange weathering, thick bedded; and 1/2 siltstone, medium brownish grey weathering, medium greenish grey fresh. Limestone, 1/2 interval 40-50 feet, interval 50-85 feet, medium dark grey weathering, bedding thin, wavy, light orange mottled, thick parting, fresh surface dark grey, finely crystalline GSC loc. 92815, 6 feet above base of unit, <u>Olenellus</u> sp.....	85	1030

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
8	<p>Siltstone, medium greenish grey weathering and fresh, interval 0-44 feet light brownish grey weathering, light greenish grey fresh. Some intervals (44-48 ft., 71-73 ft.) of silty limestone, orange weathering and fresh, thick bedded; and some intervals (82-90 ft., 99-101 ft., 110-112 ft.) of limy dolomite, orange weathering, bedding thin, wavy, fresh surface light brown. GSC loc. 92816, 27 feet above base of unit, local float, aff. <u>Olenellus mohavensis</u> (Crickmay). GSC loc. 92817, 53 feet above base, local float, cf. <u>Olenellus mohavensis</u> (Crickmay), cf. <u>Olenellus nevadensis</u> (Walcott), <u>Fremontella</u> sp. GSC loc. 92818, 65 feet above base, local float, cf. <u>Olenellus clarki</u> (Resser), <u>Olenellus</u> sp. GSC loc. 92819, 75 feet above base, local float, cf. <u>Olenellus clarki</u> (Resser), cf. <u>Olenellus mohavensis</u> (Crickmay). GSC loc. 92820, 92 feet above base, local float, cf. <u>Olenellus fremonti</u> Walcott, cf. <u>Olenellus mohavensis</u> (Crickmay). GSC loc. 92821, 104 feet above base, local float, cf. <u>Olenellus clarki</u> (Resser), cf. <u>Olenellus mohavensis</u> (Crickmay)..114</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
9	<p>Limestone, bedding thin, wavy, interval 0-32 feet medium brownish grey weathering, fresh surface light grey to slightly greenish light grey, argillaceous; interval 32-108 feet medium blue-grey weathering, light orange mottled, fresh surface medium dark grey, finely crystalline; subinterval 47-80 feet contains archaeocyathid bearing limestone mounds ^{at base mounds} up to 11 feet thick, at ^{top mounds} average $1\frac{1}{2}$ feet thick; interval 108-121 feet medium dark grey weathering, partings light orange and pinkish to reddish orange, fresh surface dark grey, finely crystalline, fine to coarse grained; interval 121-267 feet medium grey weathering, light yellow-orange mottling on partings, fresh surface medium dark grey, finely crystalline and some (156-206 ft.) fine to coarse grained.....267</p>	267	1411
10	<p>Limestone, interval 0-71 feet dull medium and medium dark grey weathering, bedding thin and some medium, partings orange and red mottled, fresh surface medium dark grey, fine grained and finely crystalline, cross-beds and flat pebble conglomerate present; interval 71-89 feet medium light and medium grey weathering, bedding thick and medium,</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>fine to course grained, cross-beds up to 1 foot thick present; interval 89-106 feet medium light grey weathering, bedding thin to thick with mounds up to 3 feet thick, fresh surface medium grey, finely crystalline. Top of this unit is top of lower segment of section 23.....</p>	106	1517
11	<p>Limestone (0-35 ft.), bright orange and cream weathering, bedding thin to thick, fresh surface buff, finely crystalline; and dolomite (35-81 ft.), orange weathering, medium and thick bedded, finely laminated, fresh surface light grey, finely crystalline.....</p>	81	1598
12	<p>Limestone, intervals 0-33 feet, 52-58 feet mottled dark grey and medium light brownish grey on weathering surface, bedding thin, wavy, parting thick, fresh surface dark grey, finely crystalline; interval 33-52 feet mottled medium light and medium grey, bedding thick, fresh surface medium dark grey, fine grained; interval 58-77 feet medium grey weathering, bedding thin, wavy, thick parting, fresh surface medium dark grey, finely crystalline, grades upward to medium light grey and light orange mottled beds that are light grey on fresh surface.....</p>	77	1675

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
13	<p>Siltstone, interval 0-51 feet limy, 4/5 light orange to buff weathering, light greenish grey fresh, and 1/5 light orange weathering and fresh; interval 51-191 feet medium light brownish to greenish grey weathering, light greenish grey fresh, limy; interval 191-221 feet mainly covered, 2-foot outcrop is siltstone, cream weathering, light grey fresh. Sub-interval 51-72 feet contains 1/8 dolomite interbeds, orange weathering, medium bedded, fresh surface light grey, finely crystalline. Limestone sub-intervals 72-75½ feet, 88-90 feet, 146-147 feet, 168-176 feet mainly medium grey weathering and fresh, bedding thin, wavy, finely crystalline. GSC loc. 92822, 10 feet above base of unit, local float, aff. <u>Olenellus fremonti</u> Walcott. GSC loc. 92823, 11 feet above base, aff. <u>Olenellus fremonti</u> Walcott.....221</p>	221	1896
14	<p>Siltstone, interval 0-7 feet orange weathering, thick bedded, limy; intervals 11-27 feet, 38-57 feet, light brownish grey to light orange weathering, medium dark grey fresh, limy. Limestone, intervals 7-11 feet and 27-33 feet, medium dark grey weathering, bedding thin, broadly wavy, thick parting, finely crystalline; interval 33-38 feet, medium</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>dark grey weathering and fresh, thick bedded (mounds?). GSC loc. 92824, 48 feet above base of unit, float, cf. <u>Olenellus laxoculus</u> Fritz. GSC loc. 92825, 49 feet above base, cf. <u>Olenellus</u> sp. 1 Fritz, 1972.....</p>	57	1953
15	<p>Limestone, finely crystalline, interval 0-90 feet medium grey weathering, light orange on partings, bedding thin, wavy, fresh surface dark grey; interval 90-103 feet reddish brown to light orange-brown weathering, bedding thin (1/4 in.), platy, fresh surface medium grey; interval 103-122 feet medium grey weathering and fresh, partings partially yellow, upper 5 feet orange, in thin, broadly wavy beds and lenses; interval 122-172 feet medium dark grey weathering, partings light brownish grey with slight purple cast, bedding thin, wavy, fresh surface dark grey. GSC loc. 92826, 99 feet above base of unit, <u>Olenellus</u> sp. 1? Fritz, 1972, <u>Proliostracus</u> sp.....</p>	172	2125
16	<p>Limestone, medium blue-grey weathering, bedding thin, wavy, light orange on partings, fresh surface dark grey, finely crystalline; interval 0-28 feet argillaceous limestone, medium light</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>grey, light brown, buff weathering, parting in irregular slabs, fresh surface medium dark grey; interval 223-233 feet thick bedded (limestone mounds?). Sparse <u>Salterella</u> sp. present 75 feet above base of unit. GSC loc. 92827, 5 feet above base, local float, <u>Olenellus laxoculus?</u> Fritz.....233</p>	233	2358
17	<p>Limestone, intervals 0-17 feet and 37-51 feet medium light brownish grey weathering, <i>slabby parting</i>, fresh surface medium dark grey, argillaceous; interval 17-37 feet medium brownish grey weathering, bedding thin, wavy, thick parting, fresh surface medium dark grey, finely crystalline; interval 51-121 feet thin, wavy bedded, grading from light orange weathering, medium light grey fresh at base to medium blue-grey weathering, medium dark grey fresh at top. <u>Salterella</u> sp. abundant in 4-inch bed 32 feet above base of unit. GSC loc. 92828, 66 feet above base of unit, <u>Wanneria</u> sp.....121</p>	121	2479
18	<p>Argillaceous limestone, light brownish grey weathering, laminated, slabby parting, fresh surface dark (0-14 ft.) and medium (14-51 ft.) grey. GSC loc. 92829, 41 feet above base</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	of unit, float, aff. <u>Olenellus clarki</u> (Resser).....	51	2530
19	Limestone, dull medium grey weathering, bedding mainly thin, wavy, ^{some} intervals (0-10 ft., 74-162 ft.) contain <i>a few</i> medium and thick beds, fresh surface medium dark grey, fine grained; interval 62-74 feet weathers brick red. Symmetrical ripple marks at 30 feet indicate current direction of N10°W or S10°E. White, ring-like structures (organic?) 1/16 inch in diameter present 62 feet above base.....	162	2692
20	Limestone (0-47 ft.), medium blue-grey weathering, bedding thin, broadly wavy, light orange mottled, fresh surface medium dark grey, finely crystalline and fine grained; and limy siltstone (47-109 ft.), light yellow-brown weathering, medium grey fresh,	109	2801
21	Limestone, medium and medium dark grey weathering, bedding thin, wavy, light orange mottled, parting thick, fresh surface dark grey and finely crystalline. Silty limestone occupies parts of various intervals (0-30 ft., 1/8; 34-54 ft., 1/2; 54-64 ft., 1/5), light orange weathering, medium		

interval 249-259 feet 1/2 limy siltstone, light brown weathering, medium dark grey fresh.

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
22	<p>dark grey fresh; Limestone mounds 2 feet thick present at 347 feet, medium light grey weathering and fresh, 1/2 foot relief on upper surface. <u>Salterella</u> sp. present 201 feet above base of unit. GSC loc. 92830, 245 feet above base, local float, <u>Olenellus sequomalus</u> Fritz, <u>Salterella</u> sp. GSC loc. 92831, 314 feet above base, <u>Bonnia</u> sp., <u>Olenellus</u> sp., <u>Wanneria</u> sp. GSC loc. 92832, 344 feet above base, cf. <u>Anabarella</u> sp., <u>Bonnia laterispina?</u> Fritz, <u>Olenellus</u> sp. Highest exposure of this unit on ridge crest is top of this (2nd) segment in section 23: Equation of top of unit 21 with horizon at base of unit 22 is tentative and is not based on exact correlation of distinctive lithologic marker beds or fossils.....347⁺</p> <p>Limestone, orange; medium grey, medium blue-grey weathering, bedding thin, wavy, parting thick, fresh surface medium dark grey, finely crystalline; interval 0-39 feet interbedded bright orange (1/2) and medium grey (1/2) weathering, bedding thin (1/8-1/2 inch), broadly wavy, fresh surface medium grey and finely crystalline; interval 136-145 feet medium dark blue-grey</p>	347 ⁺	3148

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>weathering, thin bedded, nodular, medium dark grey fresh. GSC loc. 92833, 193 feet above base of unit, <u>Olenellus</u> sp. 2 Fritz, 1972, aff. <u>Olenellus</u> sp. 3 Fritz, 1972.....195</p>		3343 [±]
	<u>post-Sekwi dark shale and platy limestone, 2491[±] feet</u>		
1	<p>Shale and limestone. Interval 0-19 feet limestone 5/10, light brownish grey, some orange weathering, in laminated lenses 1/2 inch thick, fresh surface dark grey, finely crystalline; silty shale 3/10, weathering to light brown flakes; limestone 2/10, medium dark blue-grey weathering, thin bedded, nodular, fresh surface dark grey, finely crystalline. Interval 19-31 feet limy shale 8/10, light silvery grey weathering, medium dark grey fresh; and limestone 2/10, as in lenses in 0-19 foot interval. Interval 31-50 feet silvery shale 5/10, as in 19-31 foot interval; and limestone, medium blue-grey weathering, bedding thin, wavy, fresh surface medium dark grey, finely crystalline. Interval 50-85 feet limy shale, light silvery grey to medium grey weathering, in thin, concoidal (3/8 inch thick) and planar</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>(1/8 inch thick) plates and some nodules, fresh surface dark grey. Interval 85-168 feet limy siltstone, light brownish grey weathering, medium dark grey fresh; and limestone 1/10, light to medium brown, orangish brown weathering, in thin beds and nodules, medium dark grey fresh, finely crystalline. GSC loc. 92844, 21 feet above base of unit, local float, <u>Olenellus</u> sp. 2 Fritz, 1972, <u>Olenellus</u> sp., <u>Salterella</u> sp. GSC loc. 92845, 51 feet above base, <u>Olenellus</u> sp. 2? Fritz, 1972. GSC loc. 92846, 77 feet above base, <u>Olenellus</u> sp. 2? Fritz, 1972, <u>Olenellus</u> sp. GSC loc. 92847, 94 feet above base, local float, <u>Olenellus</u> sp. 2? Fritz, <u>Olenellus</u> sp. GSC 92848, 112 feet above base, local float, <u>Olenellus gilberti</u>? Meek, <u>Salterella</u> sp. GSC loc. 92849, 123 feet above base, local float, <u>Olenellus gilberti</u>? Meek. GSC loc. 92850, 143 feet above base local float, <u>Olenellus gilberti</u> Meek.....168</p>		168

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
2	Limestone (0-63 ft., 2/5; 63-119 ft., 4/5), light brown to light orange weathering, in thin, wavy beds and in lenses, fresh surface medium to medium dark grey, finely crystalline, limestone beds and lenses laminated; and siltstone, light brown and light grey weathering, fresh surface medium to medium dark grey.	119	287
	Trilobite hash 23 feet above base,		
	burrows common 43 feet above base.....	119	287
3	Sandstone, siltstone, and limestone. Interval 0-46 feet 1/2 sandstone, medium light orange-brown weathering, bedding thin, burrowed, fresh surface light grey and very fine grained; and 1/2 siltstone, light brownish grey weathering, sericitic. Interval 46-62 feet limestone, medium brownish grey weathering, bedding thin, wavy and nodular, fresh surface medium grey, finely crystalline and fine to coarse grained, large calcite crystals (echinoderm fragments?) present. GSC loc. 92851, 46 feet above base, <u>Helcionella</u> sp., <u>Wanneria</u> sp.....	62	349

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
4	<p>Shale and limestone. Interval 0-33 feet mostly shale, light to medium grey weathering, in plates 1/8 inch thick, fresh surface dark grey, limy; basal 5 feet limestone, medium light grey and light brown weathering, thin bedded, fresh surface dark grey. Interval 33-78 feet limestone, dull medium grey weathering, thin (1/8 inch) bedded, platy, fresh surface dark grey, finely crystalline, penecontemporaneous breccia present in 33-40 feet interval. GSC loc. 92852, 10 feet above base of unit, <u>Oygopsis</u> sp., <u>Olenellus</u> sp. GSC loc. 92853, 17 feet above base, local float, <u>Bonnia</u> sp., <u>Oygopsis</u> sp., <u>Olenellus puertoblancoensis?</u> (Lochman). GSC loc. 92854, 38 feet above base, local float, <u>Goldfieldia</u> sp.....78</p>		427
5	<p>Limy siltstone, dark grey weathering, in chips 1/16 x 1 x 1 inch, fresh surface black; and limestone 1/10, medium grey weathering, thin bedded, dark grey fresh. Interval 77-95 feet mainly limestone as in lower part of unit, thin bedded, platy, thin and medium parting. GSC loc. 92855, 1 foot above base of</p>		

Section 18

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	unit, local float, <u>Goldfieldia</u> sp., <u>Ogygopsis</u> sp. GSC loc. 92856, 7 feet above base, <u>Bonnia</u> sp., dolichometopid trilobite, cf. <u>Ogygopsis batis</u> (Walcott).....	95	522
6	Limy siltstone, medium dark grey, medium brown, black weathering, fresh surface black; and limestone 1/50, medium grey to light yellow weathering, medium and thin bedded, fresh surface dark grey, finely crystalline.....	121	643
7	Siltstone, dark grey and rust weathering, fresh surface dark grey, hard, very slightly limy. Sponge spicules in float 48 feet above base of unit. GSC loc. 92857, 28 feet above base of unit, float <u>Protospongia</u> sp. GSC loc. 92858, 1028 feet above base, local float, unidentified graptolite-like structures (unbranched), but margins straight without trace of thecae.....	1848	2491

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>Sekwi Formation, 4169⁺ feet</u>			
1	Siltstone, medium brownish grey to greenish grey weathering, medium grey fresh, limy; and sparse limestone nodules, medium grey weathering and fresh. Dark grey burrows 2-3 mm wide common. GSC loc. 92882, 1 foot <i>above base of unit</i> , float, fallotaspid trilobite. GSC loc. 92883, 203 feet <i>above</i> ^{base} float <u>Holmiella</u> sp. Base of this unit and base of Sekwi Formation covered.....	313 ⁺	313 ⁺
2	Limestone 1/2, medium grey weathering, bedding thin, wavy, fresh surface medium dark grey, finely crystalline; and limy siltstone grading ^{into} silty limestone, medium orange-brown weathering, medium grey fresh.....	158	471 ⁺
3	Limestone 7/10 and limy siltstone 3/10 as in unit 2 below. Penecontemporaneous slump folds in intervals 144-151 feet, 175-183 feet, 268-280½ feet. Penecontemporaneous breccia 204-231 feet, 263-269 feet, 280½-296 feet, 319-323 feet, 339-347 feet. Questionable southward direction of slump movement determined from folds in intervals 319-323 feet, 263-269 feet, and imbricate breccia in interval 319-323 feet.....	401	872 ⁺

