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**TEN STRATIGRAPHIC SECTIONS FROM THE  
LOWER CAMBRIAN SEKWI FORMATION,  
MACKENZIE MOUNTAINS,  
NORTHWESTERN CANADA**

W. H. FRITZ



Energy, Mines and  
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Abstract

*A Precambrian and early Lower Cambrian clastic succession underlies the Sekwi Formation and comprises the basal part of the formation at all but one section. The rest of the Sekwi at nine of the sections is predominantly carbonate that is assigned to a regional unit called the middle carbonate belt. This belt is flanked on the northeast by an inner (near shore) detrital belt and on the southwest by an outer (basinal) detrital belt. One Sekwi section is almost wholly within the outer detrital belt. This section, together with sections containing some outer detrital strata, locally defines a northeasterly directed protrusion of the outer detrital belt into the middle carbonate belt.*

*Sekwi strata within the middle carbonate belt are grouped into two major clastic-carbonate pairs, or grand cycles. The mentioned Precambrian-early Lower Cambrian clastic succession and an overlying thick carbonate succession constitute the lower cycle. The clastic part of the second grand cycle consists of inner detrital strata believed to have been deposited over a carbonate bank (top of first cycle) during a regional regression. The carbonate part of the upper grand cycle is by far the thickest of the four half-cycles within the formation. Three and locally four subcycles are tentatively recognized in this half-cycle. Sekwi deposition closed near the end of Lower Cambrian time when a gradual transgression deposited dark, platy limestone and shale over uppermost Sekwi carbonates belonging to the medial and upper part of the Bonnia-Olenellus Zone.*

Résumé

*Une succession clastique du Précambrien et du début du Cambrien inférieur est recouverte par la formation de Sekwi et comporte le socle de la formation dans toutes les échelles stratigraphiques sauf une. Le reste de cette formation, dans neuf des échelles stratigraphiques, est constitué principalement de roches carbonatées que l'on attribue à une unité régionale appelée la zone carbonatée centrale. Cette zone est bordée au nord-est par une zone détritique inférieure (près du rivage) et au sud-ouest par une zone détritique extérieure (formée dans un bassin). L'une des échelles stratigraphiques de Sekwi est presque entièrement située à l'intérieur de la zone détritique extérieure. Cette échelle, ainsi que les échelles qui contiennent certaines strates détritiques extérieures, définit localement une saillie, dirigée vers le nord-est, que fait la zone détritique extérieure dans la zone carbonatée centrale.*

*A l'intérieur de la zone carbonatée centrale, les strates de Sekwi se regroupent dans deux grands couples de roches clastiques et carbonatées, ou cycles majeurs. La succession clastique du Précambrien et du début du Cambrien inférieur mentionnée ci-dessus, ainsi qu'une épaisse succession de roches carbonatées qui la recouvrent constitue le cycle inférieur. La partie clastique du deuxième cycle majeur est constituée de couches détritiques inférieures dont on croit qu'elles ont été déposées sur un remblais de roches carbonatées (sommet du premier cycle) au cours d'une régression régionale. La partie carbonatée du cycle majeur supérieur est de loin la plus épaisse des quatre demi-cycles de la formation. On pense reconnaître trois, et par endroit quatre, sous-cycles dans ce demi-cycle. La mise en place de la formation de Sekwi s'est achevée vers la fin du Cambrien inférieur au moment où une transgression progressive a déposé des calcaires et des schistes sombres et feuilletés sur les roches carbonatées qui sont situées dans la partie supérieure de la formation de Sekwi et appartiennent à la partie médiane et supérieure de la zone de Bonnia-Olenellus.*



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INTRODUCTION

Data in this paper have been organized with two purposes in mind. The first is to provide exploration companies with a number of correlated reference sections to assist in their search for lead-zinc deposits in Lower Cambrian rocks of Mackenzie Mountains — a search that has been active since 1972. The second is to fulfill the need to organize existing data in a "progress report" that can be evaluated before incorporating them into a more comprehensive study, which is the construction of a Lower Cambrian depositional model for the area. Based on the present and additional sections, the model will ultimately be used to strengthen lithologic correlations across complex facies changes and to relate these changes to various paleoenvironments.

The present data are summarized in 10 stratigraphic sections illustrated in Figures 1 and 2. Lithologic units shown in the sections are keyed by numbers to descriptions in the appendix. Fossil localities, keyed by another set of numbers, are likewise described in the appendix. In all, the appendix contains descriptions of 237 lithologic units and 205 fossil collections. The sections are located on an index map included on Figures 1 to 3; map co-ordinates for the sections are listed on Figures 1 and 2.

Figure 3 contains an interpretation of the stratigraphic data in terms of depositional belts (facies) and depositional cycles. Some of the more important interpretations shown in this figure are described in the text.

Depositional belts and cycles in the Lower Cambrian of the Mackenzie Mountains have been described by Fritz, (in press). Since that paper uses generalized data from three of the sections presented here in detail (sections 6, 7, and 10) and generalized data from Figure 3 as well, the two papers are closely related. That paper stresses lateral facies changes across the depositional strike and provides environmental interpretations. The present paper emphasizes detailed sections for local stratigraphic control.

PREVIOUS WORK AND ACKNOWLEDGMENTS

The Sekwi Formation was named and described by Handfield (1968) after the stratigraphic unit had been mapped to the south (Green and Roddick, 1961, units 4, 5; Green *et al.*, 1967, units 4, 5) and to the southeast and east (Gabrielse *et al.*, 1965, units 15, 16) of the type section (index map, section 10). Blusson (1971, p. 10) described the formation briefly and presented a map (1972) of the area surrounding the type section. Contemporaneous and later descriptions of the Sekwi Formation and faunas were published by Handfield (1971), North (1971, p. 311), Fritz (1972, 1973, in press), and Gabrielse *et al.* (1973, p. 34-36).

Most of the data presented in this paper were gathered by the writer during brief trips into the Mackenzie Mountains between 1965 and 1972. Field

support and information on the local geology were given by H. Gabrielse in 1965 and by S.L. Blusson in 1969, 1970 and 1972. Field support was also provided by R.G. Garrett in 1970. Assistance in measuring the sections was rendered by J.R. Thomas in 1965, C.E. Fipkie in 1969, and W.L.G. Annand in 1970. The writer is most grateful to the above-mentioned persons for help provided.

During the writing of this report, comparisons were made with unprocessed biostratigraphic data collected by the writer from the Sekwi Formation in 1974 and 1975.

DEPOSITIONAL BELTS

The study area lies within a region in which Lower Cambrian strata undergo a rapid lateral transition across the depositional strike. This led Gabrielse (1967, p. 276) to state, "Lower Cambrian strata display a marked facies change westerly from the west flank of Redstone Arch into Selwyn Basin, reflecting the continuing negative character of the basin. In some areas three main belts of facies can be recognized — an eastern belt dominated by sandstones, a central belt characterized by varicoloured sandy dolomites, and a western belt consisting essentially of limestones, shales, and siltstones." The three belts described by Gabrielse fit closely into a three-belt model used in the Great Basin by Palmer (1960) for Upper Cambrian strata and Robison (1960) for Middle Cambrian strata. Their belts consist of an inner detrital belt of quartzite and brightly coloured siltstone and shale (near-shore detritus), a middle carbonate belt of thin to thick bedded limestone and dolomite (carbonate shelf), and an outer detrital belt of dark, platy limestone and dark shale (unstable slope and basin deposits). The distribution of these three belts in the Mackenzie Mountains is shown in Figure 3.

GRAND CYCLES

Most of the strata shown in Figure 3 have also been assigned to grand cycles. Cambrian grand cycles were first defined in the Canadian Rocky Mountains by Aitken (1966, p. 405), who stated that grand cycles are "depositional cycles. . . , each comprising 300 to 2000 feet of strata and two or more fossil zones. . . . Each. . . commences at an abrupt basal contact, and consists of a lower, shaly half-cycle gradationally overlain by a carbonate half-cycle." The writer (Fritz, 1975, in press) has recognized grand cycles in Lower Cambrian strata of the Mackenzie Mountains and noted that they are best developed in areas where the middle carbonate belt predominates. In this paper Lower Cambrian strata are described in ascending order starting with the lowest half-cycle. A letter-number combination is used to identify each half-cycle in the following discussion, and is also used to identify these half-cycles in Figures 1-3.

#### Grand cycle A, lower half-cycle (A1)

A quartzite and siltstone succession immediately underlying the Sekwi Formation constitutes most of the half-cycle. In the eastern part of the Sekwi map-area (near sections 8-10) Blusson (1971, 1972) assigned these strata to map-units 12 (quartzite) and 13 (siltstone). These strata grade westward into siltstone and shale which Blusson (1971, p. 9) included in the upper part of his map-unit 10. Blusson (1971) placed map-unit 10 in the Proterozoic, map-unit 12 in the "Cambrian and/or Precambrian," and map-unit 13 in the Lower Cambrian. Above these strata in seven, and possibly eight, of the sections measured is a succession of limy siltstone that Green and Roddick (1961) informally named the "Swiss cheese limestone." These limy siltstone beds are displaced by limestone in section 9 and were not seen (covered?) at section 4, but elsewhere they compose the basal part of the Sekwi Formation, which is also the uppermost portion of half-cycle A1. Fossils demonstrate that the boundary between the *Fallotaspis* Zone and the *Nevadella* Zone is within the "Swiss cheese" siltstone in sections 2 and 8 (Figs. 1, 2), and it is postulated that the boundary lies within these or equivalent beds in the other sections.

#### Grand cycle A, upper half-cycle (A2)

In sections 1, 3, 5, 8, 9, and 10 most of the strata above the "Swiss cheese" siltstone or its equivalent (above A1) consists of thin bedded limestone that grades upwards into dolomite or thick bedded limestone. In some sections (1, 8-10) the highest carbonate consists of thick bedded dolomite containing "floating" grains of quartz sand. This half-cycle in sections 1-3, 5, and 8-10 is assigned (Fig. 3) to the middle carbonate belt.

In sections 6 (units 2, 3) and 7 (units 2-4) dark platy limestone and siltstone with penecontemporaneous folds are equivalent to strata in half-cycle A2 of the other sections. These strata are believed to represent basin or slope deposits (Fritz, in press), and are therefore assigned to the outer detrital belt (Fig. 3). Some other beds (section 5, parts of unit 9 and 10; section 8, units 5, 6; section 10, unit 5) have outer detrital characteristics, but are grouped with the middle carbonate strata because of space limitations in Figure 3, and because they are part of a half-cycle succession that belong predominantly in the middle carbonate belt.

#### Grand cycle B, lower half-cycle (B1)

In the northwestern part of the area (sections 1-3), light yellowish green weathering siltstone and some maroon weathering siltstone comprise this half-cycle. In sections 4, 5, and 8-10 the half-cycle is represented by light brown weathering quartzite, orange weathering dolomite, and siltstone that weathers to light brown soil. Highly coloured siltstone, ripple marks, mudcracks, thin beds of trilobite hash and the presence of *Scolithos* sp. all suggest that the half-cycle was deposited under intertidal conditions. The widespread distribution of this half-cycle indicates a regional regression that brought inner detrital clastics across the carbonate shelf.

Beds equivalent to the half-cycle in section 7 (units 6-11) consist of medium brownish grey weathering

siltstone with penecontemporaneous slump structures. Clasts are believed (Fritz, in press) to have been deposited on an unstable slope after bypassing the carbonate shelf. No shallow water or "slope" siltstone of this age is present in section 6, and therefore it is thought that equivalent strata (part of unit 3) at this site were deposited in the basin beyond, or nearly beyond, the unstable slope.

Fossils indicate that the boundary between the *Nevadella* Zone and the *Bonnia-Olenellus* Zone is within the half-cycle at sections 2, 3, and 8. It is probably within the half-cycle at sections 1, 4, 5, 9, 10. Recent data (Fritz, in press) obtained close to section 7 indicate that there the boundary lies near the contact between the siltstone equivalent of this half-cycle (units 5-10) and the underlying dark, platy limestone (unit 4).

#### Grand cycle B, upper half-cycle (B2)

Medium grey weathering limestone in thin, wavy beds is the predominant lithology in this half-cycle. The limestone in the lowest carbonate succession (B2a) is thick parting at numerous sections and forms prominent cliffs. In sections 3 and 5 thick limestone mounds are also present.

Above limestone B2a are alternate clastic (B2b, B2d, B2f) and carbonate (B2c, B2e, B2g) successions forming sub-cycles(?) that are tentatively correlated in Figures 1 and 2. A pattern of sparse dots differentiates the clastic halves of these sub-cycles(?) in Figure 3. Correlation of the sub-cycles(?) is still uncertain because of the similarity of the siltstone-limestone pairs, great distance between sections, and weak faunal control.

Section 7 contains a thick succession of dolomite (units 14, 16-18) that is thought (Fritz, in press) to have been deposited under restricted, very shallow water conditions. Section 6 contains a thick shale and platy limestone succession (units 5-10) that is in part equivalent to half-cycle B2, and is believed (Fritz, in press) to have been deposited on an unstable slope. The strata are therefore assigned to the outer detrital belt (Fig. 3). The overlying thin, wavy bedded limestone (unit 11) is assigned to the middle carbonate belt. The uppermost middle carbonate bed in section 6 and in the other sections represents the top of half-cycle B2 and the top of the Sekwi Formation.

#### POST-SEKWI DARK SHALE AND PLATY LIMESTONE

Dark shale and platy limestone that Blusson (1971, 1972) had assigned to map-units 15 and 16 were observed to overlie the Sekwi Formation at 8 of the 10 measured sections. Unit 16 probably overlies the Sekwi at the remaining two sections (top of 7 not measured, top of 8 covered). At most of the sections the contact between the Sekwi Formation and the overlying map-unit is within the *Bonnia-Olenellus* Zone. This contact is believed (Fritz, in press) to be diachronous, ranging from the medial to the upper part of this zone. The contact at section 4 differs from the others in that late Lower Cambrian(?) dolomite of the Sekwi Formation is unconformably overlain by dark shale and platy limestone of early Ordovician age.

