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TOS => MYRA FALLS

Myra Falls

Highlights

- Myra Falls is a well run operation with reserves/resources to support production for eight or more years
- Located near tidewater with power, water, transport and ship loading under owners control
- Increasing zinc grade in coming years due to rising output from Battle/Gap
- Now entering an investment phase in which the future of the mine will be secured for the remainder of the decade and beyond
- Excellent environmental compliance as required by location in provincial park Closure plan approved
- Stable, experienced workforce and good community relations

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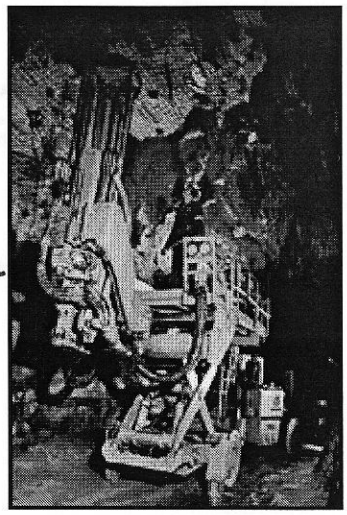
Geology
Exploration
Mining
Milling
Infrastructure
Human Resources and Community
Environment and Waste Disposal
History

Myra Falls

Mining



Two distinct but integrated mines are currently in production. The H-W mine is accessed by a 716 m deep vertical shaft which is linked to the production areas by 14 km of ramps and lateral development. The Battle/Gap mine is linked to the H-W by a 1.8 km long drift. Ore is trammed to an underground crusher by rail and hoisted to the surface.

Mining in the H-W mine employs sub-level stoping with longhole drilling. In the Battle/Gap zone, both sub-level stoping and drift and fill methods are employed, depending on the ore body configuration. Hydraulic backfilling using mill cycloned tailings is applied in both mines. As much as 55% of tailings is pumped underground for this purpose.

A major program of underground rehabilitation in 1999 has been followed by lateral development of the mining areas and modernization of infrastructure. This will lead to increased efficiency and lower costs.

Read more:

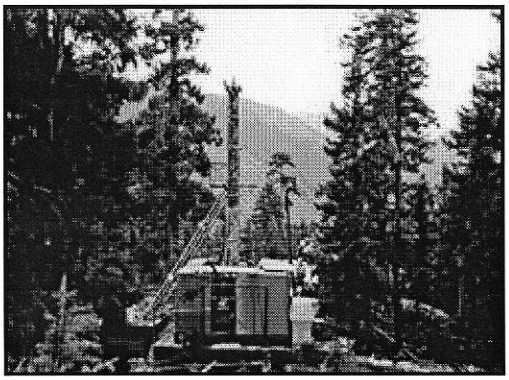
Geology
Exploration
Milling
Infrastructure
Human Resources and Community
Environment and Waste Disposal
History
Highlights

Myra Falls

Exploration, Reserves and Resources

Historically, exploration at Myra Falls has been very successful in replacing ore mined and the discovery cost has been low. Since mining started, well over 30 million tonnes of reserves and resources have been discovered while less than 20 million tonnes have been mined.

Current reserves are sufficient for a further eight years of production but ongoing exploration continues to convert resources to reserves at a pace which should ensure that production will continue at Myra Falls up to 2012 and beyond.



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Geology
Mining
Milling
Infrastructure
Human Resources and Community
Environment and Waste Disposal
History
Highlights

Myra Falls

Milling

The concentrator, which is located 1.4 km from the mine shaft, has a capacity of 1.4 million ore tonnes per year. The process comprises secondary and tertiary crushing followed by rod and ball milling and flotation to produce both zinc and copper-gold concentrates. In 1992, a gravity circuit incorporating a Knelson concentrator was installed. This generates a separate gold concentrate and has improved gold recovery.

Historically, zinc and copper recoveries have run at 90 per cent and 86 per cent respectively. The concentrates, which are well received in the market, are shipped mainly to Japan and Korea.

