

Fording River Mine


[Close](#)
[Print](#)

Key Facts

Commodity	Coal British Columbia, Canada
Location	latitude: 50 deg 12 min N longitude: 114 deg 51 min W Map Satellite Image
Owners	Teck
Production	Coal, 8mtp capacity Met Coal, Primary Product
Reserves & Resources	Coal, 110.3mt (Dec 31, 2009, proven and probable reserves)
Mining Type	Open Pit
Mining Method	Truck and Shovel
Processing Method	Gravity and Flotation
Mine Life	To 2050
Mining Equipment	15 Haulpak 930s, 12 Haulpak 830Es, and 13 Cat 793Cs using 1 - P&H 4100 XPB, 1 - P&H 4100 A, 2 - P&H 2800, 3 - Marion 301/351s, and 1 - Hitachi EX3500.
Employess	approx. 880

Overview

The Fording River mine is located 29 kilometres northeast of the community of Elkford, in southeastern British Columbia. The mine is comprised of 20,304 hectares of coal lands of which 4,263 hectares have been mined or are scheduled for mining.

Coal mined at Fording River is primarily steelmaking coal, although a small amount of thermal coal is also produced. The current annual production capacity of the mine is 8.0 million tonnes of clean coal and the preparation plant has a capacity of 10 million tonnes of clean coal.

Proven and probable reserves at Fording River are projected to support mining at 2009 production rates for a further 41 years.

Location

Coal Mountain is located 25 kilometres north of the community of Elkford in the very southeastern corner of British Columbia near the Alberta border.

The mine is set in the rich coal fields of southeast British Columbia, giving it a strong resource-based economy. Coal extraction dominates the economy, but forestry related industries also contribute significantly. Exploration is being carried out on an ongoing basis for natural gas, carbon dioxide and oil. The natural resource base seems to be limitless.

Most of the over 880 employees live locally in the Crow snest Pass, Sparw ood or Fernie. These communities offer exceptional opportunities for recreation in both summer and winter, all within the setting of the picturesque Rocky Mountains of southeastern B.C. and the Alberta foothills.

Geology

The mine site is comprised of 2,521 hectares of coal lands, of which approximately 650 hectares are currently being mined or are scheduled for mining. The mineral reserves associated with the Elkview mine lie in the Mist Mountain formation of the Crow snest coal field with the mine exploiting 16 coal seams.

The Mist Mountain Formation is located in the Front Ranges of Southeastern BC and Southw estern Alberta, it contains essentially all the coals of economic interest in southeastern British Columbia. Its thickness ranges between 450 and 550 metres and the coal forms between 8 and 12 per cent of the total thickness of the formation at most locations. Individual seams range from less than 1 to greater than 10 metres in thickness. Coals vary in rank between medium and low volatile bituminous, and generally yield firm, coherent coke, although non-coking (or weakly coking) high volatile bituminous and semianthracitic coals also occur in notable quantities in some areas.

It is estimated that the Crow s nest coal field, w hich hosts the Mist Mountain Formation, contains a coal resource of over 25 billion tonnes.

Mining & Operations

Ore is liberated by first drilling a pattern of three to four hundred holes in the overburden with a fleet of 4 B.E. 49R drills. The holes are then filled w ith explosives, and blasted. There are generally three or four blasting sessions per w eek at the mine. Overburden is blasted first and removed exposing the coal using a bench height of 15m.

The waste rock is then loaded onto a fleet of haul trucks consisting of 15 Haulpak 930s, 12 Haulpak 830Es, and 13 Cat 793Cs using 1 - P&H 4100 XPB, 1 - P&H 4100 A, 2 - P&H 2800, 3 - Marion 301/351s, and 1 - Hitachi EX3500. The shovels used at the Fording River Mine are some of the w orld's largest shovels and can load a truck in about 1 ½ minutes w ith 3, 97 tonne scoops. The trucks then take the w aste rock to the w aste dump areas at a rate of more than 115 loads per hour. To expose one tonne of coal, approximately seven or eight tonnes of w aste rock must be removed. To fully expose the coal, large dozers push residual w aste rock off the seams.

The clean coal is then loaded into trucks, using loaders w ith buckets as large as 33 cubic meters. The coal is then hauled to the breaker using 154 tonne trucks at a rate of over 13 loads per hour. Coal from different seams and from different areas of the mine is trucked to the breaker at specified ratios to meet product blend specifications.

Processing

Raw coal is trucked to the breaker, w hich breaks up the larger coal pieces and removes any large rock fragments. The raw coal is then conveyed to the w ash plant w here it is cleaned. Fine rock particles are removed from the coal using gravity and flotation techniques.

The w aste rock that is removed from the coal is either trucked to refuse dumps or sent to a tailings pond. The w ashed coal is then sent to the dryer to bring the moisture content dow n to product specifications. Once the coal is clean and has been dried, it is then conveyed to storage areas and loaded onto unit trains.

Environment and community

Environmental stewardship goes beyond daily procedure and performance of the reclamation of areas w here mining is completed. At Fording River, they are proud of our environmental accomplishments including achieving ISO 14001:1996 registration, one of the highest international standards recognized for environmental management.

Fording River has been recognized as an environmental leader. Elk Valley is the recipient of 11 provincial government reclamation aw ards since 1978, including the 2003 BC Coal Mine Citation Aw ard for their reclamation achievements and ongoing research activities.