

# Western Canadian Coal Corp. The Next North East B.C. Coal Producer

#### **RECENT SHARE PRICE** \$0.52 **52 WEEK HIGH** \$0.95 **52 WEEK LOW** \$0.35 **FISCAL YEAR END** March 31 **SYMBOL WTN** LISTED **CDNX SHARES OUTSTANDING** 16.9 Million 24.4 Million **FULLY DILUTED** \$8.79 Million MARKET CAP. **INSIDERS** 63.8% **DIRECTORS/OFFICERS** 24.3%

**INTRODUCTION:** Western Canadian Coal is a junior mining company focused on the development of its large coal resources in North East British Columbia, Canada. In the last few years, the Company has assembled a large land position in this area with significant high quality coal reserves. This area has the required infrastructure to support large tonnage coal operations. These new mines are the next generation of coal producers from this area and are capable of competing effectively in the world's coal markets both today and into the future. Recent interest by financiers has resulted in the Company having the ability to raise the required financing to place several of these deposits into production.

## Substantial share price appreciation can be expected during the coming months due to: -Company announces production of 0.75 million tonnes annually to start in late 2003 with increases to 5 million or more Financial markets understand that the Company has the financial backing to achieve its goals and significant annual cash flow in the short term



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## **HIGHLIGHTS:**

Shares valued at \$1.50 - \$2.00, later \$3.00 - \$10.00 based on production Easily developed high quality open pit resources at Burnt River, in production by later in 2003 Low capital and operating costs Initial studies indicate a cash cost in the U.S.\$30 - \$35 per tonne range Coal markets have stabilized and world supply/demand along with mine closings requires new mines to be opened to meet demand Initial permitting of first operation underway. existing well large environmental data base from 20 years of mining experience in the area, facilitates all aspects of permits potential for increased Upside production from present known resources as well as from further identification of reserves on presently controlled land position Housing, road access, state of the art rail and port facilities already in place and underutilized Experienced coal mine management with a proven track record

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#### **CORPORATE PROFILE**

Western Canadian Coal Corp. ("Western Coal" or "Company") has aggressively acquired a large land position (coal licenses) containing known coal reserves in North East British Columbia, Canada. These resources have been identified as having relatively low capital and production costs, enabling the development of mining operations that are capable of competing in the present and forecast world coal markets. As the first generation of coal projects developed in the late 1970's early 1980's (at roughly \$3 billion in capital costs), were approaching the end of their productive lives, interest in coal in this region was such that large well defined resources were no longer believed to have any value. The licenses were dropped and the Company was able to acquire these for nominal sums, despite the large sums that had previously been spent on resource definition, feasibility, and regulatory/environmental work.

Financial resources were hard to obtain to develop new mining operations, as the perception of the area was one of uneconomic coal mine development. Western Coal has therefore positioned itself for a new generation of coal mines, which under the correct circumstances would be able to compete effectively if the coal markets normalized. The coal markets have witnessed a rationalization of production in the recent past, which have resulted in real gains in the price of high quality coal products.

Western Coal has attracted the attention of partners resulting in the Company being able to access the equity markets successfully. A recent financing has enabled the Company to plan for large scale production over the next few years. The new investors are experienced in the coal markets and recognize the potential of the Company and have greatly assisted the Company with accessing the equity markets. Western Coal is now in a position to raise the capital needed to place these reserves into production.

#### Initial production from Burnt River Deposit to be brought on stream in 2003

Potential for 5 million tonnes of sales annually within the next few years

Western Canadian Coal Corp.

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### **COMPANY MANAGEMENT**

Western Coal has its Corporate Office in Vancouver, British Columbia and is managed by the following:

**David Fawcett, President and C.O.O., Director** - Mr. Fawcett, one of the founders of Western Coal, has held his current position with the Company since 1997, and has almost 30 years experience working in the Coal Industry in Western Canada. He has a B.Sc. in Mining Engineering from the University of Alberta and prior to working with Western Coal, was the C.O.O. of Pine Valley Coal (1996-1999).

John Byrne, Chairman of the Board, Director - Mr. Byrne has been involved with the Company since 2001 and currently lives in Melbourne, Australia. He is the Executive Chairman of Deepgreen Minerals Corporation Ltd. and holds directorships with many other companies. Mr. Byrne has more than 26 years experience in the resource industry.

