

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Assessment Report for The Crown Mountain Area 2014

TOTAL COST: \$2,600,332.62

AUTHOR(S): Art Palm

SIGNATURE(S): ///

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): 13-1630209-0528

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OWNER(S): NWP Coal Canada Ltd

MAILING ADDRESS:

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REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

Coking Coal, Drilling, Pre-Feasibility Study

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

Assessment Report for the Crown Mountain Area 2012, March 21 2013 Assessment Report for the Crown Mountain Area 2013, March 21 2014

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping		n/a	
Photo interpretation		n/a	
GEOPHYSICAL (line-kilometres)			
		n/a	
Ground		n/a	
		n/a	
Electromagnetic		n/a	
Induced Polarization		n/a	
Radiometric		n/a	
Seismic		n/a	
Other		n/a	
Airborne			
GEOCHEMICAL (number of samp	les analysed for)	n/a	
Soil		n/a	
Silt		n/a	
Rock		11/a	
Other		n/a	
DRILLING (total metres, number of	f holes, size, storage location)		
Core		n/a	
Non-core		n/a	
RELATED TECHNICAL			
Sampling / Assaying		n/a	
Petrographic		n/a	
Mineralographic		n/a	
Metallurgic		n/a	
PROSPECTING (scale/area)		n/a	
PREPATORY / PHYSICAL		n/a	
Line/grid (km)		n/a	
Topo/Photogrammetric (sca	ale, area)	n/a	
Legal Surveys (scale, area		n/a	
Road, local access (km)/tra	il	n/a	
Trench (number/metres)		n/a	
Underground development	(metres)	n/a	
Other			<u> </u>
		COST	statement of costs

2014 Assessment Report for The Crown Mountain Area Kootenay Land District, Fort Steele Mining Division NTS Map Sheets: 082G15, 082G10

Coal Tenure Numbers: 418150, 418151, 418152, 418153, 418154

British Columbia Map Reference: 082G077, 082G087

Latitude: 49.815 Longitude: 114.723

NOW 1630209 0528: Application Date 18 Jan 2013, Approval Date 29 May 2013 with subsequent amendments

Coal Licences Owned by:	NWP Coal Canada Ltd
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Exploration Program Operated by:	NWP Coal Canada Ltd

Suite 800, 1199 West Hastings Vancouver, BC V6E 3T5

No Exploration Field Work Conducted For 2014 – This Report Addresses Pre-Feasibility Study

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INTRODUCTION

This report presents results of a Prefeasibility Study (PFS) conducted in 2014 on coal exploration activities performed during 2013 and previous years on the Crown Mountain property located in southeastern British Columbia (BC). Norwest Corporation (Norwest) was contracted by NWP Coal Ltd, a wholly owned subsidiary of Jameson Resources Limited (Jameson), to conduct the PFS.

No additional field exploration was conducted in 2014 on the project, although due to timing of invoices, a large amount of invoices related to the 2013 program were paid in 2014. However, all such information was included in the 2013 Crown Mountain Coal Assessment Report.

2014 Project Objectives

Perform a PFS on the exploration and coal quality results obtained in 2013 and earlier.

Property Description and Access

The property is located in a mountainous area at relatively high elevations about 13 km east of Sparwood, BC and about 150 km line-of-sight south southwest from Calgary, Alberta. The North Block and South Block of the property are located about 35 km by road from Sparwood. Similarly, the South Extension is a road distance of 20 km from the same location. The location of the property is shown on Figure 1. The property is divided up into three areas: the North Block, South Block and Southern Extension Block.

Access to the North and South Blocks is via British Columbia Highway 43, and the Line Creek Road, both of which are paved, and via a series of unpaved secondary roads and trails. Access to the Southern Extension Block is via Highway 3 and the gravel Alexander Creek Road. On the property, drill sites and other exploration locations require the use of suitable 4x4 vehicles for surface access due to the nature of the roads.

The main line of the Canadian Pacific Railroad lies adjacent to Highway 3 from Alberta to Sparwood and then trends south to Fernie before continuing on to the ports on the west coast. A spur from this line extends to the north following the Elk Valley to service the Line Creek and other mines of that area.

The relief on the property is generally in the range from 2,200 m to about 1,850 m. However in Alexander Creek which drains the property it is typically in the range from 1,400 m to 1,500 m. On the top of Gaff Peak, located to the west of the licenses the elevation is as much as 2,479 m. For most of the property, topography consists of rugged ridges with moderate to steep-sloping sides at higher elevations and gentle slopes at lower elevations. The setting is truly mountainous, underlain mostly by structurally deformed sandstone, siltstone, mudstone and coal.

