NAME OF PROPERTY

SUKUNKA - BLOCK 'A' BULLMOOSE MOUNTAIN, WEST SIDE

OBJECT LOCATED - Coal outcrop:

UNCERTAINTY IN METRES 500. Lat 55°13'50" Long 121°36'30"

Mining Division Liard

District

Peace River

County

Township or Parish

Lot

PRODUCT

Concession or Range

Sec

Tp.

R.

OWNER OR OPERATOR AND ADDRESS

BP Canada Inc.

DESCRIPTION OF DEPOSIT

The coal area is bounded on the east by the Bullmoose fault complex, where steeply inclined reverse faults are associated with a strongly folded northwest-trending anticlinal structure. Between the Sukunka River to the west, and the Bullmoose fault complex, two major low-angle southwest dipping thrust faults separate the strata at the level of the Chamberlain seam into three thrust plates. The strata within these plates are essentially flat lying to gently dipping. Within the central plate, the larger of the major thrust plates, six smaller low angle thrust faults of limited extent affect the strata at the level of the Chamberlain seam. Along the lower slopes of the Sukunka valley the Lower Cretaceous Gething Formation outcrops over about 16 square miles. At an elevation of over 4,000 feet on the west flank of Bullmoose Mountain the Gething is overlain by the Moosebar Formation, consisting of marine shales. Coal seams occur in the Gething Formation, a composite section of which comprises over 1,000 feet of sandstone, siltstone, shale, and occasional conglomerate.

The most attractive seam economically occurs about 180 feet below the top of the Gething Formation and has been designated the Chamberlain seam. The average thickness of this seam is about 8.5 feet of clean coal with no rock bands. The seam is continuous over a wide area, the cover of overlying rock ranging see Card 2

HISTORY OF EXPLORATION AND DEVELOPMENT

The coal seams outcrop at elevations of about 3.400 to 3.800 feet on the west flank of Bullmoose Mountain, on the east side of the Sukunka River, some 65 miles southwest of Dawson Creek.

Up to the end of 1969 the Sukunka River area lay entirely within an area in which coal rights were reserved. In 1969 a local resident drew the attention of L. Belliveau to the presence of coal seams on the east side of the Sukunka River between Skeeter and Chamberlain Creeks. Mr. Belliveau subsequently interested Brameda Resources Limited in the area and the company began exploration work in spite of the fact that any coal resources would, for the time being, remain under reserve. Exploration work began in July and after 4 months the Chamberlain seam was discovered. Work during the year included 5,981 feet of diamond drilling in 8 holes. Brameda in 1970 acquired 41 coal licences (Nos. 1062-1066, 1069-1102, 1153, 1154). Work during the year included 49,500 feet of diamond drilling in 40 holes covering an area of about 8 square miles at approximately 2,000 foot intervals. Three adits totalling 360 feet were driven on the Chamberlain seam to provide bulk samples. Some 80 million long tons of coking coal were indicated by this work. Teck Corporation Limited acquired a 16% interest in Brameda Resources Limited and in 1972 increased that interest to 47.3 per cent.

By an agreement dated July 9, 1971, Brameda optioned the 41 coal licences to Mikas Oil Co. Ltd. and Coalition Mining Limited, both 100% owned by Brascan Limited. If fully exercised the agreement would give Mikas and Coalition 425% and 75% interests respectively.

Exploration work by Coalition during 1971 included 40,000 feet of diamond drilling in 48 holes, covering an area of about 8 square miles in considerable detail and essentially duplicating the drilling done by Brameda in 1970. Number 2 adit on the Chamberlain seam and No. 3 adit on the Skeeter seam were extended slightly, and two new adits, Nos. 4 and 5, totalling 130 feet, were driven on the Chamberlain seam to provide bulk samples.

Coalition continued as operator during 1972 and into 1973. A further 9,029 feet of diamond drilling was done in 11 holes. Trial mining was begun in three 2,900 foot head-

see Card 2

MAP REFERENCES

Map 19-1961, Dawson Creek, (Geol.), Sc. 1":4 miles - accomp. Paper 61-10, Geol. Surv. of Canada.

*Map 93 P/4 E, Sukunka River, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR			
Date	7-76	02-81			

REFERENCES

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 423; 1970, p. 525; 1971, p. 501; 1972, p. 640; 1973, p. 586; 1974, p. 423; 1975, p. E 226; 1977, p. E 272; 1978, p. E 309.

Minerals Sector; Corporation Files: "Brameda Resources Limited"; "Coalition Mining Limited"; "Brascan Resources Limited"; "Teck Corporation Limited".

Wallis, G.R., and Jordan, G.R.; The Stratigraphy and Structure of the Lower Cretaceous Gething Formation of the Sukunka River Coal Deposit in B.C.; The Canadian Institute of Mining and Metallurgy, Bulletin Vol. 67, No. 743, pp. 142-147, March 1974.

*Sukunka Deposit; Coal in British Columbia, p. 162, Coal Task Force, Victoria, B.C., 1976. NAME OF PROPERTY

SUKUNKA - Block 'A'
BULLMOOSE MOUNTAIN, WEST SIDE

TERRITORY

DESCRIPTION OF DEPOSIT (continued)

from zero at the outcrop to about 1,700 feet on the east side of the property.

The Skeeter seam, occurring about 155 feet from the top of the Gething Formation, is separated from the Chamberlain by some 20 to 40 feet of thin-bedded siltstones and laminite. The Skeeter seam is about 8 feet in thickness, although somewhat irregular, and is not as clean as the Chamberlain.

The coal of both the Chamberlain and Skeeter seams is classified as low to medium volatile coking coal.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

ings into the Chamberlain seam in September 1972 and a total of 11,400 feet of underground work was carried out. Approximately 11,000 tons of run-of-mine coal were shipped to the British Steel Corporation for test purposes. Underground development and trial mining continued into 1973 to a total of some 9,945 feet of openings. Work was suspended pending further feasibility studies. Mineable reserves were estimated at 65 million tons (Ref. Financial Post Card Service - Teck Corporation Limited). These reserves are contained on 7 of the 41 coal licences. Coalition to date had earned a 7½ interest in the property. Mikas Oil purchased a 5% interest in the property in September 1972 for 1 million dollars, bringing the interest of the parent company, Brascan Limited, to 12.5%. The company name (Mikas) was changed in January 1973 to Brascan Resources Limited.

British Columbia Railways, wholly owned by the Province of British Columbia, during part of 1973-74 held an option on a 40% interest in the property from Brameda Resources Limited. Work during 1974 included 2,088' of diamond drillin in 9 holes and 5,278' of rotary drilling in 31 holes. Durin 1975, 32 holes were diamond drilled and logged, totalling 1,114 m.

BP Canada Limited in July 1977 purchased the 87.5% interest in the 41 coal licenses (27,000 acres) from Brameda Resources Limited and Teck Corporation Limited; the remaining 12.5% interest in the property was retained by Brascan Resources Limited. Work by BP during 1977-78 included drilling in 51 diamond drill holes and 20 rotary holes. The company name was changed in 1979 to BP Canada Inc.