*Kevin James, Vice President Exploration, Officer* - Mr. James is a Professional Geologist with 21 years experience in mining and exploration and is a member of The Association of Professional Engineers and Geoscientists of the Province of British Columbia. He is also a founding Director of Western Coal. Prior to working for Western Coal, Mr. James was an integral part of the Willow Creek Project (1994-2001). He is also the President of Pika Geologic Inc since 1988, which provides geologic consulting services.

**Robert McMorran, Secretary and C.F.O., Officer** -Mr. McMorran is a Chartered Accountant with a B.Sc. in Mathematics from Simon Fraser University and has been involved with the Company since June of 1999. He is currently the President of Malaspina Consultants Inc., which provides administrative and financial/accounting services to various public companies.

(Douglas) David Austin, Director - Mr. Austin is a founding Director of the Company and has been involved with many mineral exploration and development companies over the past 15 years.

*Kenneth Bates, Director* - Mr. Bates has been a Director of the Company since June 2001 and has worked as a senior executive in the development and operation of major coal, base metal and other mines with Sheritt Gordon Mines Limited and Denison Mines Ltd. He is also the President/Director of Cline Mining Corporation.

**Shoichiro Yonezawa, Director** - Mr. Yonezawa has been a Director of the Company since June 2001 and is also the Managing Director of Energy and Fuels of Mitsui Matsushima Co. Ltd., a Japanese coal mining company. He is actively engaged in coal mining and marketing in Indonesia, China and Canada.

**Peter Maher, Director** - Mr. Maher has been a Director of the Company since February 2001 and is also a Director of Deepgreen Minerals Corporation Ltd.

John Conlon, Director - Mr. Conlon has been a Director of the Company since September 2001 and is also the President of Webcon Equipment Inc. since 1975.

## **CORPORATE HISTORY**

Western Canadian Coal Corp. was incorporated in the Province of British Columbia in October 1997 with the principal business being the acquisition, exploration and development of coal licenses. Western Canadian Coal Corp. operates and holds property through its wholly owned subsidiary Western Coal Corp. The Company's operations were initially funded by private placements of seed capital in 1997 and then through the completion of an Initial Public Offering in April 1999. During fiscal 2001, the Company completed a number of private placement financings to fund its ongoing operations and exploration activities.

The corporate and administrative offices of Western Canadian Coal Corp. are located in Vancouver, British Columbia. The common shares of the Company are listed for trading on CDNX under the symbol WTN. The focus of the company is the acquisition and development of favourably located, high quality coal deposits in British Columbia that are amenable to low-cost production.

### FINANCIAL REVIEW

Western Coal has been spending most of the funds raised in the last twelve months on advancing the Wolverine, Burnt River and Brazion projects. The majority of this was on the Wolverine as it is expected to be the next producer after the Burnt River. Burnt River is well advanced and the database is such that this project requires relatively small expenditures until the mining permits are issued and mine construction commences. Being a larger mine development, Wolverine requires completion of detailed feasibility studies and regulatory approvals, as well as a longer construction period.

During the last year, two international companies have turned their attention to Western Coal as they realized the investment opportunity the Company provided. Both have experience in coal mining and were willing to assist Western Coal as they understood the coal markets and were aware that the Company had advanced projects. Deepgreen Minerals Corporation Limited is based out of Australia, and the other, Mitsui Matsushima Co. Ltd. of Japan. These two corporations have become significant shareholders of Western Coal after purchasing a series of private placements. They control nearly 50% on a fully diluted basis.

Western Coal now has the ability with the backing of these two significant shareholders to access the capital markets in a cost effective manner to proceed with its ambitious program of producing 5 million tonnes of coal by 2007.

There are small royalty payments on certain deposits payable to certain founders/shareholders of Western Coal. The Mt. Spieker, Perry Creek and Brazion Deposits are subject to a royalty of 1% of the selling price of coal sales. The two properties of the Belcourt Group have a royalty of 0.75% of the selling price of coal sales from the properties.