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
4	Sandstone, light orange weathering, medium bedded, fresh surface light grey, very fine grained. Top of this unit is top of lower segment in section 23.....	8	880 ⁺
5	Limestone, intervals 0-106 feet and 133-177 feet part light orange weathering, medium <i>light</i> grey fresh and part <i>medium grey weathering, medium dark grey fresh,</i> lower interval thin bedded, wavy, thick parting, upper interval massive and containing penecontemporaneous slump breccia; interval 106-133 feet medium blue-grey weathering, bedding thin, wavy, orange mottled, parting thick, fresh surface dark grey, finely crystalline. Penecontemporaneous slump fold 121-126 feet above base indicates movement to west. At 135 feet 3-foot cross-bed indicates current flowed S 40°W. GSC loc. 92860, 80 feet above base, <i>Esmeraldina?</i> sp., <i>Nevadia?</i> sp. GSC loc. 92861, 110 feet above base, <i>Holmiella</i> sp.....	117	997 ⁺
6	Limestone, finely crystalline, interval 11-31 feet medium grey to light orange weathering, bedding thin, broadly wavy to wavy, fresh surface medium grey; interval 31-48 feet		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>medium light grey weathering, bedding thin to thick, fresh surface medium dark grey, penecontemporaneous slump folds and very fine grained quartz sand present. Intervals 0-11 feet and 48-58 feet covered, may contain some siltstone.....</p>	58	1055 ⁺
7	<p>Limestone, light brownish grey and light grey weathering, bedding originally thin and medium but "welded" to thick by penecontemporaneous slumping, fresh surfaces medium light brownish grey and medium grey, silty. Thin laminae of light brown weathering, very fine grained quartz sand present near top of unit. At 20 feet 3-foot fold and at 29 feet 4 foot fold indicating slumping direction of either N50°W or S50°E and of either S40°W or N40°E respectively</p>	123	1178 ⁺
8	<p>Silty and limy sandstone. Interval 0-22 feet silty limestone, medium grey weathering, thick parting, planar laminae of very fine grained quartz sand present. Interval 22-69 feet limy sandstone (22-47 ft.) and sandy limestone (47-69 ft.), medium grey to</p>		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	light orange weathering, bedding thin and medium, fresh surface light brown to medium grey, mainly very fine grained, some fine and medium grained.....	69	1247 ⁺
9	Siltstone, light orange-brown weathering, medium grey fresh, limy; and limestone nodules (1/10). Interval 0-21 feet limestone, medium light blue-grey and light orange weathering, bedding thin, wavy and nodular, fresh surface medium grey and finely crystalline, penecontemporaneous breccia in lower 7 feet of interval. Interval 58-69 feet sandstone (58-62 ft.), light orange weathering, thick bedded, blocky, fresh surface medium light grey, very fine grained, limy; and limestone (62-69 ft.), light grey weathering and fresh, thick bedded, pelletoidal. Interval 102-139 feet sandstone (102-124 ft.), light orange weathering, thin and medium bedded, fresh surface light brown to medium grey, very fine grained, limy, burrowed(?); and limestone (124-139 ft.), medium grey and orange weathering, bedding thin, wavy and nodular, fresh surface medium dark grey and		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	finely crystalline, large trilobite fragment present bearing <u>Holmiella</u> -like ornamentation. Penecontemporaneous breccia present 37-43 feet above base of unit.....	237	1484 ⁺
10	Mainly limestone and siltstone. Interval 0-37 feet limestone, medium blue-grey weathering, bedding thin, wavy, orange mottled, thick parting, fresh surface medium grey and finely crystalline. Interval 37-83 feet limestone, medium light grey weathering, in thick beds and in mounds 3 feet thick, fresh surface light pinkish grey to very light grey, finely crystalline to dense, archaeocyathids present; basal 4 feet of interval contains dolomite, orange weathering, bedding thick, blocky, fresh surface light grey, finely crystalline. Interval 83-119 feet siltstone, light orange-brown weathering, fresh surface light grey, limy; and limestone (1/5) in scattered nodules, light blue-grey weathering, medium grey fresh, finely crystalline. Interval 119-154 feet dolomite, orange weathering, medium and thick bedded, blocky, fresh surfaces light grey, cream, finely crystalline, planar		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>laminae and cross-beds up to 1 foot thick in subinterval 138-154 feet are outline by very fine quartz sand. Interval 154-184 feet limestone, light grey weathering, thick bedded, fresh surface light grey, pink, cream, finely crystalline; penecontemporaneously folded (<i>mobilized</i>) limestone in this interval ^{has} locally scoured underlying dolomite to a depth of 10½ feet. Cross-bed at 137 feet above base of unit indicates paleocurrent direction of 0° S184</p>		1668 ⁺
11	<p>Dolomite, light orange to cream weathering, bedding slabby (22-64 ft.) and medium and thick (64-217 ft.), fresh surface light grey, light brownish grey, finely crystalline. Very fine grained quartz ^{sand} "floating" in dolomite matrix or ^{concentrated} in laminae, quartz content increases toward top of unit, some medium and coarse quartz grains in upper 116 feet. Interval 0-22 feet limy siltstone, light orange to cream weathering, light grey to buff fresh,217</p>		1885 ⁺
12	<p>Shale (mainly grass covered), medium brown weathering, in small chips and flakes, fresh surface medium grey-brown.....321</p>		2206 ⁺

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
13	Limestone 1/2, medium dark grey weathering, in thin and mainly medium, irregular interbeds, fresh surface dark grey and finely crystalline; interval 0-17 feet orange weathering, bedding thin, wavy, thin to thick parting, fresh surface dark grey, finely crystalline, archaeocyathid bearing limestone mounds present, <u>Stenothecoides</u> sp. abundant. Shale 1/2, as in unit 12 below. GSC loc. 92862, 38 feet above base of unit, <u>Labradoria?</u> sp., <u>Olenellus</u> sp. GSC loc. 92863, 106 feet above base, cf. <u>Olenellus fremonti</u> Walcott.....114		2320 ⁺
14	Shale as in unit 12 below. Interval 0-22 feet contains 1/8 limestone, orange weathering, in thin (1/2 inch) plates and lenses, fresh surface medium dark grey, finely crystalline. Interval 22-30 feet limy ; silty shale, light orange-brown weathering, medium light brown fresh, highly burrowed. Intervals 63-64 feet and 78-81 feet limestone, orange weathering, bedding thin, wavy, medium dark grey fresh, finely crystalline and bioclastic. GSC loc. 92864, 15 feet above base of unit, aff. <u>Olenellus sequomalus</u> Fritz. GSC loc.		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	92865, 64 feet above base, <u>Laudonia</u> sp.,		
	<u>Olenellus</u> sp.....	102	2422 ⁺
15	Limestone, light to medium grey weathering, thin to thick bedded and with archaeocyathid- bearing mound up to 8 feet high (average is 3 feet high), fresh surface medium dark grey, finely crystalline, beds around mounds fine to coarse grained. Interval 237-243 feet shale, medium brown weathering, medium dark brown fresh.....	265	2687 ⁺
16	Limestone and shale. Limestone, thin bedded, broadly wavy, finely crystalline, interval 7-32 feet medium grey and dull medium blue- grey weathering, medium dark grey fresh; interval 40-65 feet 3/4 limestone, medium grey and orange weathering, medium dark and dark grey fresh, argillaceous; interval 65-130 feet medium blue-grey weathering, medium dark grey fresh, partings heavily mottled yellow and light orange. Shale, interval 0-7 feet, 32-40 feet, 1/4 interval 40-65 feet, medium brown weathering, medium dark brown fresh. GSC loc. 92866, 68 feet above base of unit, <u>Kutorgina</u> sp.,		
	<u>Olenellus</u> sp., aff. <u>Proliostracus</u> sp.....	130	2817 ⁺

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
17	Limestone, dull medium grey and medium light grey weathering, thin to thick bedded, fresh surface medium dark and dark grey, finely crystalline and fine grained. Interval 40-72 feet medium grey and light brownish grey mottled, partings have orange-grey and pinkish orange mottling, "blue-bird structure" common. Interval 158-174 feet dolomite, bright orange to yellow-orange weathering, thin and medium bedded, platy, fresh surface cream coloured, finely crystalline.....174	174	2991 ⁺
18	Siltstone, yellow to very light orangish yellow weathering, greenish grey fresh, dolomitic(?). Interval 0-21 feet argillaceous dolomite; light yellowish orange on weathered and fresh surface, bedding thin, platy. Interval 21-60 feet siltstone, maroon weathering and fresh. Interval 60-78 feet siltstone, 1/3 maroon weathering and fresh, 2/3 greenish grey weathering and fresh. Interval 139-143 feet dolomite, light pinkish orange weathering and fresh, bedding thin, platy, parting thick.....193	193	3184 ⁺

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
19	Limestone, interval 5-16 feet medium grey to light orange weathering, thin bedded, fresh surface dark grey, argillaceous; interval 16-63 feet medium dark grey weathering, bedding mainly thin, parting thin to thick, partially red coated, fresh surface dark grey, finely crystalline; interval 63-133 feet thick bedded, in part (63-78 ft.) medium dark grey weathering and fresh, fine and medium grained, and in part (78-133 ft.) medium dark blue-grey weathering, partings red coated, fresh surface dark grey, finely crystalline. Interval 0-5 feet dolomite, light orange-yellow weathering, finely laminated, thick parting, fresh surface cream coloured, finely crystalline. Interval 133-154 feet dolomite, cream weathering, medium and thick bedded, planar laminated, fresh surface medium light grey, finely crystalline.....154	154	3338 ⁺
20	Limestone, medium grey weathering, thin bedded, partings light orange coated, fresh surface medium dark and dark grey, finely crystalline; interval 0-10 feet 1/2 light		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	orange weathering, dark grey fresh and 1/2 argillaceous limestone, light yellow-orange weathering, medium brownish grey fresh; interval 44-47 feet, 73-74½ feet dark grey weathering and fresh, thin to thick bedded. Intervals 47-49 feet, 1/2 of 62-67 feet, 1/2 of 74½-96 covered (shale). Trilobite hash present 95 feet above base of unit. GSC loc. 92867, 25 feet above base, <u>Proliostracus</u> sp. GSC loc. 92868, 41 feet above base, <u>Proliostracus</u> <u>latus</u> Fritz.....157		3495 ⁺
21	Limestone, medium dark grey and dull medium grey weathering, medium and thin bedded, partings red mottled, fresh surface dark grey, finely crystalline; interval 22-54 feet, lower part, bedding thin, wavy, colour as described, upper part 3/4 medium dark blue-grey weathering with light yellow-orange partings, dark grey fresh, burrowed, and 1/4 shale, medium dark grey weathering and fresh; interval 78-128 feet medium light grey (78-87 ft.) and dull medium light blue-grey weathering (87-128 ft.), bedding thin and medium, fresh surface dark grey, finely crystalline, <u>Salterella</u> sp. abundant		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>(87-128 ft.); interval 179-204 feet medium light grey weathering, thick bedded, fresh surface medium dark grey, finely crystalline, base of unit irregular with 1 foot of relief. Interval 10-22 feet dolomite, light orange-yellow weathering, thin to thick bedded, blocky, fresh surface medium grey, finely crystalline. GSC loc. 92869, 44 feet above base of unit, local float, <u>Olenellus</u> sp., cf. undet. trilobite, Nelson 1966, Pl. 6, figs. 6-8, 12, 13. GSC loc. 92870, 56 feet above base, undet. trilobite as in GSC loc. 92869. GSC loc. 92871, 80 feet above base, local float, cf. <u>Olenellus</u> sp. GSC loc. 92872, 91 feet above base, cf. <u>Olenellus</u> sp. 2 Fritz, 1972. GSC loc. 92873, 93 feet above base, local float, <u>Olenellus</u> sp. GSC loc. 92874, 112 feet above base, local float, cf. <u>Olenellus</u> sp. 2 Fritz, 1972.....204</p>		3699 ⁺
22	<p>Limestone, interval 0-13 feet medium light blue-grey weathering, bedding thin, wavy, partings display some orange-yellow mottling, fresh surface dark grey, finely crystalline to dense; interval 13-72 feet medium dark grey weathering, parting surfaces light brownish</p>		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>grey, orange, red, bedding thin and some medium, wavy, parting thick, fresh surface dark grey, finely crystalline. GSC 92875, 15 feet above base of unit, float, <u>Bonnia</u> sp., cf. <u>Olenellus</u> sp.3 Fritz, 1972, <u>Olenellus</u> sp. GSC loc. 92876, 29 feet above base, local float, <u>Bonnia</u> sp., cf. <u>Olenellus</u> <u>paraoculus</u> Fritz, <u>Proliostracus</u> sp., <u>Salterella</u> sp. GSC loc. 92877, 72 feet above base, <u>Wanneria parvifrons</u> Fritz.....72</p>		3771 ⁺
23	<p>Shale and limestone. Interval 0-22 feet 1/2 shale, medium brownish grey weathering and fresh; and 1/2 limestone, light orange to tan weathering, bedding thin (3/8 inch), platy, fresh surface medium dark brownish grey, finely crystalline. Interval 22-57 feet 1/2 shale as below but silty; 1/4 shale as below but limy and in thin plates; 1/4 limestone, light orange weathering, bedding thin (1 inch), platy, fresh surface medium dark grey, finely crystalline.....57</p>		3828 ⁺
24	<p>Limestone, medium grey weathering, intervals 0-24 feet, 31-39 feet, 62-88 feet thin bedded, broadly wavy, light yellow orange partings, fresh surfaces dark grey, finely crystalline,</p>		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>some fine to coarse grained, 8-inch <i>bed of</i> flat-pebble conglomerate at base of unit; interval 24-31 feet medium bedded, 4-inch cross-beds present, fresh surface medium grey, fine grained; interval 39-62 feet mainly thin and medium bedded, beds pinch and swell, fresh surface dark grey, finely crystalline and fine and medium grained. Limestone mounds present, maximum thickness and distance above base as follows: 18 feet, 3 feet thick; 24 feet, 3 feet thick; 62 feet, 2½ feet thick; 76 feet, 1 foot thick. Cross- beds 2 feet high at 53 feet gives current direction of S40°W; cross-bed 1 foot high at 82 feet gives current direction of S65°W.....88</p>	88	3916 ⁺
25	<p>Limestone, interval 0-33 feet medium dark grey weathering and fresh, thick bedded, some red on partings, fine and medium grained, <u>Girvanella</u> sp. present 12 feet above base. Interval 33-231 feet limestone, medium light and light grey weathering, thick bedded, fresh surface medium dark grey, finely crystalline to dense; subinterval 195-202 feet limestone, medium blue-grey and bright orange weathering, bedding thin, wavy, fresh surface medium dark</p>		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	grey, finely crystalline; subinterval 221-231 feet limestone, medium light and light grey weathering, thin bedded, fresh surfaces medium light grey and cream coloured, finely crystalline. ^{Rare} Archaeocyathids	51 feet above base of unit.....231	4147 ⁺
26	Limestone, medium blue-grey weathering, bedding thin, wavy to nodular, fresh surface medium dark grey, finely crystalline. GSC loc. 92879, 22 feet above base of unit, <u>Bonnia</u> sp. Top of this unit is top of medial segment in section 23.....22		4169 ⁺
		<u>post-Sekwi dark shale and platy limestone, 733^e feet</u>	
1	Siltstone and sandstone. Interval 0-45 feet siltstone, light brown weathering, medium brown fresh. Interval 45-129 feet mainly sandstone, limy, very fine grained, planar laminated and burrowed, subinterval 45-88 feet in part medium light orange-brown weathering, ^{sandstone,} thin bedded, platy, fresh surface light grey, and in part interbedded limestone, medium grey weathering, thin bedded, platy, fresh surface dark grey, finely crystalline; subinterval 88-113 feet sandstone, medium		

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	orange-brown weathering, thick to thin bedded, fresh surface medium light grey, and scattered limestone nodules, medium grey weathering and fresh; subinterval 113-129 feet very sandy limestone, medium grey weathering, bedding thin, broadly wavy, orange-brown on partings, fresh surface medium and medium dark grey.....	129	129
2	Limestone and siltstone. Interval 0-7 feet limestone, weathers medium dark brownish grey with orange and reddish tinge, bedding thin, platy, laminated, fresh surface dark grey, rather soft. Interval 7-29 feet siltstone, dark grey weathering and fresh, hard. Interval 29-39 feet limestone, medium light grey weathering, very thin bedded, platy, fresh surface dark brownish grey, argillaceous. Interval 39-106 feet limestone, medium grey weathering, thin bedded, platy, planar laminated, fresh surface medium dark grey, finely crystalline, some beds of penecontemporaneous breccia up to 1½ feet thick, breccia fragments weather in relief, clasts are limestone and some sandstone, numerous fragments are rounded.....	106	235

Section 19

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3	Limestone, light grey, buff, light orange weathering, thin bedded (1/8 inch), platy, fresh surface dark grey. GSC loc. 92880, 38 feet above base of unit, local float, <u>Protospongia?</u> sp. GSC loc. 92881, 498 feet above base, local float; <u>Acmarrhachis?</u> sp., <u>Dunderbergia?</u> sp.....498 ⁺	498 ⁺	733 ⁺

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>map-unit 13, 269⁺ feet</u>			
1	Siltstone 4/5, rust to dark grey weathering, dark grey fresh, hard; and quartzite 1/5, rust weathering, thin and medium bedded, fresh surface light brown, very fine <i>grained</i> . This unit tectonically folded.	not measured	
2	Siltstone as in unit 1 below. Interval 257-269 feet quartzite, rust to greenish grey weathering, medium and thick bedded, fresh surface medium greenish grey, very fine grained.	269	269 ⁺

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
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Sekwi Formation, 4537 feet

1	Siltstone, medium greenish grey to light brownish grey weathering, medium light greenish grey fresh, limy; and silty limestone nodules 1/10 (0-97 ft.) to 2/10 (97-323 ft.), medium orange-brown weathering, light brown fresh. Interval 95-97 feet quartzite, light orange-brown weathering, thick bedded, fresh surface light brown, very fine grained. Fault possibly located in covered interval 131-193 feet above base of unit.	323	323
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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
2	Limestone $\frac{1}{2}$, medium light blue-grey weathering, bedding thin, wavy, $\frac{1}{3}$ orange mottled, fresh surface medium dark grey, finely crystalline; and siltstone $\frac{1}{2}$, light brown weathering, fresh surface medium grey, limy. Interval 328-361 feet sandstone, light orange-brown weathering, thick bedded, fresh surface medium grey, very fine grained, limy.	361	684

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3	<p>Limy siltstone $\frac{3}{4}$, light orange-brown weathering, medium grey fresh; and interbedded limestone $\frac{1}{4}$, medium light grey weathering, in thin beds that have been penecontemporaneously folded and brecciated, fresh surface medium grey, finely crystalline. Archaeocyathid bioherm 5 feet thick located 76 feet above base..106</p>		790

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
4	<p>Siltstone and limestone. Interval 0-43 feet probably siltstone (covered), small outcrop (30-33 ft) of sandstone present, light orange-yellow weathering, medium bedded, fresh surface medium grey, very fine grained. Interval 43-124 feet limestone, medium light blue-grey weathering, bedding thin and medium, very wavy, coated medium brown, fresh surface medium dark grey, fine and medium grained. Interval 124-146 feet limestone, fresh surface dark grey, finely crystalline, in medium light grey weathering mounds up to 5 feet thick; and in penecontemporaneous breccia, light blue-grey weathering, thin bedded. Interval 146-184 feet siltstone 3/5, light orange weathering, fresh surface dark grey, limy; and limestone 2/5, medium blue-grey weathering, thin bedded, brecciated from penecontemporaneous slumping, fresh surface dark grey, finely crystalline. Interval 184-220 feet as in interval 124-146 feet, limestone in 36-foot thick mounds grade laterally into limestone breccia...220</p>		1010

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
5	<p>Limy shale and shaley siltstone, light orange-brown to medium brownish orange weathering, fresh surface medium brownish grey; interval 265-335 feet limy siltstone, medium brownish grey weathering and fresh, in plates $\frac{1}{2}$ x 2 x 3 inches. Some limestone, interval 41-46 feet medium light grey weathering, thin bedded, fresh surface medium dark grey, finely crystalline, 1 foot thick limestone mounds present; intervals 55-63 feet and 78-82 feet fused by penecontemporaneous slumping into thick beds containing 1/5 limestone, medium blue-grey weathering, thin bedded, medium dark grey fresh and 4/5 limy siltstone, light orange weathering, medium brownish grey fresh; interval 243-265 feet light orange to medium grey weathering, thin and medium bedded, fresh surface dark grey, fine and medium grained.</p> <p>GSC loc. 92884, 110 feet above base of unit, float, <u>Bradyfallotaspis?</u> sp.</p> <p>GSC loc. 92885, 306 feet above base, local float, <u>Judomia?</u> sp.</p> <p>cf. <u>Gelasene</u> sp. or <u>Keeleaspis</u> sp. 335</p>	335	1345

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
6	<p>Limestone, in medium light grey weathering, thick (averaging 2½ ft.) archaeocyathid-bearing mounds, and in orange weathering, thin and medium beds, fresh surface medium grey, coarse grained.</p> <p>Described limestone has been locally removed by scowering and displaced by penecontemporaneously limestone breccia, ^{that is} medium grey weathering, thin bedded, medium dark grey fresh, finely crystalline. . . .</p>	55	1400
7	<p>Limestone, medium grey weathering, bedding medium (0-150 ft.), medium and thick (150-205 ft.), partings very wavy, red mottled, fresh surface medium dark grey, finely crystalline and fine grained.</p> <p>GSC loc. 92886, 14 feet above base of unit, <u>Keeleaspis sp.</u>, <u>Ekwipagetia sp.</u>, <u>Judomia?</u> sp., <u>Pagetia sp.</u>, <u>Stenothecoides sp.</u></p> <p>GSC loc. 93946, 151 feet above base, <u>Kutorgina sp.</u>, <u>Obollela sp.</u>, <u>Sekwiaspis sp.</u></p>	205	1605

