

PRODUCT COAL
PRODUIT

PROVINCE OR PROVINCE OU British Columbia
TERRITORY TERRITOIRE

N.T.S. AREA 93 I/14, 15
RÉGION DU S.N.R.C.

REF. COL
RÉF.

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ

QUINTETTE-BABCOCK

OBJECT LOCATED
OBJET LOCALISÉ

Babcock Mtn. 54°56'20" 121°02'00"

UNCERTAINTY
FACTEUR D'INCERTITUDE

Roman Mtn. Lat. 54°52'30" Long. 120°57'00"

Mining Division
Division minière

Liard

District
District

Peace River

County
Comté

Township or Parish
Canton ou paroisse

Lot
Lot

Concession or Range
Concession ou rang

Sec
Sect.

Tp.
Ct.

R.
R.

OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

Quintette Coal Limited

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The property lies along the coal-bearing Lower Cretaceous belt of the inner foothills. Both the Gates Member of the Commotion Formation and the younger Gething Formation contain coal seams of mineable thickness on the Quintette property, with the Gates containing the major portion of the reserves, especially in the Babcock area. The Gates attain a stratigraphic thickness of 345 metres. These formations are bounded by large thrust faults to the northeast and southwest, between which the structure consists of broad synclines and sharp anticlines.

There are six seams of mineable thickness in the Babcock area, but three of these are considered to contain too many bands of rock or other impurities to be mineable at the present time. The remaining three are relatively clean seams of thicknesses in excess of 3 metres, and all are considered to be high-quality metallurgical coking-coals. The structure underlying the Babcock Mountain area includes an extensive area of gently dipping seams bounded on the southwest by the Waterfall Creek syncline, an upright fold with steeply dipping limbs. These structures contain nearly all of the measured
see Card 2

Associated minerals or products
Minéraux ou produits associés

HISTORY OF EXPLORATION AND DEVELOPMENT
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

The property is located about 65 miles southwest of Dawson Creek, extending from Murray Creek northwest to Wolverine Creek and southeast to Quintette Mountain, a distance of about 15 miles. The coal licences include five main prospect areas, the Wolvernine North & South, Five Cabin Syncline, Babcock, and Quintette. For the Wolverine area see: Quintette-Wolverine, Area 93 P/3, Ref. Col 1.

Denison Mines Limited in 1970 acquired coal rights covering the area. In February 1971 a joint exploration and development agreement was reached with Alco Standard Corporation, a division of World Resources Company, through its coal operating entity Barnes & Tucker Company. Exploration began in 1971 in the Babcock and Wolverine areas. Quintette Coal Limited was incorporated in December 1971 to acquire the joint venture property. In September 1973 the joint venture was expanded to include Mitsui Mining Co. Ltd. and Tokyo Boeki Ltd. through an exploration and feasibility study agreement on the Babcock area. In June 1976 Alco Standard sold its 36.75% interest in the property under an agreement by which the Mitsui and Boeki companies acquired options to increase their respective interests in Quintette to 22.5% each. By a December 1976 agreement for funding of exploration and development, Esso Resources Canada Limited acquired the remaining (16.5%) of the Alco interest. At that time Quintette Coal Limited was owned by Denison Mines Limited (38.25%), Mitsui Mining Co. Ltd. (22.5%), Tokyo Boeki Ltd. (22.5%), and Esso Resources Canada Limited (16.75%).

Exploration during the period 1971-1977 included extensive diamond, rotary, and percussion drilling, geophysical drill hole testing, and excavation and sampling in a number of adits. The 1976 exploration program confirmed the presence of 130 million tons of surface mineable coal; reserves available for underground hydraulic mining totalled 170 million tons (Denison Mines L., 1976 A.R.). A feasibility study was completed in 1977. The property is estimated to contain 2.8 billion tons of high grade metallurgical coal to a maximum depth of 1,500' (Denison Mines L., 1978 A.R.). A 1979 agreement provided for the sale of 25 to 30 million tonnes of coal to Romania over a 20 year period.

In 1981 Quintette Coal Limited was owned by Denison Mines Limited (38.25%), Mitsui Mining Co. Ltd. (17.5%), Tokyo
see Card 2

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa
Secteur de la politique minière, ministère de l'Énergie, des Mines et des Ressources, Ottawa
120126

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1970, p. 527; 1971, pp. 500, 501; 1972, p. 639; 1973, p. 585; 1974, p. 424; 1975, p. 21⁺; 1976, p. E 219; 1977, p. E 270.

Minerals Sector; Corporation Files: "Denison Mines Limited"; "Quintette Coal Limited".

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 21-1960, Cretaceous Rocks of the Smoky and Pine River Areas, (Geol.), Sc. 1":4 miles, Paper 60-16, Geol. Surv. of Canada.

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

#Babcock-Quintette, (Topo. & measured reserves), Sc. 1":1.2 miles (approx.); Coal in British Columbia, Fig. A 4.2 a, p. 165, Coal Task Force, Victoria, B.C., Feb. 1976.

*Map 93 I/14, Kinuseo Falls, (Topo.), Sc. 1:50,000.

*Map 93 I/15, Kinuseo Creek, (Topo.), Sc. 1:50,000.

REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par	DMacR						
Date Date	02-81						

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QUINTETTE-BABACOCK

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

underground reserves. However, a considerable tonnage of coal recoverable by open-pit methods has been discovered on the Quintette property. In the Babcock area, two pits have been delineated, the Windy and Roman. The Windy pit is the surface extension of the underground reserves in the nearly flat strata underlying Babcock Mountain. The Roman pit is located within a fairly simple chevron fold on the southern end of the Murray syncline. Here five seams have an aggregate thickness of over 12 metres.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)
HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

Boeki Ltd. (17.5%), Esso Resources Canada Limited (16.75%), and Charbonnage de France (10%). Early in 1981 Quintette signed a 15 year agreement with Japanese interests to supply 6 million tonnes of metallurgical and thermal coal annually, with deliveries to begin late in 1983.

*Esso Resources sold the 2 pits in
1981 to Charbonnage de France in 1982*