Sukunka River Coal Property
PR-SUKUNKA 70(1)B.

OPEN FILE

643

MEMORANDUM 93P/4

PR-SUKUNKA 70(1)B

TO Mr. J. W. Peck,

Chief Inspector of Mines,

Dept. of Mines & Petroleum Res.

FROM THE

DEPARTMENT OF MINES

PETROLEUM RESOURCES

VICTORIA, B.C. April 1970

OPEN FILE

WHEN REPLYING PLEASE REFER TO FILE No.

Re: Visit to Sukunka River coal property.

I visited the above property with Mr. Dan Tidsbury on April 1st. Although we reached the camp we were unfortunately not able to reach the showings or drill sites as break-up conditions had started. The road up to the adit and drill sites was a sea of mud and even our big jeep could not make any headway. However, I was able to see the country and gain a fair amount of information from talking to Mr. McAdam, the resident superintendent, and examining their property maps.

Location and Access.

The coal property is in the eastern inner foothills of the Rocky Mountains, 36 miles by road south of Chetwynd. The topography is that of gently rounded hills, incised at intervals by creeks and rivers. Elevations usually do not exceed 5,000 feet. The highest mountain in the area, Bullmoose Mountain, is 6,627 feet and dominates the skyline to the east of the coal property. Timber cover appears generally rather light with plentiful birch and poplar. Good timber stands are reported to the south of the property where Canadian Forest Products Ltd. is logging, this timber being hauled to the sawmill at Chetwynd.

The Sukunka River contains quite a good volume of water and flows in a broad glacial valley in places 2 miles wide. In the lower 15 miles, before it enters the Pine River, a number of ranches are being developed on the flats and land clearing is still in progress. The road up the Sukunka is for the first 15 miles a public highway maintained by the Department of Highways. Beyond this point the road is a logging road, owned by Canadian Forest Products Ltd. At the time of our visit this road was officially closed due to break-up conditions, and there were a number of muddy stretches that were difficult to get through.

The coal seams have been found on the east side of Sukunka River, between Skeeter Creek to the north and Chamberlain Creek to the south, on the foothills of Bullmoose Mountain. A camp consisting of trailers has been established in the Sukunka Valley at the base of the foothills.

General Geology.

The geology of the area is described in G.S.C. Paper 61-10, "Dawson Creek Map Area" by D. F. Stott. Stott's mapping terminates 4 miles west of Bullmoose Mountain and thus just includes the coal area.

As the foothills are approached it is evident that there is more deformation and faulting of the sedimentary series than beneath the plains further east. A series of southwesterly-dipping low angle thrust faults have a northwesterly trend and are en echelon at one to ten mile intervals. One such fault passes

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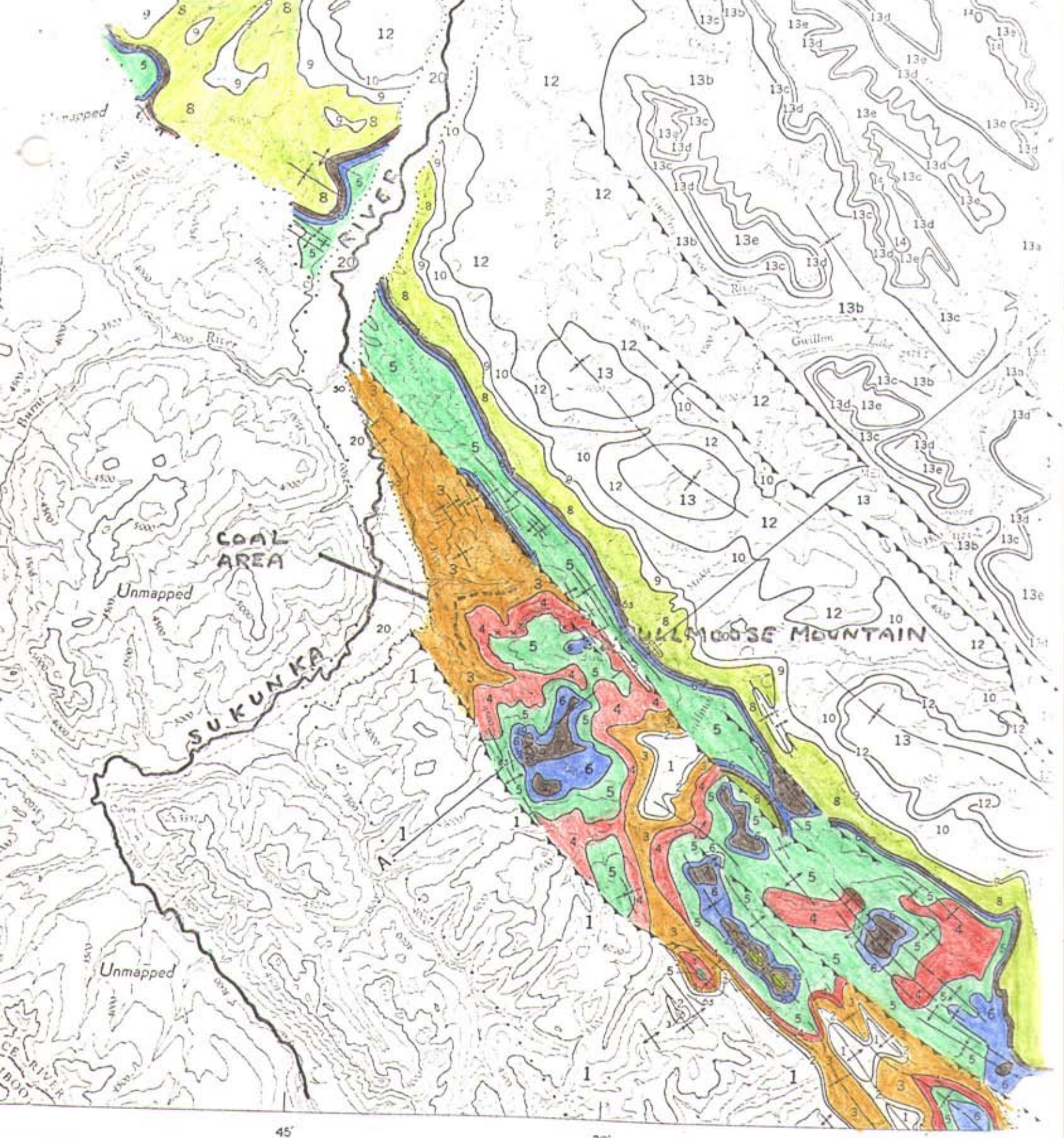