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
8	Limestone, dull medium grey weathering, thin and medium bedded, parting thick, red mottled, fine and medium grained; intervals 20-32 feet and 45-49 feet light grey weathering, thick bedded, fresh surface medium light grey, dense, some pellets (?).	71	1676

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
9	Limestone, light and medium light grey weathering and fresh, thick bedded, finely crystalline and dense. Interval (Plate 4, fig. 3) 149-473 feet grades laterally into dolomite, light pinkish cream weathering, thick bedded, ruggy ($\frac{1}{2}$ inch in diameter), fresh surface light grey, finely to coarsely crystalline. Interval 473-485 feet dolomite, pinkish cream weathering, medium bedded, fresh surface medium grey, fine and medium grained, some flat-pebble conglomerate present.	485	2161
10	Limestone, dull medium grey weathering, thin and medium bedded, some (27-47 ft., 54-79 ft., 90-92 ft., 96-99 ft.) medium and thick bedded, wavy, fresh surface medium grey, fine to coarse grained; interval 110-115 feet medium light grey weathering, thick bedded, fresh surface medium grey, finely crystalline. At 59 feet 4-inch cross-bed present, GSC loc. 93947, 26 feet above base of unit, <u>Olenellus truemani</u> ? Walcott.	115	2276

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
11	<p>Dolomite, thick bedded, finely crystalline, interval 0-36 feet cream, light orange, medium light brownish grey weathering, fresh surfaces medium and medium dark grey; interval 62-163 feet mottled medium brownish grey and light brownish grey weathering, some "bluebird structures" present, fresh surfaces medium and medium dark grey; interval 163-215 feet cream weathering, fresh surface light grey, from distance this interval shows as white band. Interval 36-62 feet limestone, dull medium grey weathering, bedding thin and medium, wavy, fresh surface medium grey, fine grained.</p>	215	2491
12	<p>Limestone, dull medium dark grey weathering and fresh, bedding thin to thick, wavy, fine to coarse grained. Intervals 49-63 feet and 107-112 feet both $\frac{1}{4}$ shale (?), covered by brown soil. GSC loc. 93948, 87 feet above base of unit, <u>Laudonia</u> sp.</p>	159	2650

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
13	Limestone, medium and medium light grey weathering, thick bedded to massive (interval 38-41 ^{feet} thin bedded), fresh surface medium dark grey, finely crystalline, archaeocyathids present	67	2717
14	Limestone finely crystalline, interval 8-77 feet medium blue-grey weathering, bedding thin to thick, wavy (8-27 ft.) and thin, platy (27-77), fresh surface dark grey; interval 77-271 feet medium to dark grey weathering, bedding thin, broadly wavy, fresh surface dark grey. Interval 0-8 feet argillaceous limestone 7/10, bright orange to medium brown weathering, bedding thin, platy, fresh surface medium dark grey, finely crystalline; and shale 3/10, weathering to medium brown flakes, fresh surface dark brown. Small fault present 168 feet above base of unit. GSC loc. 93949, 98 feet above base, <u>Olenellus</u> sp., <u>Poulsenia</u> sp. GSC loc. 93950, 106 feet above base, <u>Poulsenia</u> sp., <u>Proliostracus</u>		

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>annosus?</u> Fritz. GSC loc. 93951, 118 feet above base, <u>Kutorgena</u> sp., <u>Olenellus</u> sp., <u>Poulsenia</u> sp., cf. <u>Sekwiaspis</u> sp. GSC loc. 9352, 193 feet above base, <u>Kutorgina</u> sp., <u>Onchocephalus</u> sp., <u>Poulsenia</u> sp.	271	2988
15	Limestone, medium grey weathering, bedding thin, wavy, parting thick, fresh surface medium and medium dark grey, finely crystalline.	47	3035
16	Limestone, thin bedded, finely crystalline, interval 0-63 feet medium grey weathering, bedding wavy, $\frac{1}{2}$ orange mottled, fresh surface medium dark grey; interval 63-78 feet medium-blue grey weathering, bedding broadly wavy, fresh surface dark grey. Interval 78-84 feet shale, medium brown weathering, medium dark grey fresh. GSC loc. 93953, 38 feet above base of unit, <u>Proliostracus annosus</u> Fritz.	84	3119

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
17	Limestone, interval 0-36 feet medium light grey weathering with planar laminae that weather cream, light orange, <i>bedding thick</i> , fresh surface medium dark grey, finely crystalline; interval 36-77 feet light grey, cream, light orange weathering, thick (36-74 ft.) and medium (74-77 ft.) bedded, fresh surface medium grey, finely crystalline.	77	3196
	<i>(Plate A, Fig. 5)</i>		
18	Siltstone, various interbedded types, [^] 7/10 light orange to cream weathering, bedding thin, platy, fresh surface cream to light grey, dolomitic (?); 2/10 light brown weathering, fresh surface light greenish grey, limy; and 1/10 maroon weathering and fresh. Interval 0-30 feet maroon weathering and fresh Thickness of this unit may be tectonically distorted (small folds present).	168	3364

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
19	Limestone, medium grey weathering, bedding thin, medium, and thick (45-55 ft., 85-88 ft., 96-100 ft.), fresh surface medium dark grey, finely crystalline; intervals 24-33 feet and 101-136 feet contain light grey weathering, thick limestone mounds; interval 0-12 feet very thin bedded, broadly wavy, brittle, partings orange coated, fresh surface dark grey, finely crystalline. Interval 136-146 feet dolomite, bright orange weathering, bedding thin, platy, planar laminated, fresh surface medium grey, finely crystalline. GSC loc. 93954, 15 feet above base of unit, <u>Olenellus</u> sp. 1 Fritz,	146	3510

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
20	Limestone, interval 0-44 feet medium light grey to cream weathering, thin to thick bedded, fresh surface medium light grey, finely crystalline, above 11-foot level lithologic fragments present, some from algal mats; interval 44-59 feet medium light grey weathering, very thick bedded, fresh surface medium to medium dark grey, finely crystalline, pelletal; interval 59-85 feet medium light blue-grey weathering, bedding thin, wavy, light orange mottled, parting thick, fresh surface finely crystalline and fine to coarse grained. Interval 85-97 feet dolomite, bright orange weathering, thick bedded, blocky, some planar laminae, fresh surface medium dark grey, finely crystalline.	97	3607

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
21	Limestone, dense with ^{faint} outlines of pellets and "soft" limestone clasts, interval 0-36 feet medium light grey weathering, medium bedded, fresh surface medium grey; interval 36-76 feet medium grey weathering and fresh, thick bedded to massive.	76	3683

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
22	<p>Limestone, medium dark grey weathering, bedding thin, wavy and nodular, thick light orange coated, fresh surface dark grey, finely crystalline; interval 0-13 feet medium light grey, cream weathering, thick bedded, blocky, finely laminated, fresh surface medium grey, finely crystalline, some layers pelletoidal, at 11 feet algal mat fragments; interval 134-142 feet medium dark grey weathering, thick bedded, blocky, red stained, fresh surface dark grey, fine and medium grained. Interval 13-20 feet dolomite, bright orange weathering, bedding thick, blocky, finely laminated, fresh surface medium grey, finely crystalline. Interval 20-37 feet mudstone, light orange weathering, medium dark grey fresh. GSC loc. 93955, 47 feet above base of unit, local float, <u>Olenellus</u> <u>puertoblancoensis?</u> (Lochman). GSC loc. 93956, 185 feet above base, local float, <u>Bonnia</u> sp., <u>Olenellus</u> sp. 284</p>		

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
23	Limestone, medium light grey and medium blue-grey weathering, bedding thin, wavy, thick brown to light orange coated, fresh surface medium and medium dark grey, finely crystalline, somewhat argillaceous. From distance	118	4085
24	Limestone, medium blue-grey weathering, bedding thin, wavy and nodular, light orange mottled, some red, fresh surface medium grey, finely crystalline; interval 71-74 feet medium light grey weathering, bedding medium, blocky, fresh surface medium grey, fine grained; interval 185-208 feet dull medium light grey weathering, medium bedded, blocky, fresh surface medium grey, fine grained. GSC loc. 93957, 176 feet above base of unit, local float, <u>Bonnia</u> sp. . . .	208	4293

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
25	Limestone, medium grey weathering, bedding thin, wavy and nodular, light orange mottled, fresh surface medium dark grey, finely crystalline; interval 210-228 feet medium light grey weathering, medium bedded, wavy, fresh surface medium grey, finely crystalline. GSC loc. 93958, 67 feet above base, <u>Bonnia laterispina?</u> Fritz	244	4537

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>post-Sekwi dark shale and platy limestone, 574⁺ feet</u>		
1	Partly siltstone, black weathering and fresh. Interval 0-28 feet, ^W loer part contains siltstone as described and sparse limestone nodules, medium blue-grey weathering, medium grey fresh, averaging 2 inches thick by 5 inches wide; upper part consists of limy siltstone, dark grey and orange weathering, beds thin, platy, laminated. Intervals 28-51 feet and 56-59 feet limestone, medium grey weathering with slight maroon tinge, thin and medium bedded, blocky, rather soft, fresh surface black, sparkling. 70	70	70
2	Siltstone, dark grey and rust weathering, dark grey fresh; interval 0-68 feet contains siltstone as described and interbedded limestone 1/6, medium brownish grey weathering, thin bedded, laminated, fresh surface medium dark grey. GSC loc. 93959, 68 feet above base of unit, <u>Olenellus</u> sp. 121	121	191

Section 20

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3.	Limy siltstone, medium brownish grey . weathering, in small, angular fragments $\frac{1}{2}$ x $\frac{1}{4}$ x $\frac{1}{4}$ inches, fresh surface dark brownish grey. Dike of white quartz 8 inches wide present 26 feet above base	156	347
4	Limestone, maroon (thin, platy beds) and medium grey (medium beds) weathering, fresh surface medium dark grey, finely crystalline. Folded and possibly also faulted above 61-foot level	201	548
5	Limestone, silvery light yellow-brown weathering, bedding thin, fresh surface medium dark grey	26	574

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>map-unit 12 (not measured)</u>		
1	Quartzite; white to light brown weathering and fresh, thick bedded, fine and medium grained.		
	<u>map-unit 13, 623 feet</u>		
1	Siltstone, rust weathering, fresh surface dark grey to black; and quartzite (1/6), rust to medium brown weathering, thin bedded, platy, fresh surface medium brown and fine grained. Interval 50-75 feet contains quartzite, light brown weathering and fresh, thin and medium bedded, fine grained. Interval 534-543 ^{feet} contains quartzite; light greenish brown weathering and fresh, medium and thick bedded, fine grained	623	623
	<u>Sekwi Formation, 2143 feet</u>		
1	Limestone, medium blue-grey to medium grey weathering, in thin, broadly wavy beds (10-27 ft., 59-147 ft.) and nodules (27-59 ft.), fresh surface medium dark grey. Siltstone present in intervals 0-10 feet, and 27-59 feet ($\frac{1}{4}$), orange-brown weathering, fresh surface medium grey, limy. Penecontemporaneous limestone breccia in interval 12-16 feet	147	147

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
2	<p>Siltstone 3/4, intervals 0-21 feet and 41-71 feet, light orange-brown weathering, medium grey fresh, limy; and limestones 1/4, as in unit 1 but exhibiting penecontemporaneous slump structures. Limestone, interval 21-26 feet medium orange-brown weathering, bedding medium, blocky, fresh surface medium grey; interval 28-41 feet medium grey weathering with light brown partings, bedding thin, platy to nodular, fresh surface medium dark grey, finely crystalline; interval 71-97 feet light blue-grey weathering, bedding thin, platy, light yellow, fresh surface medium dark grey, dense to finely crystalline. Sandstone present in interval 26-28 feet, light brown weathering and fresh, medium bedded, planar laminated, fine grained. GSC loc. 92740, 3 feet above base of unit, <u>Kootenia diutina</u> Fritz, <u>Obelella?</u> sp. GSC 92741; 8 feet above base, <u>Keeleaspis stupenda?</u> Fritz, <u>Nevadia</u> sp. GSC loc. 92742, 16 feet above base, <u>Holmiella preancora</u> Fritz, <u>Kootenia diutina?</u> Fritz, <u>Nevadella faceta</u> Fritz. GSC loc. 92743, 22 feet above base, <u>Kootenia diutina?</u> Fritz 97</p>		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3	<p>Siltstone in intervals 0-52 feet and 102-113 feet, light brownish grey weathering, fresh surface dark grey, limy. Limestone in mounds and bioherms with archaeocyathids, light to medium grey, orange weathering, medium grey fresh; dense to finely crystalline; <i>subinterval</i> 36-42 feet, isolated bioherm 6 feet thick; interval 52-102 feet mainly stacked mounds 1 foot thick, up to 6 feet thick near top, uppermost 1 foot orange weathering limestone, pelletoidal, containing some penecontemporaneous breccia; interval 113-146 feet irregular; thin to thick beds with $\frac{1}{2}$ foot to 1 foot archaeocyathid bearing mounds, penecontemporaneous breccia at top</p>	146	390
4	<p>Siltstone, light brown (0-165 ft.) and orange-brown (165-242 ft.) weathering, fresh surface medium grey, limy.</p> <p>Interval 0-26 feet, argillaceous limestone, light brown weathering, bedding thin ($\frac{3}{8}$ inch), platy, fresh surface dark grey. Interval 26-30 feet quartzite, light brown weathering and fresh, thick bedded, fine grained. Interval 72-84 feet limestone, medium light blue-grey weathering, bedding thin, wavy, fresh surface medium dark grey, finely crystalline, 2 feet of penecontemporaneous breccia</p>		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	at base of interval. GSC loc. 92744, 9 feet above base of unit, <u>Holmiella preancora?</u> Fritz, <u>Keeleaspis</u> sp., <u>Nevadella faceta</u>		
	Fritz	242	632
5	Dolomite, light pink, cream, orange weathering, thick bedded, fresh surface light grey, finely crystalline, ^{Some} medium and coarsely crystalline; interval 0-38 feet buff, orange weathering, thin to thick bedded; cross-beds 128 feet above base of unit indicate current direction of 0°S (3 cross -beds), S20E, 0°N. Quartzite present in intervals 23-24 feet, 108-114 feet, 198-199 feet, light grey weathering and fresh, fine grained. Above 32 foot level floating quartz sand present in dolomite. Faults within this interval were avoided by moving 300 feet to SE of measuring route on ridge crest	199	831
6	Siltstone, $\frac{1}{2}$ light yellow-grey weathering and fresh, dolomitic; and $\frac{1}{2}$ maroon weathering and fresh. Top of this unit is top of lower segment of section 19	21	852
7	Quartzite, light brown weathering and fresh, thick bedded, coarse grained (0-17 ft.) and fine to coarse grained (17-60 ft.), <u>Scolithos</u> sp. present		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	14 feet above base of unit	60	912
8	Limy siltstone, orange to yellow-grey weathering, medium light brownish grey fresh. Interval 7-27 feet $\frac{1}{2}$ siltstone as described; and $\frac{1}{2}$ limy sandstone, orange weathering, thick to thin bedded, light to medium grey fresh, fine grained	27	939
9	Limestone, medium dark grey weathering and fresh, thin and medium bedded, fine grained; interval 46-51 feet has red mottling on partings. Limestone in interval 35-46 feet dark grey weathering and fresh, thin bedded. GSC loc 92745, 10 feet above base ^{of unit,} <u>Laudonia?</u> sp., aff. Nelson, 1966, pl. 6, figs. 6-9, 12, 13. GSC loc. 92746, 31 feet above base, <u>Olenellus</u> sp., aff. Nelson, 1966, Pl. 6, figs. 6-9, 12, 13 ..	51	990
10	Shale, olive grey weathering and fresh; and interbedded limestone (1/20), medium brownish orange weathering, thin bedded, fresh surface medium grey, bioclastic. GSC loc. 92747, 50 feet above base, <u>Laudonia</u> sp., <u>Olenellus?</u> sp.....	55	1045
11	Limestone, medium dark grey weathering and fresh, bedding thin and wavy, mottled light yellow, parting thin to thick. Interval 67-120 feet $\frac{1}{2}$ limestone as described and $\frac{1}{2}$ light grey		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	weathering shale. GSC loc 92888, 40 feet above base of unit, <u>Laudonia</u> sp., ptychoparioid trilobite with preglabellar ridge.....	120	1165
12	Limestone, interval 0-7 feet and 27-66 feet medium grey weathering and fresh, medium and thick bedded, fine grained; interval 7-22 feet medium grey weathering, bedding thin, broadly way, fresh surface medium dark grey, finely crystalline, pisolites present at base of unit. Dolomite, interval 22-27 feet light orange, cream weathering, thin bedded, medium light grey fresh, finely crystalline; and interval 66-85 feet orange to orange-grey weathering, medium bedded, fresh surface medium light grey, finely crystalline.....	85	1250
13	Shale, interval 0-8 feet light yellow-grey weathering and fresh; interval 8-20 feet 1/2 light green weathering and fresh and 1/2 maroon weathering and fresh; interval 20-91 feet light brown to orange weathering, fresh surface light brown to greenish grey; interval 93-103 feet 2/3 dark grey weathering and fresh. Dolomite present in interval 91-93 feet, orange, weathering, thick and medium bedded, laminated, fresh surface greenish grey, fine to coarse ^{grained} quartz sandstone at top; interval 93-103		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	feet 1/3 dolomite, cream weathering, thin bedded, medium grey fresh.....	103	1353
14	Limestone, dull medium dark grey weathering, bedding thin, wavy and irregular, fresh surfaces medium dark grey and dark grey, fine to coarse grained. Interval 42-50 feet contains 2/3 limestone as described and 1/3 siltstone (?) weathering to brown soil. Interval 79-111 feet contains shale, lower 1/2 light brown weathering, medium dark grey fresh; upper 1/2 orange weathering, greenish grey fresh. GSC loc 92748, 32 feet above base ^{of unit,} <u>Poulsenia</u> sp, <u>Proliostracus contractus</u> ? Fritz.....	134	1487
15	Limestone and dolomite. Interval 0-22 feet 1/2 limestone, medium dark grey weathering and fresh, bedding thin (3/8 inch), platy, partings light grey, finely crystalline; and 1/2 dolomite, light orange weathering, medium and thick bedded, planar laminated, fresh surface medium grey, finely crystalline. Intervals 22-66 feet and 77-99 feet limestone, weathering surface mottled medium brownish grey and medium dark grey, thick to thin bedded, fresh surface dark grey and finely crystalline. Interval 66-77 feet dolomite, orange weathering, thin bedded,		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>platy, fresh surface dark grey. Interval 99-138 feet contains subintervals of limestone as in intervals 22-66 feet and 77-99 feet, but fine grained as well as finely crystalline; alternating with subintervals of dolomite, pinkish orange weathering, thick to thin bedded, fresh surface medium grey, finely crystalline.</p> <p><u>Salterella</u> sp. present 49 feet above base of unit and stromatolites 6 inches high present 61 feet above base of unit. GSC loc. 92749, 49 feet above base, <u>Proliostracus depressus?</u> Fritz, <u>Wanneria?</u> sp. GSC loc 92750, 50 feet above base, <u>Proliostracus depressus?</u> Fritz.....138</p>		1625
16	<p>Limestone, interval 0-30 feet dull medium light grey weathering, bedding thin and medium, some <i>Cross</i>-beds present, fresh surface medium dark grey, fine grained; interval 30-60 feet light yellow-grey weathering, thin bedded, platy (lower 1/2) and nodular (upper 1/2), fresh surface dark grey, argillaceous; intervals 60-70 feet and 75-89 feet dull medium grey weathering, thin to thick bedded, fresh surface medium dark and dark grey, fine grained; intervals 70-75 feet dolomitic limestone, orange weathering, thick bedded, planar laminated, fresh surface</p>		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	medium dark grey, finely crystalline. Fault at top of this unit marks top of medial segment in section 19	89	1714
17	Limestone, intervals 0-26 feet, 29-123 feet medium dark grey weathering and fresh, bedding thin, wavy, orange mottled, thick to thin parting, finely crystalline; intervals 26-29 feet, 123-135 feet light yellow-grey weathering, bedding thin, platy, fresh surface dark grey, argillaceous. GSC loc. 92751, 10 feet above base of unit, local float, <u>Proliostracus</u> sp.	135	1849
18	Limestone, medium blue-grey weathering, bedding thin, wavy, light yellow-orange mottled, thin to thick parting, fresh surface medium dark grey, finely crystalline; interval 176-186 ^{feet} medium grey, light grey, yellow weathering, thin bedded, platy, fresh surface dark grey, finely crystalline; interval 201-209 feet $\frac{1}{2}$ blue-grey weathering as described and $\frac{1}{2}$ shale (?) weathering to brown soil. GSC loc. 92752, 32 feet above base of unit, trilobite fragments. GSC loc. 92753, 46 feet above base, <u>Wanneria logani</u> (Walcott). GSC loc. 92754, 82 feet above base, aff. <u>Bonnia</u> <u>laterispina</u> sp. GSC loc 92755, 156 feet above base, local float, <u>Olenellus</u> sp., <u>Salterella</u> sp.,		

