

802157

MYRA FALLS OPERATIONS

92F/12

WESTERN MINES LIMITED

(Latitude 49° 35' N, Longitude 125° 36' W, Elevation 1,250 Feet)

LOCATION, ACCESS AND CLIMATE

The Myra Falls operations of Western Mines Limited are located near the south end of Buttle Lake, approximately thirty-five miles southwest of Campbell River, B.C.

Access to the property is by a paved road thirty-one miles in length on Highway 28, then south along the eastshore of Buttle Lake 25 miles to the mine site.

Air temperatures reach a maximum of ninety degrees Fahrenheit in summer and a minimum of zero degrees Fahrenheit in winter. Annual precipitation is one hundred and twenty inches which includes fifteen feet of snowfall. Snow cover varies considerably, but may reach a depth of five feet at the plant elevation.

HISTORY AND OWNERSHIP

The claims were originally staked and prospected by James Cross and Associates of Victoria, B.C. The Paramount Mining Company excavated several trenches, drove an eighty foot adit and diamond drilled ten holes totalling 2,169 feet between 1919 and 1925. In 1930 reconnaissance geological mapping of the area was carried out for the Geological Survey, Canada. Several companies examined the property between 1946 and 1960.

Western Mines Limited optioned the property from P.M. Reynolds and Associates in May, 1961 and commenced production in 1967. The property now consists of the Lynx and Myra underground mines and the Lynx open pit which are integrated to a 1000 short tons per day flotation concentrator.

