NAME OF PROPERTY

EXPO (HUSHAMU LAKE)

OBJECT LOCATED Hushamu Deposit

UNCERTAINTY IN METRES 250. Lat. 50°40'35" Long.

50°40'35" Long. 127°51'25"

Mining Division N

Nanaimo

District Rupert

County

Township or Parish

Lot

**PRODUCT** 

Concession or Range

Sec

Tp.

R.

## OWNER OR OPERATOR AND ADDRESS

BHP - Utah Mines Ltd.

# DESCRIPTION OF DEPOSIT

The Expo claims are underlain mainly by Jurassic volcanic rocks of the Bonanza Subgroup. Some Karmutsen Group volcanic rocks and Quatsino and Parson Bay sedimentary rocks also are present. These rocks are intruded by plutons of varied size and degree of contamination and differentiation. The Bonanza rocks are cut by several silicified, brecciated zones which are possibly related to volcanic centres.

Pyrite and minor chalcopyrite and molybdenite occur as quartz-filled fractures and as disseminations in andesite with argillic, carbonate and epidote alteration. Zones of pyrophyllite-bearing silicified breccia occur in a volcanic center.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located between 1,000 and 1,500 feet,  $2\frac{1}{2}$  miles south of Nahwitti Lake near Hepler Creek.

In 1968 Utah Construction and Mining Co. acquired the Expo group of 711 claims, adjacent to the Hep group (see 92 L/12, CU 19). Work consisted of geological mapping, a geochemical survey, and 7,000 feet of diamond drilling in 50 holes.

In 1969 and 1970, work on the Expo, Don, and Hep group of 822 claims included geological, geochemical, magnetometer, and induced polarization surveys. A total of 3,566 feet in 18 holes was diamond drilled.

The Company name was changed to Utah Mines Ltd. in 1971. From 1971 to 1973 work on 492 Expo claims, 60 Hep claims, 12 Don fractions, 9 Expo fractions, and 2 Wan fractions included geological and topographical mapping, and magnetometer, electromagnetic, and induced polarization surveys. Diamond drilling of 8,000 feet in 16 holes was done on the Expo group.

Work done in 1974 included topographic and geological mapping and magnetometer and induced polarization surveys. A seismic survey of 0.3 line-miles was done on Hep 93 and 100. Surface diamond drilling of 23 holes totalling 19,530 feet was carried out on Expo 23, 189, 217, 237, 238, 258-261, 479, 487, 504 Fraction, Hep 59, 98 and Don 14 Fraction.

Work in 1976-77 included 1142 m of diamond drilling in 8 holes on Expo 258, 259, 261, 283, Don 14 Fr. and HEP 54, 59, 100.

Exploration over this large property was directed towards copper until 1980 when the emphasis shifted to gold exploration. Work over the larger property in 1980-86 included geochemical soil and rock surveys, mag and IP surveys, and 3932 m of diamond drilling in 26 holes. The company name (Utah) was changed in July 1987 to BHP-Utah Mines Ltd.

Moraga Resources Ltd. in April 1987, obtained from BHP-Utah an option to earn a 45% interest in the larger Expo property, then comprising 527 contiguous claims (576 units). Close spaced diamond drilling began in late 1988 at the westerly end of the Hushamu Deposit which contains an indicated mineable 57,500,000 tons averaging 0.32% Cu, 0.008% molybdenum, 0-012 02/t Au within a geological reserve of

con't card 2

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Mines and Mineral Occurrences of Alert Bay-Cape Scott area, Sc. 1:250,000, Fig. 15 - accomp. Paper 74-8, Geol. Surv. of Canada, 1974.

MAP REFERENCES
Map 4-1974, Alert Bay-Cape Scott, (Geol.), Sc. 1:250,000 accomp. Paper 74-8, Geol. Surv. of Canada, 1974.

\*Map 92 L/12 , Quatsino, (Topo.), Sc. 1:50,000.

Map 1734 G, Quatsino, (Aeromag.), Sc. 1":1 mile.

#Expo Property, (Geol.), Sc. 1 cm : 0.5 km, Figure 3, Report by H.M. Jones & Assoc., 11/07/88, in Moraga Resources Ltd. Prospectus 26/07/88.

## REMARKS

#### LJ Comp./Rev. By LJDMacR 10-75 12-76 12-88 Date

#### REFERENCES

Reports of Minister of Mines, British Columbia: 1968, p. 96.

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1969, p. 202; 1970, p. 262; 1971, p. 322; 1972, p. 304; 1973, p. 262; 1974, p. 218.

Muller, Northcote, and Carlisle; Geology and Mineral Deposits of Alert-Cape Scott Map-area; Paper 74-8, p. 65, Geol. Surv. of Canada, 1974.

Exploration in British Columbia, BC EMPR: 1976, p. 129; 1977, p. 174; 1980, p. 275; 1982, p. 232; 1983, p. 337; 1985, p. 238; 1986, p. 281.

Mineral Policy Sector; Corporation Files: "Moraga Resources Ltd.".

George Cross News Letters: 1988, No. 225, 226, 237.

BCI 92 L - 240

CARD 2

**PRODUCT PRODUIT** 

COPPER

PROVINCE OR TERRITORY

TERRITOIRE

PROVINCE OU British Columbia

N.T.S. AREA 92 L/12 RÉGION DU S.N.R.C.

REF. Cu 18 RÉF.

NAME OF PROPERTY NOM DE LA PROPRIÉTÉ

EXPO (HUSHAMU LAKE)

HISTORY OF EXPLORATION AND DEVELOPMENT (con't) HISTORIQUE DE L'EXPLORATION ET DE LA MISE EN VALEUR

some 100,000,000 tons (H.M. Jones & Assoc. Inc., Expo Property Summary Report, July 11, 1988 - in Moraga Resources Ltd. Propsectus, 26/07/88).