Alexander Creek drains the property and passes through the center of the southern part of the property, trending generally from north to south. Other important rivers in the area include the Elk River, the valley of which includes Highway 3 to the west of the property and the Crowsnest River to the south; Alexander Creek flows into the Crowsnest River. Water should be available from any of these sources or from

several streams that are tributaries to these rivers. Power lines follow the route of Highway 3 and service the various communities in the area.

Records from the weather recording station indicate total average yearly precipitation is 105 cm with winter snowfall averaging 368 cm. The highest and lowest temperatures recorded at Fernie were 36° C and minus 40° C, respectively. Despite the temperature range, the open pit mines in the surrounding region operate through all seasons of the year.

During exploration in this general area snow depths in the higher elevations have been reported to exceed 4 m in places. Snow can cover the ground from late September to the end of May at higher elevations. The property, especially in the east, is vegetated by native vegetation that is typical of the Subalpine Forest zone of this area.



Figure 1: Property Location Map

Property History

The history of exploration and development of this coal property extends back to coal development activities in southern Alberta and Southeast British Columbia of the late nineteenth century. At that time, the Crow's Nest Pass Coal Company was established in 1897 to develop the coal resources of the British Columbia side of the Crowsnest Pass. Several subsidiaries were created to operate ancillary activities. They included the Morrissey, Fernie and Michel Railway, and the Crows Nest Pass Electric Light and Power Company. Various mines were opened at Coal Creek, Natal, Michel and Morrissey. After the Second World War demand for coal dropped and the company diversified through a subsidiary, Crow's Nest Pass Oil and Gas Company. As the 1950s and 1960s progressed the mines were closed and the company moved into the forest products area.

In 1965 the name of the company was changed to Crows Nest Industries Ltd. In 1968 the company's coal resources were sold to Kaiser Steel and the assets of Crows Nest Pass Electric Light and Power were sold to British Columbia Hydro. However there are existing historic references to coal drilling exploration being completed by Crows Nest Industries Ltd. in the Crown Mountain area in 1969 and exploration data from that program has been used in the present report. Thus either the date of the sale to Kaiser is incorrect or the Crown Mountain asset was never sold to Kaiser Steel. Either way, the Crown Mountain Coal Property was owned by Crows Nest Industries in 1976.

A change in the demand for coal resulted in the company reacquiring some coal lands from Kaiser in 1976. In 1977 Shell Canada purchased the company and renamed it Crows Nest Resources Limited. That company was sold in 1991 and ownership and responsibility for at least some of its coal assets were transferred with the sale.

Crows Nest Resources Limited explored the property for three field seasons from 1979 through 1981. In 1979 the property was mapped and drilled, the latter including both core and cuttings sampling of different holes. The program of 1980 was a relatively minor one only including geologic mapping. The program of 1981 consisted of further mapping, hand trenching of seam exposures and the construction of a mechanically excavated pit and the collection of a bulk sample. These activities appear to be the last exploration works performed on this property during the Crows Nest Resources/Shell Canada tenure. Eventually the property was relinquished and later acquired by Morris Geological. It appears that no further exploration work was conducted on the property until it was acquired by Jameson.

Jameson Resources Limited through its subsidiary NWP Coal undertook a major exploration program which included field mapping, trenching and drilling in 2012. All exploration was supervised by Norwest Corporation. Field mapping was completed to verify the geological observations reported from the 1979 and 1981 programs. A total of 12 trenches, in which the coal seams were well exposed, were constructed using a back hoe. Some, but not all, of these were permitted as "Deep Trenches" with a depth of 3 m. Roadside-cut shallow trenches were usually less than 1.2 m deep. When a trench intersected coal it was sampled as channels and this material was also sent to the laboratory for analysis. The drilling and coal sampling program included 41 holes for a total penetrated depth of 5,768 m. A total of nine angle holes

and 31 vertical reverse circulation holes were drilled. All of the holes in the program were geophysically logged except where poor hole conditions prevented it.

In 2013 Jameson Resources once again conducted a field exploration program. This program consisted of reverse circulation (6 holes – 796 meters) and large diameter core drilling (7 holes – 853 meters), followed by a comprehensive lab analysis program. Results were reported in the 2013 Coal Assessment Report filed with the province.

There was no exploration performed in 2014 on the project.