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## APPENDIX

## SECTION 1.

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>unnamed quartzite</u> (Lower Cambrian or Precambrian)			
1	Quartzite, rust to purple weathering, thin to medium bedded, 5 per cent in beds over 2 feet thick. Planar laminated. Fresh surfaces medium grey, light pink, light brownish grey, fine grained.	115+	115+
<u>Sekwi Formation (3802 ft.)</u> (Lower Cambrian)			
1	Covered. Basal 10 feet exposed, shale, light greenish grey on weathered and fresh surfaces, light brown on weathered joint surfaces. Slightly limy, non-fissile.	234	234
2	Limestone, light grey to cream weathering, bedding thin, wavy, parting thick. Fresh surfaces light grey, finely crystalline. Interval 56-66 feet above base in part replaced by orange weathering dolomite. Top 9 feet composed of light grey weathering limestone in thin, nodular beds.	75	309
3	Shale, light orange-brown weathering, light greenish grey on fresh surfaces.	14	323
4	Dolomite, medium grey weathering, medium bedded. Fresh surfaces medium grey and finely crystalline. Interval 48-50 feet above base contains up to grit sized grains of "floating" quartz sand.	53	376
5	Covered. Argillaceous dolomite, medium dark grey on weathered and fresh surfaces, thin bedded and platy.	31	407
6	Dolomite, in thin beds (75%), weathering medium dark grey to light grey, and in thick beds (25%) weathering light grey-brown. A 7 foot sub-unit of thick bedded, dark grey dolomite with dolomite conglomerate in the lowest beds is 1.5 feet above base. "Floating" medium to coarse/quartz sand occurs in a 1.5 foot bed at base of unit and in various other intervals, highest sandy beds are 77.5-80 feet above base.	113	520
7	Covered. Dolomite in thin beds?.	70	590
8	Dolomite, light brown weathering, medium bedded. Fresh surfaces are light greenish grey and finely crystalline.	36	626
9	Covered. Within unit, interval 50-58 feet is represented by outcrop of dolomitic shale. Shale weathers light brown to light greenish grey, fresh surfaces are light greenish grey.	74	700

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
10	Limestone, medium grey, weathering with light brown parting surfaces, bedding thin and nodular. GSC loc. 85808, 11 feet above base, <i>Nevadella eucharis</i> (Walcott).	12.5	712.5
11	Dolomitic sandstone, rust weathering, thick bedded. Fresh surfaces light green and light grey, fine grained. Interval 62.5 - 72.5 feet contains quartzite, light orange weathering, medium grained, poorly sorted, angular. <i>Scolithos</i> sp. present 39.5 feet above base.	87.5	800
12	Quartzite (more than 2/3), rust weathering, in thick beds. Fresh surfaces medium grey and fine grained, some medium and coarse grained. Siltstone (less than 1/3), rust weathering; interval 65.5 - 76 feet contains dull purple weathering and fresh siltstone. <i>Scolithos</i> sp. present 52 feet above base.	106	906
13	Siltstone (nearly 5/6), light greenish grey weathering. Fresh surfaces same colour as weathered or slightly darker, lime content increases 51 feet above base. Some limestone (slightly more than 1/6). Lower limestone light brown on weathered and fresh surfaces, dense; upper limestone dark grey on weathered and fresh surfaces. GSC loc. 85809, 69 feet above base, <i>Nevadella</i> sp., archaeocyathid.	304	1210
14	Limestone, medium dark grey on weathered surface, light brown to light orange siltstone mottling on bedding surfaces. Bedding thin, wavy, but parting very thick. GSC loc. 85810, 124 feet above base, cf. <i>Bristolia</i> sp. or <i>Laudonia</i> sp.	127	1337
15	Limestone, basal 13 feet dull light grey weathering, thin bedded, and medium light grey on fresh surfaces. Upper 32 feet medium dark grey weathering with light brown and light orange parting surfaces. Fresh surfaces are dark grey. GSC loc. 85811 is in float 2 feet above base, <i>Olenellus truemani?</i> Walcott, <i>Bristolia</i> sp.	45	1382
16	Limestone as in unit 14, but without light brown to light orange siltstone mottling.	230	1612
17	Mainly covered by brown soil. Some outcrops of light green to light orange-brown weathering, platy siltstone. Fresh surfaces are greenish grey and limy. Interval 118 - 173 feet above base contains some siltstone float with ripple-marks and mudcracks. Purple siltstone plates present but rare in this interval. Interval 293 - 295 feet contains outcrop of limestone, light orange-brown weathering, medium bedded, medium dark grey on fresh surfaces; limestone contains abundant fine quartz sand, especially in uppermost 2 feet.	367	1979

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
18	Limestone present in basal 17 foot sub-unit with <i>Girvanella</i> sp. at top, medium grey weathering, bedding averages 1 foot in thickness. Fresh surfaces dark grey and finely crystalline. Remaining 15 feet of unit consists of medium dark grey shale (6 ft.); light grey, limy siltstone (6 ft.), and nodular dark grey limestone (3 ft.).	32	2011
19	Limestone, medium dark grey weathering, bedding thin, wavy to nodular, parting thick, bedding surfaces are mottled light orange-brown and light pink. Fresh surfaces are medium dark grey to dark grey and finely crystalline. Interval 64-108 feet above base covered, probably contains thin bedded, platy limestone.	152	2163
20	Mainly covered. Basal 56 feet probably siltstone as is exposed in 56-61 foot interval, siltstone light grey weathering, medium grey on fresh surface. Outcrop 61-86 feet above base consist of limestone. Lower 12 feet of limestone weathers medium grey, thin wavy bedded. Upper 13 feet of limestone weathers light brown, is medium dark grey and finely crystalline on fresh surfaces, and is argillaceous. Interval 86-246 feet above base covered by mainly nodular and thin, wavy bedded limestone float. GSC loc. 85812 in float 202 feet above base, <i>Olenellus</i> sp.	246	2409
21	Limestone, medium to medium dark grey weathering, thin, wavy bedded to nodular, thick parting. Fresh surfaces medium dark grey and finely crystalline. Interval 91-116 feet above base contains platy limestone. <i>Olenellid</i> hash 151 feet above base. GSC loc. 85813, 91 feet above base, <i>Wanneria?</i> sp., " <i>Esmeraldina</i> " sp., <i>Salterella</i> sp.	251	2660
22	Mainly covered. Limestone, medium grey weathering. Bedding thin, wavy and platy. Fresh surfaces are medium dark grey and finely crystalline. Interval 61-67 feet above base contains medium grey weathering limestone in beds averaging 1 foot in thickness. GSC 85814, 112 feet above base, <i>Olenellus</i> sp.	190	2850
23	Limestone, medium to medium dark grey weathering, thin bedded, thick parting. Fresh surfaces medium dark to dark grey and finely crystalline. Beds in interval 0-85 feet are broadly wavy, those in interval 85-133 feet are wavy to nodular.	133	2983
24	Mainly covered. Interval 46-56 feet contains medium grey weathering limestone in thin, wavy beds. Partings weather light brownish orange, fresh surfaces dark grey and finely crystalline.	115	3098

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
25	Limestone, medium grey weathering, thin, wavy bedded, thick parting. Light brownish orange siltstone on bedding surfaces. Fresh surfaces dark grey and finely crystalline. GSC loc. 85815, 154 feet above base, cf. <i>Bonnia brennus</i> Walcott, <i>Salterella</i> sp., <i>Wanneria</i> sp. GSC loc. 85816, 164 feet above base, <i>Bonnia</i> sp., <i>Salterella</i> sp., <i>Wanneria</i> sp.	379	3477
26	Covered. Shale float 90 per cent, medium grey weathering, in elongate "pencils". Fresh surfaces are dark grey. Limestone float 10 per cent, in thin plates and nodules that weather light brown.	176	3653
27	Limestone (2/3), medium grey weathering, thin wavy bedded. Fresh surfaces medium dark grey and finely crystalline. Siltstone (1/3), light brown weathering.	149	3802
<u>Post Sekwi dark shale and platy limestone (1085 ft.)</u>			
1	Covered with medium dark grey weathering soil. Some limestone float, medium grey weathering, in thin (0.75 in.) plates. Also some limestone nodules (flattened baseball sized), light brown weathering dark grey in fresh surfaces and finely crystalline.	209	209
2	Limestone, light to medium grey weathering, thin and medium bedded, platy. Fresh surfaces dark grey and finely crystalline. Interval 100-119 feet covered by dark grey soil. GSC loc. 85817, 204 feet above base, <i>Ogygopsis batis</i> (Walcott), <i>Zacanthopsis</i> sp.	204	413
3	Mainly shale(?) weathering to dark grey soil. Limestone (1/3), light grey weathering, in thin and medium beds, platy. Fresh surfaces medium to dark grey, finely crystalline.	399	812
4	Shale, black on wet (dry not seen) and fresh surfaces, flakey, not limy. Limestone in rare interbeds, light grey weathering. Fresh surfaces dark grey and finely crystalline. GSC loc. 85818, 30 feet above base, <i>Lancastria</i> sp., sponge spicules.	273	1085
<u>unnamed sandstone</u> (Middle Cambrian?)			
1	Sandstone, light brown weathering with small (0.75 mm) hematite spots, mainly in thick, irregular beds. Fresh surfaces light brown, grains poorly sorted, mainly medium in size. Exotic limestone blocks present from base to at least 893 foot level. GSC loc. 85819 in limestone block 643 feet above base, <i>Bonnia</i> sp., <i>Piaziella</i> sp., olenellid fragments. GSC loc. 85320 in limestone block 644 feet above base, <i>Olenellus puertoblancoensis</i> (Lochman).	2228+	2228+

## SECTION 2

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>unnamed quartzite (590 ft. +)</u>			
1	Quartzite, light pink weathering near base, yellow weathering near top, medium and thick bedded. Fresh surfaces light grey, fine grained, some grains light green, some grains of red chert.	250±	250±
2	Quartzite (50%), medium grey weathering, thick bedded. Fresh surfaces medium grey, fine grained. Interval 256-277 feet contains light orange weathering quartzite; interval 305-340 feet contains light brown to rust weathering quartzite. Siltstone (50%), rust to dark grey weathering, dark grey, fresh surfaces slightly micaceous, hard. Interval 277-305 feet contains light brown and light greenish brown siltstone, fresh surfaces light brown and greenish brown.	340	590±
<u>Sekwi Formation (3434 ft.)</u>			
1	Shale, weathered and fresh surfaces maroon to brick red, bedding thin but parting up to 5 feet thick. Some limestone in thin, nodular bands, light brown to orange weathering, fresh surfaces light grey to purplish grey, finely crystalline. GSC loc. 84298, float from 0-6 feet, <i>Kutorgina?</i> sp. GSC loc. 84299, 18 feet above base, <i>Kutorgina?</i> sp., <i>Parafallotaspis?</i> sp.	56	56
2	Siltstone, light brown and light greenish brown on weathered and fresh surfaces. Parting irregular, subparallel to bedding, average parting interval 0.4 inches. GSC loc. 84300, local float at base of unit, <i>Parafallotaspis grata</i> Fritz. GSC loc. 84301, local float from approximately 2 feet above base of unit, <i>Parafallotaspis grata</i> Fritz, <i>Nevadella?</i> sp. GSC loc. 84302, 21 feet above base, <i>Parafallotaspis</i> sp. GSC loc. 84303, 26 feet above base, <i>Parafallotaspis</i> sp. GSC loc. 84304, 57 feet above base, <i>Parafallotaspis</i> sp. GSC loc. 84305, 60 feet above base, cf. <i>Bergeroniellus</i> sp., <i>Nevadella</i> sp. GSC loc. 84306, 100 feet above base, unidentified olenellid. GSC loc. 84307, 108 feet above base, " <i>Esmeraldina</i> " sp. GSC loc. 84308, 125 feet above base, unidentified olenellid. GSC loc. 84309, 132 feet above base, " <i>Esmeraldina</i> " sp.	189	245
3	Siltstone, as in unit 2 but more resistant, some fine grained quartzite in thin interbeds. GSC loc. 84310, float 51 feet above base, <i>Obollela</i> sp., GSC loc. 84311, 63 feet above base, " <i>Esmeraldina</i> "? sp., <i>Nevadella</i> sp. GSC loc. 84312, float 84 feet above base, " <i>Esmeraldina</i> "? sp., <i>Nevadella</i> sp.	85	330

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
4	Sandstone and siltstone, light brown on weathered and fresh surfaces, slightly limy, thin bedded in lower 90 feet, thick bedded in upper 18 feet. Sandstone is fine grained. GSC loc. 84313, 4 feet above base, " <i>Esmeraldina</i> "? sp., <i>Nevadia</i> sp.	108	438
5	Dolomite, orange weathering to medium pinkish grey weathering, thick bedded. Fresh surfaces light grey, cream, some medium grey, finely crystalline.	150	588
6	Dolomite, orange weathering, thin bedded. Fresh surfaces light grey and light brown, finely crystalline. Interval 27-32 feet above base contains dolomite as described, but also "floating" coarse quartz grains.	297	885
7	Limestone (50%), medium grey on weathered and fresh surfaces, bedding thin and wavy. Siltstone (50%).	10	895
8	Siltstone, light greenish brown on weathered and fresh surfaces, thin bedded, slightly limy. Some purplish grey weathering beds near top of unit. Interval 53-72 feet above base contains quartzite, orange and light brown weathering, thick bedded, fresh surfaces light brown, fine grained. GSC loc. 84314, base of unit, <i>Nevadella</i> sp. GSC loc. 84315, float from base of unit, <i>Nevadella eucharis</i> (Walcott).	164	1059
9	Shale, green weathering, not fissile. Interval 27-31 feet contains limestone, medium grey weathering, thick parting, light grey on fresh surfaces, finely crystalline. GSC loc. 84316, local float 16 feet above base, <i>Laudonia</i> ? sp., <i>Olenellus truemani</i> Walcott.	58	1117
10	Siltstone, light green on weathered and fresh surfaces, becoming limy and light brownish green near top, thin bedded, platy. GSC loc. 84317, local float 9 feet above base, <i>Olenellus</i> sp.	148	1265
11	Limestone, dark grey on weathered and fresh surfaces, bedding thin and wavy, finely crystalline. Interval 110-113 feet contains archaeocyathids. Interval 117-136 feet contains limestone, medium grey weathering with light orange parting surfaces, thin bedded, laminated, platy. Interval 136-151 feet contains algal mounds averaging 1 foot thick and up to 4 foot thick. GSC loc. 84318, 39 feet above base, <i>Olenellus</i> sp. GSC loc. 84319, 107 feet above base, <i>Tabulaconus</i> sp., archaeocyathids. GSC loc. 84320, 111 feet above base, <i>Tabulaconus</i> sp., archaeocyathids. GSC loc. 84321, 112 feet above base, <i>Tabulaconus</i> sp., archaeocyathids.	250	1515