## **COAL MARKETS**

During the last several years, the world coal producers have rationalized, especially in Australia. The large increase in production that was brought on stream in the early 1980's after the oil

squeeze in the early 1970's had been depleted. New coal mines, particularly if they need major infrastructure additions, can take close to a decade to come into production. An example of this scenario was the planning and infrastructure development, required for the first generation of North East coal producers (Quintette and Bullmoose). The required rail, road, port, and housing along with the development of the first two coal mines for coal production needed a capital investment of about \$3 billion. At the time that the infrastructure was planned, it was expected that once this had been put in place, several other mines would be added and that annual production from this coal field would increase to over 10 million tonnes annually. Due to the high costs associated with this development, and an oversupply in world markets, no further mines came into production.

The Quintette operation has ceased production, as the developed resources have been depleted and further capital would be required to replace the production. Plans exist to develop the Babcock reserve at this operation, but this has not started or been confirmed as of this date. The Bullmoose operation will deplete its present developed resources in 2003, with reduced production in that year. Plans exist at Bullmoose to develop another resource but once again this has not commenced or been confirmed. At the height of production, about 6-7 million tonnes annually was produced from these two operations.

Several production scenarios for the North East coalfields have been investigated and it is envisaged that by 2007, Western Coal will be producing between 4.3 and 7.5 million tonnes of saleable coal. Under a pessimistic projection, the coalfield would produce only 5 million tonnes annually but under an optimistic projection this could exceed 14 million tonnes on an annual basis. A likely projection forecasts the coalfield producing at about 9 million tonnes with Western Coal contributing around 5 million tonnes annually.

The demand for North East B.C. coking coal is likely to increase as coke makers have become knowledgeable in using this coal in their blends, and as coke ovens are not being replaced (fast enough), the ovens become older and can handle these coals more readily than others available. Another factor, as present coking (metallurgical) coal production is reduced, or completely shut down is the diversity of supply. Therefore, from the steel makers viewpoint, it is important to have a coking coal supply from several geographic locations around the world. This diversity enables production to be maintained in the event of a problem with a port, a railway line or a particular mine site.

Coal prices generally have increased in the last couple of years with some dramatic increases in the price of coal not under contract. A large (if not the world's largest) coal producer has recently sought to import several million tonnes of coal. Mine safety in China caused the government to close approximately 12,000 small mines last year, and domestic prices increased by 20% or more. Production from Europe of all types of coal has been decreasing for many years as the available resources become uneconomic. Initially these shortfalls were being covered by existing mines that had excess mine capacity, however, existing mines are nearing their capacities therefore new mines are required. New mines that have relatively low production costs (low strip ratios, thick coal seams) and that have access to modern transportation and port facilities, will be the first to be developed. Western Coal's are in this category.

Western Coal, with its different coal license blocks, has the potential to supply several products to the export market. All are low in sulphur and some will be able to be shipped raw depending on the quality required. Hard Coking and Semi-Hard Coking can be produced from the Wolverine and Brazion deposits. Pulverized Coal Injection ("PCI") coal has increased in the coke making process; it is now known that low volatile coals used for PCI reduce the coke required more than higher volatile coals. The Burnt River deposit can produce both ultra-low and low volatile PCI coals with an acceptable Hargrove Index ("HGI"). Demand for this product is increasing dramatically and samples from this deposit have already attracted interest from prospective buyers.

The majority of coal, both thermal and coking, is shipped under long term contracts with periodic price adjustments based upon the terms of the contract (often annual in the spring). The largest metallurgical coal producer in B.C. (located in South East B.C.) has recently been divested and is now being analyzed by several members of the Canadian financial community. Production in 2000 was the highest for some time exceeding 14 million tonnes of metallurgical and a further 1.2 million tonnes of thermal coal. Metallurgical coal contracts last peaked in 1983/84 at close to US\$72 per tonne. In 1985/86 the coal price plummeted to US\$43 and then traded in the upper 40's and low 50's until 1997/98 when a new recent low of about US\$38 per tonne was realized. Since that time, the market has recovered and prices have risen to the mid 40's and this general pricing is now expected to hold at around this number for several years. Present coal producers are expected to be quite profitable at these rates and new lower cost production will come on stream to augment present production. This will replace that from mines that have run out of lower cost production due to mining conditions such as higher strip ratios or thinner underground mining widths and poor ground conditions.

All cash flow and other projections in this report have been based on a long term coking coal price of US\$43 per tonne and long term low volatile PCI coal price of US\$35.50 per tonne. A long term exchange rate of Cdn.\$/US\$ of 0.65/1.00. Note the coal market is priced in US dollars and it is quite common for international coal producers to enter into currency hedging programs to protect them from the currency exposure.