Property Location and Coal Tenure

The Crown Mountain Coal Property is located in the Elk Valley Coalfield in the East Kootenay region of southeast British Columbia. It is approximately 150 km line-of-sight and 300 km by road southwest of Calgary, Alberta. The center of the property is about 30 km northeast of Sparwood, British Columbia, at Latitude 1140 43.6'W, Longitude 490 48.4'N, as shown on Figure 2. The location and distribution of the coal licenses is shown on Figure 2. According to the tenure records of the British Columbia Provincial Government, title to the coal licenses is held by NWP Coal Canada Ltd. (NWP Coal) of Vancouver, British Columbia. NWP Coal holds a 100% interest in five adjacent coal licenses that cover a combined area of 2,588 ha. Table 1 is a reproduction of the government records concerning these titles.

Tenure Number	Map Reference	Work Recorded to	Status	Mining District	Area (ha)
418150	082G087	May 2, 2014	Good Standing	Fort Steele	334
418151	082G077	May 2, 2014	Good Standing	Fort Steele	1001
418152	082G087	May 2, 2014	Good Standing	Fort Steele	167
418153	082G087	May 2, 2014	Good Standing	Fort Steele	251
418154	082G087	May 2, 2014	Good Standing	Fort Steele	835
418430	082G087	May 2, 2014	Good Standing	Fort Steele	975

TABLE 1 JAMESON RESOURCES LIMITED CROWN MOUNTAIN COAL PROPERTY COAL LICENCE TENURE DATA

Jameson, acting through NWP Coal, originally acquired the coal license rights to the Crown Mountain Coal Property from Robert J. Morris. The completion of that transaction led Jameson to acquire a 90% interest in the property, the remaining 10% being retained by Robert J. Morris as an undivided interest.

NWP Coal applied for an additional coal license (418430) which adjoins the western margin of the existing tenure area. The application which covers 975 hectares was accepted by Mineral Titles BC on October 16^{th} 2013.



Figure 2: Coal Licenses

2014 Summary Of Work

Norwest Corporation commenced the PFS in January of 2014 and completed the report in September 2014. The PFS was performed in joint compliance to NI 43-101 of Canada and the 2014 JORC Code.

COSTS INCURRED

As there was no exploration conducted in 2014, the costs for the project were limited to those associated with the PFS, and ongoing environmental data collection in preparation for submitting an EA application.

TABLE 2

JAMESON RESOURCES LIMITED CROWN MOUNTAIN COAL PROPERTY COSTS INCURRED

Cost Centre	Amount	
Exploration		
Drilling		
Data Administration		
Environmental & Rehabilitation	\$899,871.21	
Economic Studies	\$74,604.32	
Exploration - Technical Services including field costs	\$239,580.63	
Laboratory and Coal Quality Testwork	\$276,389.51	
Acquisition		
Applications		
Land Administration	\$132,417.00	
First Nations		
Rents/rates/permits		
Surface Exploration	\$37,960.11	
Geophysics and Remote sensing		
Site Preparation		
Pre-Feasibility Study		
Drilling		
Data Administration		
Environmental & Rehabilitation	\$16,694.73	
Economic Studies	\$882,380.81	
Exploration - Technical Services including field costs		
Laboratory and Coal Quality Testwork	\$40,434.30	
Acquisition		
Applications		
Land Administration		
First Nations		
Rents/rates/permits		
Surface Exploration		
Geophysics and Remote sensing		
Site Preparation		
TOTAL	\$2,600,332.62	
NOTE: Although costs were paid in 2014, all related	field exploration activi	ty was
conducted in 2013 and was included in the 2013 Coa	al Assessment Report.	



DRILLING

No drilling activities were performed in 2014.

GEOPHYSICAL LOGGING

There was no geophysical logging performed in 2014.

COAL SAMPLING

No coal sampling was performed in 2014.

COAL ANALYSIS

There was no coal analysis performed in 2014.

GEOLOGIC MAPPING

No additional geologic mapping was performed in 2014.

GEOLOGICAL SETTING

Regional Stratigraphy

The general stratigraphic succession is summarized on Figure 3. The Jurassic-Cretaceous Kootenay Group includes, from top to base, the Elk Formation, the Mist Mountain Formation, and the Morrissey Formation (Grieve and Ollerenshaw, 1989-2). The major coal bearing unit is the Mist Mountain Formation. The Kootenay Group conformably overlies the Fernie Formation. The regional geology of the property is shown on Figure 4.