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
12	Limestone, light orange-brown weathering, thin bedded, platy. Fresh surfaces medium grey and finely crystalline.	43	1558
13	Dolomite, mainly light pink weathering, bedding thin and wavy, basal 5 feet dark grey with orange tint and thick bedded, upper 15 feet medium dark grey, thick bedded and oölitic.	42	1600
14	Limestone, dark grey to medium dark grey weathering, bedding thin and wavy. Fresh surfaces dark grey and finely crystalline. Basal 88 feet weathers with bluish cast and has yellowish brown to orange-brown mottling on bedding surfaces. Upper 76 feet is thick parting and bedding surfaces weather with orange and red mottling. GSC loc. 84322, 8 feet above base, <i>Olenellus</i> sp., <i>Proliostracus</i> sp. GSC loc. 84323, 42 feet above base, <i>Olenellus</i> sp., <i>Proliostracus</i> sp. GSC loc. 84324, at top of unit, <i>Proliostracus</i> sp., <i>Salterella</i> sp.	185	1785
15	Siltstone, light brown to orange weathering, some purple weathering. Interval 55-105 feet above base is light green on weathered and fresh surfaces, limy. Interval 105-215 feet contains mudcracks. <i>Girvanella?</i> sp. present 231 feet above base. Basal 19 feet consists of light yellow-brown weathering limestone in thin plates. GSC loc. 84325, 7 feet above base, <i>Proliostracus contractus?</i> Fritz.	282	2067
16	Limestone, light and medium blue-grey weathering, bedding thin and wavy. Siltstone exposed in interval 89-98 feet, light brown to light orange weathering. Covered from 98 feet to top of unit, probably more siltstone. Low stromatolites 1 foot in diameter present 89 feet above base. GSC loc. 84326, 33 feet above base, <i>Olenellus laxocules?</i> Fritz.	113	2180
17	Argillaceous limestone, weathering light brown, yellow-brown, bright red, bedding thin, very nodular. GSC loc. 84327, 13 feet above base, <i>Olenellus</i> sp., <i>Proliostracus annosus</i> Fritz.	35	2215
18	Limestone, light brown to medium grey weathering, thin bedded, platy, fresh surfaces medium grey, finely crystalline. <i>Salterella</i> sp. abundant. GSC loc. 84328, 2 feet above base, <i>Proliostracus annosus</i> Fritz, <i>Proliostracus?</i> sp. GSC loc. 84329, 94 feet above base, <i>Olenellus</i> sp., <i>Salterella</i> sp.	182	2397
19	Limestone, dark grey on weathered and fresh surfaces, thin bedded, very nodular.	81	2478

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
20	Limestone, medium grey weathering, bedding thin, wavy, parting surfaces mottled with light orange weathering siltstone. GSC loc. 84330, 74 feet above base, aff. <i>Olenellus puertoblancoensis</i> (Lochman). GSC loc. 84331, 93 feet above base, cf. <i>Olenellus</i> sp. 2 Fritz, 1972 and <i>Wanneria</i> sp.	180	2658
21	Covered. Float consists of dark limestone, dark grey on weathered and fresh surfaces, bedding thin and wavy; float covering interval 91-112 feet above base is predominantly nodular. Fault present at base of this interval. GSC loc. 84332, in float 47 feet above base, <i>Olenellus</i> sp.	112	2770
22	Limestone, medium grey weathering, bedding thin and and platy, fresh surfaces dark grey. Bedding surfaces covered with light orange and light pink weathering siltstone.	29	2799
23	Covered. Float in interval 0-32 feet above base consists of limestone, light blue-grey weathering, bedding thin and nodular. Interval 32-63 feet above base covered by siltstone and argillaceous limestone, yellow-brown and light orange weathering, platy.	63	2862
24	Limestone (50%), light grey weathering, bedding thin and wavy, partings covered by light orange weathering siltstone. Covered intervals (50%) underlain by siltstone(?).	43	2905
25	Limestone, light yellow, light grey and light orange weathering, bedding thin and platy. Fresh surfaces dark grey and finely crystalline. Upper 39 feet covered, probably contains limestone as below and subordinate amount of shale.	95	3000
26	Limestone, medium grey weathering, bedding thin, wavy and nodular, parting surfaces mottled with light orange and bright red weathering siltstone. Fresh surfaces medium dark grey and finely crystalline, sparry calcite present 223 feet above base to top of unit. Some nodular beds present 65-201 feet above base. GSC loc. 84333, 10 feet above base, <i>Olenellus</i> sp. 2? Fritz, 1972, GSC loc. 84334, 115 feet above base, <i>Bonnia laterispina</i> Fritz, <i>Olenellus</i> sp., <i>Wanneria</i> sp. GSC loc. 84335, 180 feet above base, <i>Bonnia laterispina</i> Fritz, <i>Olenellus laxoculus</i> Fritz, <i>Wanneria parvifrons?</i> Fritz. GSC loc. 84336, 230 feet above base, <i>Bonnia laterispina</i> Fritz, <i>Wanneria parvifrons</i> Fritz. GSC loc. 84337, 340 feet above base, <i>Olenellus</i> sp., <i>Salterella</i> sp., <i>Wanneria parvifrons?</i> Fritz.	434	3434

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Post-Sekwi dark shale and platy limestone (1009 ft.)</u>			
1	Shale, lower 57 feet light brown weathering, soft, slightly limy; interval 57-153 feet above base dark grey weathering, hard. Subordinate limestone present, mainly light grey weathering, some orange weathering, laminated, in thin plates and lenses. GSC loc. 84338, 61 feet above base, <i>Olenellus clarki?</i> (Resser).	153	153
2	Limestone (50%), lower beds weather light grey, platy; upper beds weather light brownish grey, bedding thin and wavy. Shale (50%) as in upper beds of unit 1. GSC loc. 84339, in float 16-20 feet above base, <i>Bonnia</i> sp. (2 pairs of spines), <i>Olenellus</i> sp.	20	173
3	Shale, black.	166	339
4	Limestone, dark and medium grey weathering, platy, very thin bedded, very dark grey on fresh surfaces. GSC loc. 84340, float from interval 2 feet above base to top, <i>Goldfieldia</i> sp., <i>Olenellus puertoblancoensis?</i> (Lochman).	17	356
5	Shale, black.	215	571
6	Limestone, dark and medium grey weathering, thin bedded, fresh surfaces very dark grey. GSC loc. 84341, at top of unit, <i>Ogygopsis?</i> sp., <i>Olenellus</i> sp.	19	590
7	Black shale.	171	761
8	Siltstone, medium dark grey weathering, platy, partings 0.10 to 0.25 inches thick, dark grey on fresh surfaces	125	886
9	Covered, probably shale.	123	1009
<u>unnamed sandstone</u> (Middle Cambrian?)			
1	Sandstone, lower 357 feet light brown weathering, thick bedded (average 1 foot). Fresh surfaces light grey, fine grained. Quartzite above 357 feet similar to that below but thin bedded, not measured above 375 foot level.	375+	375+

## SECTION 3

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>unnamed quartzite</u>			
1	Quartzite, rust to dark purple weathering, medium bedded. Fresh surfaces light purple, fine grained. Abundant trails on bedding surfaces of upper beds.	35+	35+
<u>Sekwi Formation (3047 ft.)</u>			
1	Limestone, orange-brown weathering, bedding medium, up to 1 foot in thickness, blocky. Fresh surfaces pinkish brown and light brown. Sparse brachiopod fragments present.	24	24
2	Siltstone, light brown to light grey-brown weathering. Fresh surfaces medium grey. Limestone nodules 1 inch thick, in layers, medium grey on weathered and fresh surfaces. Sparse glauconite present 2 feet above base. Fault present at top of this unit. GSC loc. 86883, 171 feet above base, <i>Nevadella?</i> sp.	176	200
3	Siltstone, limy, medium grey on weathered and fresh surfaces; and limestone, silty, orange weathering, in thin, wavy beds. Fresh limestone surfaces are medium grey.	52	252
4	Siltstone, limy, orange-brown weathering, fresh surfaces are medium grey. Faint medium grey weathering nodules present, fresh surfaces on nodules same as surrounding siltstone. GSC loc. 86884, 148 feet above base, cf. <i>Botsfordia</i> sp.	163	415
5	Limestone, medium grey weathering, thin-bedded, platy. Fresh surfaces dark grey and finely crystalline. Sparse archaeocyathids present 8 feet above base. GSC loc. 86885, 15 feet above base, <i>Holmiella</i> sp.	31	446
6	Siltstone, light brown and mainly medium brown weathering, in thin plates. Fresh surfaces medium grey. GSC loc. 86886, 30 feet above base, <i>Bradyfallotaspis?</i> sp. GSC loc. 86887, 49 feet above base, " <i>Esmeraldina</i> " sp., <i>Holmia</i> sp.	129	575
7	Limestone, light blue-grey weathering, bedding thin and nodular, abundant light brown siltstone on bedding surfaces. Fresh limestone medium grey and finely crystalline. GSC loc. 86888, in float 25 feet above base, <i>Holmiella</i> sp. GSC loc. 86889, 38 feet above base, <i>Holmiella</i> sp. GSC loc. 86890 in float 120 feet above base, <i>Holmiella?</i> sp.	175	750

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
8	Limestone, dull medium grey weathering, thin and medium bedded. Fresh surfaces medium dark grey and finely crystalline. Oölites present but rare. GSC loc. 86891, 27 feet above base, <i>Holmiella falcata</i> Fritz, <i>Nevadella?</i> sp.	142	892
9	Limestone, light grey weathering, thick parting, both planar laminated and cross-bedded. Fresh surfaces medium grey and finely crystalline. At top of this unit, section offset in order to compensate for fault.	26	918
10	Dolomite, bright, light orange weathering, bedding thin and platy, mudcracks present. Fresh surfaces are cream coloured, finely crystalline, some fine grained "floating" quartz sand present.	75	993
11	Dolomite containing large amounts of fine grained quartz sand, especially at top, light brown weathering. Fresh surfaces are brownish cream.	11	1004
12	Dolomite, similar to that in unit 10. Starting 82 feet above base, 15 per cent of dolomite weathers purple. Some fine grains of quartz sand scattered throughout interval.	184	1188
13	Siltstone, light grey-green (1/3) and maroon (2/3) weathering. Quartzite in 5-foot-bed located 57 feet above base, rust weathering thick bedded, fresh surfaces medium grey-green, fine grained. GSC loc. 86892, 4 feet above base, <i>Nevadella</i> sp. GSC loc. 86893, in float 15 feet above base, <i>Olenellus truemani</i> Walcott. GSC loc. 86894, in float 25 feet above base, cf. <i>Mickwitzia monilifera</i> Walcott.	332	1520
14	Limestone, medium and light grey weathering, in thick, irregular beds and algal mounds, some thin beds between mounds. Fresh surfaces finely crystalline to dense. Basal 54 feet consists of dark grey weathering limestone in thin, wavy beds that are thick parting, rust mottled. Fresh surfaces are dark grey and finely crystalline. <i>Girvanella</i> sp. present 54-58 feet above base. <i>Scenella</i> sp. abundant 65 feet above base. Archaeocyathids present 58-61 feet above base.	345	1865
15	Limestone, medium grey weathering, bedding medium and thin. Fresh surfaces medium grey and finely crystalline. Top 22 feet consists of light grey weathering limestone in medium and thick, blocky beds. Fresh surfaces medium grey, finely crystalline.	135	2000
16	Siltstone, bright orange and orange-yellow weathering. Dolomite present 10-18 feet above base, light orange weathering, in thin, platy beds.	180	2180

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
17	Limestone, weathers medium grey with cream cast, thick bedded. Fresh surfaces medium light to medium grey and finely crystalline. Top 4' consists of dolomite, light orange weathering, laminated, thick parting.	21	2201
18	Limestone, medium grey weathering, mainly thin wavy bedded, thick parting. Fresh surfaces dark grey and finely crystalline. Oölites present 18-21 feet above base; oncholithes present 36-69 feet above base. GSC loc. 86895, in float 49 feet above base, <i>Salterella</i> sp., <i>Wanneria</i> sp. GSC loc. 86896, 146 feet above base, <i>Proliostracus annosus</i> Fritz. GSC loc. 86897, 215 feet above base, <i>Olenellus</i> sp., <i>Wanneria</i> sp. GSC loc. 86898, 235 feet above base, cf. <i>Wanneria parvifrons</i> Fritz. GSC loc. 86899, 238 feet above base, <i>Proliostracus</i> sp., <i>Wanneria</i> sp.	277	2478
19	Limestone, medium grey weathering, thin bedded, thin to thick parting. Algal mounds 1.5 feet thick 7 feet above base and 3 feet thick 12 feet above base. Interval 59-65 feet above base contains light grey shale.	77	2555
20	Shale, light grey weathering.	29	2584
21	Limestone, medium grey weathering, bedding thin and wavy, parting thin to thick. Fresh surfaces dark grey and finely crystalline. Basal 14 feet thin bedded and platy. Oölites in 1 foot bed 14 feet above base. Algal mounds 2 feet thick 63 feet above base. GSC loc. 86900, 1 foot above base, aff. <i>Olenellus puertoblancoensis</i> (Lochman). GSC loc. 86901, 454 feet above base, <i>Bonnia</i> sp. 1? Fritz, 1972, <i>Helcionella</i> sp.	463	3047
<u>Post-Sekwi dark shale platy limestone (1703 ft. +)</u>			
1	Shale (50%), medium to dark grey weathering; and limestone (50%) in thin, wavy and nodular beds. Limestone in basal 55 feet in light grey interbeds. Limestone continuous in upper 9 feet, medium grey weathering, medium dark grey on fresh surfaces.	64	64
2	Shale, basal 16.5 feet olive grey weathering. Interval 16.5-19 feet above base contains sandstone, light brown weathering, thin bedded, medium grey on fresh surfaces, fine grained, slightly limy. Interval 19-92 feet contains shale, medium to dark grey weathering with limestone pods and thin, nodular limestone interbeds as in unit 22.	92	156

