



British Columbia Geological Survey Geological Fieldwork 1979

WOLVERINE--HASLER MAP--AREA

(93I/14; 93O/8; 93P/3, 4, 5)

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1979 was the final year of a three-year mapping project to define the coal measures of the central portion of the Peace River Coalfield. Originally only the Bullhead and Fort St. John Groups were intended to be mapped, but discovery of the development of clean, thick coal seams below the Bullhead encouraged the author to include beds of the Upper Minnes Group in this study.

The total map-area is rectangular, 26 by 70 kilometres oriented northwest-southeast, approximating the regional strike. A major thrust bringing up older rocks over the Minnes Group forms the southwest boundary; the Fort St. John/Smoky Group contact is the northeast boundary. Geographically the southeast boundary is the Wolverine River while a line bearing northeast-southwest and lying 5 kilometres south-east of Mount Le Hudette forms the northwest boundary. Areas and the year they were mapped are shown on the accompanying map (Fig. 31).

A preliminary map at a scale of 1:50 000 is in preparation and will be available in early 1980.

MINNES GROUP

The very thick resistant sandstone unit outcropping on the Sukunka road just west of Windfall Creek and extending approximately 10 kilometres south is believed to belong to the Lower Minnes Group (perhaps equivalent to the Monteith Formation), not the Cadomin as some workers had previously concluded.

The thick coals found on the north salient of Mount Merrick are in strata believed to be equivalent to Hughes' Dresser Formation, not his Brenot Formation as previously stated (*Geological Fieldwork, 1978*). A complete description of sections measured in the Upper Minnes Group, their correlation and nomenclature is in preparation.

CADOMIN FORMATION

Outcrops examined on the Manalta property west of Mount Suprenant showed considerable variation in the character of the formation. Composition and texture vary rapidly over short distances and are often quite unlike the rather uniform character the formation displays in the rest of the map-area.

At the most southerly part of the Hasler Forestry Road, two thick conglomeratic units outcrop within a stratigraphic interval of approximately 50 metres. Both resemble the Cadomin in character but unfortunately outcrop is not extensive enough to see if one or both of the beds have lateral continuity.

A sequence of Cadomin-Gething strata outcropping on the northeast side of Mount Merrick illustrates a similar case. Again there are two thick (6 to 7 metres) conglomerates approximately 175 metres stratigraphically apart. The exception is that here lateral exposure exists and the upper conglomerate is shown to change lithology rapidly to a medium-grained sandy unit, whereas the lower unit outcrops as a conglomerate over the several kilometres it is exposed. Numerous other examples of large conglomerates in the Lower Gething are found further south.

GETHING FORMATION

Generally the Gething thickens somewhat northward from Bullmoose Mountain (350 metres) to the headwaters of Hasler Creek where a composite section has established a thickness of 400 metres. The character changes to the north as well; local facies changes are far more rapid than in the Bullmoose area, making correlations difficult over relatively short distances. Although good coal seam development exists in places they do not have significant lateral continuity. Also, no evidence has been found of the marine tongues that exist in the Upper Gething in the Bullmoose area.

MOOSEBAR FORMATION

North of Bullmoose Mountain a new facies unit appears between the nonmarine coal-bearing Gething strata and the rather uniform fissile mudstones that typify the basal Moosebar elsewhere. This new unit consists mainly of sandstones and siltstones and appears to be a shallow marine sequence; perhaps representing small regressive stages in the major Moosebar transgression. It is known to reach a thickness of 230 metres in the vicinity of the headwaters of Goodrich Creek but thins southward and disappears at Bullmoose Mountain.

COMMOTION FORMATION, GATES MEMBER

Although the total thickness of the *Gates member* remains relatively constant over the map-area, the major coals known south of Bullmoose Mountain are represented by a few thin, poorly developed seams northward. However, major conglomerate and sand units are still common in the northern part of the map-area, especially in the lower part of the member. In the area just south of Mount Linklater an especially clean sand and conglomeratic unit was noted in the basal Gates although a few minor coal seams lie stratigraphically below it.

REFERENCES

B.C. Ministry of Energy, Mines & Pet. Res., Geological Fieldwork, 1977, pp. 57-59; 1978, Paper 79-1, pp. 79-83.