Figure 4: Regional Geology

The Fernie Formation

Grieve and Kilby state that: "The marine Fernie Formation, of Jurassic age, is the oldest stratigraphic unit in the block. It is primarily a recessive unit, in contrast to the overlying Kootenay Group. Its base is marked by a thin band of phosphorite and phosphatic shale, which gives way to dark gray shale, overlain by the Rock Creek Member, which is composed of brownish silty shale with thin black limestone beds. The overlying Grey Beds consist of medium brownish grey shale with interbeds of calcareous sandstone and impure limestone (Price, 1962). A glauconitic sandstone or shale unit (Green Beds) immediately underlies the uppermost unit, the Passage Beds, which is a coarsening-upward sequence of interbedded shale and sandstone transitional to the Morrissey Formation of the overlying Kootenay Group".

The Morrissey Formation

The base of the overlying Late Jurassic to Early Cretaceous Kootenay Group is marked by the Morrissey Formation which is resistant and easily mapped in most areas of its occurrence. It averages 40 m in thickness in the area, and consists of two members (Gibson, 1985). The lower Weary Ridge Member is predominantly a fine-grained, quartzose, argillaceous, calcareous and ferruginous sandstone. The upper Moose Mountain Member is the more resistant and consists predominantly of medium-grained quartz-chert sandstone. Thin interbeds of carbonaceous shale and coal occur locally within the Moose Mountain Member.

The Mist Mountain Formation

The economically important Mist Mountain Formation conformably overlies the Morrissey Formation. It is moderately recessive to moderately resistant depending on the proportion of resistant sandstone or conglomerate beds it contains. It averages 500 m in thickness in the Crowsnest coalfield. Mist Mountain Formation in the Crowsnest coalfield consists of an interbedded sequence of siltstone, sandstone, mudstone, shale, coal and conglomerate of predominantly nonmarine origin. Fine-grained clastic rocks tend to be dark grey because of their carbonaceous content, while the sandstones, which contain grains of quartz, chert and quartzite (Gibson, 1985), tend to be somewhat lighter in color.

The depositional environment for the Mist Mountain Formation is that of an interbedded sequence of sandstone, siltstone, mudstone, shale, and coal, with rare conglomerate. It represents sediment deposition on a non-marine delta plain which prograded eastward into the inland Fernie Sea, and which received terrigenous clastic material eroded from tectonically active uplands to the west (Gibson, 1977; Jansa, 1972). Sediments are believed to have been deposited on lower delta coastal plains and upper delta alluvial plains, with the former being restricted to the basal part of the section (Gibson, 1977; Jansa, 1972). Deposition in alluvial channels and flood plains is generally inferred, with the latter environment represented by deposits typical of levee, crevasse, splay, flood-basin and swamp or marsh settings (Gibson and Hughes, 1981). No marine or brackish water deposits have been identified within the section.

The Elk Formation

The Elk Formation, which gradationally overlies the Mist Mountain Formation, is the uppermost formation in the Kootenay Group. It is a relatively resistant nonmarine unit dominated by coarse clastic rocks and in the Crowsnest coalfield it varies in thickness from a maximum of 482 m on Sparwood Ridge (Gibson, 1985) to 155 m near McLatchie Creek (Grieve and Ollerenshaw, 1989). Thicknesses of 327 m (Grieve and Ollerenshaw, 1989) and 253.5 m (Gibson, 1985) have been recorded at Flathead Ridge and Mount Taylor, respectively. In general it decreases in thickness from west to east. It is composed of sandstone, siltstone, mudstone, shale, coal and, locally, conglomerate. Sandstone units tend to be more numerous and laterally continuous than those in the Mist Mountain Formation. Conglomerates are associated with sandstone units, and achieve greatest concentration and thickness within the thickest sections, that is, at the western edge of the coalfield. Siltstone is generally similar to that in the Mist Mountain Formation, with the exception of the light grey weathering, well-indurated "needle siltstones" (Gibson, 1977).

The Blairmore Group

The contact with the overlying Lower Cretaceous Blairmore Group occurs at the base of the Cadomin Formation, the basal unit of the nonmarine Blairmore Group. In the Crowsnest coalfield this contact is abrupt and scoured, but may be conformable, at least in the western part of the coalfield (Gibson, 1979; Ricketts and Sweet, 1985). The Cadomin Formation in the Crowsnest coalfield consists of one or more thick cliff-forming chert-pebble to cobble conglomerate beds separated by recessive greenish and maroon mudstone units with a locally developed thin bed of light grey, nodular-weathering micrite. The Cadomin Formation is gradationally overlain by the Lower Blairmore, which in the Crowsnest coalfield is a 455 m thick recessive sequence of greenish grey, grey and maroon mudstone, with interbedded siltstone, cherty sandstone, conglomerate and minor limestone (Ollerenshaw, 1981a). The conformably overlying Beaver Mines-Mill Creek Formation in the Crowsnest coalfield is a sequence of greenish grey and maroon mudstone, sandstone and conglomerate 1,875 m thick.

