PRODUCT *PRODUIT*	PROVINCE OR TERRITORY *PROVINCE OU TERRITOIRE*	N.T.S. AREA *RÉGION DU S.N.R.C.*	REF. *RÉF.*
URANIUM	British Columbia	82 E/10	U 3

NAME OF PROPERTY / *NOM DE LA PROPRIÉTÉ*: BLIZZARD

OBJECT LOCATED / *OBJET LOCALISÉ* – Centre of property.

UNCERTAINTY / *FACTEUR D'INCERTITUDE* 1,000 m

Lat. / *Lat.* 49°37'

Long. / *Long.* 118°55'

Mining Division / *Division minière*: Greenwood

District / *District*: Similkameen

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*

Norcen Energy Resources Limited

DESCRIPTION OF DEPOSIT/*DESCRIPTION DU GISEMENT*

The Blizzard Deposit is a hydrogenic paleochannel deposit. Uranium was leached from surrounding felsic plutonic rocks and transported by ground-waters and/or meteoric waters into a structurally controlled paleochannel and precipitated as autunite and saleeite within Miocene sandstones and carbonaceous mudstones.

The underlying basement complex consists mainly of biotite granodiorite of the Valhalla intrusions, of Cretaceous (?) age. Consolidated and loosely consolidated sedimentary rocks overlie the basement complex within a sinusoidal northwest-southeast trending paleochannel which has a southeast plunge of about 1.5 degrees; a prominent fault appears to have formed a trough which has controlled the deposition of fluvial deposits. The sedimentary rocks have been traced for a distance of 1,600 m and average 150 m wide and 15 m thick. They comprise feldspathic sandstones, carbonaceous sandstones, and interbedded sequences of carbonaceous mudstone. A basal conglomerate unconformably overlies the basement complex in local areas of high relief. An ellipsoidal shaped basalt capping overlies

see Card 2 ....

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

The property is located north of Lassie Lake, 30 miles southeast of Kelowna.

The Blizzard claim (20 units) and the Beverly, Moraig, and Patricia claims (43 units) were staked in February 1976 by Lacana Mining Corporation. Work during the year included a reconnaissance percussion drilling program which located interesting uranium values.

Late in 1976 Lacana optioned a 70% interest in the property to a joint venture group that had been organized that same year to participate in a 5 year program to explore for uranium. The joint venture comprised Norcen Energy Resources Limited as manager and operator (a 40% interest), Campbell Chibougamau Mines Ltd. (30%), and E & B Explorations Ltd., a private company managing uranium exploration funds for German investors (30%). Campbell Chibougamau subsequently sold half its interest (15%) in the joint venture to Ontario Hydro.

The joint venture consortium put down 52 rotary and diamond drill holes during 1977. Drilling by the joint venture during 1978 was done in 341 holes, bringing the totals to date to 17,500 metres of diamond drilling in 327 holes, and 2,300 metres of rotary drilling in 65 holes.* Reserves mineable by open pit were reported as 2,208,000 tonnes at 0.2145% U_3O_8 (Campbell Chibougamau Mines, 1979 Annual Report). A feasibility study was in progress during 1979. The British Columbia government on February 27, 1980 announced a seven-year moratorium on uranium mining and exploration in the province.

The Campbell Chibougamau name was changed in July 1980 to Campbell Resources Inc.

E & B Explorations Ltd was acquired by Imperial Metals Corporation in May 1983.

*Work in 1979 included a geochemical soil survey (389 samples), 1,384 m of drilling in 86 percussion holes, and radon testing on 739 sites.

Associated minerals or products
Minéraux ou produits associés

Mineral Policy Sector, Department of Energy, Mines and Resources, Otta
Secteur de la politique minérale, ministère de l'Énergie, des Mines et des Ressources, Otta
120042

HISTORY OF PRODUCTION/*HISTORIQUE DE LA PRODUCTION*

MAP REFERENCES/*RÉFÉRENCES CARTOGRAPHIQUES*

Map 6-1957, Kettle River, (Geol.), Sc. 1":4 miles, Geol. Surv. of Canada.

Map 8499 G, Christian Valley, (Aeromag.), Sc. 1":1 mile.

#Map of Kelowna Area Uranium properties, Northern Miner, Feb. 24, 1977, p. 6.

*Map 82 E/10, Christian Valley, (Topo.), Sc. 1:50,000.

Geological setting of the Blizzard basal type uranium deposit, Fig. 2, CIM Special Volume 33, p. 311.

REMARKS/*REMARQUES*

Comp./Rev. By *Comp./rév. par*	DMacR	DMacR	DMacR				
Date *Date*	05-78	10-80	01-86				

REFERENCES/*BIBLIOGRAPHIE*

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1976, p. E 29; 1977, p. E 31; 1978, p. E 31; 1979, p. 35.

Mineral Policy Sector; Corporation Files: "Lacana Mining Corporation"; "Norcen Energy Resources Limited"; "Campbell Chibougamau Mines Ltd."; "E & B Explorations Ltd.".

+Sawyer, D.A.; The Blizzard uranium deposit; Canadian Mining Journal, April 1979, p. 44.

Uranium Deposits of Canada, CIM Special Volume 33, p. 311, 1986.

PRODUCT *PRODUIT*	PROVINCE OR TERRITORY *PROVINCE OU TERRITOIRE*	N.T.S. AREA *RÉGION DU S.N.R.C.*	REF. *RÉF.*
URANIUM	British Columbia	82 E/10	U 3

NAME OF PROPERTY
NOM DE LA PROPRIÉTÉ BLIZZARD

DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT (continued)

most of the mineralized area. The basalt is approximately 1,200 m long and 500 m wide with thicknesses up to 74 m. The youngest rock unit is a mushroom-shaped diatreme breccia pipe from 60 to 90 m in diameter which intrudes the basalt and sedimentary rocks at the northwest end of the mineral deposit.

The two main uranium minerals identified to date are autunite (calcium uranyl phosphate) and saleeite (magnesium uranyl phosphate). These two minerals occur primarily within the sandstones and mudstones as coatings surrounding the clasts and within the matrix.

Also these uranium minerals appear to a lesser extent within the conglomerate, the breccia pipe and within the upper few metres of the basement rocks.

The uranium mineralization is continuous over the 1,600 m length of the deposit. The deposit is sinusoidal and generally follows the main paleochannel. Widths of the mineralized zone range from 60 to 265 m with true thickness from 1 to 24 m. The deepest the uranium occurs within the sandstone and mudstone units is 90 m which gradually shallows to a depth of 2 m below surface.