#### **COAL PROJECTS**

Western Coal has assembled a portfolio of coal licenses that can provide a selection of products to the market place. These licenses vary as to their stage of development; one has already mined and shipped a bulk sample, others have defined resources, while still others have projected resources and require exploration drilling.

The licenses located in the North East coalfield can be grouped geographically into three locations: Brazion Group, Wolverine Group, and Belcourt Group. The Company has another license block in South East B.C. but presently has no immediate plans to develop this thermal B resource. Each of the groups has more than one coal deposit located within the immediate area and these deposits have been picked as they will be able to complement each other both from a geographical and product mix stand point. The North East B.C. groups are all located within easy road access of either Tumbler Ridge or Chetwynd; both depressed towns with an availability of housing and skilled unemployed coal miners. Schools, and other town site amenities are already in place.



LOCATION MAP

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## RESOURCES BRAZION GROUP

There are four coal licenses in this group; Burnt River with a defined resource of over 30 million tonnes, West Brazion with known coal strata and a potential for 20 to 30 million tonnes, Brazion and Hudette properties also with known coal strata and the potential for another 25 million tonnes. Burnt River has been extensively explored and is now at the stage where final feasibility and permitting are warranted. The other three have had minimum drilling and will require further exploration, but present drilling does indicate the presence of significant coal resources of the right quality with relatively low stripping ratios.

These properties are located about 40 kilometres from Chetwynd, a town with a population of 3,000 capable of supporting mining operations in this area. The general location of these properties would indicate that a central processing plant could readily serve all four, with use of an existing road to Hasler (30 kilometres) to truck the coal to new load-out facility on the B.C. Rail main line.

### Burnt River

This property was explored from 1977 to 1985 with Teck Corporation being the operator in the later years. A total of 224 drill holes totaling 12,979 metres have been drilled. In 1985 as part as feasibility and regulatory applications, a 43,000 tonne bulk sample of thermal coal was extracted from two test pits and shipped to potential Asian customers. Feasibility work carried out by Teck in the early 1980's indicated a resource in excess of 30 million tonnes at a strip ratio of 5:1. (Note in coal mining Strip Ratios are given as Bank Cubic Metres of overburden moved for each tonne of coal.) The raw (unprocessed) product yielded an ash content of less than 10% with very low volatiles and a heating value of 7,500 to 8,000 kcal/kg (kilo calories per kilogram) (13,500 to 14,400 BTU/lb). This very high calorific value along with low ash and low volatile content makes this an ideal coal for PCI. Western Coal has examined the market for this product and there have been customers expressing a keen interest in this product. The higher the carbon content of coal for PCI the more the reduction of coke consumption that can be achieved and the less disruptive the reaction in the furnace.

Western Coal has identified a low strip ratio series of starter pits that contain nearly 7 million tonnes at a strip ratio of 2.8:1. Permitting is underway for this mine and it is expected that production could be achieved in the later half of 2003. Although being planned for 750,000 tonnes per year the eventual mine capacity is expected to be about 1 million tonnes annually.

Medium sized mining equipment will be used to keep the dilution of the coal to a minimum. The seams will be blended and crushed to produce a consistent product, and for the first years will not require any washing. As the mining progresses it is anticipated that a portable washer will be used to reduce the ash content of a portion of the coal (the coarse fraction) so that it can be blended back with the fines to maintain product specifications.

It is expected that the mining and coal haul of the product by truck to the load-out will be contracted out. A rail loop will be constructed to allow for the loading of unit trains as the mining rate increases. Indicative product specifications (dry basis) are 8.5% ash, 13% volatiles, 78.50% fixed carbon and less than 0.5% sulphur with a calorific value in excess of 7,800 kcal/kg.

Exploration of the other three properties in this group will be conducted along with the development of the Burnt River Mine. Based on preliminary data, the Company plans to bring the Brazion deposit into production in 2005 at 0.5 million tonnes annually rising to 1.25 million tonnes in year 2007. Thus the Brazion group would be contributing between 1.6 and 2.5 million tonnes annually depending on demand with the forecast being 2 million tonnes.