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p><u>Wanneria</u> sp. GSC loc. 92756, 191 feet above base, local float, <u>Bonnia laterispina</u> Fritz, <u>Olenellus</u> sp., <u>Wanneria</u> sp. GSC loc. 92757, 249 feet above base, <u>Wanneria logani</u> (Walcott).</p>	269	2118
19	<p>Limestone 2/3, orange and medium grey weathering, thick to thin bedded, fresh surface medium dark grey, finely crystalline; and siltstone, orange to medium grey weathering, fresh surface medium dark grey, limy</p>	25	2143
	<p><u>post-Sekwi dark shale and platy limestone, 1397⁺</u></p>		
1	<p>Limestone, dolomite and shale. Interval 0-87 feet 5/6 limestone, dull medium brown to medium grey weathering, in thin (1/8 inch), brittle plates, fresh surface dark grey; and 1/6 shale, black weathering and fresh. Intervals 87-118 feet and 147-193 feet dolomite, medium light brown to orange-brown weathering, medium and thin bedded, blocky, fresh surface medium dark grey, finely crystalline. Interval 118-147 ^{feet} contains 1/2 limestone, medium brown, light orange, and medium grey weathering, bedding thin, platy, fresh surface dark grey; and 1/2 black weathering and fresh siltstone. GSC loc 92758, 50 feet above base of unit, cf. <u>Olenellus paraoculus</u> Fritz.....</p>	193	193

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
2	Limestone 1/2, brownish grey weathering, thin bedded, platy, laminated, fresh surface medium grey; and shale 1/2, black weathering and fresh. Uppermost 8 feet limestone, medium grey to pinkish grey weathering, bedding medium and thin, fresh surface medium dark grey, finely crystalline.....	52	245
3	Shale, black weathering and fresh. Interval 14-22 feet limestone, light grey weathering, thin to thick bedded, contains penecontemporaneous limestone breccia.....	56	301
4	<p>interbedded limestone (1/2) & shale (1/2)</p> <p>Limestone in lower part of unit light brown weathering, thin bedded, platy, fresh surface dark grey, penecontemporaneous limestone breccia near base; upper part cream to light grey weathering, bedding thin and medium, fresh surface medium grey. Shale black weathering and fresh. GSC loc. 92759, 17 feet above base of unit, <u>Cedaria</u> sp., <u>Pseudagnostus</u> sp. GSC loc 92760, 35 feet above base <u>Acmaehachis</u> sp., <u>Cedaria</u> sp. GSC loc. 92761, 242 feet above base, <u>Cedaria</u> sp. GSC loc 92762, 286 feet above base, <u>Olenaspella</u> sp., <u>Pseudagnostus</u> sp. GSC loc. 92763, 380 feet above base, <u>Cerpuolimbus</u> sp., <u>Pseudagnostus</u> sp. GSC loc. 92764, 836 feet above base.....</p>	1096	1397

Section 21

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
5	Shaley limestone, silvery grey weathering, thin bedded, some light grey weathering lenses, fresh surface medium grey. Chert present in sparse layers, black weathering and fresh. Siltstone in minor amounts, brown to dark grey weathering, black on fresh surface.	(not measured)	

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>map-unit 12, not measured</u>		
1	Quartzite, cream to light grey weathering, medium and thick bedded, fresh surface light grey, mainly fine grained, poorly sorted, ranging from fine to coarse. This unit faulted.		
	<u>map-unit 13, 585 feet</u>		
1	Mainly siltstone. Interval 0-105 feet siltstone, orange-brown to light brown weathering, burrowed. Interval 105-115 feet limestone, light orange-brown weathering, bedding thin, wavy, medium to thick parting, fresh surface pink and finely crystalline. Interval 115-500 feet 9/10 siltstone, dark grey weathering and fresh, sericitic; and 1/10 interbedded sandstone, medium dark brownish grey weathering and fresh, bedding thin, very fine grained, small ripple marks 220 feet above base of interval, tectonic fold	500	500
2	Mainly siltstone. Interval 0-50 feet siltstone, olive grey weathering and fresh; and interbedded quartzite, rust weathering, bedding thin, platy, fresh surface light grey, very fine grained. Interval 50-85 feet 2/3 siltstone as in interval below and 1/3 sandstone orange weathering, in thin beds and lenses, fresh surface light brown, very fine grained, limy, trails 4 mm wide present	85	585

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>Sekwi Formation, 2985 feet</u>			
1	Interval 0-8 feet limestone, medium grey weathering and fresh, bedding thin, wavy, finely crystalline; basal 2 feet 1/2 shale, light brown weathering and fresh. Interval 8-35 feet siltstone, very dark grey weathering and fresh (8-15 ft.) and shale, medium grey weathering and fresh (15-35 ft.). Subinterval 15-35 feet contains some limestone, orange weathering, in thin (2 inch) lenses, fresh surface medium grey, finely crystalline. GSC loc. 91705, 4 1/2 feet above base of unit, <u>Fallotaspis?</u> sp., <u>Helcionella</u> sp. GSC loc. 91706, 6 feet above base, <u>Fallotaspis?</u> sp. GSC loc. 91707, 8 feet above base, <u>Parafallotaspis?</u> sp.	35	35
2	Limy siltstone, light orange-brown weathering, dark grey fresh; and limestone (2/5) in dispersed nodules, medium grey weathering, medium dark grey fresh, finely crystalline. Interval 55-68 feet limestone, medium blue-grey weathering, bedding thin, wavy, partings light yellow-brown, fresh surface medium dark grey, finely crystalline. GSC loc. 91708, 19 feet above base of unit, <u>Nevadella</u> sp., <u>Holmiella</u> sp., <u>Judomia?</u> sp. GSC loc. 91709, 53 feet above base, <u>Nevadella faceta</u> Fritz, <u>Pagetides</u> sp.	88	123

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3	Limestone, thin bedded, some medium, finely crystalline; interval 0-50 feet medium dark grey weathering and fresh, wavy bedded; interval 50-62 feet medium light grey weathering, medium dark grey fresh, breaks easily under hammer. GSC loc. 91710, 33 feet above base of unit, cf. <u>Holmia?</u> sp. Fritz, 1973	62	185
4	Mainly shale. Interval 0-54 feet shale, medium grey weathering and fresh, in flakes; and 1/10 quartzite, orange weathering, thin bedded, planar laminated, fresh surface light brown, fine grained. Interval 54-98 ^{ft.} 3/5 shale, light brown and light grey weathering; and 2/5 limestone, light orange weathering, thin bedded, fresh surface light brown, argillaceous; subinterval 54-57 feet dolomite, orange weathering, thin bedded, fresh surface light brown, finely and medium crystalline; subinterval 57-60 feet shale, black weathering and fresh	98	283
5	Limy shale 3/5, dull light orange and light grey weathering; and limestone 2/5, medium light grey weathering, in nodules, fresh surface medium grey, finely crystalline. Intervals 84-96 feet and 107-117 feet limestone, medium dark grey weathering and fresh, bedding thin, wavy, finely crystalline	154	437

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
6	Limestone, dull medium blue-grey weathering, mainly thin bedded, some medium, blocky, fresh surface dark grey, finely crystalline. Interval 101-105 feet shale(?), covered with light orange soil	117	554
7	Limy siltstone 3/5, light brownish orange weathering, medium light grey fresh; and limestone 2/5, medium light grey weathering, in nodules, medium grey fresh, finely crystalline. Interval 28-80 feet limy siltstone as mentioned and 7/10 limestone, medium blue-grey weathering, in thin, wavy beds and nodules, fresh surface medium grey, finely crystalline. Intervals 96-98 feet and 103 1/2 - 105 feet sandstone, pink weathering, thick bedded, fresh surface light brown, mainly fine grained, up to coarse grained, well rounded, poorly sorted, some penecontemporaneous slump structures. GSC loc. 91711, 105 feet above base of unit, <u>Kootenia</u> sp.	162	716
8	Limestone and limy siltstone. Interval 0-5 feet limestone, medium dark grey weathering and fresh, thick bedded, composed of penecontemporaneous breccia and conglomerate. Interval 5-40 feet 1/2 interbedded limestone, medium dark grey weathering, thin bedded, platy, fresh surface dark grey, finely crystalline, and 1/2 shale, orange-brown weathering, medium light grey fresh, limy; limestone and shale in 29-40 foot subinterval penecontemporaneously folded and brecciated. Interval 40-49 feet limestone,		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>dark ^{grey} weathering and fresh, in thin beds that have been fused while soft into thick beds by penecontemporaneous slumping, finely crystalline. Interval 49-62 feet limestone, <u>7/10</u> dull medium blue-grey weathering, in thin beds and nodules, medium dark grey fresh, finely crystalline; and shale 3/10, as in 5-40 foot interval below</p>	62	778
9	<p>Limestone, dull medium dark grey weathering, mainly thin bedded, platy and in lenses, some penecontemporaneous breccia and boudins, laminated, fresh surface dark grey, finely crystalline. Interval 97-109 feet dolomite, cream weathering, thick bedded, fresh surface light brownish grey, finely crystalline. GSC loc. 91712, 112 feet above base of unit, <u>Bradyfallotaspis</u> sp., <u>Ekwipagetia?</u> sp. GSC loc. 91713, 114 feet above base, <u>Holmia preancora</u> Fritz</p>	187	965
10	<p>Mainly limestone, medium dark grey (0-40 ft.) and medium grey (40-80 ft.) weathering, bedding thin, wavy, parting thick (0-40 ft., 65-80 ft.) and thin (40-65 ft.), fresh surface dark grey and finely crystalline. Interval 65-80 ^{feet} changes laterally and vertically (80-95 ft.) from limestone as described to dolomite, cream to pinkish cream (some reddish) weathering, mainly medium bedded, fresh surface light brown, finely and medium crystalline. Interval 95-105 feet 2/3 dolomite,</p>		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	orange weathering, thin bedded, fresh surface light brown, finely crystalline; and 1/3 siltstone(?) weathering to light brown soil..	105	1070
11	Carbonate. Interval 0-69 feet limestone, medium dark grey weathering and fresh, bedding irregular, thin to thick, ^{some in} mounds up to 8 feet thick <i>containing</i> archaeocyathids; limestone changes laterally into <i>same</i> type of dolomite as described in interval ¹² above. Interval 69-120 feet dolomite, orange and reddish orange weathering, mainly medium bedded, fresh surface mottled light and medium grey, medium and coarsely crystalline	120	1190
12	Dolomite, quartzite, and siltstone. Interval 0-70 feet dolomite, subinterval 0-45 feet light orange-yellow weathering and fresh, in float fragments 3 x 3 x 3 inches, argillaceous; subinterval 45-70 feet orange-yellow, pink weathering, thin and medium bedded, blocky, fresh surface light brown, pink, finely crystalline, some (1/3) interbedded light brown shale. Intervals 70-107 feet, 118-124 feet quartzite, light brown, greenish grey weather- ing and fresh, some light pink, bedding thin, platy, very fine and fine grained; and 1/3 dolomitic sandstone, light pink weathering and fresh, changing laterally to brick red. Interval 107-112 feet dolomite, orange weathering, thin bedded, fresh surface light brown, containing		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	fine to coarse "floating" grains of quartz sand. Intervals 112-118 feet, 124-148 feet siltstone, light brown to greenish brown weathering and fresh; and 1/20 interbedded sandstone, medium brownish red, bright brick red weathering and fresh, thin bedded, fine grained	148	1338
13	Quartzite, light grey to white weathering and fresh and some light brown and pink weathering and fresh, bedding thick, sorting poor, mainly fine and medium grained, some grains up to grit sized, top 1/2 foot coarse and grit sized, <u>Scolithos</u> present. Interval 13-22 feet siltstone, light brown weathering, light greenish grey fresh	72	1410
14	Siltstone, khaki weathering and fresh; interval 0-45 feet also contains 1/5 interbedded dolomite, orange weathering, thin bedded, fresh surface light grey, argillaceous. GSC loc. 91714, 35 feet above base of unit, float, <u>Olenellus?</u> sp., trilobite fragments with <u>Wanneria</u> -like pattern. GSC loc. 91715, 65 feet above base, float, <u>Olenellus</u> sp., cf. <u>Wanneria</u> sp. or <u>Laudonia</u> sp.	95	1505

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
15	Limestone, 1/2 dark grey weathering and fresh, bedding thin, wavy and nodular, finely crystalline; and 1/2 medium light grey weathering, bedding thin, irregular, fresh surface medium grey, sparry and medium grained. Intervals 97-100 feet and 107-112 feet limestone, light grey weathering, thick bedded, fresh surface medium grey, dense, archaeocyathids present. Interval 0-30 feet contains 1/3 siltstone(?) weathering to brown soil. GSC loc. 91716, 103 feet above base of unit, <u>Bristolia?</u> sp., <u>Olenellus truemani?</u> Walcott...	170	1675
16	Limestone, 1/3 medium blue-grey weathering, bedding thin, wavy, fresh surface medium dark grey, finely crystalline; and 1/3 medium light grey weathering, bedding thin, irregular, light orange on partings, fresh surface sparry and fine grained. Interbedded siltstone(?) 1/3 weathering to light yellow soil. <u>Salterella</u> sp. present in float 70 feet above base of unit....	80	1755
17	Siltstone and interbedded carbonate. Interval 0-80 feet 7/10 siltstone or shale weathering to light brown soil; and 3/10 limestone, 1/2 dull orange-brown weathering and fresh, in thin irregular plates, argillaceous, and 1/2 medium grey weathering and fresh, bedding thin, wavy, yellow-orange coated, finely crystalline. Interval 80-150 feet siltstone, greenish yellow weathering and fresh; subinterval 90-105 feet 1/3 dark cream weathering and fresh limestone,		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	bedding thin, argillaceous; subinterval 105-122 feet, 1/2 subinterval 122-144 feet, and subinterval 144-149 feet dolomite, orange to orange-cream weathering, bedding thin and medium, blocky, fresh surface light grey, finely crystalline. Interval 149-160 feet siltstone, light yellow weathering, light grey fresh	160	1915
18	Limestone, dull medium grey weathering and fresh, bedding thin, irregular, medium grained; and 1/3 dark grey weathering and fresh, bedding thin, wavy and nodular, finely crystalline.....	80	1995
19	Mostly limestone, dull medium grey weathering, bedding thin, wavy, fresh surface medium dark grey, finely crystalline. Siltstone, interval 17-39 feet light brownish grey weathering, medium dark grey fresh; interval 72-78 feet, interval 151-159 feet and 1/3 interval 230-243 feet light grey weathering and fresh. Dolomite, interval 86-95 feet orange-cream weathering, bedding thick and medium, fresh surface light grey; interval 134-151 feet cream to brick-red weathering, bedding thin, fresh surface medium light grey, finely crystalline, grades laterally into medium grey limestone described above; interval 206-220 feet 2/3 dolomite, cream to pink weathering, bedding medium and thick, fresh surface mottled light and medium grey, finely crystalline, interbedded with 1/3 limestone as described. Interval 0-17 feet		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	limestone, light grey weathering, bedding medium, blocky, fresh surface medium light grey, dense to finely crystalline. GSC loc. 91717, 42 feet above base of unit, <u>Proliostracus annosus</u> Fritz	243	2238
20	Limestone, interval 0-33 feet medium grey weathering and fresh, bedding medium and thin, blocky, medium grained; interval 33-82 feet medium blue-grey weathering, bedding thin, wavy, yellow coated, fresh surface medium dark grey, finely crystalline. GSC loc. 91718, 38 feet above base of unit, <u>Paterina</u> sp., <u>Poulsenia</u> sp., <u>Salterella</u> sp. Top of this unit is top of lower segment in section 22	82	2320
21	Dolomite, orange weathering, some pink to dark pink, bedding medium to thick, fresh surface mottled light and medium grey, medium crystalline.....	40	2360
22	Limestone, thin bedded, interval 0-22 feet medium light blue-grey weathering, bedding wavy, yellow-orange mottled, fresh surface dark grey and finely crystalline, and 1/10 siltstone(?) weathering to medium brown soil; interval 22-51 feet medium grey weathering, bedding platy, dull yellow-brown coated, trails abundant, fresh surface medium dark grey, finely crystalline, <u>Salterella</u> sp. present; interval 51-625 feet medium grey		

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>weathering, semiplaty, some wavy, fresh surface medium dark grey, finely crystalline and fine grained, and some dolomite subintervals (+ 10 ft. each) located 340-350 feet, 575-585 feet from base of unit. GSC loc. 91719, 10 feet above base of unit, <u>Olenellus</u> sp. 3? Fritz, 1972. GSC loc. 91720, 15 feet above base, <u>Olenellus</u> sp. 3? Fritz, ^{1972, <u>Wanneria parvifrons</u> Fritz.} GSC loc. 91721, 73 feet above base, <u>Bonnia</u> sp., <u>Olenellus</u> sp. 2? Fritz, 1972, <u>Wanneria</u> sp. GSC loc. 91722, 490 feet above base, <u>Bonnia</u> sp., <u>Wanneria</u> sp. GSC loc. 91722a, 640 feet above base, float, <u>Olenellus</u> sp., <u>Wanneria</u> sp. GSC loc. 91723, in this unit but just below base of 3rd segment in section 22, approximately 530 feet above base, <u>Olenellus paraoculus</u>? Fritz, 1972, <u>Wanneria</u> sp. Top of this unit is top of 2nd segment in section 22.</p>	625	2985

post-Sekwi dark shale and platy limestone, 1555+ feet

- 1 Limestone (1/2), dull medium grey weathering, bedding thin (1/4 inch), platy, fresh surface dark grey; and 1/2 shale, dark grey to black weathering and fresh. Interval 0-40 feet contains described strata and 1/5 dolomitic limestone, orange weathering, bedding thin and medium, fresh surface medium grey, finely crystalline. Interval 130-135 feet limestone, medium light grey weathering, bedding mainly medium, very irregular, fresh surface dark