ISHED, 1961
ES OF THIS MAP MAY BE OBTAINED FROM THE
CTOR, GEOLOGICAL SURVEY OF CANADA, OTTAWA

From G.S.C. MAP 19-1961

BALDEN CREEK

Geology by WICKENDEN, SHAW, AND STEFF.

SCALE: ONE INCH = FOUR MILES

8		HASLER FORMATION
7		COMMOTION FORMATION (UPPER)
6		COMMOTION FORMATION (MIDDLE)
5		COMMOTION FORMATION (LOWER)
4		MOOSEBAR FORMATION
3		GETHING FORMATION

LOWER CRETACEOUS

through Bullmoose Mountain, and another one occurs 4 miles southwest. Between these two faults various Lower Cretaceous formations form what would appear to be a very gentle syncline free of major faults. Along the lower slopes of the Sukunka Valley and foothills the Gething formation outcrops over about 16 square miles. According to Stott, about 300 feet stratigraphical thickness of the Gething is exposed at the falls on Sukunka River, consisting of a cyclic succession of coal, carbonaceous shales, fine-grained sandstones, and conglomerate.

At an elevation of over 4,000 feet on the foothills of Bullmoose Mountain, the Gething is overlain by the Moosebar formation, consisting of marine shales, which in turn is overlain (at 4,700 to 5,000 feet elevation) by the lower member of the Commotion formation.

Economic Geology.

The outcrops of several coal seams of economic thickness occur in the Gething formation between Skeeter Creek and Chamberlain Creek, east of Sukunka River, on the foothills of Bullmoose Mountain. Interest is being concentrated on one seam which varies from 7 to 11 feet thick and appears to extend over a wide area. This seam outcrops at about 3,800 feet elevation. There is another potentially mineable coal seam below the "main" seam. This is of somewhat variable thickness due to the presence of rock bands, but is reported to contain rarely less than 4 feet of clean coal. There are also reported to be some thinner seams above the "main seam".

Recent drilling seems to have indicated the continuity of the main seam over at least one square mile, although in places beneath as much as 1,200 feet of cover. It would seem that the company now has proved up a drill-indicated reserve of 7.5 million tons in the main seam. From investigations of outcrops in the area, it was suggested to the writer that it might be possible to geologically infer up to five times that reserve.

Such samples of the coal that have been taken indicate that it is a medium volatile bituminous coal of high grade coking quality. A sample taken at the face of the adit on a 4.5 feet section gave the following analysis:-

Moisture	4.70%
Ash	4.50%
Volatile matter	26.35%
Fixed carbon	68.73%
Sulphur	0.52%
B.Th.U.	15,269 per lb.
Free Swelling Index	8.5

Work Done.

Some time in 1969 a local resident drew the attention of Mr. Len Beliveau of Frontier Resources Ltd. to the presence of these coal outcrops, and Mr. Beliveau subsequently interested Brameda Resources Ltd. in embarking on exploration of the property in spite of the fact that it lay within a reserved area. At first Mr. Beliveau carried out the work under contract from Brameda, but it was later taken over by Brameda themselves.

A crew of up to 25 men has been employed in the latter part of the year, although this was down to 10 (including staff) at the time of my visit. A considerable

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of access roads have been made and some stripping of seam outcrops done. An adit has been driven 170 feet into one seam. A total of 18 holes have been diamond drilled (N Q wire line) totalling 12,168 feet.

The adit was driven in a 25-foot section of the main seam, but it appears that this is an unusual thickness of the seam, probably due to the proximity of a fault. No further work is being done in the adit at the present time. Drilling had been continued up to the time of our visit, but would probably be discontinued as the company seemed to be short of ready money to meet current bills. I understand the local contractor who had done the road work had been waiting for payment for some time.

The man in charge on the site for Brameda is Bill McAdam to whom we issued a Third Class Certificate a short time ago. I got the impression that he was a suitable man for the job. A safety lamp and methane detector was available, and a copy of the Coal Mines Regulation Act was in the office. Mr. Tidsbury said he had found McAdam very co-operative on any matters he had requested him to attend to.

McAdam told me he had at no time found any methane in the adit, which is not surprising as the seam would almost certainly be drained of methane so close to the surface. However, as you have been informed, some flows of natural gas have been encountered in the diamond drill holes. I understand such flows have come from sandstone members of the Moosebar formation, well above the horizon of the seams in the Gething.

I was informed that Brameda had retained Dr. Hughes (formerly of this Department) as a consulting geologist, and that he had made one visit to the property.

A. R. C. James

A. R. C. James, P. Eng.,
Inspector of Mines.

ARCJ:sl