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
3	Sandstone (60%), orange-brown weathering, bedding thin and platy. Fresh surfaces medium brownish grey and very fine grained. Shale (40%), medium dark grey weathering. Some limestone present in medium grey weathering, platy beds with laminae, fresh surfaces dark grey.	122	278
4	Limestone, thin bedded. Lower 25 feet medium grey weathering, bedding surfaces wavy, thick parting, fresh surfaces medium dark grey and finely crystalline. Upper 31 feet medium dark grey weathering, platy, dark grey on fresh surfaces and finely crystalline. GSC loc 86902, in float 25-56 feet above base, <i>Goldfieldia</i> sp.	56	334
5	Siltstone, medium dark grey weathering, shaly. GSC loc. 86903, float from 149 feet above base, probably originating from unit 2, <i>Olenellus</i> sp.	160	494
6	Shale (50%), medium grey weathering. Limestone (50%), in lower part of unit light brownish grey weathering, bedding medium, fresh surfaces medium dark grey and finely crystalline; in upper part of unit limestone as below but in light brown weathering nodules.	119	613
7	Shale, black weathering. Limestone (15%), dull medium grey weathering, thin bedded, platy, laminated. Fresh limestone medium dark grey. GSC loc. 86904 in 6 inch bioclastic bed at base of unit, <i>Helcionella</i> sp., <i>Onchocephalus?</i> sp., cf. <i>Pelagiella</i> sp.	260	873
8	Limestone, medium and light grey weathering, thin and medium bedded. Fresh surfaces medium grey and medium dark grey. Interval 285-505 feet above base recessive, probably contains considerable amount of shale.	630	1503
	(Ordovician? shale)		
9	Shale (50%), black, siliceous to organic. Limestone (40%), very light grey to white weathering, thin bedded, laminated, fresh surfaces dark grey and dense. Chert (10%), in thin, laminated beds.	200+	1703+

## SECTION 4

Unit	Lithology	Thickness (feet)	Height Above lowest outcrop of formation (feet)
Sekwi Formation (2552+ ft.) (lower portion of formation covered)			
1	Quartzite, light brown, some orange-brown weathering, medium bedded, burrowed. Fresh surfaces medium brownish grey, very fine grained. Some (5%) purple weathering quartzite. Minor amount (15%) of siltstone present, same colour as quartzite.	50+	50+
2	Siltstone, limy siltstone and very fine grained quartzite, in thin, platy beds except for medium beds in upper 31 feet. Fresh surfaces light cream to light brown. Interval 94-96 feet contains limestone, medium grey weathering, bedding thin and wavy. Fresh surfaces light grey and finely crystalline. GSC loc. 88934, 39 feet above base, <i>Hyolithes</i> sp., <i>Nevadella?</i> sp.	127	177
3	Dolomite, orange to light orange and light grey weathering, thick bedded except for medium in top 21 feet. Fresh surfaces light grey and cream coloured, finely crystalline. Interval 68-109 feet above base contains "floating" medium and fine quartz grains in cross beds, current flowed to south. Interval 109-132 feet covered by siltstone, khaki coloured, highly burrowed. GSC loc. 88935, in float 124 feet above base, <i>Olenellus laxoculus?</i> Fritz, <i>Wanneria</i> sp.	153	330
4	Siltstone, 0-21 feet medium to light brown and rust weathering, thin bedded, fresh surfaces medium grey; 38-43 feet medium brown on weathered and fresh surfaces, burrowed. Interval 21-38 feet contains dolomite (50%), orange weathering, and sandstone (50%), brick red weathering, quartz grains up to granule in size. GSC loc. 88936, in float 10 feet above base, <i>Olenellus</i> sp.	43	373
5	Limestone, medium light grey weathering, bedding thin and wavy, parting thick, mottled by yellowish brown siltstone. Fresh surfaces medium light grey and finely crystalline. Limestone in basal 20 feet thin parting.	95	468
6	Siltstone, medium brown weathering, medium grey on fresh surfaces, limy. Intervals 92-96 feet and 117-119.5 feet contain dolomite, orange weathering, thick bedded, fresh surfaces cream coloured; lower interval contains 1 inch layers of medium grained quartz sand.	167	635
7	Limestone, mainly medium grey weathering, bedding thin, wavy and nodular. Fresh surfaces medium dark grey and finely crystalline. Basal 36 feet contain 50 per cent siltstone, light brown weathering, medium grey fracturing. Interval 36-63 feet above base contains dolomitic limestone, orange weathering, medium bedded, fresh surfaces light grey and finely crystalline; thin (0.1 to 3 inches) layers of fine grained quartz sand present. Interval 164-190 feet contains siltstone, medium brown weathering; and limestone, orange weathering, in thin beds and lenses, fresh surfaces medium grey and finely crystalline. GSC loc. 88937, 72 feet above base, <i>Olenellus</i> sp., <i>Proliostracus annosus</i> Fritz, 1972.	210.5	845.5

Unit	Lithology	Thickness (feet)	Height Above lowest outcrop of formation (feet)
8	Siltstone, limy, interval 0-23.5 feet light grey weathering, some orange weathering, platy; interval 32.5-52.5 feet light yellow to light brown weathering; 52.5-66 feet covered, may contain siltstone. Interval 23.5-32.5 feet contains dolomite, orange weathering thick bedded, fresh surfaces medium grey and finely crystalline.	66.5	912
9	Dolomite. Interval 0-28 feet medium dark brown and reddish brown weathering, thick bedded, vuggy, fresh surfaces dark grey and finely crystalline. Interval 28-60 feet contains dull medium grey weathering dolomite in thin, wavy beds; upper 4 feet contains siltstone, yellowish brown weathering, limy. Interval 60-134 feet contains yellowish orange weathering (60-93 ft.) and pinkish to orange weathering (93-134 ft.) dolomite in medium and thick beds. Fresh dolomite cream coloured, finely crystalline.	134	1046
10	Dolomite, mainly medium brown weathering; interval 0-17 feet thin, wavy bedded, medium grey on fresh surfaces, finely crystalline; interval 29.5-60 feet medium and thick bedded, blocky, fresh surfaces dark grey and finely crystalline. Limestone present in interval 17-29.5 feet, light yellow and brownish medium grey weathering, thin bedded, platy, fresh surfaces medium dark grey and finely crystalline. Interval 60-86 feet contains dolomite, light orange-yellow and orange-pink weathering, thin bedded, wavy and platy, fresh surfaces medium dark grey and finely crystalline.	86	1132
11	Dolomite, light yellowish cream to pinkish cream weathering, in thick (0-40 ft.) and in medium and thick (40-48.5 ft.) beds. Fresh surfaces light grey and finely crystalline.	48.5	1180.5
12	Limestone and dolomite. Basal 11.5 feet limestone, medium grey weathering, thick parting, fresh surfaces medium dark grey and finely crystalline. Interval 11.5-30 feet contains limestone and dolomite, orange weathering, thin bedded and platy, fresh surfaces dark grey and finely crystalline. Some coarse grains of "floating" quartz sand present. GSC loc. 88938, 8.5 feet above base, <i>Olenellus</i> sp., <i>Proliostracus</i> sp.	30	1210.5
13	Dolomite, yellow to light orange weathering, pinkish orange in upper 15 feet, thick bedded, fresh surfaces light grey to cream coloured, finely crystalline. Basal 28.5 feet, 50 per cent dolomite as described but thin bedded and platy; and 50 per cent siltstone, light yellowish brown and light brown weathering. Coarse grains of "floating" quartz sand in interval 33.5-68.5 feet above base.	83.5	1294

Unit	Lithology	Thickness (feet)	Height Above lowest outcrop of formation (feet)
14	Dolomite, mainly orange and yellow weathering, bedding mostly thin and medium, fresh surfaces light brown and cream coloured, finely crystalline. Some shale(?) present. At 111 feet, 3 feet of chocolate weathering dolomite present.	141	1435
15	Dolomite, weathering light yellow, orange and light brown (0-20 ft., 25-40 ft.); medium pinkish grey and orange-grey (40-70 ft.); and medium brown to reddish brown (70-95 ft.). Bedding medium and thin, finely crystalline.	114	1549
16	Dolomite, very light grey to light pinkish grey weathering, very thick bedded, fresh surfaces very light grey and finely crystalline.	34	1538
17	Dolomite, mainly light yellow and yellowish grey weathering, thin and some medium bedded. Fresh surfaces medium and dark grey, finely crystalline. Basal 5 feet contains dolomite that weathers dark grey, with reddish cast; intervals 69-73 feet contain medium brown weathering dolomite.	132	1715
18	Dolomite, interval 0-13 feet medium brownish grey weathering, thick bedded, fresh surfaces dark grey and finely crystalline. Interval 34-73 feet light greyish brown weathering, medium and thick bedded, fresh surfaces dark grey and finely crystalline. In this interval spherical cavities (large olive sized) present, may indicate former oncholithes removed by weathering. Interval 84-96 feet yellow weathering, medium bedded, fresh surfaces light grey and finely crystalline. Remaining intervals covered (argillaceous dolomite?).	96	1811
19	Dolomite, thick bedded, finely crystalline. Interval 0-40 feet medium grey weathering, medium dark grey on fresh surfaces. Interval 40-164 feet light grey with cream hue, light grey on fresh surfaces.	164	1975
20	Dolomite, mainly light brownish grey weathering, some medium to dark brownish grey, thin and medium bedded to approximately 200 foot level, remainder thick bedded. Fresh surfaces mainly medium grey, finely crystalline. Some dark grey dolomite beds present at various levels giving banded appearance to outcrop.	577	2552
<u>unnamed limestone and shale (1531 ft.)</u> (Ordovician)			
1	Shale, weathering to black soil and some limestone in outcrops (46-49 ft., 66-75 ft.) and in float. Limestone light grey weathering, in thin plates, fresh surfaces dark grey and finely crystalline. GSC loc. 88939, float 68 feet above base, <i>Hystricururus?</i> sp., <i>Leiostegium?</i> sp. GSC loc. 88940, float 73 feet above base, asaphacean-type pygidium, <i>Geragnostus?</i> sp.	100+	100+

## SECTION 5

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Map unit 13 (Blusson, 1972)</u>			
1	Siltstone, rust weathering, dark grey on fresh surfaces, micaceous, not limy, some spheroidal weathering. Quartzite (10%) present, rust to dark grey weathering, in medium and thick interbeds, planar laminated, fresh surfaces medium grey, fine grained.	305+	305+
<u>Sekwi Formation (3435 ft.)</u>			
1	Siltstone (50%) as in unit 1 below. Quartzite (50%), light brown weathering, thin and medium bedded, planar laminated, fresh surfaces medium grey and fine grained. Upper 5 feet of unit contain limestone, orange weathering, medium and thick bedded, fresh surfaces medium grey, silty and glauconitic. GSC loc. 89218, top of unit, <i>Fallotaspis</i> sp., <i>Helcionella?</i> sp., ostracode?	35	35
2	Siltstone, rust weathering, dark grey on fresh surfaces. Above 65 foot level siltstone becomes limy and contains limestone nodules, orange weathering, medium to dark grey on fresh surface. Flat, dark grey burrows(?) (0.25 in. wide) are common. Limestone present in uppermost beds of unit, medium blue-grey weathering, thin bedded, platy, parting surfaces orange weathering, fresh surfaces medium grey and finely crystalline. Fault present at top of unit. GSC loc. 89219, 158 feet above base, <i>Holmia?</i> sp. GSC loc. 89220, 182 feet above base, <i>Holmia?</i> sp. Fritz, 1973.	190	225
3	Covered. Siltstone?	110	335
4	Quartzite, light greenish grey to orange weathering, thick bedded, fresh surfaces light greenish grey, fine grained.	40	375
5	Siltstone, dark grey to rust weathering, fresh surfaces dark grey, interval 45-88 feet limy, orange weathering. Lower 45 feet tectonically folded.	88	463
6	Siltstone, dark grey on weathered and fresh surfaces, basal beds black.	55	518
7	Siltstone, orange weathering, thin to thick bedded, fresh surfaces medium dark grey. Limy concretions present. Fresh surfaces in uppermost 10 feet are buff coloured. Burrows present.	107	625
8	Siltstone, light orange weathering, thin bedded and nodular, fresh surfaces medium grey and light brown. At 155 feet, 1 foot of limestone, dark grey on weathered and fresh surfaces, bedding thin and nodular.	220	845

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
9	Limestone, dark grey on weathered and fresh surfaces, thin bedded, platy, some parting surfaces weather orange. At 138 feet, 5 foot limestone bed containing depositional breccia. Interval 189-215 feet contains limestone (algal?) bioherm, weathered and fresh surfaces light grey, very thick bedded, archaeocyathids present but sparse.	255	1100
10	Limestone and siltstone. Interval 0-70 feet 80 per cent siltstone, light grey weathering, medium light brownish grey on fresh surfaces; and 20 per cent limestone, light orange to buff weathering, thin bedded, medium light grey on fresh surfaces. Interval 70-90 feet contains quartzite in lower half, medium brownish orange weathering, light brownish orange on fresh surfaces, fine and medium grained, medium and thick bedded, slump structures present; upper half limestone, buff and light grey weathering, thick bedded, fresh surfaces medium light grey and finely crystalline. Interval 90-159 feet contains limestone (60%) light brownish to light yellowish grey weathering, thin bedded and platy, fresh surfaces medium dark grey and finely crystalline; and siltstone (40%), light brownish grey weathering, medium dark grey on fresh surfaces.	159	1259
11	Limestone, medium and dark blue-grey weathering, in thick mounds (80%) containing archaeocyathids, and in thin platy beds (20%), medium and dark grey on fresh surfaces.	41	1300
12	Covered. Float is siltstone, light yellowish brown on weathered and fresh surfaces, also light grey on some fresh surfaces.	110	1410
13	Carbonate. Interval 0-32 feet contains limestone (50%), rust weathering, thin bedded, fresh surfaces medium dark grey and finely crystalline; and siltstone (50%) as described in unit 12, burrows present. Interval 32-55 feet contains limestone, light and medium grey on weathered and fresh surfaces, medium and thick bedded, some cross beds up to 1 foot high. Interval 55-98 feet contains dolomite, light pink and orange weathering, bedding and cross bedding as in limestone below, fresh surfaces light grey and medium crystalline.	98	1508
14	Siltstone, light brown weathering, burrowed, interval 140-153 feet greenish grey and khaki weathering. Subordinate amount of quartzite, interval 92-113 feet cream to light grey weathering, thick bedded, fresh surfaces light grey, mainly fine grained, sorting poor, up to grit sized; interval 153-193 feet quartzite as described, but 10 per cent purple weathering; interval 201-218 feet as described but purple to light brown on fresh and weathered surfaces.	232	1740