Read more:

Geology
Exploration
Mining
Infrastructure
Human Resources and Community
Environment and Waste Disposal
History
Highlights

Myra Falls

Infrastructure

The Myra Falls operation is linked to the port at Campbell River by a 90 km asphalt road. Concentrates are shipped through a Boliden owned handling and loading facility at Campbell River.

Electric power to the project is supplied by nearby hydro-electric power stations owned by Boliden. These are supplemented by standby diesel generators to give a total installed power of 12MW.

Read more:

Geology
Exploration
Mining
Milling
Human Resources and Community
Environment and Waste Disposal
History
Highlights

Myra Falls

Human Resources and Community

There are 362 employees at the Myra Falls operation. Most of these live in Campbell River and other nearby communities. There is, however, short term accommodation on site for shift workers on the 12 hour schedule.

Health and safety are given high priority at Myra Falls. Constant efforts have resulted in a good safety record with a low and falling accident frequency rate.

Myra Falls is important to the surrounding community and relations with local and provincial authorities as well as labor unions are excellent.

Read more:

Geology
Exploration
Mining
Milling
Infrastructure
Environment and Waste Disposal
History
Highlights

Myra Falls

Environment and Waste Disposal

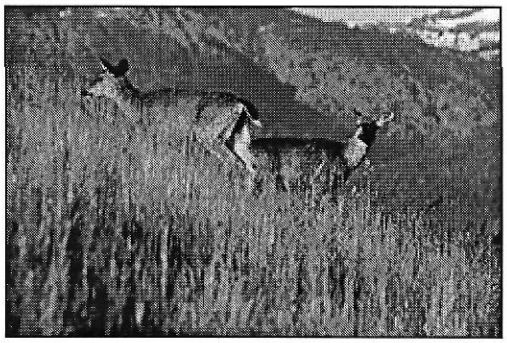
The area in which the Myra Falls operation is situated has been designated the Strathcona Westmin Provincial Park. This lies within the larger Strathcona Provincial Park. Because of its location, the mine is subject to the most stringent land management and environmental regulations but the operation is in compliance with them. Boliden's mineral claims cover an area of 3,600 hectares but the area actually affected by the operation is no more than 170 hectares.

Mill tailings are stored in a tailings pond with an upstream tailings impoundment. Boliden has embarked on two courses of action to ensure the long term availability of safe and stable waste disposal facilities.

- Reinforcement of the existing tailings impoundment to ensure that it meets all requirements with regard to resistance to earthquakes.
- Design of a new system of tailings disposal, converting tailings into paste for back filling of underground workings. Paste not used underground may be stored in the old Lynx open pit on surface.

Apart from routine monitoring, ongoing environmental work includes the following:

- Reclamation of land areas no longer in use - including re-seeding and tree planting. The whole site will eventually be restored to Class 'A" Park status when production ceases.
- Maintaining an up to date closure and reclamation plan. The current plan has been approved by the government of British Columbia.



Read more:

Geology
Exploration
Mining
Milling
Infrastructure
Human Resources and Community
History
Highlights

Myra Falls

History

Mining, by open pit, began in 1966 in the Lynx deposit while underground production got under way in 1972 in what became the Myra Mine. Both these deposits have since been mined out.

A new zone, designated the H-W, was discovered under the Myra deposit in 1979 and underground mining was launched there in 1984. In 1991, further new discoveries were achieved in what became known as the Battle and Gap zones. The Battle/Gap and the H-W zones comprise the two producing areas at Myra Falls today.

1864/65 Brown and Buttle Expedition
First prospecting in the area and first reported sighting of Buttle Lake.

1894 John Laing Expedition
Exploration and prospecting

1910 Price Ellison Expedition assessed Park potential

1911 Strathcona Park Act created B.C.'s first provincial park

1918 Park Act amended to allow prospecting, staking of claims and mining. Claims staked covering current Myra Falls Operations.

1920/30 Mining companies begin active exploration work

1930/60 Sporadic exploration. Limited access delays major development.

