N.T.S. AREA 82 F/10 RÉGION DU S.N.R.C.

REF. PB 1 REF.

#### NAME OF PROPERTY HIGHLANDER NOM DE LA PROPRIÉTÉ OBJECT LOCATED OBJET LOCALISÉ Long. 116<sup>0</sup>56' 490431 UNCERTAINTY FACTEUR D'INCERTITUDE Long. Mining Division District Slocan Kootenay Division minière District County Township or Parish Comté Canton ou paroisse Lot Concession or Range Lot Concession ou rang Sec Tp. Sect. Ct. R.

## OWNER OR OPERATOR/PROPRIÉTAIRE OU EXPLOITANT

Yale Lead & Zinc Mines Ltd., 525 Seymour St., Vancouver, B.C.

### DESCRIPTION OF DEPOSIT/DESCRIPTION DU GISEMENT

The deposit occurs in the top of the Lardeau series which is composed mainly of micaceous and chloritic schists, quartzites and limestones. Granite and quartz monzonite sills, as well as thin sheets of mafic rock, 1 to 15 feet thick intrude the Lardeau series. The vein is a shear which strikes north-south and dips 45° west. It varies considerably in width and grade. The average mining width is 7 feet, made up of about 2 feet of nearly barren hanging wall gouge, 2 to 3 feet of galena and sphalerite in quartz and carbonate and a 2 to 3 foot footwall zone consisting of irregularly spaced veinlets of sphalerite in quartz.

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

The Highlander vein outcrops on top of a high bluff to the southwest of the village of Ainsworth. The claim was staked in 1893 by M. Stephenson. Major development work on the property began in 1901 with the formation of the Highlander Mining and Milling Co. A crosscut was driven from the base of the bluff to intersect the vein at a depth of about 200 ft. The crosscut was extended westerly for about 2,900 feet, intersecting the projected downward extension of the vein at 1,560 feet from the portal. Drifts were extended north and south on the vein for 350 feet and 1,016 feet respectively.

The property lay idle from 1911 to 1948. Mapping and diamond drilling of the property and the surrounding area was carried out from 1948 through 1950 by the Yale Lead & Zinc Mines Ltd. who obtained most of the claims in an area extending from Cedar to Coffee Creek. The orebody outlined was found to lie on 5 claims, the Highlander, Albion, Banker, Krao and Black Diamond. The north drift on the Highlander vein was extended to 2,100 feet and raises, following the dip of the Highlander vein, were driven to the Albion and Banker workings. Stoping was carried out on 5 levels. In 1955 a new adit was driven 200' below the old adit. The end of the orebody was reached in 1959 and the mine closed. Leasers worked the Highland vein in 1959 and 1960.

# HISTORY OF PRODUCTION/HISTORIQUE DE LA PRODUCTION

Production figures for the Highlander claim have not been recorded separately as the Highlander vein extends on to adjoining claims which were all worked as one unit in recent years.

From 1893 (the claim was staked in 1893 by M. Stephenson) to 1953, 145,477 tons of ore was shipped from the Highlander, Little Donald and Black Diamond claims. From this ore 67 ounces of gold, 332,827 ounces of silver, 14,560,670 pounds of lead, 4,431,163 pounds of zinc, 1,634 pounds of cadmium and 243 pounds of antimony were recovered.

MAP REFERENCES/RÉFÉRENCES CARTOGRAPHIQUES

Map 603 A, Nelson, (Geol.), Sc. 1":4 miles - accomp. Mem. 228.

### REMARKS/REMARQUES

Comp./Rev. By Comp./rév. par				
Date Date	06-62	-		

### REFERENCES/BIBLIOGRAPHIE

Annual Reports, Dept. of Mines, B.C.: 1949-1960.

Schofield, S.J.; Geology and Ore Deposits of Ainsworth Mining Camp, British Columbia; Mem. 117, Geol. Surv. of Canada, 1920.

Rice, H.M.A.; Notes on Geology and Mineral Deposits at Ainsworth; Preliminary Paper 44-13, Geol. Surv. of Canada.

Northern Miner, 11-10, 1951.

Eastwood, G.E.P.; Highlander-Hot Springs Area; Annual Report 1951, pp. 144-156, Dept. of Mines, B.C.

1980, 1.81

BCI 82F/NE-30.