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
15	Limestone, medium to dark grey on weathered and fresh surfaces, bedding irregular, medium and thick. Sparse white calcite spheres present near base. Upper 21 feet of limestone interfingers with dolomite, orange weathering, light grey on fresh surfaces. GSC loc. 89221, 5 feet above base, aff. <i>Laudonia</i> sp. GSC loc. 89222, 8 feet above base, <i>Olenellus truemani</i> Walcott, <i>Wanneria?</i> sp. GSC loc. 89223, 40 feet above base <i>Obolella</i> sp.?, <i>Olenellus</i> sp.	90	1830
16	Shale and siltstone, light brown and khaki weathering, light grey on fresh surfaces. Some limestone in float, light brown weathering, thin bedded, fresh surfaces medium grey and finely crystalline. Interval 54-58 feet contains dolomite, orange weathering, in thin, irregular beds, fresh surfaces medium dark grey and finely crystalline.	80	1910
17	Limestone, medium and medium dark blue-grey weathering, bedding thin, wavy and nodular, parting thin to thick, fresh surfaces medium dark grey, finely crystalline and dense. Interval 80-100 feet contains large limestone "mounds" (fused slump breccia?, algal bioherms?) 8 feet thick, medium light grey on fresh and weathered surfaces. Similar "mounds" 5 feet thick present 148-153 feet above base. Sparse archaeocyathids present near base. Interval 251-265 feet contains oncholiths in thick blocky beds of dark grey weathering and fresh limestone. GSC loc. 89224, float located 105 feet above base may be from uppermost beds in unit, edelsteinaspid. GSC loc. 89225, local float, 266 feet above base, <i>Olenellus laxoculus</i> Fritz. GSC loc. 89226, local float, 286 feet above base <i>Proliostracus contractus?</i> Fritz. GSC loc. 89227, local float, 36 feet above base <i>Olenellus laxoculus?</i> Fritz, <i>Proliostracus</i> sp.	371	2281
18	Siltstone, light orange weathering, fresh surfaces mainly light grey; interval 21-38 feet mainly brick-red on weathered and fresh surfaces; interval 191-210 feet light brown weathering, light greenish brown on fresh surfaces. Some limestone in thin, platy beds; orange weathering with light grey fresh surfaces (119-191 ft.), medium dark grey weathering with dark grey fresh surfaces (210-238 ft.), and light brownish grey weathering with medium to dark grey fresh surfaces (238-255 ft.).	255	2536
19	Limestone, medium dark grey weathering, thin, wavy bedded, mainly thick parting, fresh surfaces dark grey and finely crystalline. Intervals 68-86 feet and 144-160 feet above base contain 50% siltstone. Interval 160-184 feet contains limestone, medium dark grey weathering, very thin bedded, platy, dark grey on fresh surfaces. GSC loc. 89228, 1 foot above base, <i>Olenellus paraoculus</i> Fritz. GSC loc. 89229, 84 feet above base, <i>Olenellus paraoculus?</i> Fritz.	278	2814

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
20	Siltstone (? , covered) and carbonate. Dolomite, bright orange weathering, in 10 inch bed at base of unit. Intervals 14-36 feet and 44-56 feet contain limestone, medium dark grey weathering, bedding thin, wavy and nodular, parting thick, fresh surfaces dark grey and finely crystalline. Interval 56-84 feet contains dolomite, light pinkish orange weathering, thin, wavy bedded, thick parting, fresh surfaces medium dark grey and finely crystalline.	161	2975
21	Carbonate. Interval 0-72 feet contains limestone, medium dark grey weathering, thin bedded, nodular, thick parting, fresh surfaces dark grey and finely crystalline. Interval 72-157 feet dolomite, orange and pinkish orange weathering, thin, wavy bedded, thick partings, fresh surfaces dark grey and finely crystalline. Interval 157-201 feet mainly covered, float over lower half limestone, light and dark grey mottled, thin bedded, fresh surfaces dark grey and finely crystalline; float over upper half limestone, light grey to light brown weathering, thin bedded, platy, fresh surfaces dark grey and finely crystalline. Basal 10 feet of this interval may contain shale or siltstone. Interval 201-245 feet limestone, medium dark, dull grey weathering, bedding surfaces light brown, thin bedded, slightly wavy, thick parting, fresh surfaces dark grey and finely crystalline; <i>Salterella</i> sp. present at base. Interval 245-380 feet dolomite, light greyish pink to orange weathering, thin to thick bedded, thick parting fresh surfaces light to dark grey and finely crystalline; dolomite grades laterally into limestone, dull medium grey and light brown weathering, bedding irregular, thin, parting thick and thin, fresh surfaces dark grey and finely crystalline, trails(?) on bedding surfaces. Interval 380-460 feet, limestone, medium blue-grey weathering, 40 per cent of surfaces mottled light brown, thin bedded, nodular, fresh surfaces dark grey and finely crystalline. GSC loc. 89230, 405-410 feet above base, <i>Olenellus paraoculus?</i> Fritz, <i>Wanneria</i> sp.	460	3435
<u>Post-Sekwi dark shale and platy limestone (1000 ft. ±)</u>			
1	Shale, medium brown weathering, dark grey on fresh surfaces. Some limestone, dull medium grey, brown, and orange weathering, in thin interbeds, dark grey to black on fresh surfaces. GSC loc. 89231, float 30 feet above base, <i>Goldfieldia</i> sp.	1000±	1000±

## SECTION 6

Unit	Lithology	Thickness (feet)	Height Above lowest outcrop of formation (feet)
<u>Sekwi Formation (2779 ft. +)</u> (lowest portion of formation covered)			
1	<p>Siltstone (70%) light to medium brownish orange weathering, medium brown on fresh surfaces; and limestone (30%), light to medium blue-grey weathering, in nodules averaging 1.5 x 3 inches in cross section, fresh surfaces medium dark grey, dense to finely crystalline. Intervals 24-32 feet and 46-87 feet above base of unit contain strata as described, but more limestone (50%) present in nodules and in thin, wavy beds. GSC loc. 89299, 17 feet above lowest outcrop, <i>Holmia?</i> sp. GSC loc. 89300, 78 feet above lowest outcrop, <i>Serrodiscus</i> sp., <i>Yukonides?</i> sp. GSC loc. 89301, 145 feet above lowest outcrop, <i>Serrodiscus</i> sp.</p>	238	238
2	<p>Limestone (50%), medium dark grey weathering, beds thin, platy, laminated, fresh surfaces medium dark grey. Siltstone (50%), medium brown to rust weathering, medium brownish grey on fresh surfaces. Top 3.5 feet consists of limestone, light grey weathering, in thick bed containing penecontemporaneous breccia derived from thin, platy limestone beds, fresh surfaces medium dark grey and finely crystalline. The lower segment of section 6 terminates at top of breccia bed. Same breccia bed immediately underlying the middle segment is 12 feet thick.</p>	54	292
3	<p>Limestone, dull medium dark grey weathering with faint purple cast, very thin bedded, platy, fresh surfaces dark grey and finely crystalline. Intervals 96-126 feet and 275-299 feet above base of unit contain limestone as above but in layered lenses averaging 8 inches high and 24 inches long, largest lenses are 12 inches high and 48 inches long. Interval 340-378 feet contains some limestone as described along with medium dark grey, medium bedded limestone (50%) in lower half and medium light grey limestone in medium beds (70%) in upper half, fresh surfaces of all medium beds are dark grey to medium dark grey and finely crystalline. GSC loc. 89302, 38 feet above base of unit, float from much higher stratigraphic position, <i>Ogygopsis</i> sp. GSC loc. 89303, 299 feet above base of unit, cf. <i>Bonnia</i> sp.</p>	403	695

Unit	Lithology	Thickness (feet)	Height Above lowest outcrop of formation (feet)
4	Limestone, medium light grey weathering, medium and thin bedded, thick parting, fresh surfaces dark grey and finely crystalline. Abundant light grey weathering limestone spheres present, average diameter is 3 inches. Basal 10 feet lack spheres, medium dark grey weathering, medium bedded, fresh surfaces dark grey and finely crystalline. Top of this unit is top of section 6b. GSC loc. 89304, 13 feet above base of unit in section 6b, <i>edelsteinaspid?</i> , <i>Olenellus?</i> sp., <i>Salterella</i> sp., sponge spicules. GSC loc. 89233, 42 feet below top of unit in section 6c, <i>Ekwapagetia</i> sp., <i>Hyolithes</i> sp., <i>Olenellus</i> sp., <i>Pagetides</i> sp.	84	779
5	Siltstone, light brownish grey weathering, fresh surfaces dark grey, limy, weathers in thick (0.25 inch) flakes. Interval 290-316 feet contains argillaceous limestone, orange-grey weathering, bedding mainly thin, platy, some beds up to 3 feet thick, laminated, fresh surfaces brownish medium grey to dark grey. Base of this unit is base of section 6c. GSC loc. 89234, float from interval 40-190 feet above base of unit, <i>Bonnia</i> sp., undescribed trilobite cf. Nelson and Durham, 1966, Pl. 6, figs. 6-9, 12, 13. GSC loc. 89235, float from 308 feet above base of unit, <i>Olenellus</i> sp. 1? Fritz, 1972, undescribed trilobites as in GSC loc. 89234.	484	1263
6	Limestone, basal 18 feet 60 per cent light grey weathering, thick bedded; and 40 per cent medium dark grey weathering, thin bedded, platy; both types dark grey and finely crystalline. Thick beds contain penecontemporaneous breccia derived from limestone of thin bedded type. Top 10 feet contain shale (50%), black on weathered and fresh surfaces, brittle; and limestone (50%), medium dark grey weathering, in thin, wavy beds and in round (2 inch diameter) nodules, fresh surfaces dark grey, finely crystalline to dense.	28	1291
7	Silty shale, medium brownish grey weathering, float in form of small rectangles and pencils, limy, fresh surfaces medium dark brownish grey.	118	1409
8	Shale, silvery light yellow weathering, limy, medium grey in fresh surfaces.	191	1600
9	Argillaceous limestone, orange and medium grey weathering, medium and thin bedded, becoming thinner bedded and more shaly in upper half, fresh surfaces dark grey and finely crystalline. Top of this unit is near top of middle segment in section 6. Lower 145 feet of unit 10 was measured in this segment and compare with lower unit 10 strata in upper segment. GSC loc. 89236, 90 feet above base of unit 9, <i>Olenellus?</i> sp., undetermined trilobite as in GSC loc. 89234.	224	1824

Unit	Lithology	Thickness (feet)	Height Above lowest outcrop of formation (feet)
10	Limestone, lower 145 feet in section 6c medium dark blue-grey weathering, bedding thin and wavy, partings mottled with orange-brown and red weathering siltstone, fresh surface dark grey and finely crystalline. Bed of penecontemporaneous breccia present 45 feet above base, and large penecontemporaneous(?) fold present 145 feet above base. In section 6d, 7 feet of strata penecontemporaneously folded 100 feet above base indicates slump movement in S 60°W(?) direction. In same section penecontemporaneous fold present 480 feet above base, axis of fold is N 05°W, direction of slump uncertain. Approximately 100 feet above base of unit in section 6d limestone becomes thin bedded, platy, laminated, weathered parting surfaces are medium grey and yellow-orange, fresh dark grey and finely crystalline. Base of this unit is base of section 6d. GSC loc. 89237, 20 feet above base of unit, cf. <i>Bonnia laevigata</i> Rasetti, <i>Ogygopsis</i> sp. GSC loc. 89238, float from 35 feet above base of unit, <i>Bonnia</i> sp. GSC loc. 89239, 90.5 feet above base of unit, cf. <i>Bonnia tatondukensis</i> Palmer. GSC loc. 89240, float from 125 feet above base of unit, <i>Ogygopsis?</i> sp. GSC loc. 89241, 345 feet above base of unit, <i>Bonnia</i> sp., aff. undet. trilobite in GSC loc. 89234.	680	2504
11	Limestone, dull medium light grey weathering, bedding thin, wavy, fresh surfaces medium dark grey, finely crystalline, trails(?) abundant. GSC loc. 89242, 140 feet above base of unit, cf. <i>Olenellus puertoblancoensis</i> (Lochman).	275	2779
	<u>Post-Sekwi dark shale and platy limestone (385 ft. +)</u> (basal 385 ft. Cambrian?)		
1	Covered, float mainly siltstone, medium brownish grey weathering, fresh surfaces dark grey to medium brownish grey, some trails(?) near base of unit. Limestone (5%) present in bright orange weathering, medium and thick interbeds, finely laminated, fresh surfaces dark grey and dense. Oölite present in 2 inch limestone bed approximately 40 feet above base.	385	385
	(Ordovician)		
2	Shale, black on weathered and fresh surfaces, hard, brittle. GSC loc. 89242, float 55 feet above base of unit, <i>Didymograptus</i> sp., <i>Phyllograptus</i> sp., <i>Tetragraptus</i> sp. This unit not measured.		