#### WOLVERINE GROUP

There are three primary areas in this group: Perry Creek, Mt. Spieker (includes Bird, EB Pit, and South Bird) and Hermann. Known resources are in excess of 50 million tonnes while the group could contain as much as 139 million tonnes. The coal seams of interest are the ones used to produce the metallurgical coal shipped to Japan from the early producers.

Perry Creek is located 23 kilometres west of the town of Tumbler Ridge and adjacent to the B.C. Rail branch line. The J-seam has two rock partings with a total coal thickness of up to 7 metres. This is the seam for which the resources have been calculated. Underground mining has been limited to an area that meets seam thickness parameters and a requirement that the dip not exceed 16 degrees. Within this area a total resource of 36 million tonnes has been outlined.

Mine plans are now being firmed up and mining permits obtained. It is Western Coal's objective to start production from this area by 2004 at 1 million tonnes rising to 1.75 million tonnes in 2006. The product would be a medium volatile bituminous coking coal. The raw coal would be washed and at an overall average yield of 75%. A three unit continuous miner operation would produce 1.35 million tonnes of raw coal or 1 million tonnes annually of clean coal (product). This metallurgical coal could be expected to have an air dried ash content below 9%, a moisture of 9%, a low sulphur of 0.6% or less, and an FSI (Free Swelling Index) of 6-8. This would be a similar product to that shipped previously from this area.

Based on these assumptions mine operating costs would be between \$25 and \$30 per tonne of clean product.

Hermann Coal Property has had significant drilling to date and a resource of 27 million tonnes has been identified at a strip ratio of about 5.3:1. The coal is a low to medium volatile metallurgical coal, but feasibility work will be required to identify mineable resources within this resource, particularly regarding the washability, and blending to produce a saleable product.

#### **BELCOURT GROUP**

There are two properties in this group, Red Deer, and Holtslander. They are located about 85 kilometres south of Tumbler Ridge and were extensively explored in the late 1970's and early 1980's. A recent preliminary feasibility study investigated a 2 million tonne open pit mine starting on the Red Deer and then moving to the Holtslander deposit. The surface mineable, run of mine resources were 44 million tonnes at a strip ratio of 5.8:1. The coal is metallurgical and classified as hard coking, low ash, and sulphur with excellent coking characteristics.

## POTENTIAL FOR FURTHER RESOURCES

Coal resources are generally qualified as having a strip ratio if they are open pitable (determined by economics) and in the case of underground, sufficiently flat lying and regular to enable economic mining. Coal seams tend to underlie significant areas once you are located in a coal field, but in most cases only a portion of this resource is of economic interest.

### Brazion Group

Defined resources for this group only exist at present on the Burnt River property. These as defined are presently 33 million tonnes. The data on the West Brazion lease would allow an estimate of about 20 million tonnes. Based on known data on the coal strata at the Brazion and Hudette leases an estimate can be made that there is likely to be a further resource of about 25 million tonnes. Thus the resource as presently defined is 33 million tonnes with a reasonable anticipation of expanding to 78 million tonnes.

### Wolverine Group

The two known explored deposits within this group are Mt. Spieker and the Bird Underground. These are known to contain 7 and 29 million tonnes respectively. Scoping studies based on drilling give a resource of 36 million tonnes at Perry Creek, and 27 million tonnes at Hermann. The EB Pit, which in previous reports had resources of 13 to 19 million tonnes, is now thought to contain about 15 million tonnes. Based on coal strata data a further 10 million tonnes could be expected at Perry Creek, 5 million tons at Bird Open pit, and another 10 million tonnes in the area. The present resource is 73 million tonnes in this district with the potential to increase this to 139 million tonnes.

#### Belcourt Group

Reports have estimated the surface mineable resource at about 44 million tonnes. The overall coal resource on the property is estimated to be 141 million tonnes.

Present identified resources based on exploration data total 69 million tonnes in North East B.C. with the potential to expand this to more than 250 million tonnes. Western Coal has a further defined resource of 25 million tonnes of coal resource at Lillyburt in South East B.C..

## MINING

Coal mining has adapted to the harsh economic climate in which the product must meet specifications and be produced on a world competitive price basis. This translates into today's market, with rail freight costs and port handling costs in North East B.C. at a little under \$20 per tonne, into mine site operating costs in the \$30 per tonne range.