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	grey, finely crystalline, some penecon- temporaneous breccia present, small (1/8 x 1/4 inch) chert blebs at top. GSC loc. 91724, 30 feet above base, local float, <u>Goldfieldia</u> sp.	245	245
2	Siltstone, dark grey to black weathering and fresh	420	665
3	Limestone 2/5, light brownish grey to medium dark grey weathering, very thin and thin bedded, platy, laminated, fresh surface dark grey, finely crystalline; and siltstone 3/5, weathering to dark grey soil. GSC loc. 91725, base of unit, float, <u>Bathyriscus?</u> sp., <u>Hypagnostus</u> sp., <u>Modocia</u> sp., <u>Ptychagnostus</u> <u>richmondensis?</u> (Walcott). GSC loc. 91726, 150 feet above base, local float, <u>Modocia</u> sp., <u>Protospongia</u> sp.	445	1110
4	Limestone 1/3, light brownish orange, dull yellow-orange weathering, thin bedded, platy, fresh surface medium dark grey, finely crystalline; and siltstone 2/3, dark grey to black weathering and fresh. GSC loc. 91727, 35 feet above base of unit, very local float, <u>Cedaria</u> sp., <u>Blountia</u> sp. GSC loc. 91728, 155 feet ^{above base,} local float, <u>Cedaria</u> sp., <u>Coosella?</u> sp. GSC loc. 91729, 340 feet above base, local float, <u>Olenaspella?</u> sp., <u>Pseudagnostus</u> sp. GSC loc. 91730, 370 feet above base, local float, <u>Cernuolimbus</u> sp., <u>Dunderbergia</u> sp., <u>Olenaspella</u> sp., <u>Pseudagnostus</u> sp.	445	1555

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>map-unit 12, 199⁺ feet</u>			
1	Quartzite, light maroon weathering and fresh, thick bedded, 4 inch cross-beds present; some beds light orange-brown weathering, light brownish grey fresh, all fine grained. Siltstone present in intervals 35-36 feet, 97-112 feet, 141-168 feet, and 180-199 feet above base, dark grey weathering and fresh, meaceous, hard.		
	Base of <i>unit</i> covered.....	199	199
<u>map-unit 13, 1101 feet</u>			
1	Quartzite 2/5, rust weathering, thick to thin bedded, blocky, fresh surface medium light brown to light grey, above 116-foot level fresh surface is greenish grey, fine and very fine grained; and ^t silstone 3/5, as in _A unit 1 below, burrowed.....	552	552
2	Siltstones 9/10, as in two units below, and quartzite 1/10, rust weathering, thin and medium bedded, fresh surfaces light brown, light greenish grey, fine and very fine grained.....	476	1028
3	Siltstone, medium brownish grey to greenish grey weathering and fresh, burrowed.....	73	1101

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>Sekwi Formation, 3049 feet</u>			
1	<p>Siltstone 3/4, <i>limy</i>; interval 0-35 feet brownish grey weathering, greenish grey fresh; interval 63-155 feet light orange-brown weathering, light brown on fresh surface; and limestone 1/4 in both intervals light orange- brown weathering, in nodules, fresh surface medium grey (1-35 ft) and medium light brown (63-155^{ft}), finely crystalline. Interval 35-63 feet contains siltstone, black weathering and fresh. GSC loc. 92704, 5 feet above base, fallotaspid trilobite. GSC loc 92705, 35 feet above base, <u>Fallotaspis</u> sp. GSC loc 92706, 107 feet above base, local float, <u>Holmia?</u> sp. Fritz, 1973. GSC loc 92707, 108 feet above base, local float, <u>Holmia?</u> sp. Fritz, 1973, <u>Serrodiscus</u> sp.....155</p>	155	155
2	<p>Limestone, medium blue-grey weathering, <i>bedding</i> <i>thin</i>, wavy and nodular, yellow-orange mottled, fresh surface medium dark grey; and siltstone with limestone nodules as in intervals 0-35 feet and 63 -155 feet <i>of</i> unit 1, in present unit siltstone with nodules is in intervals 3-10 feet, 13-20 feet, 25-38 feet and 1/2 in interval 113-235 feet. GSC loc 92708, 135 feet above</p>		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	base, float, <u>Pagetides</u> sp., <u>Serrodiscus</u> sp. GSC loc. 92709, 136 feet above base, <u>Kootenia</u> ? sp., <u>Serrodiscus mackenziensis</u> Fritz. GSC loc. 92710, 154 feet above base, <u>Kootenia diutina</u> Fritz, <u>Pagetides asperlimbus</u> Fritz.....235		390
3	Siltstone, light orange-brown weathering, fresh surface medium grey, <u>liny</u> ; and some limestone nodules as in unit 2. Interval 25-30 feet contains limestone, medium blue-grey weathering, thin bedded, wavy, fresh surface medium dark grey.....118		508
4	Limestone, dull light blue-grey weathering, thin bedded, platy, fresh surface dark grey and finely crystalline, penecontemporaneous breccia in intervals 72-93 feet, 110-115 feet, 136-139 feet, 157-160 feet, 164-175 feet, 178-183 feet, 208-213 feet, 222-233 feet, 244- 246 feet, 276-295 feet. ^{Breccia in} interval 164-175 ^{feet} is lense-like and pinches out to 0 feet in short distance. Interval 0-10 feet contains thin bedded limestone (2/5) and siltstone with nodules (3/5) as in unit 2. GSC loc.92711, 200 feet above base of unit, <u>Nevadella bacculenta</u> Fritz..295		803
5	Limestone 1/2, orange to orange-brown weathering, thin bedded, platy, dark grey on fresh surface;		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	and siltstone 1/2, same colour as limestone, limy. Interval 104-139 feet contains limestone, light grey weathering, very thick bedded, fresh surface medium grey, finely crystalline, lower 8 feet of interval contains penecontemporaneous breccia. Penecontemporaneous folds 6 inches high present 27 feet and 42 feet above base of unit.....	139	942
6	Siltstone 3/4, medium brownish grey weathering, fresh surface medium grey, limy; and limestone 1/4, medium brownish grey weathering, thin bedded, platy, fresh surface dark grey, finely crystalline.....	88	1030
7	Limestone 3/5, medium dark grey and orange-brown weathering, bedding thin and some medium, fresh surface dark grey, fine grained; and siltstone as in unit 6 below. Cross-bed 4 inches high located 19 feet above base indicates current flowed 0° to south. GSC loc. 92712, at base of unit, local float, edelsteinaspis trilobite, <u>Judomia?</u> sp, <u>Keeleaspis</u> sp., <u>Kutorgina</u> sp. GSC loc.92713, 15 feet above base of unit, <u>Brady fallotaspis patula?</u> Fritz, <u>Esmeraldina?</u> sp., <u>Judomia?</u> sp. GSC loc. 72714, 33 feet above base of unit, <u>Brady fallotaspis</u>		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	sp., cf. <u>Esmeraldina</u> sp. or <u>Wanneria</u> sp., <u>Judomia?</u> sp., <u>Sekwiaspis</u> sp. GSC loc. 92715, 89 feet above base of unit, <u>Judomia?</u> sp. GSC loc. 92716, 97 feet, above <i>base</i> , <u>Brady fallotaspis</u> sp., <u>Keeleaspis</u> sp., <u>Judomia?</u> sp.....102	102	1132
8	Siltstone 3/4, light grey-brown weathering, in thin (3/8 inch) plates, fresh surface medium grey, limy; and limestone, light brownish orange weathering, thin bedded, fresh surface medium grey, argillaceous.....68	68	1200
9	Sandstone 2/5, medium light brownish grey, weathering, thin bedded, platy, planar laminated, fresh surface medium grey, very fine grained; and siltstone, same colour as sandstone, limy, burrowed.....98	98	1298
10	Limestone, interval 0-26 feet medium orange-brown weathering, medium bedded, thick parting, medium grey fresh, coarse grained (lower 1/2), and medium light grey weathering and fresh (upper 1/2); interval 26-34 feet orange weathering, thin to thick bedded, blocky, fresh surface light grey, finely crystalline, "floating" quartz grains up to coarse size and sparse archaeocyathids present.....34	34	1332

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
11	Siltstone, interval 0-38 feet light greenish grey weathering and fresh; interval 38-86 feet maroon weathering and fresh; and interval 86-98 feet orange to light greenish grey weathering, light greenish grey fresh. GSC loc. 92717, 24 feet above base of unit, local float, <u>Judomia?</u> sp., <u>Nisusia?</u> sp., undetermined o/enellid. GSC loc 92718, 33 feet above base, local float, <u>Judomia?</u> sp.....98	98	1430
12	Quartzite, thick bedded, fine and medium grained, intervals 0-21 feet, 140-151 feet rust weathering, light greenish grey fresh; intervals 21-53 feet, 98-115 feet light pinkish grey to light brown weathering and fresh; intervals 75-93 feet, 115-124 feet, 157-172 feet medium light maroon to maroon weathering and fresh; interval 124- 130 light yellow-orange weathering, light grey fresh. Intervals 53-75 feet, 93-98 feet, 130-140 feet (?) and 151-157 feet (?) contain siltstone, light orange-yellow weathering, light grey fresh. Directions of current flow as indicated by cross-bedding and distances above base of unit are as follows: 0°S, 23 feet; 0°S, 39 feet; 0°S, 81 feet; S25W, 103 feet.....172	172	1602
13	Siltstone, light greenish grey weathering and fresh,		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>lower 5 feet 1/2 maroon weathering and fresh; interval 30-39 feet siltstone (?) weathering to light grey soil. GSC loc 92719, 8 feet above base, local float, <u>Olenellus</u> sp.....39</p>	39	1641
14	<p>Limestone, thick parting; interval 0-7 feet orange weathering, thin bedded, fresh surface dark grey, finely crystalline; interval 7-61 feet medium dark grey weathering, red mottling on partings, medium and thin bedded, fresh surface dark grey, finely crystalline and fine to coarse grained; interval 61-89 feet medium blue-grey weathering, bedding thin, wavy, yellow mottled, fresh surface dark grey, finely crystalline.....89</p>	89	1730
15	<p>Shale, olive grey weathering and fresh; and interbedded limestone 1/5, light orange-brown weathering, thin bedded, fresh surface medium grey, bioclastic; interval 142-162 feet contains limestone (1/2) as below in lenses and thin wavy beds and shale (1/2) as below. GSC loc. 92720, 10 feet above ^{of unit,} base, local float, <u>Olenellus</u> sp., cf. <u>Polliaxis</u> sp., aff. <u>Poulsenia</u> sp. GSC loc 92721, 68 feet above base, edelsteinaspid ? trilobite, aff. <u>Olenellus laxoculus</u> Fritz, <u>Olene llus</u> spp.,</p>		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>ptychoparioid trilobite. GSC loc. 92722, 159 feet above base of unit, cf. <u>Olenellus</u> <u>freemonti</u> Walcott, aff. <u>Olenellus laxoculus</u> Fritz, <u>Olenellus</u> sp., ptychoparioid trilobite with strong preglabellar ridge, aff. <u>Wannevia</u> sp. Top of this unit is top of lower segment of section.....162</p>	162	1892
16	<p>Limestone, finely crystalline, interval 0-25 feet, 50-80 feet medium blue-grey weathering, bedding thin, wavy, light orange mottled, fresh surface dark grey; interval 25-50 feet, dull medium grey weathering, thin to thick bedded, blocky, fresh surface medium grey, finely crystalline and fine grained; interval 80-128 feet, light grey weathering, thick bedded, fresh surface medium grey, finely crystalline and dense.....128</p>	128	2020
17	<p>Limestone, medium grey weathering, bedding thin, wavy, parting thin to thick, light brown and light yellow-brown mottled, fresh surface medium dark grey, finely crystalline. Intervals 92-110 feet, 198-212 feet covered by brown soil. (siltstone?). Interval 110-117 feet contains dolomite, light orange-yellow weathering, thick and medium bedded, laminated, fresh surface medium light grey, limy.</p>		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	GSC loc. 92723, 55 feet above base of unit, local float, <u>Proliostracus latus</u> Fritz. GSC loc. 92724, 180 feet above base of unit, local float, <u>Olenellus</u> sp., <u>Proliostracus annosus</u> Fritz. GSC loc 92725, 187 feet above base of unit, local float, aff. <u>Wanneria parvifrons</u> Fritz....275		2295
18	Dolomite and limestone. Interval 0-36 feet dolomite, bright orange and pinkish orange weathering, bedding thin to thick, vugs 3/8 inch in diameter, fresh surface light to medium grey, finely to coarsely crystalline. Interval 36-60 feet limestone, light grey weathering, thick bedded, fresh surface medium grey, finely crystalline; uppermost thick bed in mounds 1½ feet thick, interfiguring laterally with medium grey limestone, thin bedded, fresh surface medium dark grey, fine to coarse grained.....60		2355
19	Limestone, interval 0-23 feet light grey to cream weathering, thin to thick bedded, fresh surface medium grey, finely crystalline and fine to course grained; interval 23-110 feet, 130-134 feet medium blue-grey weathering, bedding thin, broadly wavy, some beds light orange mottled, fresh surface dark grey, finely crystalline; interval		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	110-130 feet light grey, cream, and light orange, weathering, bedding thin, platy, fresh surface medium grey, finely crystalline. GSC loc. 92726, 14 feet above base of unit, local float, <u>Olenellus</u> sp., <u>Salterella</u> sp. GSC loc. 92727, 31 feet above base of unit, local float, <u>Olenellus</u> <u>laxoculus?</u> Fritz, <u>Poulsenia</u> sp. GSC loc. 92728, 71 feet above base of unit, <u>Olenellus</u> sp., <u>Poulenia</u> sp.....134		2489
20	Limestone, medium light grey weathering, thick bedded, fresh surface medium dark grey, fine grained and finely crystalline. Interval 13- 16 feet contains dolomite that locally displaces limestone; dolomite orange weathering, thick bedded, fresh surface medium grey, finely crystalline.....47		2536
21	Dolomite, interval 0-7 feet dull orange weathering, bedding thin, wavy, fresh surface medium grey, finely crystalline, interval 7-23 feet ^{may be} same as interval below (covered); interval 23-33 feet light orange weathering, thick bedded, ^{6 inches high} cross-beds present, fresh surface medium light grey, fine and medium grained, limy.....33		2569
22	Limestone, medium blue-grey weathering, bedding thin, wavy, light orange mottled, above 24-foot level		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<i>mainly</i>	<p data-bbox="289 380 1128 1388"> A thick parting, fresh surface medium dark grey, finely crystalline; intervals 85-102 feet, 194-212 feet medium light grey weathering, medium and thick bedded, fresh surface medium dark grey, fine grained, cross-bed_s up to 1 foot high present; top 2 feet contains algal mounds 1 foot high, medium light grey weathering, dark grey fresh. GSC loc 92729, 13 feet above base ^{of unit,} local float, <u>Bonnia laterispina</u> Fritz, <u>Olenellus</u> sp. GSC loc. 92730, 24 feet above base, <u>Bonnia</u> sp. GSC loc. 92731, 29 feet above base, <u>Bonnia</u> sp., <u>Olenellus</u> sp. 2 Fritz, 1972, <u>Wanneria</u> sp. GSC loc. 92732, 46 feet above base, <u>Bonnia laterispina</u> Fritz, <u>Wanneria</u> sp. GSC loc 92887, 341 feet above base, local float, <u>Bonnia</u> sp. . . . 368 </p>		2937
23	<p data-bbox="289 1419 1128 1969"> Limestone, interval 0-75 feet medium blue-grey weathering, thin bedded (1/2) and nodular (1/2), thin to thick parting, fresh surface dark grey and finely crystalline; interval 75-112 feet 1/2 limestone as below and 1/2 orange-brown weathering, thin and medium bedded, fresh surface <i>medium</i> grey and finely crystalline. GSC loc. 92733, 1 foot above base of unit, <u>Bonnia</u> sp. 1? Fritz, 1972, <u>Olenellus paraoculus</u> Fritz, <u>Olenellus</u> sp. 2 </p>		

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	Fritz, 1972, <u>Wanneria logani</u> (Walcott).		
	GSC loc 92734, 66 feet above base of unit, local float, <u>Olenellus paraoculus?</u>		
	Fritz, <u>Wanneria logani</u> (Walcott). GSC loc. 92735, 71 feet above base, local float, <u>Wanneria logani?</u> (Walcott). GSC loc. 92736, 80 feet above base, local float, <u>Olenellus paraoculus</u> Fritz.....	112	3049
	<u>post-Sekwi dark shale and platy limestone, 2086 feet</u>		
1	Siltstone, medium brown weathering, fresh surface medium brown to dark grey, limy; and scattered limestone nodules averaging 4 inches high and 10 inches long, medium grey to orange weathering, fresh surface dark grey, finely crystalline.....	36	36
2	Limestone, dull medium grey weathering with slight purple hue, some light brown, orange, and yellow weathering, thin bedded (1/8 inch), platy, fresh surface dark grey, finely crystalline. Interval 51-125 ^{feet} contains limestone as described and $\frac{9}{10}$ siltstone, dark grey weathering and fresh, and medium brown weathering and fresh. GSC loc. 92737, 8 feet above base at unit, local float, <u>Gold fieldia</u> sp.....	125	161

Section 23

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
3	Siltstone, black weathering and fresh, hard. Minor float consisting of orange-brown weathering limestone in thin plates that may be from this unit or from unit 5 above; plates containing <u>Protospongia?</u> sp. were noted 74 feet, 154 feet, 205 feet, 275 feet, 395 feet, 445 feet, and 930 feet above base of unit. GSC loc. 92738, 75 feet above base, float, <u>Protospongia?</u> sp.....	1025	1186
4	Limestone, light orange-brown weathering, thin bedded, platy.....	105	1291
5	Siltstone dark grey to black weathering and fresh; and limestone, medium grey and some brown weathering, fresh surfaces brown to dark grey. Section terminated before reaching top of unit. GSC loc 92739, 795 feet above base of unit, local float, <u>Baltagnostus</u> sp, <u>Cedaria</u> sp., <u>Modocia</u> sp.....	795 ⁺	2086 ⁺

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>map-unit 12 (not measured)</u>		
1	Quartzite, white, light brown, rust weathering, thick bedded, blocky, fresh surface white, mainly fine grained, some medium, sparse coarse.		
	<u>map-unit 13, 745 feet</u>		
1	Siltstone 4/5, medium dark grey weathering and fresh; and quartzite 1/5, medium brown weathering and fresh, planar laminated, thin bedded, fine grained.....	147	147
2	Siltstone, rust to medium dark grey weathering, medium dark grey fresh; and some (1/20) sandstone in interbeds, light brown to rust weathering, thin bedded, planar laminated, fresh surface medium brown to dark grey, fine grained.....	598	745
	<u>Sekwi Formation, 3770 feet</u>		
1	Siltstone, medium brownish grey (0-35 ft.) and orange-brown (44-103 ft.) weathering, fresh surface medium grey. <i>Interval 44-103</i> <i>feet 1/5 limestone</i> medium grey weathering, in scattered nodules, fresh surface medium dark grey and finely crystalline. Liny sandstone <i>in interval 0-19 feet minor (1/10) and in</i> <i>interval 19-35 feet abundant (1/2), orange</i>		