## SECTION 7

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Map unit 10a (Blusson, 1972), (200 ft. +)</u>			
1	Siltstone, rust weathering, fresh surfaces gun-metal grey, hard; and quartzite (5%), rust weathering, bedding medium and thin, platy, very fine grained, burrows present (upper $\pm$ 200 ft. of this unit unmeasured, remainder covered).	200	+200
<u>Sekwi Formation, (3505 ft. <math>\pm</math>)</u>			
1	Siltstone, light brownish orange weathering, fresh surfaces light greyish brown; and sparse limestone nodules (diameters average 1.5 inches), medium grey weathering, fresh surfaces same as fresh siltstone matrix. Interval 270-279 feet contains limestone, light blue-grey weathering, bedding thin, nodular, fresh surfaces dark grey and finely crystalline. Dark grey burrows (0.25 inch wide) present. GSC loc. 86149, 269 feet above base, <i>Serrodiscus mackenziensis</i> Fritz, <i>Yukonides lacrinus?</i> Fritz.	429	429
2	Limestone, light to dark grey weathering, thin to thick bedded, fresh surfaces dark grey and finely crystalline. Penecontemporaneous limestone breccia abundant. Penecontemporaneous folds in interval 45-64 feet above base indicate slump directions of N 65°W, N 50°W, N 63°W, N 40°W. Some exotic blocks of limestone near base of unit, largest is limestone boulder 3 feet high and 5 feet long. Upper 30 feet of unit contains thin bedded limestone as described (50%); and siltstone, light grey to light brownish grey weathering, medium light grey on fresh surfaces, limy. GSC loc. 86150, 80 feet above base, <i>Judomia? absita</i> Fritz, <i>Nevadia? sp.</i> , <i>Pagetides latusulcus</i> Fritz.	94	523
3	Siltstone, light brown weathering, fresh surfaces medium grey, limy, weathers to chips averaging 0.25 x 2 x 1.5 inches. Slump structures present. GSC loc. 86151, float 92 feet above base, <i>Bradyfallotaspis</i> sp. 3 Fritz, 1972, <i>Ekwapagetia plicofimbria</i> Fritz, <i>Judomia? absita</i> Fritz, <i>Labradoria hespera</i> Fritz, <i>Pagetides abyssistriatus</i> Fritz. GSC loc. 86152, float 152 feet above base, aff. <i>Anadoxides</i> sp. 1 Fritz, 1973, <i>Bradyfallotaspis</i> sp. 3 Fritz, 1972, <i>Dinesus</i> sp. 1 Fritz 1973, <i>Edelsteinaspis?</i> sp. 1 Fritz 1973, <i>Ekwapagetia plicofimbria</i> Fritz, <i>Judomia? absita</i> Fritz, <i>Pagetides abyssistriatus</i> Fritz, <i>Sekwiaspis canola</i> Fritz.	162	685
4	Limestone, dark grey to light brownish grey weathering, thin bedded, interval 41-61 feet above base medium bedded, fresh surfaces dark grey and finely crystalline. Interval 10-22 feet above base contains limestone in one thick bed, light orange weathering, medium grey on fresh surface. Penecontemporaneous slump structures present. GSC loc. 86153, 38 feet above base, <i>Ekwapagetia plicofimbria</i> Fritz, <i>Judomia? absita</i> Fritz, <i>Pagetides abyssistriatus</i> Fritz.	97	782

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
5	Quartzite, dull orange weathering, mainly thick and medium bedded, fresh surfaces, light to medium dark grey, fine and very fine grained. Cross beds present, up to 8 inches high.	15	797
6	Siltstone, medium to light brownish grey weathering, fresh surfaces medium dark grey, weathers to chips 0.25 x 0.75 x 0.75 inches, limy, penecontemporaneous folds present.	48	845
7	Limestone, orange weathering, massive, medium dark grey on fresh surfaces, archaeocyathids abundant, unit laterally pinches and swells to form bioherms, greatest local thickness is 33 feet.	33	878
8	Siltstone, as in unit 6.	118	996
9	Limestone in archaeocyathid bioherms as in unit 7. Greatest local thickness is 94 feet. GSC loc. 86154, 92 feet above base, <i>Tabulaconus</i> sp., archaeocyathids.	94	1090
10	Siltstone, light brown weathering, medium dark grey on fresh surfaces, weathers to chips 0.25 x 1 x 1 inches.	403	1493
11	Siltstone, as in unit 10; and quartzite (20%), medium reddish brown on weathered and fresh surfaces, in thin interbeds, very fine grained, limy.	72	1565
12	Limestone, medium dark grey weathering, thin and medium bedded, dark grey on fresh surfaces and finely crystalline. Oolites present throughout unit. Pisolites present in interval 60-145 feet above base. Olenellid fragments present 60 feet above base. <i>Girvanella</i> sp. bed present 80 feet above base. Uppermost 7 feet consist of limestone, bright orange weathering, thick and medium bedded, fresh surfaces medium grey and finely crystalline.	152	1717
13	Siltstone, light brown and light orange weathering, fresh surfaces light grey. Minor quartzite (10%), light orange to light brown weathering, in thin and medium interbeds, fresh surfaces light brown and light grey, very fine grained.	218	1935
14	Dolomite, light grey weathering with some red stain, medium and thick bedded, fresh surfaces medium light to dark grey, finely crystalline. Basal 15 feet limestone, dark grey on weathered and fresh surfaces, bedding thin and wavy. GSC loc. 86155, 7 feet above base, archaeocyathids.	130	2065

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
15	Limestone (60%), medium grey weathering, bedding thin, wavy, fresh surfaces medium dark grey and finely crystalline; and shale (40%) that weathers to light brown dirt. GSC loc. 86156, 32.5 feet above base, <i>edelsteinaspis?</i> , <i>Olenellus laxoculus?</i> Fritz, <i>Wanneria?</i> sp. GSC loc. 86157, 55 feet above base, <i>edelsteinaspis?</i> sp., <i>Olenellus laxoculus?</i> Fritz.	90	2155
16	Dolomite, light grey and dark grey weathering with some red stain, bedding medium and thick, blocky, fresh surfaces light to dark grey and finely crystalline. Dolomite in uppermost 140 feet of unit weathers light and medium brown. Limestone present in lowest 23 feet of unit, medium grey weathering, thin bedded, medium to dark grey on fresh surfaces, finely crystalline, oolites present.	490	2645
17	Dolomite, yellowish orange weathering, thin bedded, platy, fresh surfaces light grey and finely crystalline. Possible fault 290 feet above base.	360	3005
18	Dolomite, lower beds weather dark brown, medium bedded, dark grey on fresh surfaces and finely crystalline. Higher intervals weather light grey and brown, medium bedded. GSC loc. 86158, 17 feet above base, unidentified burrows(?). This unit not measured.	500±	3505±

#### SECTION 8

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Map unit 13 (Blusson, 1972)</u>			
1	Siltstone, black on weathered and fresh surfaces, hard, not measured.	+100	+100
<u>Sekwi Formation, (2322 ft. +)</u>			
1	Siltstone (60%), medium brown to medium orange-brown weathering, medium brownish grey on fresh surfaces, limy, dark grey burrows (0.25 inches wide) present; and limestone (40%) in nodules, medium blue-grey weathering, medium dark grey on fresh surfaces, finely crystalline. Black siltstone similar to that in map unit 13 present in several 1 foot beds, one bed located 52 feet above base of unit. GSC loc. 89340, float at base of present unit, <i>Parafallotaspis?</i> sp. GSC loc. 89339, float, 22 feet above base <i>Holmia?</i> sp. GSC loc. 89338, float, 67 feet above base, cf. <i>Holmia</i> sp. or <i>Holmiella</i> sp.	129	129

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
2	Limestone, light blue-grey weathering, thin bedded, platy to broadly wavy, partings weather light orange, fresh surfaces medium dark grey and finely crystalline. Interval 20-37 feet above base contains limestone (70%) and siltstone (30%) as in unit 1.	78	207
3	Limestone (60%), light blue-grey weathering, in bedded nodules, dark grey on fresh surfaces and finely crystalline; and siltstone (40%), orange-brown to brownish grey weathering, fresh surfaces medium brownish grey, limy.	85	292
4	Siltstone, as in unit 3 and sparse limestone nodules as in unit 3. Dark grey burrows 0.25 inches wide are common. GSC loc. 89337, float, 0-10 feet above base of unit, <i>Holmiella</i> sp., <i>Nedvadella</i> sp., <i>Pagetides spinulus?</i> Fritz. <i>Serrodiscus</i> sp. GSC loc. 89336, 27 feet above base, <i>Bradyfallotaspis</i> sp., <i>Keeleaspis?</i> sp., <i>Kootenia</i> sp., <i>Serrodiscus</i> sp. GSC loc. 89335, 45 feet above base, <i>Keeleaspis</i> sp., <i>Kootenia?</i> sp., <i>Nevadella faceta?</i> Fritz.	88	380
5	Limestone, medium grey weathering, thin bedded, platy, fresh surfaces dark grey and finely crystalline. One thick bed contains penecontemporaneous limestone breccia.	62	442
6	Dolomite, medium light grey weathering, thin bedded, medium light grey on fresh surfaces and finely crystalline. Lower 38 feet contains dolomite, orange-cream weathering, thick bedded, light grey on fresh surfaces, contains abundant penecontemporaneous dolomite breccia.	150	592
7	Dolomite, cream to pinkish cream weathering, thick bedded, fresh surfaces light grey (some mottled light and medium grey), finely to coarsely crystalline. Uppermost beds weather bright orange.	353	945
8	Shale, olive grey on weathered and fresh surfaces (0-63 ft.); and medium brown on weathered surfaces, medium grey on fresh surfaces (155-175 ft.). Interval 63-155 feet above base contains 70 per cent quartzite, medium brown to medium orange-brown weathering, thick bedded, fresh surfaces medium light brown to medium grey, fine to coarse grained, <i>Scolithos</i> abundant; and shale (30%), medium grey to rust weathering, medium grey on fresh surfaces. GSC loc. 89334, float 107 feet above base of unit, <i>Judomia?</i> sp., <i>Mickwitzia?</i> sp., <i>Salterella</i> sp.	175	1120

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
9	Limestone and dolomite, weathering surface mottled medium blue-grey (limestone, 60%) and orange (dolomite, 40%), thick bedded, fresh surfaces of both limestone and dolomite are dark grey. Basal 12 feet weathers bright orange. Uppermost beds marked by orange weathering, raised, oölite sized structures. GSC loc. 89333, 12 feet above base, <i>Fremontella?</i> sp., <i>Olenellus truemani</i> Walcott, <i>Poulsenia</i> sp.	52	1172
10	Shale, weathers to small, olive-brown flakes. Interval 20-25 feet above base contains siltstone, khaki to reddish brown weathering, burrowed.	82	1254
11	Carbonate, basal 54 feet limestone, medium dark grey weathering with yellowish orange to brownish orange mottling on parting surface, very thin bedded, parting thin to thick, fresh surfaces dark grey and finely crystalline. Interval 54-86 ft. and 94-98 ft. contains dolomite, bright orange weathering, bedding thick, blocky, laminated, fresh surfaces light grey to light brown, finely crystalline, "floating" quartz sand at top of 54-86 foot interval. Interval 86-94 feet contains limestone, light blue-grey weathering, thin wavy bedded, medium grey on fresh surfaces and dense, "floating" quartz sand at base of interval. Interval 94-118 feet contains limestone (80%), medium grey weathering, thin bedded, wavy, medium and dark grey in fresh surfaces; and dolomite (20%), locally replacing limestone, orange weathering, medium grey in fresh surfaces, finely crystalline. GSC loc. 89332, 33 feet above base, <i>Olenellus</i> sp. GSC loc. 89331, 99 feet above base, <i>Poulsenia</i> sp.	118	1372
12	Shale, bright orange weathering, light brown to greenish grey on fresh surfaces. Intervals 53-54 feet and 99-100 feet contain purple weathering and fresh shale. Interval 0-49 feet contains dolomitic shale, orange weathering, in medium and thin plates, fresh surfaces are light brown.	160	1532
13	Mainly dolomite, interval 15-59 feet orange weathering, thin bedded, light grey on fresh surfaces; interval 71-130 feet cream weathering and fresh, thick (71-81 ft., 124-130 ft.) and thin (81-124 ft.) bedded; interval 160-164 feet light grey weathering, thick bedded, laminated, medium grey on fresh surfaces. Limestone present in 0-15 feet and 65-71 feet interval, medium dark grey on weathered and fresh surfaces, thin bedded; and in 130-160 foot interval, light grey weathering, thick bedded. Interval 59-65 feet contains shale, light brown weathering and fresh. GSC loc. 89330, 10 feet above base, <i>Proliostracus</i> sp. GSC loc. 89329, float, 51 feet above base, <i>Olenellus</i> sp.	164	1696