During the early 1980's the expectation was for coals to sell at almost double the present prices. Open pits and underground operations, were planned on a grand scale with little serious attention to mine flexibility and therefore large open pits were designed, along with large coal preparation facilities. Underground mining in this coal field had been investigated and once again the

method investigated was long wall mining with its inherent lack of flexibility. The open pits employed large equipment with the objective of benefiting from economies of scale, such that higher stripping ratios could be mined. Dilution from the use of this equipment would be removed in the coal preparation plant. The two initial mines in this area both suffered from this mentality to some degree. Quintette, the largest operation, suffered particularly and initially the yields (recovery of clean coal from mined coal) were so low that the plant was unable to handle the rejects (waste) and several additions to the washing circuit were needed. Bullmoose, a smaller operation, was more readily able to adapt to the realities that greeted these new mines once they had achieved commercial production.

The results from this first generation of mines was mixed with neither operation making an initial acceptable rate of return on investment, let alone paying back the large infrastructure costs incurred in building the port, railway additions, roads and town. Bullmoose was always profitable and achieved a measure of success in the later half of its life, as it was able to adapt to some degree to the new reality.

Western Coal has researched the available mining methods both for open pit and underground and found that advances have occurred in the manner in which equipment can be employed. The open pits will be designed to mine coal that can be economically recovered and the product will be washed only when necessary. Underground will employ modern, highly productive mining methods and equipment. Today's underground mining is often cost competitive with open pit mining. Experimental methods of recovering coal from beyond final open pit walls have now been fully developed. These systems known as "Highwall Miners" are able to obtain respectable recovery rates at very low costs.

Coal preparation (washing to remove primarily ash and waste) has reached a stage where modular plants are less capital intensive than the large ones built decades ago, but are able to wash at an operating cost and efficiency similar to the larger units. The concept of washing has changed and it is now well recognized that partial washing may be able to achieve the product required.

Western Coal, managed by an experienced group of coal miners, will be able to mine coal from these licenses, in a manner that was viewed as inappropriate 20 years ago. Smaller open pits with lower strip ratios, and appropriately sized equipment will lower costs and enable the Company to adapt to changing market conditions. Underground operations will consist of smaller blocks, lower underground haul distances, and flexible highly productive units. Economic coal reserves can and will be extended by the use of highly productive Highwall Miners. The combination of the changing technology, the focus on flexible and adaptable mining, along with skilled management will enable Western Coal to develop the next generation of mine producers in the North East B.C. coal field such that they will be highly competitive in world markets and significantly profitable for the shareholders.

#### INFRASTRUCTURE/ENVIRONMENTAL

In the late 1970's and early 1980's infrastructure was built to enable the Quintette and Bullmoose mines to be developed and deliver coal to the coast. It is estimated that about \$3 billion was spent on the infrastructure and mine development. The mine development was the responsibility of private enterprise, but the infrastructure was primarily the responsibility of both the federal and provincial governments concerned. The town of Tumbler Ridge was developed to provide housing, schools, etc. for the employees. Roads were built to service the area. A 127 kilometre high voltage power line was constructed and a 129 kilometre rail spur line was built over rugged terrain, and equipped with modern electric locomotives. The CN rail line from Prince George to the port of Prince Rupert, 725 kilometres, was upgraded to handle unit trains. A major deep sea port was constructed at Prince Rupert, so that the largest ocean freighters used in bulk transportation could be quickly loaded without incurring demurrage charges. This infrastructure was designed to handle more than the requirements of the two new mines as further development was planned for this coal field. It was believed that a total of more than 10 million tonnes would be produced and as much as 15 million tonnes annually was likely.

These facilities were all state of the art at that time and 20 years later would still be considered amongst the most modern and efficient in the world. With the closing of Quintette and likely closing of Bullmoose, the railways and port have realized that it is imperative for them to charge competitive rates to handle the coal or the producers are unable to compete in the world markets and there will be no coal to handle. The coal producers in South East B.C. have remained in business during the last several years when low coal prices prevailed partly due to an implied arrangement with the railroads and the port facilities used to limit freight rates and handling charges depending on the price at which coal is sold. These infrastructure providers have a symbiotic relationship with the coal producers, and this has recently resulted in rates for rail freight and port handling, that can be supported by the producers.