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p>weathering, medium and thin bedded, medium grey on fresh surface, very fine grained. Interval 35-44 feet contains siltstone, black weathering and fresh. GSC loc. 92765, 72 feet above base of unit, aff. <u>Holmia?</u> sp. Fritz, 1973.....103</p>	103	103
2	<p>Limestone, medium blue-grey weathering, bedding thin, wavy, orange mottled, thin to thick parting, fresh surface medium dark grey, finely crystalline; and siltstone (1/2) in interval 71-142 feet, <u>like</u> siltstone in 44-103 foot interval in unit 1. GSC loc. 92766, 5 feet above base of unit, cf. <u>Holmia?</u> sp. Fritz, 1973. GSC loc. 92767, 69 feet above base, <u>Serrodiscus</u> <u>makenziensis</u> Fritz. GSC loc. 92768, 97 feet above base, <u>Holmiella?</u> sp.....142</p>	142	245
3	<p>Siltstone, orange-brown weathering, fresh surface orange-brown to medium grey, <u>limy</u>. Quartzite (1/5) present in interval 0-13 feet, medium light brown weathering and fresh, in thin interbeds, planar laminated, fine grained. Scattered limestone nodules (1/10) in interval 13-92 feet.....92</p>	92	337

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
4	Limestone, blue-grey weathering, fresh surface medium dark grey, finely crystalline, in thick beds containing penecontemporaneous limestone breccia (0-3 ft., 45-76 ft., 89-119 ft.) and in thin, platy beds. Interval 89-119 feet contains some quartzite, light brownish grey weathering and fresh, thick bedded penecontemporaneously folded, fine grained.....	123	460
5	Siltstone, medium brownish grey weathering and fresh, limy. Interval 0-30 feet 1/2 limestone, orange weathering, in thin lenses and thin platy beds, fresh surface medium brownish grey, finely crystalline, some penecontemporaneous limestone breccia present. Interval 63-225 feet 1/3 interbedded limestone, light brownish weathering and fresh, in thin plates.....	225	685
6	Siltstone, medium brownish grey weathering and fresh, weathering in small angular fragments (1/8 inch x 1/8 inch x 1/4 inch), some fragment limy, some not; and interbedded sandstone 1/20, orange brown weathering, bedding mainly thin, planar laminated, fresh surface medium grey, very fine grained, limy, exhibiting penecontemporaneous slump structures.....	95	780

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
7	<p>Siltstone, olive grey weathering and fresh; and 1/5 interbedded sandstone, orange weathering, in thin, platy beds and in lenses, fresh surface medium grey, very fine grained, penecontemporaneous slump structure (0° west?).</p> <p>153 feet above base. Interval 253-302 feet sandstone 1/3 as described except thick bedded, planar laminated and some cross-beds, very fine grained; and siltstone 2/3, medium brown weathering and fresh, <u>liny</u>. GSC loc. 92769, 15 feet above base of unit, <u>Judomia</u> ? sp. GSC loc. 92770, 20 feet above base, float, <u>Judomia</u>? sp. GSC loc. 92771, 115 feet above base, float, <u>Judomia</u>? sp.....</p>	302	1082
8	<p>Limestone, medium grey weathering, some orange weathering, thin to thick bedded, cross-beds up to 1 foot high, current direction on 2 cross-beds 0°N, 0°S, abundant evidence of scour and fill, fresh surface medium dark grey, fine grained; top 3 feet ^{is} orange weathering thick bed containing sparse limestone fragments up to 1/2 inch in diameter, fresh surface medium grey, fine grained. Shale interbeds present (1/10), medium grey weathering and fresh. GSC loc. 92772, 8 feet above base of</p>		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	unit, cf. <u>Judomia? absita</u> Fritz. GSC loc. 92773, 131 feet above base, local float, <u>Brady fallotaspis</u> sp. GSC loc. 92774, 138 feet above base, local float, archaeocyathid, <u>Brady fallotaspis</u> sp., edelsteinaspid, <u>Judomia?</u> sp., <u>Kutorgina</u> sp. Fossil collections from ^{duplicate measurement of} unit 8 in the upper segment of section 10 are as follows: GSC loc. 92777, 15 feet above base of unit, local float, <u>Brady fallotaspis</u> sp., <u>Mickwitzia</u> sp. GSC loc. 92778, 139 feet above base, <u>Brady-</u> <u>fallotaspis</u> sp., <u>Sekwiaspis?</u> sp.....152		1234
9	Limestone, interval 0-52 feet medium grey, pinkish orange, bright orange weathering, bedding thin, platy, burrowed, ripple marked, fresh surface medium grey, fine grained; interval 52-81 feet 2/3 limestone, medium brownish grey and orange weathering, bedding thin, platy, fresh surface medium brownish grey, and 1/3 siltstone (?) weathering to brown soil; interval 81-84 feet orange weathering, thick bedded, fresh surface medium dark grey, fine grained; interval 84-103 feet 1/6 limestone, orange-grey weathering, thin bedded, fresh surface medium brown to medium grey and 5/6 shale, medium brown to olive-grey		

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	weathering, fresh surface olive grey. This is highest unit described in lower segment of section 20. Description of upper segment begins with unit 11.....	103	1337
10	Quartzite, light brown (17-44 ft.) and rust (87-109 ft.) weathering, thin to thick bedded, fresh surface light brown, mainly fine grained, some up to grit sized; and siltstone (0-17 ft., 44-87 ft.), medium brownish grey weathering and fresh with some interbedded sandstone, light brown weathering and fresh	109	1446
11	Siltstone, light greenish grey weathering and fresh, some maroon weathering and fresh. Sandstone in minor amounts present, greenish brown weathering, bedding thin, fresh surface light brown, fine grained	51	1497
12	Limestone, interval 0-25 feet yellow-orange, medium grey weathering, bedding thin, wavy, fresh surface dark grey, finely crystalline, archaeocyathids and <u>Tabuloconus?</u> sp. at base; interval 25-40 feet medium dark grey weathering, thin bedded, some red mottling, fresh surface dark grey, fine grained; interval 40-86 feet dark grey and light orange-grey mottled, thick bedded, finely crystalline; interval 86-115 feet yellow and medium dark grey weathering, bedding thin to thick, fresh surface dark grey, finely crystalline	115	1612

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
13	Limestone, medium and dark grey weathering, <i>wavy,</i> bedding thin, parting thin and medium, red and light orange mottled, fresh surface dark grey, finely crystalline; and shale, interval 0-42 feet 1/4 and interval 109-115 feet 3/4, olive grey to dark olive grey weathering and fresh. GSC loc. 92779, 17 feet above base of unit, <u>Olenellus truemani?</u> Walcott. GSC loc. 92780, 45 feet above base, float, <u>Laudonia</u> sp., <u>ptychoparioid</u> trilobite with strong preglabellar ridge. GSC loc. 92781, 118 feet above base, local float, <u>Proliostracus depressus?</u> Fritz.....155	155	1767
14	Limestone, medium blue-grey weathering, bedding thin, wavy, parting thin to thick, light yellow and orange mottled, fresh surface medium dark grey, finely crystalline; limestone mounds 1 foot thick near base and 2 feet thick at 127-foot level. Intervals 16-40 feet and 208-215 feet contain medium limestone, thick bedded, fine grained, medium dark grey weathering and dark grey fresh (16-40 ft.), and dull medium light grey weathering and medium grey fresh (208-215 ft.). Shale, interval 94-112 feet 1/3, medium grey weathering, dark grey fresh; interval 150-151 feet, medium dark brown weathering,		

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Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	dark grey fresh; interval 224-247 feet 1/2 (?), weathering to brown soil. GSC 92782, 60 feet above base of unit, float, <u>Olenellus</u> sp., ptychoparioid trilobite with preglabellar ridge. GSC loc. 92783, 280 feet above base, local float, <u>Olenellus sequomalus?</u> Fritz, <u>Proliostracus contractus?</u> Fritz.....	304	2071
15	Dolomitic siltstone, light yellow-orange weathering, light grey to greenish grey fresh, in plates 1/4 inch thick and flakes; some 1 foot intervals of maroon siltstone in lower 1/3 of unit.....	222	2293
16	Dolomite, interval 0-36 feet medium brownish grey weathering, thick bedded, fresh surface medium grey, finely crystalline; interval 36-114 feet light grey to cream weathering, thick bedded, fresh surface light grey, finely crystalline, small vugs (1/8 inch) common in rows paralleling bedding; interval 114-144 feet medium dark brownish grey weathering, medium bedded, fresh surface medium dark grey, finely crystalline, "bluebird structures" abundant....	144	2437
17	Dolomite (lower 1/2), light orange-yellow weathering, bedding thin, platy, fresh surface medium grey, finely crystalline; and siltstone (upper 1/2), medium brownish grey weathering,		

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	fresh surface medium dark grey	85	2522
18	Dolomite, medium brownish grey and medium dark brownish grey weathering, thin and medium bedded, fresh surfaces medium grey and dark grey, finely crystalline	200	2722
19	Dolomite, thin and medium bedded, finely crystalline, in intervals that are cream to light grey weathering, light grey fresh alternating with intervals that are medium brownish grey weathering, medium grey fresh	605	3327
20	Dolomite, mainly thin bedded, finely crystalline, interval 0-135 feet medium grey weathering and fresh; interval 135-190 feet thin and medium bedded, $\frac{1}{2}$ medium grey weathering and fresh and bearing <u>Girvanella</u> -like markings, and $\frac{1}{2}$ light grey weathering and fresh; interval 190-355 feet medium light grey weathering and fresh and light grey weathering and fresh	355	3682
21	Limestone, medium light grey weathering, bedding thin, broadly wavy, some 1-foot thick mounds present, fresh surface medium dark grey, finely crystalline, GSC loc. 92784, 83 feet above base of unit, <u>Bonnia</u> sp., <u>Olenellus paraoculus</u> Fritz, <u>Wanneria logani</u> (Walcott)	88	3770

Section 24

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<u>post-Sekwi dark shale and platy limestone, 1417⁺ feet</u>		
1	Siltstone, black, dark grey, rust weathering, fresh surface black, upper part slightly limy. Fault possibly located at base of this unit.....	167	167
2	Limestone and limy siltstone, orange-yellow weathering, bedding thin, platy, medium brownish grey fresh, <u>Protospongia</u> in float at 119 feet, 290, feet, 318 feet above base. GSC loc. 92785, 400 feet above base of unit, float, <u>Protospongia</u> sp.....	615	782
3	Limestone, medium dark and dark grey weathering, bedding thin, some medium and thick, planar laminated, fresh surface dark grey, finely crystalline; and some orange-brown, silty limestone as in unit 2 below.....	360	1142
4	Limestone, light grey weathering (silvery grey from distance), thin bedded, platy, fresh surface dark grey, rather soft. GSC loc. 92786, 40 feet above base of unit, float, <u>Climacograptus</u> sp. GSC loc. 92787, 140 ^{feet} above base, float, diplograptids, GSC loc. 92788, 178 feet above base, float, unidentified graptolite. GSC loc. 92789, 207 feet above base, float, <u>Orthograptus</u> sp.....	275	1417

Section

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
<u>Sekwi Formation, 3053⁺ feet (base not exposed)</u>			
1	Siltstone, medium brownish grey weathering, ... medium dark grey fresh, limy.....not measured		
2	Limestone, medium to dark grey weathering, bedding thin and very thin, platy, planar laminated, fresh surface dark grey, finely crystalline. Concretions averaging 4 inches in diameter present in upper part of unit. GSC loc. 92806, 0'-1' above base of unit, aff. <u>Anadoxides</u> sp. 1 Fritz, 1973, <u>Brady fallotaspis</u> sp., <u>Ekwipagetia plicofimbria</u> Fritz, <u>Judomia?</u> <u>absita</u> Fritz, <u>Keeleaspis</u> sp., <u>Pagetides abyssistriatus</u> Fritz, <u>Sekwiaspis</u> sp. GSC loc. 92807, 15 feet ^{above base,} <u>Pagetides</u> sp.....52		52 ⁺
3	Siltstone, medium brownish grey weathering, fresh surface medium dark grey, limy. Interval 167-198 feet contains limestone mounds in siltstone matrix; mounds are brownish orange weathering, up to 3 feet thick, fresh surface medium dark grey and finely crystalline, archaeocyathids present. Subinterval 188-190 feet contains quartzite, light orange-brown weathering, medium bedded, fresh surface medium grey, fine grained, limy. Penecontemporaneous folds present at 160 feet. GSC loc. 92803, 135 feet above base of unit, <u>Judomia?</u> sp.,		

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	undetermined olenellid. GSC loc. 92804, 188 feet above base, float, <u>Bonnia?</u> sp., <u>Olenellus</u> sp. GSC loc. 92805, 208 feet ^{above base,} float, <u>Olenellus</u> <u>truemani?</u> Walcott. GSC loc. 9280, interval 198-322 above base, float, <u>Bonnia?</u> sp. <u>Pagetides</u> sp. GSC loc. 92790, 318 feet ^{above base,} local float, <u>Bonnia</u> sp.....322		374 ⁺
4	Limestone 2/5, orange weathering, in mounds up to 3 feet thick, fresh surface medium dark grey, finely crystalline; and siltstone 3/5, orange-brown weathering, medium grey fresh, limy.....44		418 ⁺
5	Siltstone, medium brownish grey weathering, fresh surface medium dark grey, limy, weathers to plates 3/8 x 4x3 inches and smaller. GSC loc. 92791, 72 feet above base of unit, <u>Olenellus</u> sp. GSC loc. 92792, 72 feet, local (?) float, <u>Ekwipagetia</u> sp., <u>Gelasene?</u> sp., <u>Olenellus?</u> sp. GSC loc. 92793, 98 feet, local float, <u>Ekwipagetia</u> sp., <u>Olenellus</u> sp. GSC loc. 92794, 106 feet, local(?) float, <u>Olenellus</u> sp., <u>Pagetides</u> sp. GSC loc. 92795, 121 feet, local (?) float, <u>Olenellus</u> sp., GSC loc. 92796, 135 feet, local (?) float, <u>Ekwipagetia?</u> sp., <u>Olenellus</u> sp. GSC loc. 92797, 156 feet, <u>Olenellus?</u> sp.....236		654 ⁺

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
6	Siltstone as in unit 5; and sandstone, rust to orange weathering, in sparse, thin interbeds (increase to 1/5 in interval 160-183 feet), fresh surface medium grey, very fine grained, limy. Penecontemporaneous fold at 75 feet indicates slumping in 0°W or 0°E direction, similar fold at 95 feet indicates slumping in N75°W or S75°E direction. 183	35	837 ⁺
7	Shale, light silvery grey weathering and fresh, ...	35	872 ⁺
8	Limestone, mainly fine grained, interval 0-13 feet dull medium grey and light orange-brown weathering, medium bedded, cross-beds abundant, some channeling present, fresh surface medium dark grey; interval 13-16½ feet dark grey to black weathering, thin bedded, wavy, recessive, fresh surface medium grey; interval 16½-59 feet dull medium light grey and pinkish medium light grey weathering, medium and some thick bedded, cross-beds present, fresh surface medium light grey; interval 59-111 feet medium dark grey weathering and fresh, thin bedded, upper part contains limestone fragments fe 2/16-3/16 inch in diameter, GSC loc. 92798, 11 feet above base of unit, cf. olenellid sp. undet. 1 above base, Palmer, 1968. GSC loc. 92799, 96 feet float,	35	837 ⁺

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
	<p><u>Olenellus</u> sp. Top of this unit is top of lower segment of section 21.....111</p>		983 ⁺
9	<p>Siltstone, light yellow-brown weathering, fresh surface medium light grey with greenish tinge, limy. Intervals 2-4 feet, 20-27 feet, 79-83 feet, 123-143 feet, and 153-155 feet orange weathering, thin bedded, <i>fresh surface</i> medium and medium dark grey, finely crystalline and fine grained. Interval 29-40 feet contains limestone, medium dark grey weathering and fresh, bedding thin, fine to coarse grained. Interval 107-108$\frac{1}{2}$ feet contains sandstone, orange weathering and fresh, fine grained, ripple marked.</p>	<i>contain limestone,</i>	
	Archaeocyathids present at 147 feet.....203		1186 ⁺
10	<p>Dolomite, mainly thick bedded, interval 0-10 feet light brownish grey weathering, medium bedded, fresh surface medium grey, oolitic; interval 10-91 feet medium light grey weathering, medium grey, fresh, oolitic and pisolitic(?); interval 91-120 feet light brownish grey weathering, fresh surface medium grey, "bluebird structures" present, finely crystalline; interval 120-138 feet medium light grey weathering, medium grey fresh, finely crystalline; interval 138-162 feet covered; interval 162-197 feet medium brownish</p>		

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
11	<p>grey weathering, medium grey fresh, finely crystalline, oolitic and pisolitic.....197</p> <p>Mainly dolomite, siltstone and shale. <i>Intervals of dolomite,</i></p> <p>finely crystalline,</p> <p>24-34 feet light orange-brown weathering, medium bedded,</p> <p>fresh surface medium grey; 51-61 feet light brownish grey weathering, medium bedded, fresh surface medium dark grey; 68-93 feet, 102-109 feet, 121-128 feet medium brownish grey weathering (some orange-pink), thick bedded fresh surface medium dark grey, some oolites and pisolites present (102-109 ft.); 143-160 feet medium light grey weathering, thick bedded fresh surface medium grey; 93-102 feet, <i>109-121 feet</i> covered, probably containing dolomite. Siltstone(?) in all or parts of covered intervals 0-15 feet, 18-24 feet, 40-51 feet, 61-68 feet. Shale in intervals 128-143 feet, 160-166 feet, light grey weathering, medium dark grey fresh.</p> <p>Limestone, thin bedded, wavy, finely crystalline; interval 15-18 feet light orange-brown weathering, fresh surfaces medium grey; interval 34-40 feet medium grey weathering and fresh.....166</p>	197	1383 ⁺
		166	1549 ⁺

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
12	Dolomite, medium brown weathering, medium (0-22 ft.) and thick (22-58 ft.) bedded, fresh surface medium grey, finely crystalline, oolites and pisolites(?) in 23-58 foot interval. Interval 58-70 feet covered, probably contains dolomite.....	70	1619 ⁺
13	Dolomite, medium dark brownish grey weathering, thick bedded, "bluebird structures" present, fresh surface medium grey, finely crystalline, 1/4 beds in interval 30-62 feet oolitic and pisolitic; intervals 16-30 feet and 62-77 feet covered, probably contain dolomite.....	81	1700 ⁺
14	Dolomite, light grey to medium light grey ^{weathering,} some cream, thick bedded, fresh surface light grey, finely crystalline, faint oolites visible. Interval 70-81 feet covered, dolomite (?).....	81	1781 ⁺
15	Dolomite, medium brownish grey weathering, medium and thick bedded, fresh surface medium grey, finely crystalline, some oolitic layers; intervals 4-14 feet, 77-97 feet covered, dolomite(?).....	97	1878 ⁺