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
14	Shale, light orange-yellow weathering and fresh, and light grey fresh, slightly limy. Interval 96-117 feet contains limestone, light grey weathering, thin bedded, wavy, fresh surfaces dark grey, lowermost 3 feet have purple weathering parting surfaces. Interval 117-135 feet contains dolomite, medium grey on weathered and fresh surfaces, thick bedded, medium crystalline. Interval 135-144 feet contains limestone, medium dark grey weathering and fresh, thin bedded, wavy and nodular, medium and thick parting, finely crystalline.	144	1840
15	Shale (80%), light grey to light yellowish grey weathering; and dolomite (20%), bright orange weathering; in thin and medium interbeds, fresh surfaces light grey and finely crystalline.	52	1892
16	Mainly dolomite, interval 0-23 feet 20 per cent dolomite, interval 35-113 feet 80 per cent dolomite, cream weathering, bedding mainly medium, wavy to planar laminated, fresh surfaces finely crystalline and medium grey. Interval 23-35 feet covered, probably contains shale. Interval 113-148 feet contains dolomite, medium dark grey weathering with some pink areas, mottled, bedding thin, wavy, parting thick, fresh surfaces medium grey and finely crystalline; uppermost 3 feet orange weathering. Interval 148-156 feet contains greenish-grey weathering and fresh shale. Interval 156-181 feet contains dolomite, bright orange weathering, bedding very thin to thick, platy, laminated, fresh surfaces medium grey.	181	2073
17	Limestone, dull medium grey weathering with 50 per cent orange and red mottling, bedding thin and wavy, parting thick to thin, fresh surfaces medium dark grey and fine grained. Intervals 5-18 feet and 39-51 feet contain nodular beds. GSC loc. 89328, 2 feet above base, cf. <i>Olenellus laxoculus</i> Fritz. GSC loc. 89327, 29 feet above base, <i>Poulsenia</i> sp., <i>Wanneria logani</i> (Walcott). GSC loc. 89326, 77 feet above base <i>Proliostracus</i> sp. GSC loc. 89325, 108 feet above base <i>Proliostracus annosus</i> Fritz.	147	2220
18	Limestone, medium dark blue-grey weathering with orange and red mottling, thin bedded, wavy, fresh surfaces dark grey and finely crystalline. Parting thin to thick in basal 46 feet where bedding surfaces are broadly wavy to planar. Section covered above 102 feet level of this unit. GSC loc 89324, 21 feet above base, <i>Olenellus</i> sp. 2 Fritz 1972, <i>Wanneria parvifrons?</i> Fritz. GSC loc. 89323, 36 feet above base, <i>Bonnia</i> sp., <i>Olenellus</i> sp. 2 Fritz, 1972, <i>Olenellus</i> sp. 3? Fritz, 1972, <i>Wanneria logani?</i> (Walcott). GSC loc. 89322, 62 feet above base, <i>Bonnia laterispina</i> Fritz, <i>Olenellus</i> sp. GSC loc. 89321, 82 feet above base, <i>Bonnia laterispina?</i> Fritz, <i>Olenellus</i> sp., <i>Wanneria parvifrons?</i> Fritz.	102+	2322

## SECTION 9

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Map unit 13 (Blusson, 1972), not measured</u>			
1	Siltstone, medium brownish grey to rust weathering, medium brown to medium grey on fresh surfaces, burrowed.		
<u>Sekwi Formation, (2202 ft.)</u>			
1	Limestone, medium grey weathering, partings weather medium orange-brown, bedding thin, wavy, parting thick, fresh surfaces dark grey and finely crystalline. GSC loc. 89316, 15 feet above base, <i>Parafallotaspis grata</i> Fritz.	119	119
2	Limestone, interval 0-58 feet medium dark grey weathering, bedding thin, wavy, fresh surfaces dark grey, finely crystalline; interval 58-100 feet, half medium dark grey weathering and half light brown weathering, thin bedded, nodular near base, fresh surfaces dark grey and finely crystalline; interval 100-165 feet medium dark grey weathering, parting surfaces weather buff, bedding thin, platy, fresh surfaces dark grey and finely crystalline. At 149 feet, 2 foot bed of dolomite, orange weathering, fresh surface light grey and finely crystalline.	165	284
3	Mainly dolomite. Interval 0-30 feet dolomite, half medium orange-brown weathering, thin bedded, platy, greenish grey fresh, silty; and half orange weathering, medium and thick bedded, fresh surfaces cream coloured, contains quartz sand "floating" and in layers 0.5 inches thick. Interval 30-46 ft. dolomite, medium orange-brown weathering, thin bedded, platy, fresh surfaces light greenish grey, silty. Interval 46-73 feet quartz sandstone (50%), orange weathering, medium and thick bedded, fresh surfaces light brown, fine to coarse grained; and siltstone (50%), khaki weathering, light greenish grey on fresh surfaces.	73	357
4	Dolomite, bright orange weathering, thick bedded, fresh surfaces cream weathering, finely crystalline.	76	433
5	Limy siltstone, medium brown to medium orange-brown weathering, bedding thin, parting medium and thick, fresh surfaces medium grey to medium dark grey. Limestone in intervals 98-107 feet and 150-164 feet medium blue-grey weathering, bedding thin, wavy, fresh surfaces dark grey and finely crystalline. GSC loc. 89315, 150 feet above base, <i>Nevadella</i> sp.	164	597

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
6	Quartzite and sandy dolomite. Interval 0-65 feet dolomite with abundant quartz sand, orange-grey weathering, thin bedded, very thick parting, fresh surfaces light greenish grey. Interval 65-80 feet dolomite, bright orange weathering, thin and medium bedded, fresh surfaces cream coloured, weathered rock has many holes 0.5 inch in diameter. Interval 80-136 feet dolomitic sandstone, orange-cream weathering, medium bedded, fresh surfaces cream coloured, fine grained; raised layers of white quartz sand 0.4 inches thick on weathered surfaces. Interval 136-200 feet, quartzite and dolomitic quartzite, light orange-cream weathering, thick bedded, fresh surfaces cream and light brown, mainly fine and medium grained, sorting poor, some grit sized clasts.	200	797
7	Dolomite, intervals 0-69 feet, 120-164 feet and half of 69-88 feet bright orange weathering, thin and medium bedded, fresh surfaces light grey and finely crystalline. Interval 88-113 feet and half of 69-88 feet dolomitic sandstone and quartzite, light pinkish grey on weathered and fresh surfaces, thick bedded, sorting very poor, very fine grained to grit sized, <i>Scolithos</i> at top of 88-113 foot interval. Intervals 113-120 feet and 164-181 feet contain siltstone, khaki weathering, fresh surfaces brown and medium grey.	181	978
8	Dolomite and sandstone. Interval 0-39 feet sandstone, light purple weathering and fresh, thick bedded, coarse grained, weathers to grus-like sand. Interval 39-61 feet dolomitic sandstone, cream to orange-cream weathering, thin and medium bedded, fresh surfaces cream to light brown, at base cross-beds 1 foot high indicate current directions of N 40°W and 0°W. Interval 61-110 feet dolomite, cream and orange-cream weathering, medium and thin bedded.	110	1088
9	Dolomitic siltstone, light yellow, orange-yellow and light greenish brown weathering, some mudcracks. Interval 0-33 feet 50% siltstone as above and 50% dolomite, cream and pink weathering, thin bedded, fresh surfaces cream coloured. Interval 33-38 feet contains siltstone, dark purple weathered and fresh surfaces, mudcracks present.	95	1183
10	Limestone, interval 0-28 feet medium grey weathering, mainly thin, wavy bedded, fresh surfaces medium and dark grey, finely crystalline, abundant sand and grit sized limestone fragments; interval 28-210 feet in part dolomite, bright orange and light pinkish cream weathering, thin and medium bedded, fresh surfaces light to dark grey and finely crystalline, laterally changing to limestone, medium light grey weathering, thin bedded, thin to thick parting, fresh surfaces medium grey and finely crystalline, "floating" coarse		

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
	quartz sand 5 to 10 feet above base of this interval; interval 210-254 feet limestone medium blue-grey weathering, bedding thin, wavy, fresh surfaces dark grey and finely crystalline. GSC loc. 89314, 9 feet above base of unit, <i>Olenellus</i> sp. 1 Fritz 1972. GSC loc. 89313, 20 feet above base, <i>Olenellus</i> sp. GSC loc. 89312, 177 feet above base, <i>Olenellus</i> sp., <i>Proliostracus annosus</i> Fritz, <i>Salterella</i> sp., <i>Wanneria?</i> sp. GSC loc. 89311, 242 feet above base, <i>Bonnia</i> sp., <i>Wanneria</i> sp.	254	1437
11	Mainly dolomite. Interval 0-135 feet bright orange and orange-cream weathering dolomite, thin and medium bedded, platy, planar laminated; interval 135-160 feet limestone, medium grey weathering, thick to thin bedded, planar laminated, fresh surfaces medium dark grey and finely crystalline; interval 160-187 feet dolomite (60%), bright orange weathering, thick and medium bedded, planar laminated, fine surfaces medium to dark grey and finely crystalline, and silty dolomite (40%), light brown weathering, thin bedded, fresh surfaces dark grey, mudcracks near top of interval.	187	1624
12	Dolomite, light grey and cream weathering, thick bedded, fresh surfaces light grey and finely crystalline.	55	1679
13	Carbonate. Interval 0-21 feet contains dolomite, pinkish cream weathering, medium bedded, planar laminated, fresh surfaces light grey and finely crystalline; sub-interval 8-16 feet in part limestone that grades laterally into dolomite, limestone medium grey weathering, dark grey on fresh surfaces. Interval 21-37.5 feet dolomite, bright orange weathering, thin and medium bedded, fresh surfaces medium grey and finely crystalline. Interval 37.5-56 feet limestone, medium blue-grey weathering, medium and thin bedded, fresh surfaces dark grey and finely crystalline. Interval 56-87 feet 40 per cent dolomite as in 37.5-56 foot interval below, 30 per cent limestone as in 87-122 foot interval above, and 30 per cent shale(?), (covered). Interval 87-122 feet contains limestone, light blue-grey weathering, bedding thin, wavy, mottled light brown and orange-brown, fresh surfaces dark grey and finely crystalline. GSC loc. 89310, 108 feet above base, <i>Bonnia</i> sp., <i>Olenellus turmalis?</i> Cowie, <i>Wanneria logani?</i> (Walcott).	122	1801
14	Dolomite, light pinkish grey and light orange-grey weathering, bedding medium, wavy, fresh surfaces light grey and medium crystalline.	103	1904

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
15	Dolomite, mainly medium brownish grey weathering, bedding thin, wavy, parting thick, fresh surfaces dark grey, finely crystalline, sparse white quartz bodies 0.25 x 0.5 inches present, <i>Salterella</i> sp. present 30 feet above base of unit. Basal 21.5 feet mainly limestone, blue-grey weathering, bedding thin, wavy, partings light brown, fresh surfaces dark grey, finely crystalline. Bright orange dolomite present in thick beds 21.5-23 feet above base. Intervals 0-4 feet and 104-118 feet contain shale(?), covered. Interval 118-149 feet dolomite as described, but medium dark grey weathering. GSC loc. 89309, 17 feet above base of unit, <i>Bonnia fieldensis?</i> (Walcott), <i>Nisusia</i> sp., <i>Paterina</i> sp.	149	2053
16	Limestone, light grey-brown to light orange-brown weathering, thin (80%) and medium (20%) bedded, fresh surfaces dark grey and finely crystalline, argillaceous. Basal 10 feet covered, probably shale. Interval 14-19 feet contains limestone as described, but weathering bright orange. GSC loc. 89308, 10-15 feet above base, <i>Olenellus gilberti?</i> Meek. GSC loc. 89307, 59 feet above base, <i>Olenellus puertoblancoensis</i> (Walcott).	85	2138
17	Mainly limestone, medium grey weathering, thin and some medium bedded, fresh surfaces medium dark grey and finely crystalline. Interval 0-8 feet shale(?), (covered). Interval 10-14 feet contains dolomite, light orange-brown weathering, medium bedded, fresh surfaces medium grey and finely crystalline. GSC loc. 89306, 9 feet above base, <i>Bonnia?</i> sp., <i>Lingulella</i> sp., <i>Paterina</i> sp., <i>Piaziella</i> sp., <i>Syspacephalus rapidus</i> Fritz. GSC loc. 89305, 63.5 feet above base, <i>Antagmus</i> sp., <i>Bonnia columbensis?</i> Resser, <i>Helcionella</i> sp., <i>Hyalithes</i> sp., <i>Kutorgina</i> sp., <i>Ogygopsis</i> sp., <i>Paterina</i> sp., <i>Syspacephalus laevigatus?</i> Rasetti.	64	2202
<u>Post-Sekwi dark shale and platy limestone, (840 ft. +)</u>			
1	Siltstone and shale; lower portion covered by dark grey siltstone fragments and soil, fresh siltstone surfaces black; upper portion covered by limestone float, medium brown and medium to dark grey weathering, thin to very thin bedded, platy, fresh surfaces dark grey. Sponge spicules common from base of unit to at least 600 foot level. GSC loc. 89320, 13 feet above base, <i>Bonnia</i> sp., cf. <i>Chancia</i> sp., <i>Ogygopsis?</i> sp., <i>Syspacephalus</i> sp. <i>Zacanthopsis</i> sp.	840	840
2	Limestone, medium grey weathering, thin bedded, platy, dark grey on fresh surfaces and finely crystalline. GSC loc. 89319, float 650 feet above base, <i>Bellefontia?</i> sp., <i>Hystricurus?</i> sp. GSC loc. 89318, float estimated to be 1100 feet above base, <i>Apatokephalus?</i> sp., olenid. GSC loc. 89317, estimated to be 1600 feet above base, <i>Didymograptus?</i> sp., <i>Phyllograptus</i> sp.		