Unconformably overlying the Blairmore Group are two marine shale sequences of the Blackstone and Wapiabi Formations. These are separated by nonmarine sandstone and shale of the Cardium Formation of the Alberta Group.

The Mist Mountain Formation of the Jurassic-Cretaceous Kootenay Group is the primary coal-bearing unit on the property and encompasses all of the economic coal seams. It conformably overlies the Moose Mountain Member of the Morrissey Formation. Except where controlled by faulting in the northernmost part of the South Block, the Mist Mountain Formation is the formation which crops out at the surface. The Morrissey Formation conformably overlies the Fernie Formation; these units are separated by a transitional zone of interbedded shale and sandstone with the former having the same characteristics as those of the Fernie Formation. A marker bed, normally found 5 m to 10 m below the base of the Moose Mountain Member, was found in all drill holes on the property that penetrated to that depth.



Based on results from the 2012 drilling campaign, the North Block has a preserved thickness in the range from 43 m to 145 m of Mist Mountain Formation strata. The equivalent values for the South Block are from 72 m to 162 m. Similarly, on the Southern Extension the Mist Mountain sequence is from 55 m to 110 m thick.

The top of the underlying Morrissey Formation is located from about 2 m to 13 m below the 10 Seam Lower which is the deepest coal unit on the property. The contact is readily identifiable because the Morrissey Formation is a distinct, weathering-resistant unit. Above the 10 Seam is the 9 Seam; the roof of this seam in the North Block, and occasionally in the South Block, is a weathering-resistant blocky unit of fine-to-medium grained sandstone that commonly displays an orange weathering color, it is locally referred to as the Ridge Sandstone. Both the Ridge Sandstone and the sandstone of the Moose Mountain Formation are mapped at the surface at various locations throughout the property.

Regional Structure

The tectonic history of this region has produced structural deformation on every scale. Southeast British Columbia coalfields are part of the Lewis Thrust plate. This plate is characterized by features associated with the compressional Laramide tectonic regime during deformation of the Rocky Mountain front ranges in late Cretaceous and early Tertiary time, namely flexural slip folds with north to northwest trending axes, and west-dipping thrust faults. A period of extensional faulting followed in late Eocene and early Oligocene time (Price, 1965), some of which occurred on earlier thrust fault surfaces.

According to Grieve (1993):

"The Lewis Thrust Sheet in the Elk Valley Coalfield is bounded to the east by the outcrop of the Lewis Thrust Fault and to the west by the Bourgeau Thrust Fault. The plane of the Lewis Thrust Fault has been folded by movement on a younger underlying thrust. Outcrop expressions of subsurface folds in the Lewis Thrust include the Alexander Creek Syncline and the Fording Mountain Anticline. The Alexander Creek Syncline underlies the entire length of the coalfield and encompasses the Line Creek Mine and the Eagle Mountain component of the Fording Coal Operation.

The Alexander Creek Syncline is the dominant structure in the Elk Valley Coalfield as it underlies the main body of the coalfield throughout its entire 97 km length. The syncline is generally upright but is locally steeply inclined. It is mainly an asymmetric fold, with the west limb being shorter in most cases." Grieve maps the Alexander Creek Syncline as being the large syncline that forms the mineable structure on the North Block of Crown Mountain.

A second significant structure on the Crown Mountain Coal Property appears to be the Ewin Pass Fault. Again, according to Grieve (1993) "The Ewin Pass Fault occurs in the east limb of the Alexander Creek Syncline throughout much of the south half of the coalfield. It may



also continue southward from Line Creek to Crown Mountain, assuming that the Crown Mountain Fault is the same structure, although there is no direct evidence for this. Throughout its length it has had the effect of thickening the east limb by causing a repetition of strata. The Ewin Pass Fault has been depicted in the subsurface by Price and Grieve as a listric, west-dipping splay of the Lewis Thrust.

The Crown Mountain Fault has placed west dipping Fernie formation strata in the east limb of the Alexander Creek Syncline over west dipping strata of the lower part of the Mist Mountain Formation.".