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
16	Dolomite, thick bedded, finely crystalline; 2/3 light grey weathering and fresh; 1/3 medium dark brownish grey weathering, medium dark grey fresh with abundant "bluebird structure". Vugs 1/4 inch in diameter common in 120-124 foot interval.....	185	2063 ⁺
17	Siltstone 3/5 interval 37-150 feet light greenish grey weathering, light brown to light grey fresh, dolomitic; interval 0-37 feet light brown, light yellowish brown weathering, light greenish grey fresh. Dolomite 2/5 in interval 37-150 feet, light orange weathering, thin bedded, platy, medium grey on fresh surface, finely crystalline.....	150	2213
18	Dolomite, mainly medium light grey ^{weathering,} some medium brownish grey, thick bedded, fresh surface medium light grey, finely crystalline.....	230	2443
19	Dolomite, medium bedded, finely crystalline, 2/3 medium brownish grey weathering, medium grey fresh, and 1/3 medium light grey weathering and fresh. White chert in dolomite ^{at base of unit} weathers in relief (1/8 x 1/4 inch blebs). Top 3 feet consists of dolomite, orange weathering, thin bedded, platy, fresh surface medium light grey, finely crystalline.....	110	2553 ⁺

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
20	Dolomite, medium and medium light brownish grey weathering, medium bedded, fresh surface medium grey and finely crystalline.....	475	3028
21	Dolomite, dull orange-brown weathering, medium and thick bedded, fresh surface light brownish grey, finely crystalline. This unit 1/4 mile to south ^{to} changes _{to} limestone, medium grey weathering, medium dark grey fresh, thin bedded, wavy, thin to thick parting, finely crystalline, <u>Salterella</u> sp. common. GSC loc. 92808 in float from mentioned limestone, <u>Bonnia</u> spp., <u>Labradoria?</u> sp.....	25	3053 ⁺
<u>post-Sekwi dark shale and platy limestone, 465⁺ feet</u>			
1	Siltstone, medium dark grey weathering and fresh, some beds with very slight purple tinge; and limy siltstone, medium light brown weathering and fresh.....	120	120
2	Limy siltstone 4/5, medium dark brownish grey weathering, dark grey fresh; and limestone 1/5, light brown, orange, medium grey weathering, fresh surface dark grey.....	35	155
3	Covered, probably dark grey siltstone or shale..	170	325

Section 25

Unit	Lithology	Thickness (feet)	Height Above base of fm. (feet)
4	Limestone in thick bedded penecontemporaneous breccia unit, breccia consists of limestone plates, medium blue-grey weathering, some orange-brown weathering, thin bedded, fresh surface medium dark grey, finely crystalline. Some black chert fragments up to 1 x 1 x 4 inches in size present.....	10	335
5	Siltstone, black weathering and fresh, hard.....	75	410
6	Silty limestone, white weathering, fresh surface dark grey, thin bedded, platy. GSC loc. 92809, 15-50 feet above base, float, didymograptid(?) stipe, diplograptids indet.....	55	465

PLATE 1

- Figure 1. View looking north toward section 11. Base of Sekwi Formation is at "a" and top is at "b". GSC photo no. 202887-W.
- Figure 2. View looking north toward section 12. Approximate base (covered) of Sekwi Formation is at "a" and top is at "b". GSC photo no. 202887-Z.
- Figure 3. View of Sekwi Formation looking south at section 13. Quartzite in foreground marks approximate boundary between Nevadella Zone and Bonnia-Olenellus Zone, and is basal quartzite in unit 9. Contact between unit 10 and // (top of half-cycle B₁) is located at "a". GSC photo no. 202887-M.
- Figure 4. View looking northwest from section 13 to similar section on ridge across valley. Base of Sekwi Formation is at "a", quartzite equivalent to that shown in figure 3 is at "b", top of unit 14 is at "c", and top of Sekwi Formation is at "d". Unconformity between Lower and Upper Cambrian is at "e". GSC photo no. 202887-Q.
- Figure 5. Penecontemporaneous limestone breccia in thick shale unit, section 14. Position of breccia interbed within Sekwi Formation is shown at "b" in Fig. 6. GSC photo no. 202887-T.
- Figure 6. View looking west at Sekwi Formation from section 14. Contact between thick lower dolomite and thick shale unit is at "a". Penecontemporaneous breccia bed within thick shale is at "b", and top of Sekwi Formation is at "c". GSC photo no. 202887-U.

PLATE 2

- Figure 1. View looking west at section 15. Base of Sekwi Formation is at "a", one of penecontemporaneous limestone breccia interbeds ^{within} shale unit 2 is at "b", and contact between unit 2 and 3 is at "c". GSC photos no. 202887-L, 202887-M, and 202887-N overlapped.
- Figure 2. View looking southeast at section 16. Base of Sekwi Formation is at "a". Point "b" marks top of section at horizon below uppermost (snow covered) Sekwi beds. GSC photos. no. 202887-X and 203166-D overlapped.
- Figures 3,4. Cross-bedded quartzite in unnamed quartzite unit 1, lower segment of section 16. Note abrupt steepening and over-
(520 feet above base of unit 1).
turning of laminae at top of cross-bed in figure 3 at "a" /
Interpretation is that sand at top of bed has yielded toward current direction before consolidating. GSC photos no. 203166 (fig. 3) and 203166-G (fig. 4).

PLATE 3

- Figure 1. View looking north at lower segment of section 16. Base of section is at "a" and contact between unnamed quartzite and Sekwi Formation is at "b". GSC photo no. 202887-P.
- Figure 2. Flat-pebble conglomerate in upper beds of unit 17, section 17. GSC photo no. 203166-F.
- Figure 3. View looking southwest at upper segment of section 17. Contact between Sekwi Formation and unnamed dark siltstone and limestone map-unit is at "a". Approximate position of Upper Cambrian fossil localities GSC loc. 92629 and 92630 is at "b". GSC photo no. 202887-S.
- Figure 4. View looking southeast at middle segment of section 18. Base of segment is at "a" and top is behind ridge crest at "b". All of strata cropping out in distance belongs to Sekwi Formation. GSC photo no. 202997-K.
- Figure 5. View looking southwest at upper segment of section 18. Contact between Sekwi Formation and unnamed dark siltstone and limestone map-unit ^{is} at "a". Approximate position of Lower Cambrian fossil localities GSC loc. 92855 and 92856 is at "b". GSC photo no. 203166-B.
- Figure 6. View looking southeast at lower segment of section 19 (lower part of Sekwi Formation). Base of segment is at "a" and top is at "b". GSC photo no. 203166-C.

PLATE 4

- Figure 1. View looking northwest at upper two segments of section 19. Base of medial segment is at "a", base of unit 12 is at "b", top of medial segment is at "c"; base of upper segment is at "d" (just below top of Sekwi Fm.) and upper Cambrian fossil locality GSC loc. 92881 is at "e". GSC photo no. 203166-H.
- Figure 2. Outcrop and slabby talus showing typical lithology of light brown to orange-brown weathering limy siltstone in lower part of Sekwi Formation, section 19. GSC photo no. 202887-0.
- Figure 3. Massive to thick bedded light grey weathering limestone in unit 9 of section 20. Assistant sitting at "a" gives scale. GSC photo 202997-V.
- Figure 4. Massive to thick bedded, light grey weathering limestone (unit 25, upper right in photograph) in section 19 that is similar to, but younger than limestone (unit 9) in section 20 (fig. 3). Assistant in lower centre of photograph is standing near contact between units 23 and 24. Top of massive limestone in this figure is shown at "c" in figure 1. GSC photo no. 203166-A.
- Figure 5. View looking north at medial segment of section 20. Base and top of unit 18 are shown at "a" and "b", respectively. GSC photo no. 203166-E.
- Figure 6. View looking west at Sekwi Formation, medial segment of section 21. Base of medial segment and of unit 7 is at "a" and top of unit 13 is at "b". GSC photo no. 203166-O.

PLATE 5

- Figure 1. View looking west at stacked limestone mounds (foreground) composing bioherm in Sekwi Formation, 52-102 foot interval in unit 3, lower segment of section 21. Similar bioherm at approximately same stratigraphic horizon is visible in background at "a". Base of medial segment of section 21 is visible on far skyline at "b". Crossfaults offset bioherm horizon in foreground same horizon at "a", second crossfault^a offsets strata at "a" from strata at "b". Assistant at "c" gives scale. GSC photo no. 203166-V.
- Figure 2. View looking east at upper segment of section 21. Base of segment is at "a" and top of Sekwi Formation is at "b". GSC photo no. 203166-J.
- Figure 3. View looking northwest at lower segment of section 22. Base of map-unit 13 is at "a", base of Sekwi Formation is at "b", unit 13 of Sekwi Formation is at "c", and top of lower segment is at "d". GSC photo no. 203166-Q.
- Figure 4. View looking northeast at upper segment of section 21. Top of Sekwi Formation is at "a". Approximate position of Upper Cambrian fossil localities GSC loc. 92759 and 92760 is at "b". GSC photo no. 203166-P.
- Figure 5. View looking northeast at lower segment of section 22. Contact between map-unit 13 (foreground) and Sekwi Formation is at "a". Unit 13 of Sekwi Formation is at "b". GSC photo no. 203166-U.
- Figure 6. Penecontemporaneous slump structure in limy siltstone in lower portion of Sekwi Formation, 106 feet above base of unit 7, section 22. GSC photo no. 202887-Y.

PLATE 6

- Figure 1. View looking north at post-Sekwi dark shale and platy limestone map-unit, upper segment of section 22. Camera is near top of Sekwi Formation. Late Middle Cambrian fossil locality GSC loc. 91725 is at "a". GSC photo no. 203166-S.
- Figure 2. View looking north at Sekwi Formation, lower segment of section 23. Irregular interbeds of penecontemporaneous limestone breccia (units 4 and 5) are located between "a" and "b". Base of quartzite unit 12 is at "c". GSC photo no. 203166-T.
- Figure 3. Penecontemporaneous breccia in interbeds between "a" and "b" in figure 2. GSC photo no. 203166-R.
- Figure 4. Conglomerate and breccia in interbed located high in unit 5 and short distance below point "b" in figure 2. GSC photo no. 202887-R.
- Figure 5. View looking south at upper segment of section 23. Base of segment is at edge of main stream (not visible) located below point "a", top of Sekwi Formation is at "c", Upper Cambrian fossil locality GSC loc. 92739 is at "d". GSC photo no. 203166-L.
- Figure 6. Irregular limestone mounds in upper part of Sekwi Formation, unit 18, section 23, located at point "b" in figure 5. Hammer at "a" in figure 6 gives scale. GSC photo no. 203166-I.

PLATE 7

- Figure 1. View looking south at lower segment of section 24. Base of map-unit 13 is at "a", Sekwi Formation is at "b", unit 4 is at "c", and unit 8 is at "d". GSC photo no. 202887-G.
- Figure 2. View looking south at Sekwi Formation, ^{upper} segment of section 24. Unit 4 is at "a", base of unit *q* is at "b", unit 10 is at "c", and base of unit 16 is at "d". Exposure of unit *q* shown in figure 3 is at "e". GSC photo no. 203166-K.
- Figure 3. View looking west at thick bedded, light grey limestone in unit *q*. Location of outcrop is shown at "e" in figure 2. Scale is given by assistant standing at "a". GSC photo no. 202887-E.
- Figure 4. View looking east at Sekwi Formation, lower segment of section 25. Unit 2 is at "a", unit 4 is at "b", and base of unit 10 is at "c". Section 7 is located east of section 25 on ridge marked "d". GSC photo no. 202887-F.
- Figure 5. Dark platy limestone in Sekwi Formation, unit 2, section 25. Outcrop is located at "a" in figure 4. GSC photo no. 202887-J.
- Figure 6. Penecontemporaneous folds in sandstone and siltstone, Sekwi Formation near sections 7 and 25. Strata in outcrop correlates with unit 6, section 25, and is located at lat. $63^{\circ}27'$, long. $129^{\circ}27'$. GSC photo no. 202887-H.
- Figure 7. View looking north at upper segment of section 25. Base of unit 8 is at "a", base of unit 11 is at "b". Post-Sekwi Formation units 1 and 2 were measured over crest of hill below "c". Latter two units were remeasured below "d" along with successive units 3-6. GSC photo no. 203166-N.

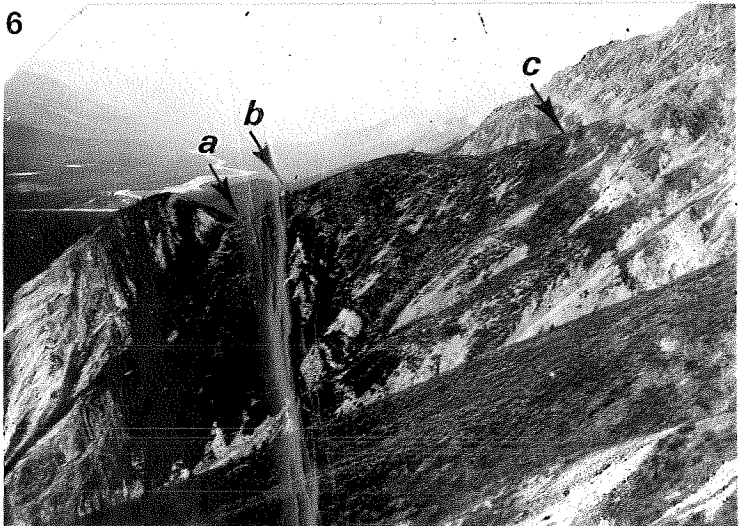
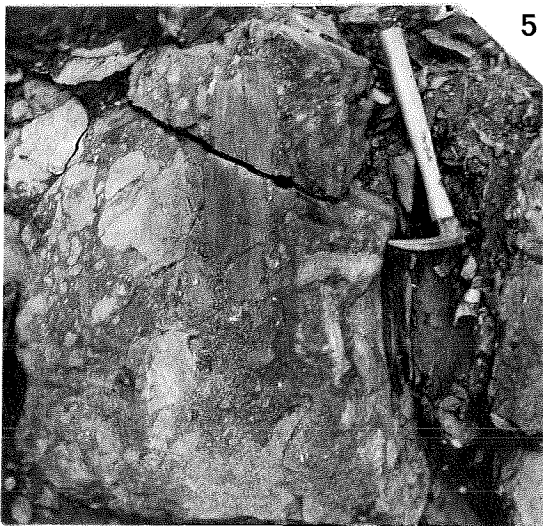
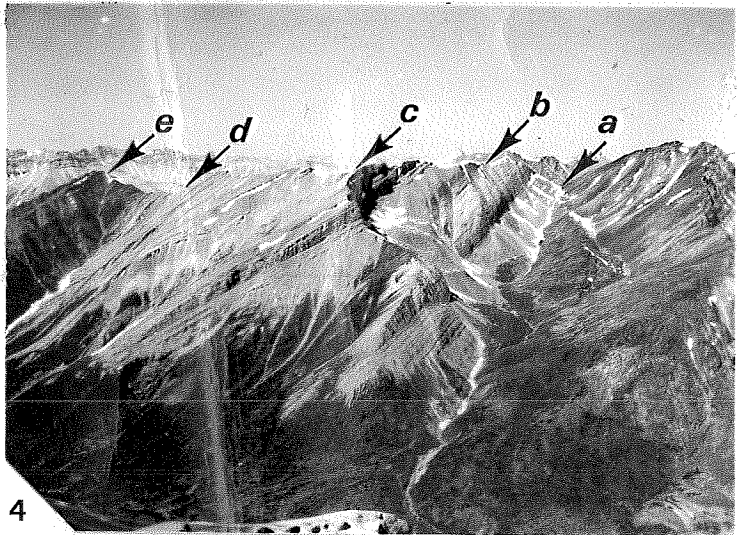
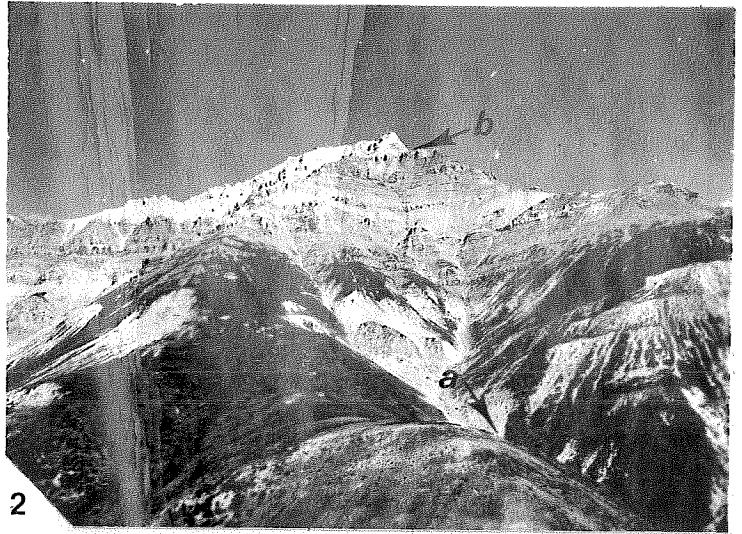
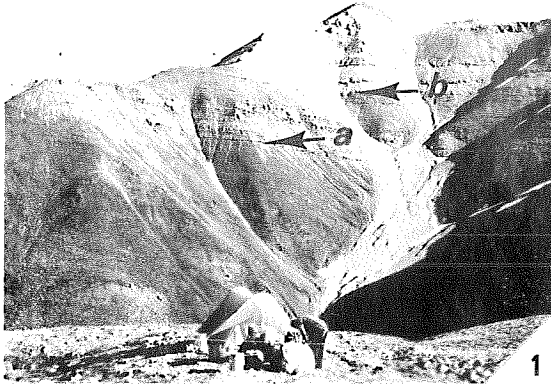