## SECTION 10

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Map unit 13 (Blusson, 1972), not measured</u>			
1	Siltstone, brown weathering, brownish grey on fresh surfaces; and some interbedded quartzite, light brown weathering, thin and medium bedded, fresh surfaces light brownish grey, fine grained.		
<u>Sekwi Formation, (2309 ft.)</u>			
1	Limestone, light grey weathering and fresh, thin and medium bedded, finely crystalline, sparse grains of glauconite present. GSC loc. 73025, 6 feet above base <i>Parafallotaspis grata</i> Fritz.	14	14
2	Siltstone(?) or shale(?), covered.	35	49
3	Limestone, light blue-grey weathering, bedding thin, wavy, fresh surfaces medium to medium dark grey, finely crystalline. Weathered parting surfaces mottled orange-yellow (0-95 ft.) and orange-brown (95-340 ft.). GSC loc. 73026, 141 feet above base, <i>Kootenia diutina</i> Fritz, <i>Pagetides spinulus</i> Fritz. GSC loc. 73027, 210 feet above base, <i>Bradyfallotaspis fusa</i> Fritz, <i>Bradyfallotaspis</i> sp. 1 Fritz 1972, <i>Holmiella preancora</i> Fritz, <i>Keeleaspis stupenda</i> Fritz, <i>K. diutina</i> Fritz, <i>Nevadella faceta</i> Fritz, <i>P. spinulus</i> Fritz, undet. olenellid.	340	389
4	Siltstone(?) weathering to brown dirt; some limestone, light brown weathering, bedding thin (0.25 inch), platy. GSC loc. 73030, 41 feet above base, <i>Bradyfallotaspis fusa</i> Fritz, <i>Holmiella preancora</i> Fritz, <i>Kootenia diutina</i> Fritz, undet. olenellid, <i>Pagetides spinulus</i> Fritz.	75	464
5	Limestone, light blue-grey weathering, partings partially light brown (0-80 ft.) and orange-brown (80-241 ft.), bedding thin, broadly wavy to platy, fresh surfaces medium dark grey and finely crystalline. Archaeocyathid-bearing limestone mounds 3 feet thick 51 feet above base and 6 feet thick 189 feet above base. Interval 241-246 feet contains dolomitic limestone, bright orange weathering, fresh surfaces light brown and finely crystalline. Top 24 feet covered, may contain thin bedded limestone. GSC loc. 73032, 29 feet above base, <i>Bradyfallotaspis patula</i> Fritz, <i>Holmiella preancora</i> Fritz, <i>Kootenia diutina</i> Fritz, <i>Keeleaspis stupenda</i> Fritz, <i>Nevadella faceta</i> Fritz, <i>Nevadella</i> sp. 2 Fritz 1972, <i>Pagetides spinulus</i> Fritz, <i>Sekwiaspis artifrons</i> Fritz. GSC loc. 73033, 51 feet above base, <i>H. preancora</i> Fritz, <i>Keeleaspis pustula</i> Fritz, <i>K. stupenda</i> Fritz, <i>K. diutina</i> Fritz, <i>Nevadella</i> sp. 2 Fritz 1972, <i>P. spinulus</i> Fritz, <i>Sekwiaspis artifrons</i> Fritz. GSC loc. 73034, 115 feet above base, <i>K. pustula</i> Fritz, <i>K. stupenda</i> Fritz, <i>Holmiella falcata</i> Fritz, <i>H. preancora</i> Fritz, <i>K. diutina</i> Fritz, <i>N. faceta</i> Fritz, <i>P. spinulus</i> Fritz, <i>Yukonides lacrinus</i> Fritz. GSC loc. 73035, float 148 feet above base, <i>K. diutina</i> Fritz, <i>N. faceta</i> Fritz,		

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
	<i>S. artifrons</i> Fritz, <i>Y. lacrinus</i> Fritz. GSC loc. 73036, float 179 feet above base, <i>K. pustula</i> Fritz, <i>K. stupenda</i> Fritz, <i>K. diutina</i> Fritz, <i>N. faceta</i> Fritz, <i>P. spinulus</i> Fritz, <i>Pagetides?</i> sp. 1 Fritz 1972, <i>S. artifrons</i> Fritz, undet pygidium 1 Fritz 1972. GSC loc. 73037, float 189 feet above base, <i>H. falcata</i> Fritz, <i>K. pustula</i> Fritz, <i>K. stupenda</i> Fritz, <i>K. diutina</i> Fritz, <i>Nahanniaspis prima</i> Fritz, <i>N. faceta</i> Fritz, <i>P. spinulus</i> Fritz, <i>Y. lacrinus</i> Fritz. GSC loc. 73038, float 203 feet above base, <i>B. patula</i> Fritz, <i>H. falcata</i> Fritz, <i>K. pustula</i> Fritz, <i>K. stupenda</i> Fritz, <i>K. diutina</i> Fritz, <i>Nevadella</i> sp. 1 Fritz 1972, <i>P. spinulus</i> Fritz, <i>Y. lacrinus</i> Fritz. GSC loc. 73039, float 230 feet above base, <i>Gelasene?</i> sp. Fritz 1972, <i>H. falcata</i> Fritz, <i>K. pustula</i> Fritz, <i>K. diutina</i> Fritz, <i>P. spinulus</i> Fritz.	270	734
6	Dolomite, orange weathering, thin and medium bedded, fresh surfaces medium grey to buff and finely crystalline.	32	766
7	Dolomite, light orange (0-73 ft., 229-291 ft.), light pinkish cream (73-168 ft.), and light brown (168-229 ft.) weathering, thick bedded, fresh surfaces light buff, pinkish buff (0-229 ft.) and light grey (229-291 ft.), finely crystalline. Intervals 0-73 feet and 163-229 feet contain considerable interbedded medium and coarse quartz grains that weather in raised laminations 0.25 inches thick; quartz grains present but sparse in interval 229-291 feet.	291	1057
8	Quartzite (0-14 ft.), light and medium brown weathering, thick bedded, fresh surfaces light brown, medium to grit sized (0-8 ft.) and fine grained (8-14 ft.); and dolomite (14-23 ft.) orange to light brown weathering, beds thin to thick, average 10 inches, fresh surfaces orange to dark grey.	23	1080
9	Covered, probably thin bedded limestone and siltstone. Change in dip on either side of this unit suggest presence of fault.	33	1113
10	Quartzite, light brown weathering and fresh, thin bedded, medium and coarse grained, poorly sorted; interbedded with dolomite, orange weathering, thin bedded, fresh surfaces light brown and finely crystalline. At top of unit there is 1 foot of light blue-grey weathering limestone.	57	1170
11	Dolomite, orange weathering, thin bedded, fresh surfaces light grey and finely crystalline. Interval 50-66 feet above base siltstone(?), covered by brown dirt. Top 5 feet consists of limestone, basal 4 feet light blue-grey weathering, thin bedded, fresh surfaces medium dark grey, finely crystalline; upper 1 foot contains coarse quartz grains, dark brown weathering, fresh surfaces light brown. GSC loc. 73040, float 12 feet above base, <i>Olenellus truemani</i> Walcott, <i>Proliostracus depressus</i> Fritz. GSC loc 73041, 14 feet above base, <i>Fremontella?</i> sp. GSC loc. 73042, 52 feet above base, <i>Proliostracus contractus</i> Fritz. GSC loc. 73043, 96 feet above base, <i>Olenellus</i> sp. 1 Fritz 1972.	104	1274

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
12	Siltstone(?) in 0-10 foot interval covered by brown soil; and limestone, interval 10-24 feet, light blue-grey weathering, bedding thin, wavy, orange mottled, fresh surfaces medium dark grey and finely crystalline. GSC loc. 73044, 15 feet above base, <i>Proliostracus latus</i> Fritz, <i>Proliostracus annosus</i> Fritz, aff. <i>P. annosus</i> Fritz.	24	1298
13	Dolomite, thick bedded, finely crystalline, in part (0-38 ft.) orange weathering and medium dark grey fresh, and in part (82-109 ft.) bright orange to brick red weathering, medium grey fresh; and limestone (38-51 ft., 60-82 ft., 109-114 ft.) light to medium grey weathering, thin to thick bedded, fresh surfaces medium dark grey and dark grey, finely crystalline. Interval 51-60 feet contains 4 feet of orange weathering, thin bedded dolomite at base and 5 feet of siltstone(?) weathering to brown soil. GSC loc. 73045, 72 feet above base, <i>Variopelta laevis</i> Fritz.	114	1412
14	Limestone, interval 0-49 feet 50% light blue-grey weathering, thin bedded, fresh surfaces medium dark grey and finely crystalline; interval 49-83 feet light to medium grey weathering, thin bedded, wavy and platy, fresh surfaces medium dark grey and finely crystalline. Siltstone(?) weathering to brown soil occupies 50 per cent of interval 0-49 feet. Bright orange weathering dolomite in 3 foot bed present 6 feet below top of unit. GSC loc. 73047, at top of unit, <i>Poulsenia</i> sp. 1 Fritz 1972.	83	1495
15	Limestone, light to medium grey weathering, thin to thick bedded, fresh surfaces medium grey and finely crystalline. GSC loc. 73048, 18 feet above base of unit, <i>Poulsenia</i> sp. 1 Fritz 1972.	74	1569
16	Limestone, light grey weathering, partings half covered with buff siltstone, bedding thin, wavy, fresh surfaces medium dark grey and finely crystalline. GSC loc. 73049, 10 feet above base of unit, <i>Olenellus laxoculus</i> Fritz, <i>Olenellus sequomalus</i> Fritz, <i>Wanneria parvifrons</i> Fritz, <i>Wanneria logani</i> (Walcott). GSC loc. 73050, 17 feet above base, <i>W. logani</i> (Walcott). GSC loc. 73051, 19 feet above base, <i>Olenellus</i> sp. 2 Fritz 1972, <i>W. logani</i> (Walcott), GSC loc. 73052, 38 feet above base, <i>O. sp. 2</i> Fritz 1972, <i>Olenellus</i> sp. 3 Fritz 1972. GSC loc. 73053, 52 feet above base, <i>O. sp. 2</i> Fritz 1972, <i>W. logani</i> (Walcott). GSC loc. 73054, 55 feet above base, <i>Bonnia</i> sp. 1 Fritz 1972, <i>O. sp. 2</i> Fritz 1972, <i>W. logani</i> (Walcott). GSC loc. 73055, 59 feet above base, <i>W. logani</i> (Walcott). GSC loc. 73056, 61 feet above base, <i>O. sp. 2</i> Fritz 1972, <i>W. logani</i> (Walcott). GSC loc. 73057, 64 feet above base, <i>O. sp. 2</i> Fritz 1972, <i>W. logani</i> (Walcott). GSC loc. 73058, float 88 feet above base, <i>Olenellus paraoculus</i> Fritz. GSC loc. 73059, float 164 feet above base, <i>O. paraoculus</i> Fritz, <i>Wanneria</i> sp. 1 Fritz 1972. GSC loc. 73060, float 164 feet above base, <i>O. paraoculus</i> Fritz. GSC loc. 73061, 166 feet above base, <i>O. paraoculus</i> Fritz.	171	1740

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
17	Limestone, light orange-yellow (0-15 ft. , 37-49 ft. ) and light grey (15-37 ft. , 49-95 ft. ) weathering, thick bedded, fresh surfaces medium grey (0-49 ft. ) and medium dark grey (49-95 ft. ), finely crystalline. GSC loc. 73062, 75 ft. above base, <i>Olenellus</i> sp. 2 Fritz 1972. GSC loc. 73063, 90 ft. above base, <i>Bonnia laterispina</i> Fritz.	95	1835
18	Mainly limestone, interval 0-22 feet limestone, light blue-grey weathering, orange mottled, thin, wavy bedded, fresh surfaces medium dark grey and finely crystalline; interval 22-44 ft. dolomite, orange weathering, mainly thin bedded, fresh surfaces medium dark grey to brownish grey, finely crystalline; interval 44-59 ft. dolomitic limestone, medium grey weathering, thick bedded, blocky, orange mottled; interval 59-72 feet, 50% shale and 50% dolomite, orange weathering, medium bedded; interval 72-82 feet dolomitic limestone, orange weathering, thick bedded. GSC loc. 73064, 13 feet above base, <i>Olenellus paraoculus</i> Fritz, <i>Wanneria logani</i> (Walcott). GSC loc. 73065, 21 feet above base, <i>O. paraoculus</i> Fritz. GSC loc. 73066, 44 feet above base, <i>Olenellus</i> sp. 4 Fritz 1972.	82	1917
19	Limestone, medium light grey weathering, bedding thin in lower part (0-60 ft. ), thickness increasing above (60-125 ft. ) until thick at top, fresh surfaces medium to dark grey and finely crystalline. GSC loc. 73067, 49 feet above base, <i>Bonnia</i> sp. 2 Fritz, <i>Zacanthopsis stribuccus</i> Fritz.	125	2042
20	Limestone, interval 10-55 feet medium grey weathering, thin bedded, fresh surfaces dark grey and finely crystalline; interval 55-167 feet medium dark grey weathering, thin bedded, dark grey to black on fresh surfaces, interbedded with some dark shale(?) that weathers to black soil. Basal 10 feet of interval dolomite, orange weathering, thin bedded, light grey on fresh surfaces.	167	2209
21	Dolomite and limestone. Interval 0-28 feet contains dolomite, orange weathering, thin bedded, platy. Interval 28-78 feet 50% dolomite as in 0-28 foot interval and 50% limestone, medium grey weathering, thin bedded, platy, fresh surfaces very dark grey and finely crystalline. Interval 78-98 feet covered, siltstone(?). Top 2 feet consists of limestone, light grey weathering, thick bedded, fresh surfaces medium dark grey, finely to coarsely crystalline. GSC loc. 73068, 30 feet above base, <i>Olenellus puertoblancoensis</i> (Lochman). GSC loc. 73069, 32 feet above base, <i>O. puertoblancoensis</i> (Lochman). GSC loc. 73070, 53 feet above base, <i>Bonnia</i> sp. 3 Fritz 1972, <i>O. puertoblancoensis</i> (Lochman). GSC loc. 73071, 68 feet above base, <i>Bonnia</i> sp. 3 Fritz 1972, <i>Olenellus altifrontatus</i> Fritz. <i>O. puertoblancoensis</i> (Lochman). GSC loc. 73072, 78 feet above base, <i>O. puertoblancoensis</i> (Lochman). GSC loc 73073, top of unit, <i>Antagmus truncatus</i> Fritz, <i>Bonnia columbensis</i> Resser, <i>Olenellus</i> sp. 5 Fritz, <i>Piaziella pia</i> (Walcott), ptychoparioid sp. undet. Fritz 1972.	100	2309

Unit	Lithology	Thickness (feet)	Height Above base of formation (feet)
<u>Post-Sekwi dark shale and platy limestone (67 ft. +)</u>			
1	Covered, probably limestone and shale. Float is limestone, medium dark grey weathering, thin bedded (average 0.4 inches), fresh surfaces dark grey and finely crystalline; and brown to black weathering soil. GSC loc. 73074, float 9 feet above base, <i>Zacanthopsis stribuccus?</i> Fritz. GSC loc. 73075, float 10 feet above base of unit, <i>Syspacephalus vapidus</i> Fritz, <i>Olenellus?</i> sp., <i>Oryctocephalus?</i> sp., <i>Piaziella?</i> <i>rara</i> Fritz.	67	67
2	Limestone, medium dark grey and medium brown weathering, thin bedded, platy, fresh surfaces dark grey and finely crystalline. GSC loc. 73076, 3 feet above base, <i>Baltagnostus</i> sp., <i>Elrathia</i> sp., <i>Elrathina?</i> sp., <i>Helcionella</i> sp., <i>Hypagnostus</i> sp., <i>Nisusia</i> sp., <i>Olenoides</i> sp., <i>Ptychagnostus richmondensis</i> (Walcott). This unit not measured.		