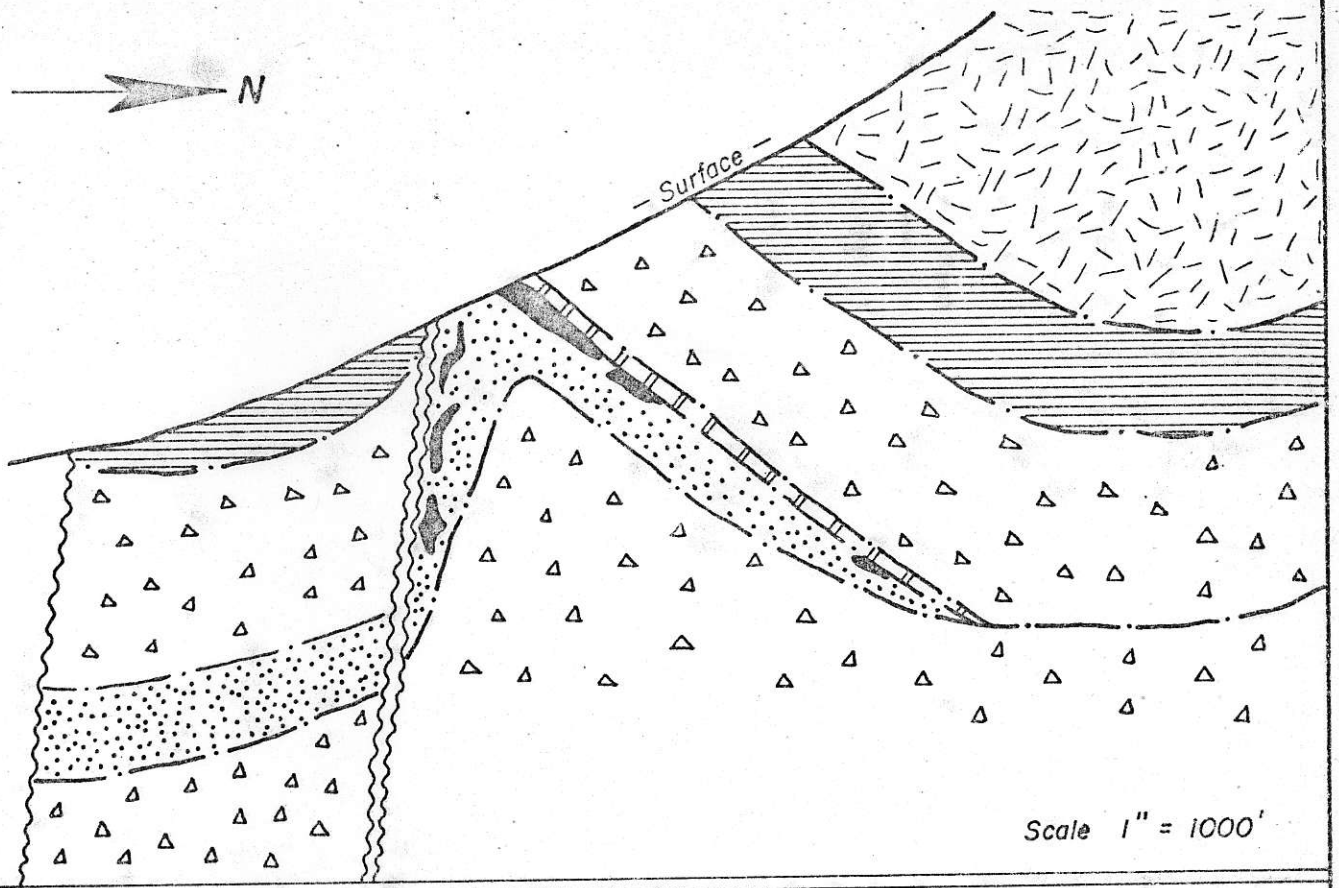
GEOLOGY

The Western Mines ore deposits occur near the north limit of a northwesterly trending belt of Permian volcanics near the geographical centre of Vancouver Island.

These Permian volcanics, of the Sicker Group, are divided into three units in the mine area; namely, Vent formation, Sharp Banded Tuff formation and Dacitic Tuff formation.

The Vent formation, which contains the orebodies, is comprised of rhyolite and andesite flows and breccias and dacitic tuffs forming submarine volcanic piles. Figure 1, "A Generalized Cross-Section of Lynx Mine Area", shows the typical mine geology.

RD  
80734m  
1974  
MINERAL INDUSTRIES IN WESTERN CANADA  
10th Commonwealth Mining & Metallurgical Congress  
Sept. 2-28, 1974













- |   |                       |   |                    |
|---|-----------------------|---|--------------------|
|  | ORE                   |  | DACITIC TUFF FM.   |
|  | VENT. FM.             |  | FAULT              |
|  | RHYOLITE              |  | "SOUTH WALL" FAULT |
|  | ANDESITE              |  | CONTACT            |
|  | SHARP BANDED TUFF FM. |   |                    |

FIGURE I.  
A GENERALIZED CROSS-SECTION OF LYNX MINE AREA

DRAWN BY 

Faulting is the major structural feature and much of the ore occurs along a major northwesterly-southeasterly fault system. The orebodies are stratabound between an underlying rhyolite breccia and overlying andesite flow along the "north wall", and are dragged down along the "south wall" fault.

The ore lenses have a relatively small cross-sectional area, but are remarkably persistent along strike. Ore minerals present are sphalerite, chalcopyrite, galena, tetrahedrite and bornite in fine grained massive to sparsely disseminated lenses. Gangue minerals are quartz, sericite, chlorite, barite, calcite and pyrite. Average ore grade is 0.10 ounces of gold per ton, 3.5 ounces of silver per ton, 1.6 percent copper, 1.0 percent lead and 7.5 percent zinc.

Alteration is persistent in the mine area and consists of sericitization, chloritization, bleaching, silicification, pyritization, and foliation with quartz sericite and quartz chlorite schists being formed.

PROPERTY OPERATION

The surface layout of the Myra Falls property is shown in Figure 2, "Surface Plan of Myra Falls Property". A centrally located flotation concentrator is fed from three centres of mining, namely the Lynx Mine, the Myra Mine, and the Lynx open pit. The administration and plant departments are housed in the general service building. The plant department operates hydro and diesel power plants and provides electrical and mechanical maintenance for all operating departments, except the open pit which is mined by a contractor.

Personnel distribution as of December 31st, 1973 was as follows:

	<u>Hourly</u>	<u>Staff</u>	<u>Total</u>
Property Management		1	1
Mining	151	11	162
Concentrator and			
Assay Office	26	12	38
Plant and Surface	44	5	49
Office, Engineering			
and Geology	—	28	28
Sub-Total	221	57	278
Contractors			<u>11</u>
Total			<u>289</u>