Mining has now occurred in the area for over 20 years with little or no environmental problems. The mines were developed in a period when environmental considerations had become a part of the coal production process. Pit slopes were properly engineered, dumps located in appropriate areas, and consideration was given to the wild life habitat. Prior to these mine start ups there was considerable environmental base line monitoring, and since then there has been extensive monitoring in the area due to the 20 years of mining. The impact of two very large operations on the environment has been minimal. The coal from this coal field is low in sulphur and other impurities that could cause environmental damage. Access to the area has provided employment in the tourist sector particular for hunting and fishing.

This history, along with the need to provide employment in the area so as to maintain a sustainable community, should enable properly prepared documents for the permits required for a mine operation to pass through the process expeditiously. It should also be noted that the present permitting process in B.C. is now well understood by all the parties involved.

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## **ECONOMICS**

Coal mine economics are based on several parameters. The capital cost of placing the mine, either open pit or underground, into production and the operating cost of the mine to produce run of mine coal. The coal quality of the run of mine versus the coal required under the contract, determines the need for processing (washing) and the amount of processing required results in a yield of clean coal (product) versus run of mine. The handling costs to load the coal into railway cars and the ability to load unit trains (trains dedicated to coal haulage) will affect the freight rates that the railway charges. Unloading of the cars at the port, port handling costs, and the speed at which large bulk ships can be loaded also impact the overall cost of the product.

In this report each operation will have differing economics, but despite the significant rail haul rates and the remote location, these mines will have the benefit of a rail system designed to handle large tonnages of coal, and a port that can load some of the largest bulk carriers with a quick turnaround. In today's competitive coal market (especially sea borne) this is not an unusual situation as modern transportation and port facilities have become an essential constituent of the coal business.

### CAPITAL COSTS

Western Coal plans on keeping the capital costs of the mining operations to a minimum. In open pit mines, the equipment will be relatively small in comparison to some of the larger operations, so that mining can be more selective and the actual mining can be contracted out. The mobile equipment envisaged would and could be used in many applications and therefore will not need to be purchased solely for the mining operations.

In the case of underground mining using continuous miners, there is once again the ability to use contract miners as the capital per mining unit is lower and underground contract mining has developed into a separate business.

Washing and load out facilities are more site specific and therefore Western Coal will generally be making the investment in these facilities. Modern washing plants of a reasonable size have become either readily moveable or are designed to be mobile (for smaller plants).

The initial three mining operations are expected to have the following capital costs:-

#### Burnt River

This will be the first to come on stream and with a reasonable period for permitting this should start production in the later half of 2003, resulting in about 375,000 tonnes of product that year and 750,000 tonnes in 2004. It will be an open pit mine.

Total pre-production capital using contract mining and contract crushing would be \$9.5 million, including the work needed for the permits and a 10% contingency.

### Wovlerine/Perry Creek

This project, due to start up in 2004, would be developed over a 3 year period to achieve an annual production capacity of 2 million tonnes. This mine will be producing a metallurgical coal from the EB and Hermann deposits utilizing open pit and from the Perry Creek deposit via underground mining. Total initial capital would be about \$53 million, of which the major item is the coal preparation (wash) plant and coal handling facilities at \$27.5 million. \$3.275 million has been allowed for permitting and final feasibility.

### **Brazion**

A 2.25 million tonnes a year mine is planned to produce from the West Brazion, Brazion and Hudette coal deposits using open pit mining. Start up would be in 2005, with full production by 2007. The total initial pre production capital costs are expected to be nearly \$36 million. \$14 million would be for the wash plant and coal load out.

## **OPERATING COSTS**

The initial three mining operations are expected to have the following operating costs:-

### Burnt River

This mine will be shipping run of mine or raw coal as there will be no need to wash it to provide a sought after PCI product. The stripping ratio will start at around 3.5:1 increasing to a little over 4:1 for an average of just under 4:1 for a 15 year life. The open pit mining cost is expected to be about \$15 per tonne, and processing and haul to load out and loading about \$13 per tonne, for a total of \$28 per tonne loaded in the rail car. Based on offsite rail, port, and sales costs of about \$20 per tonne the total cost loaded into the ship would be about \$48 per tonne (US\$31.20 per tonne).

#### Wovlerine Perry Creek

This mine will be washing some of the raw coal production with yields varying from 70 to 80% depending on the raw coal being washed. Mine production costs, coal loaded into railway cars is forecast at about \$33 per tonne, and total costs loaded into the boat are expected to be about \$53 per tonne (US\$34.45). Underground mining costs are similar to open pit at this operation.