Property Stratigraphy

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Property Structure

Grieve (1993) has suggested that the major structures, the Alexander Creek Syncline and the Ewin Pass Fault associated with and located to the east of it, both extend south onto the Crown Mountain Coal Property. The presence of the syncline on the Crown Mountain property has been recognized for a long time and the Crown Mountain Fault, Grieve's suggestion for the extension of the Ewin Pass Fault, has been well located by historic mapping on the property. These features cause the property to be broken into



separate structural domains each with separate mining attributes or geological characteristics. These domains are referred to as the North Block, the South Block and the Southern Extension Block. The North Block lies west of the Crown Mountain Fault and occupies the Alexander Creek Syncline axial region. The South Block is located on the east side of the Crown Mountain Fault and is generally located somewhat further south than the North Block. The Southern Extension is the natural strike extension of the South Block and is contiguous with it.

The location of the North Block is shown to the west of the Crown Mountain Fault on the illustration of Figure 5. The North Block is thus situated on the hanging wall side of the fault. On the property, the syncline is asymmetric with the west limb having a steeper dip than the east limb. The dip of the west limb is typically 55° while that of the east limb is 44° . The fold axis has a north-northwest trend.

The South Block is shown in the central and southern portions of Figure 5, on the east side of the Crown Mountain Fault. The South Block is thus located in the footwall sequence below this fault. In the past the structure of this part of the property was that of a monocline. However the 2012 and 2013 drill hole data and reexamination of the outcrop data, show that the dip of the beds "flatten-out" as they approach the fault toward the southwest. This indicates that the original structure of these beds was a syncline that has been truncated by the thrust fault and only the east limb of the syncline remains. This interpretation is consistent with the regional observation of Grieve referred to previously.

The Southern Extension, as with the South Block lies to the east of the Crown Mountain Thrust Fault in the footwall sequence below the fault as shown on Figure 6. There is an erosional break between the structure of the South Block and the Southern Extension. Besides the Crown Mountain Fault, field mapping indicates the presence of at least one small scale thrust fault splays that appear to be developed from the Crown Mountain Thrust. However, the Southern Extension has not been explored to the same extent as has the North and South Blocks: limited holes were drilled in 2012, and no exploration work was conducted in 2013. More exploration in the Southern Extension is needed to fully define the structure of this area.



Figure 5: North and South Blocks



Figure 6: Southern Extension

COAL GEOLOGY

Deposit Type

The definition of "Deposit Type" for coal properties is different from that applied to other types of geologic deposits. Criteria applied to coal deposits for the purposes of determination of coal resources and reserves include both "Geology Type" as well as "Deposit Type". For coal deposits this is an important concept because the classification of a coal deposit as a particular type determines the range of limiting criteria that may be applied during the estimation of Reserves and Resources.

"Geology Type" for coal deposits is a parameter that is specified in Geological Survey of Canada Paper 88-21, which is a reference for coal deposits as specified in NI 43-101. Coal "Geology Type" is a definition of the amount of geological complexity, usually imposed by the tectonic history of the area, and the classification of a coal deposit by "Geology Type" determines the approach to be used for the Resource/Reserve estimation procedures and the limits to be applied to certain key estimation criteria. The identification of a particular "Geology Type" for a coal property defines the confidence that can be placed in the extrapolation of data values away from a particular point of reference such as a drill hole.

The classification scheme of GSC Paper 88-21 is similar to many other international coal reserve classification systems but it has one significant difference. This system is designed to accommodate differences in the degree of tectonic deformation of different coal deposits in Canada. Four classes are provided for:

- 1. "Low" which is for deposits of the Plains type with low tectonic disturbance.
- 2. "Moderate" which is for deposits affected to some extent by tectonic deformation.
- 3. "Complex" which is for deposits subjected to relatively high levels of tectonic deformation.
- 4. "Severe" for Rocky Mountain type deposits which have been subjected to extreme levels of tectonic deformation.

The coal deposits of the Elk Valley Coalfield are typical of those for Inner Foothills and Rocky Mountain areas which have been subjected to a relatively high tectonic deformation. From place to place coal deposits of this type may be characterized by tight folds, some with steeply inclined or overturned limbs. These features can be seen in different parts of the coalfield but they are far from being universal.

The Crown Mountain Coal Property is divided into two distinct structural domains separated by a northerly trending thrust fault that is named the Crown Mountain Thrust Fault. These two domains exist as two distinct Geology Types.

On the northwest side of the thrust, located in the part of the property that is referred to as the North Block, there is a large syncline that is angular and tightly appressed. The axis of this fold is oriented at a shallow angle to the fault trend such that the fold axis and fault approach each other from the north boundary of the property in a southerly direction. The structure of this area is clearly more disturbed



tectonically than other parts of the property and it has the features that cause it to be categorized as a Complex Geology Type.