1955/57 Shoreline of Buttle Lake logged by B.C. Hydro in preparation for flooding. Some salvage logging of fire damaged Thelwood and Price Valleys

1961 Western Mines Ltd., Westmin's predecessor company, purchases claims.

1963 Westmin starts major development.

1966 Westmin builds connector highway along the east side of Buttle Lake; previous access to the minesite was by boat. Lynx Mine starts as an open pit operation with a 750 tonne per day mill.

1969 Myra Mine discovered.

1972 Myra Mine begins production.

1975 Lynx Mine ends open pit production, continues underground operations.

1976 Aggressive exploration initiated to counter decline in ore reserves.

1979 Large (14 million tonnes) H-W deposit discovered.

1985 New 2,700 tonne per day mill and related infrastructure commissioned to handle H-W ore, later expanded to 4,000 tonne per day capacity.

1986 The Myra Mine ends operations after producing over one million tonnes of high-grade ore.

1989 Strathcona-Myra Provincial Park (3,328 hectares, 2 per cent of Strathcona Park) established as a "Class B" park to accommodate Westmin's mining lease.

1990 Park renamed Strathcona-Westmin Provincial Park.

1991 Gap and Battle deposits discovered.

1994 Lynx operations suspended for economic reasons.

1996 Release of Strathcona-Westmin Provincial Park Master Plan

1998 Boliden Limited purchases Westmin Resources Limited, creates Boliden-Westmin (Canada) Limited.

1998/99 Three month underground rehabilitation project completed.

2002 Construction begins on Paste Plant for future tailings disposal.

Read more:
Geology
Exploration
Mining
Milling
Infrastructure
Human Resources and Community
Environment and Waste Disposal
Highlights

Myra Falls

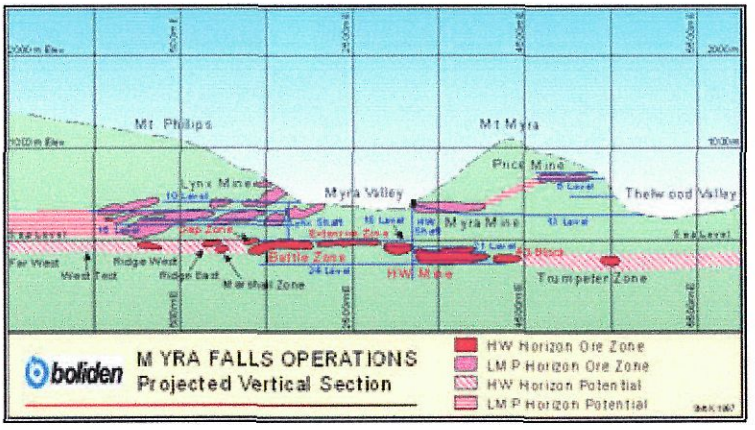
Geology

The Myra Falls ore bodies are massive sulphide deposits of volcanogenic exhalative origin. They are hosted within the Myra Formation, a package of Devonian volcanic rocks which expends northwest/southeast across Vancouver Island. The Myra Formation appears to comprise three rhyolite zones, two of which contain mineralisation. The chief characteristics of the mineralisation are as follows:

A diverse assemblage of mineralised bodies comprising a swarm of sub-parallel sulphide lenses ranging from zinc-rich lenses of 10,000 tonnes to the polymetallic H-W zone with 10 million tonnes. Some of the smaller bodies represent significant resource potential.

The principal minerals are sphalerite, pyrite and chalcopyrite with minor galena, bornite and tennantite.

The H-W deposit is a flat-lying, dish shaped pyritic lens ranging from 2 to 65 m in thickness. It lies 300 - 600 m below the valley floor. The Battle/Gap Zone, which is geologically similar but has a much higher zinc content, is situated along the volcanic trend at 700 - 900 m depth.



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Exploration
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Human Resources and Community
Environment and Waste Disposal
History
Highlights