## Brazion Group

This operation would be carefully blending the coal produced to produce a product mix consisting of 80% metallurgical, and 20% PCI. All production is from with an overall strip ratio of a little more than 5:1. Production costs for product loaded into railway cars is just under \$30 per tonne. Loaded into boat the cost is expected to be close to \$50 per tonne (US\$32.50).

## SENSITIVITY

At the Burnt River Project the sales price is forecast at US\$35.50 per tonne, cash operating costs at US\$31.20, and the cash margin would be US\$4.30 per tonne. At 750,000 tonnes annually this is US\$3.25 million or Cdn.\$5 million. This is very sensitive to both sales price and total operating costs.

The Wolverine/Perry Creek operation will primarily be selling a hard coking metallurgical product at US\$43 per tonne and some at lower prices resulting in a blended price of US\$42.50. The cash margin would be US\$8.00 per tonne, resulting in a cash flow of US\$8 million (Cdn.\$12.3 million) at a million tonnes or US\$16 (Cdn.\$24.6 million) annually at the projected 2 million tonne level.

The Brazion Group blended price would be US\$38 per tonne, and with costs at US\$32.50 per tonne the cash margin would be about US\$5.50 per tonne. At a million tonnes of annual production this translates to US\$5.5 million (Cdn.\$8.5) of cash flow.

Production is forecast at 375,000 tonnes in 2003, 1.9 million tonnes in 2004, 3.6 million tonnes in 2005, 4 million in 2006, and 5 million tonnes starting in 2007.

The total cash to Western Coal will be very dependant both on coal price and annual production rates. At 5 million tonnes per year production rate, a US\$1.00 change in coal price results in US\$5 million (Cdn.\$7.70 million) change in cash flow.

#### VALUATION

Assuming that production of 375,000 tonnes of Burnt River Coal is sold in 2003, then the gross cash flow would be about \$2.5 million to the Company. If the required capital for the Burnt River Mine were to be raised from the equity market then Western Coal would have about 32 million shares outstanding. Cash flow in 2003 would be about \$0.08 or \$0.16 at an annual rate.

In 2004, Burnt River would contribute \$0.16 per share and Wolverine another \$0.30 per share, for a total of \$0.46 per share, based on 32 million shares. Some but not all of the capital for Wolverine would come from the equity markets. Thus total cash flow would be closer to \$0.35 per share.

At a 5 million tonne annual rate of sales as forecast the annual gross cash flow would be about \$40 million annually or without further dilution about a \$1.00 per share.

Western Coal shares are presently worth \$1.50 to \$2.00.

After the permitting, funding, and construction of the Burnt River Western Coal shares are worth \$3.00 or more,

After achieving annual sales of 5 million tonnes annually. And annual cash flows of about \$40 million, Western Coal shares could be worth \$10.00 per share

#### SHARE CAPITAL

As of March 7, 2002 the Company has 16,882,730 common shares outstanding (including escrowed securities). (This includes 1.5 million shares subject to issue upon closing of the private placement announced December 6, 2001)

As of March 7, 2002, there are a total of 920,000 outstanding options to purchase common shares, and these if exercised could net the Company \$395,250.

125,000 options to purchase common shares @ \$0.30	expiration	February 19, 2006
795,000 options to purchase common shares @ \$0.45	expiration	May 3, 2006

As of March 7, 2002, there are a total of 6,621,667 outstanding warrants to purchase common shares, and these if exercised could net the Company up to \$3,609,500.

459,000 warrants to purchase common shares @ \$0.35	expiration	July 11, 2002
975,000 warrants to purchase common shares @ \$0.45	expiration	March 7, 2003
1,550,000 warrants to purchase common shares @ \$0.65	expiration	May 11. 2003
2,100,000 warrants to purchase common shares @ \$0.55	expiration	July 25, 2002
37,667 warrants to purchase common shares @ \$0.60	expiration	December 21, 2003
1,500,000 warrants to purchase common shares @ \$0.55	expiration	December 6, 2003

Fully diluted, Western Coal would have 24,424,397.common shares outstanding (including escrowed securities) and the Company could receive a total of \$4,004,750 into the treasury.

## ESCROWED SHARES

As of March 7, 2002, there are 2,510,096 shares in escrow.

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