The structure of the sequence on the east side of the fault is significantly different from this. There the structure is simply a westerly dipping monocline. This area is referred to as the South Block. The lower level of tectonic disturbance for this area allows it to be categorized as a Moderate Geology Type. There is a third portion of the property that is the strike extension of the South Block. This area is referred to as the South Extension. At present the South Extension area has been explored to a much lesser extent than has both of the other two blocks. At present this area is categorized the same as the area that it adjoins to the north. Thus the South Extension is categorized as a Moderate Geology type.

"Deposit Type" as defined in GSC Paper 88-21 refers to the extraction method most suited to the coal deposit. There are four categories, which are:

- surface;
- underground;
- non-conventional; and
- sterilized.

Crown Mountain is close to important infrastructure including major roads, rail, power and a mining town site. These features will be important for the development of the property. Because of the nature of the terrain and the geology of the area Crown Mountain is suitable for the planning of development using surface mining methods. However, investigations are presently being undertaken to determine whether some forms of underground mining may also be applicable.

Coal Occurrence and Mineralization

For coal deposits, "mineralization" refers to coal development and coal seam stratigraphy.

According to Grieve and Kilby (1989), within a complete stratigraphic section, "Coals in the Mist Mountain Formation are almost exclusively humic. Original banding has often been destroyed by shearing associated with Laramide deformation. They form an average of 10 % of the total thickness of the formation in seams which range from less than 1.0 m to greater than 15.0 m in thickness. Coal seams do not tend to cluster in any part of the stratigraphic section, and the only horizon which is consistently coal-bearing is the basal 20.0 m to 25.0 m of the formation".

However it must be noted that the Mist Mountain Formation section in the Crown Mountain area is an erosional remnant. The whole of the section is not present on this property. The sequence on the property is known to include, in the most complete stratigraphic section, only Seam 8, at the top, through Seam 10 at the base and the various plies and splits of these seams.

Drilling has penetrated three principal seams on the property. The principal seams are named 8 Seam, 9 Seam and 10 Seam but 8 Seam and 10 Seam have been found to consist of three plies in each case. These plies are generally persistent across the property and each ply has thus been recognized as a separate seam. The term "Major Seam" has been has been defined to include all seven of these seams in order to distinguish them from other coal horizons, referred to as "Rider Seams" which also occur in the sequence. Thus there are a total of seven major seams and these are named the 8 Upper, 8 Middle, 8 Lower, 9, 10 Upper, 10 Middle, and 10 Lower Seams. These names are presented in descending stratigraphic order. Table 3 is a summary of the net coal average thicknesses for the major seams.

Seam Name	North Block Average Thickness (m)	South Block Average Thickness (m)	Southern Extension Average Thickness (m)
8 Upper	12.47	-	-
8 Middle	4.27	-	-
8 Lower	3.74	3.3	-
9	4.68	3.06	10.1
10 Upper	7.56	3.09	3.29
10 Middle	1.08	3.97	1.4
10 Lower	1.52	1.62	-
Combined Average	35.32	15.04	14.79

TABLE 3
JAMESON RESOURCES LIMITED
CROWN MOUNTAIN COAL PROPERTY
SUMMARY OF MAJOR SEAM AVERAGE NET COAL THICKNESS

As Table 3 shows there is a significant difference in the combined net coal thickness for the North and South Blocks. However this is due to the fact that the upper plies of 8 Seam are eroded in that area, as they appear to be in the Southern Extension.

It has also been found that several of the seams have splits or "Rider Seams" associated with them from place-to-place. These riders are typically thinner and usually not as laterally continuous as the seams with which they are associated; the rider seams have been named with a prefix according to their overlying seam. From place-to-place the rider seams achieve mineable thickness. Table 4 shows the typical average net coal thickness for the rider seams on the property.



Seam Name	North Block Average Thickness (m)	South Block Average Thickness (m)	Southern Extension Average Thickness (m)
8 Rider	0.98	2.10	-
9 Rider	1.85	0.85	2.52
10 Middle Rider	-	0.78	-
Combined Average	2.83	3.73	2.52

COAL RESOURCE ESTIMATES

In early 2013, Norwest Corporation completed a compliant Resource Report and estimated a total of 66.6 million measured and indicated tonnes in Crown Mountain's North and South blocks. An additional 23.7 million tonnes was identified as inferred resource, in the Southern Extension area.

This initial resource estimate was updated by Norwest in March 2014. The update, based on summer 2013 drilling results, resulted in an increase of Measured and Indicated resources to 74.9 million tonnes (the inferred category remained unchanged, as the Southern Extension was not explored in 2013). It is the 74.9 million tonne resource upon which the PFS is based.