PLATE 2

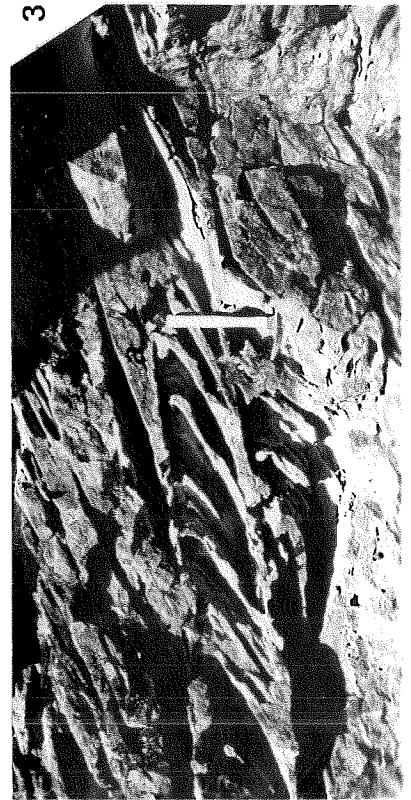
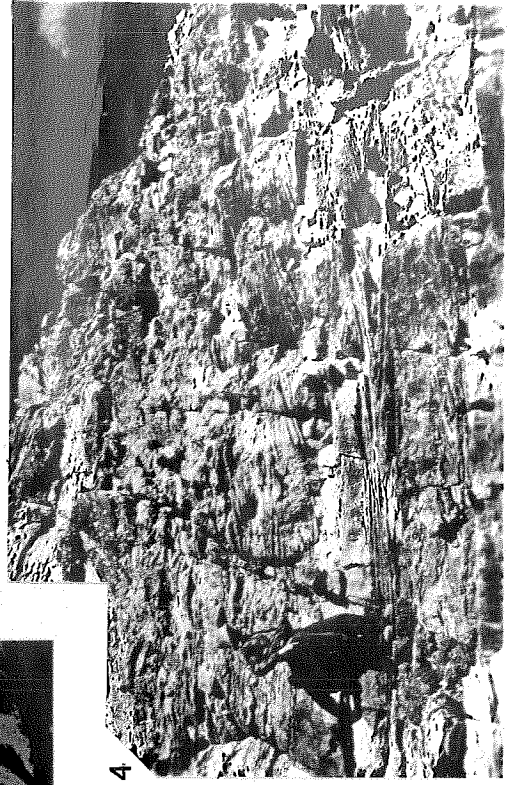
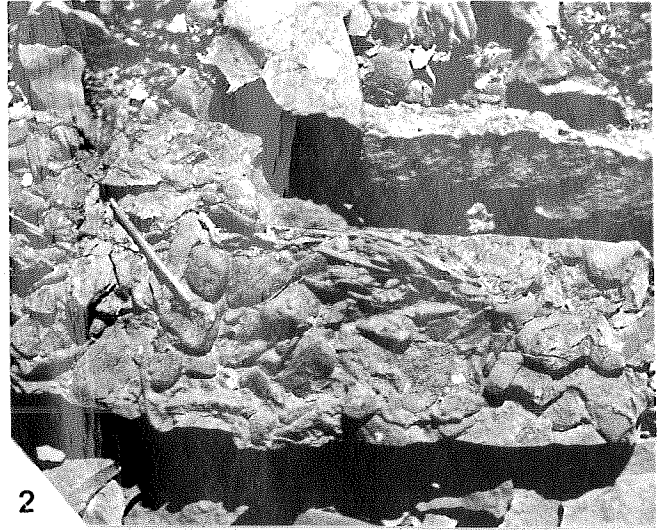
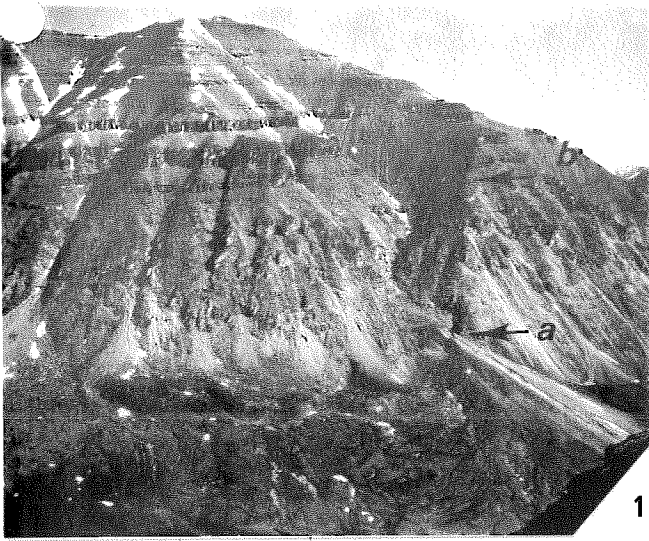
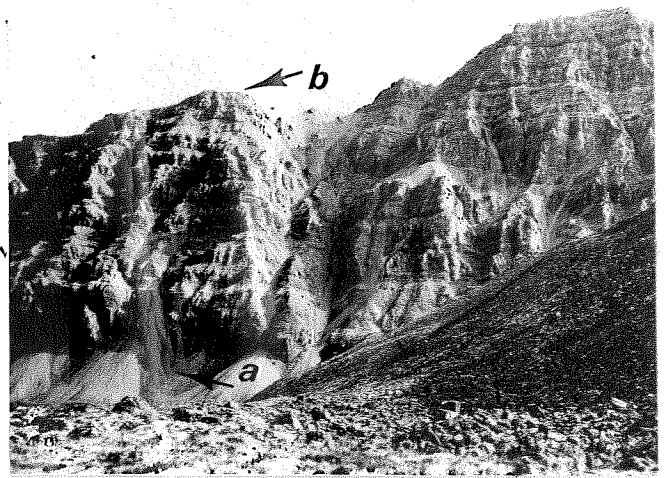


PLATE 3



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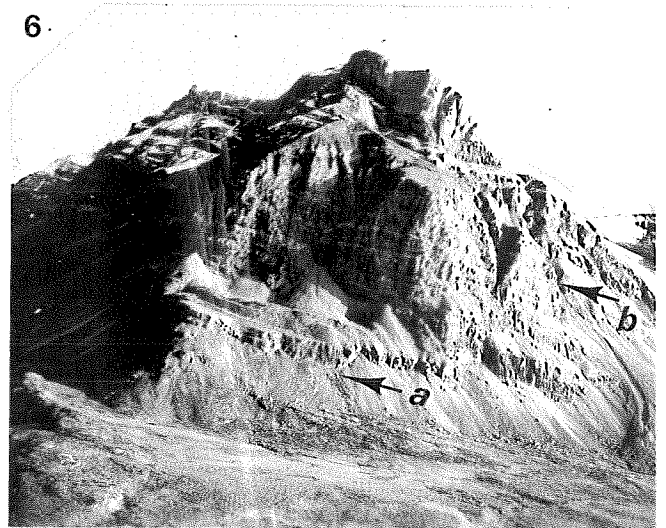
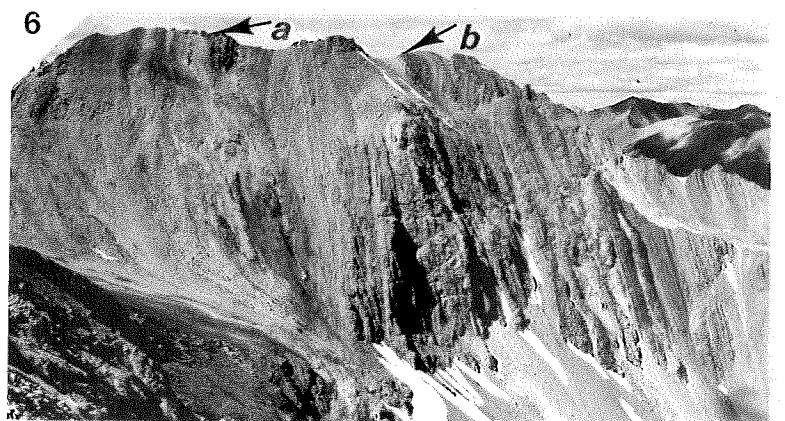
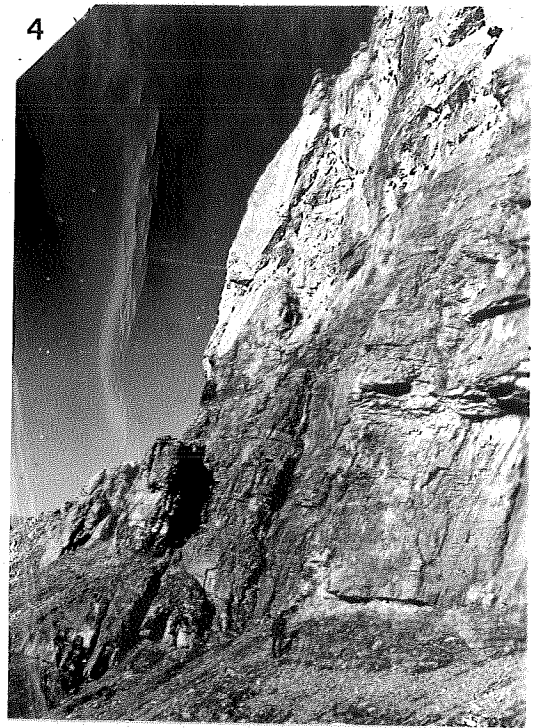
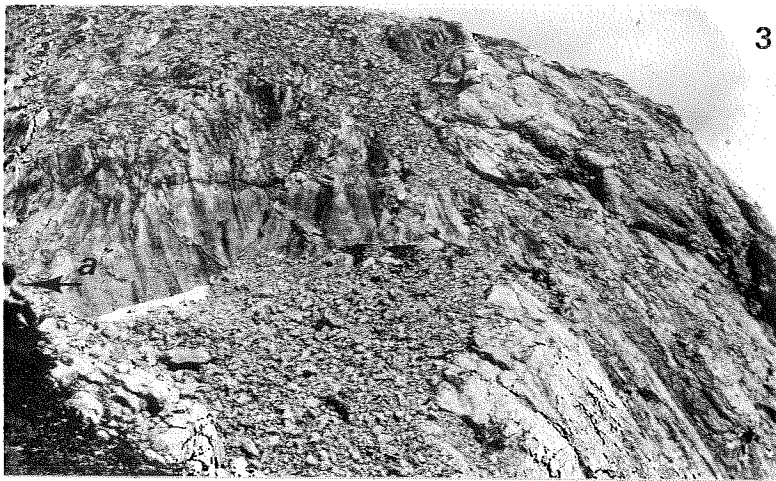
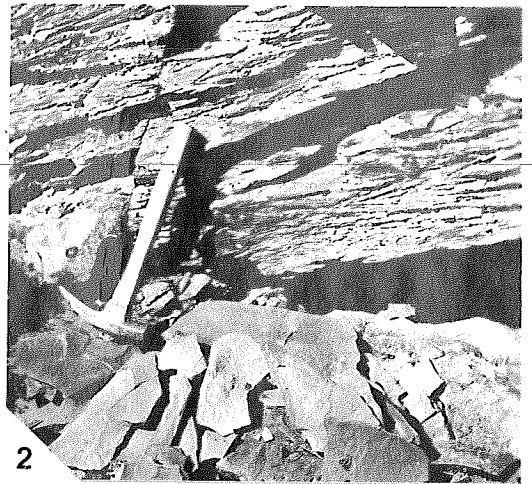


PLATE 4



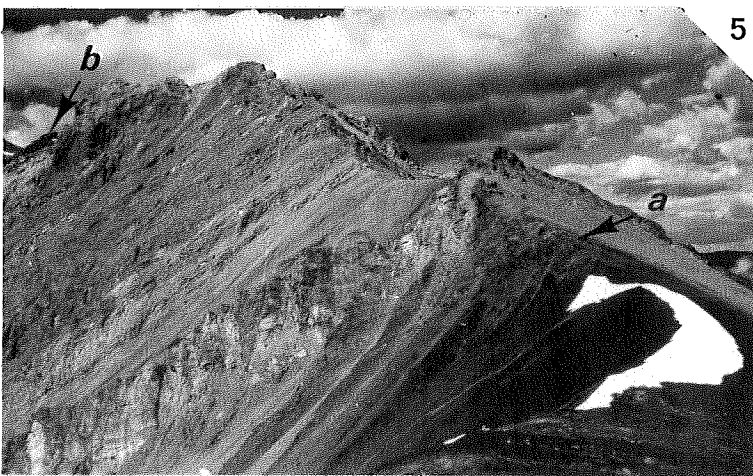
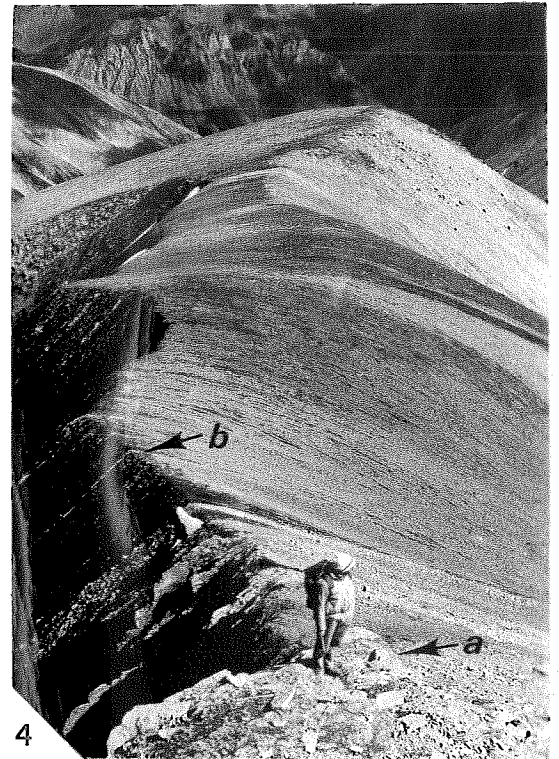
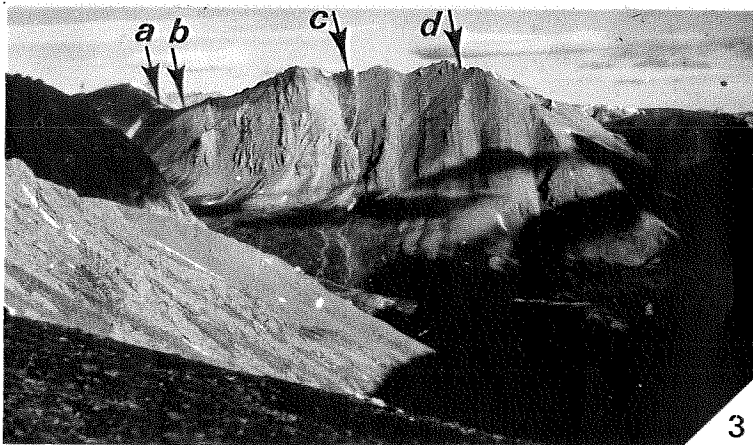
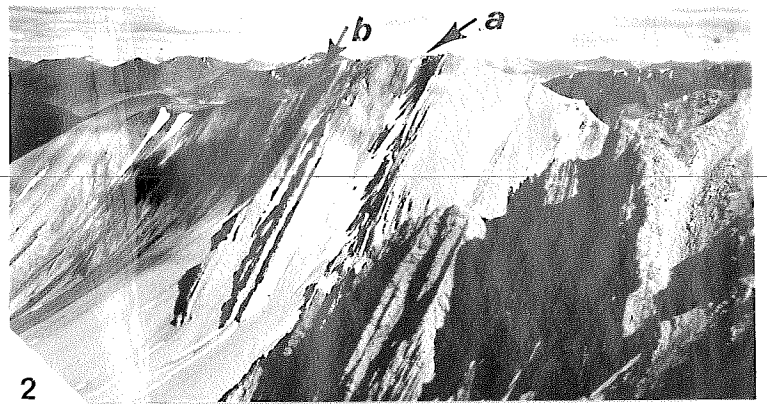


PLATE 6

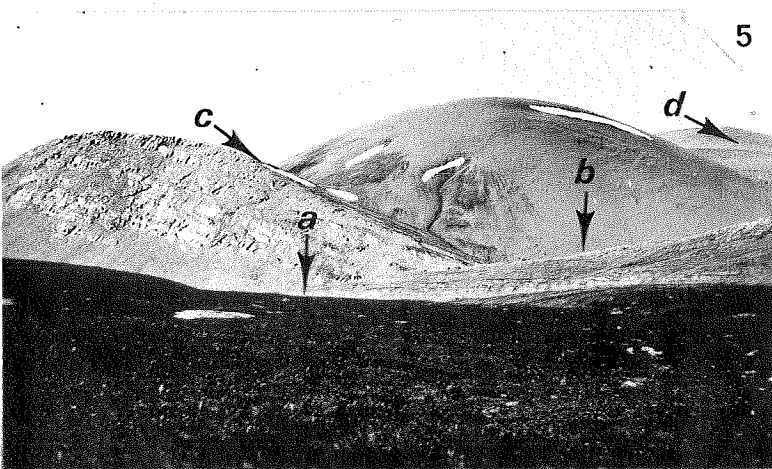
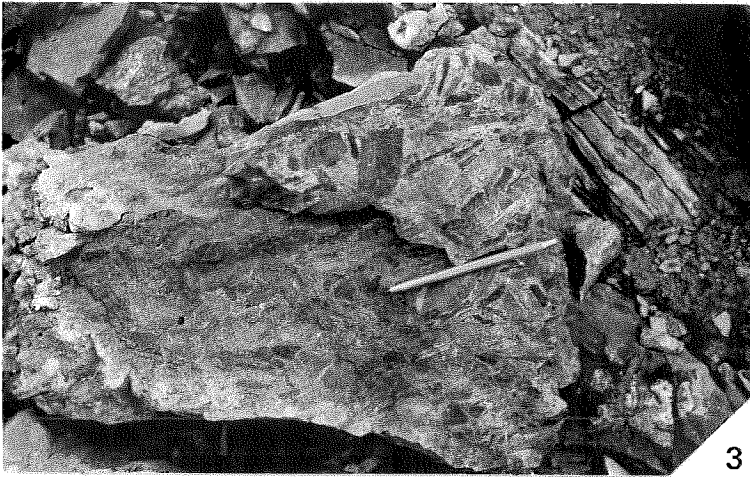
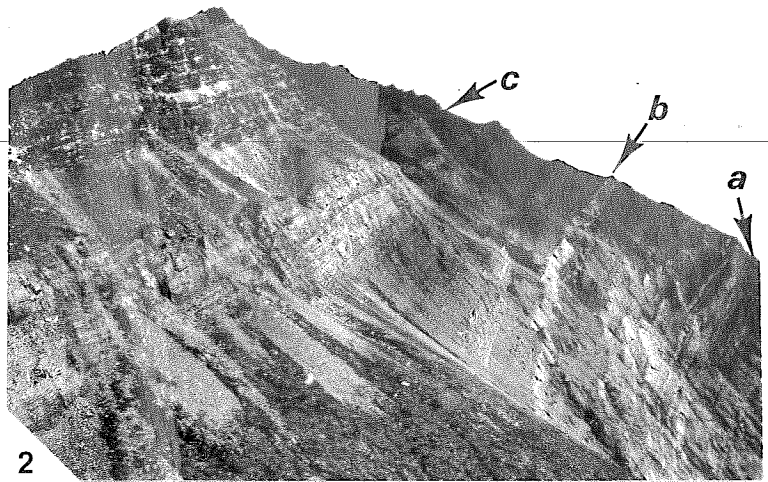
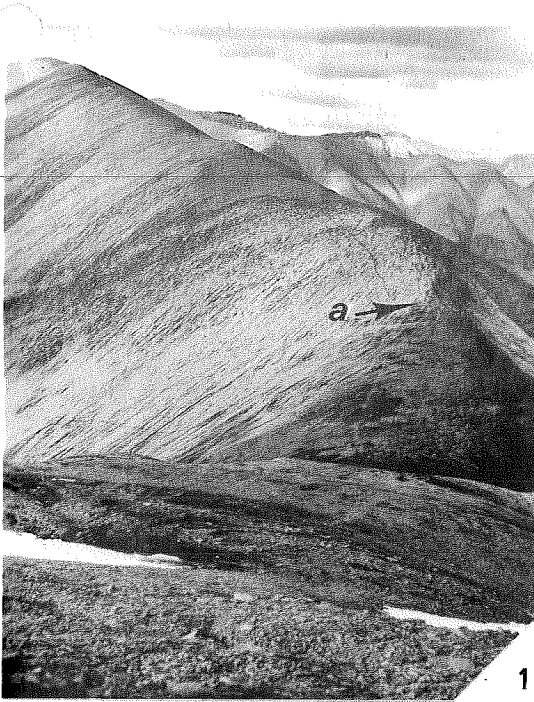


PLATE 7