RESOURCE AREA	Measured (Mt)	Indicated (Mt)	Measured & Indicated (Mt)	Inferred (Mt)	Measured, Indicated & Inferred (Mt)
North Block	7.9	7.1	15.0	0	15.0
South Block	51.3	0	51.3	0	51.3
Southern Extension	0	0	0	23.7	23.7
TOTAL	59.2Mt	7.1Mt	66.3Mt	23.7Mt	90.0Mt

Table 5: Crown Mountain Resource 2013 (Effective January 21, 2013)

RESOURCE AREA	Measured (Mt)	Indicated (Mt)	Measured & Indicated (Mt)	Inferred (Mt)	Measured, Indicated & Inferred (Mt)
North Block	8.0	6.0	14.0	0	14.0
South Block	60.9	0	60.9	0	60.9
Southern Extension	0	0	0	23.7	23.7
TOTAL	68.9Mt	6.0Mt	74.9Mt	23.7Mt	98.6Mt

Table 6 – Crown Mountain Resource 2014 (Effective March 11, 2014)

Note: Data for Tables 5 and 6 was prepared in accordance with provisions of NI 43-101 and presented above in accordance with the JORC Code (2012 Edition), Clause 26.

PREFEASIBILITY REPORT

Reserves

The PFS has identified 55.8 million ROM tonnes as a coal reserve, of which 49.7 million tonnes are classified as Proven and 6.1 million tonnes as Probable. These reserves are underpinned by the resources contained in the preceding Table 6.

		F	Run of Mine C	oal Reserves		
A #00	ASTM	(Ktonnes)				
Area	Group	Proven		Probable		
		COKING	PCI	COKING	PCI	
North Pit	Bituminous	7,252	756	4,907	1,192	
East Pit		3,563	461	0	0	
South Pit		31,784	5,913	0	0	
Sub-Total		42,599	7,131	4,907	1,192	
Total Proven & Probable		49,730 6,099		99		
Total		55,829				

Table 7– Run of mine surface mineable reserve summary (ktonnes)(as at May 31, 2014)



Basic PFS Assumptions and Design Parameters

Jameson provided guidance to Norwest regarding the desired annual output of the operation. The guidance provided by Jameson is listed below:

PFS - Parameters	
Resource Base	Measured and Indicated only: exclude all Inferred
Mine Life	Through to exhaustion of economic resources
Clean Coal Production Rate	1.5 to 2.0 million tons per annum (Mtpa)
Time To First Production	Base schedule on fast-tracking project

Table 8 - PFS Parameters

Currency and Exchange Rates

All costs discussed in the PFS are in Canadian dollars. Coal sales prices are presented in US dollars.

The exchange rate assumed is 0.92 CAD per USD. This rate was estimated by Norwest based on current economic conditions and publicly available data from various sources.

However, for the purpose of simplicity, all economic figures presented in this announcement have been converted to USD.

Mining and Processing

The mining method selected for Crown Mountain in the PFS is open pit. Mining equipment includes excavators, front end loaders, and haul trucks, supported by dozers, backhoes, and blasthole drills. This type of equipment is typical for Elk Valley mining operations, and includes equipment specific to selective mining in certain thinner seams present on the property. The vast majority (90%) of overburden removal is projected to require blasting.

Part of the initial screening work on the PFS was to develop break even strip ratio (BESR) mining pits. Norwest accomplished that objective by using costs from the 2013 Preliminary Economic Assessment and revised coal sales price forecasts of US\$155 per tonne for hard coking coal (down from the \$202 sales price assumed in the PEA) and US\$110 for PCI coal (versus US\$142 in the PEA). This work, and the mine design and economic evaluation process that followed, resulted in the identification of project reserves, as are presented in this announcement.



The mine plan has been sequenced to extract the low strip ratio North block first, followed by the smaller East block (a subset of the South block, but a distinctly higher quality and discrete mine pit) and ultimately the large South block.

Following geotechnical evaluation of the core recovered during the 2013 exploration program, and considering available regional data, the following design parameters were used in the pit design:

Highwall	Inter-ramp Angle = 48° for a maximum wall height of 150m. Walls higher than 150 m require an additional 20 m catch bench between stacks.			
	Bedding Plane Dip	Berm Width	Berm Frequency	
	< 35°	0 m	Not required	
Footwall	36° to 50°	8 m	70 m	
	51° to 65°	8 m	30 m	
	> 65°	10 m	30 m	

Table 9 – Crown Mountain Pit Slope Guidelines

After pre-stripping, North block coal is mined beginning in late 2017. To allow for desired annual production, multiple pits are operated (ie: he East block pit begins concurrent production in 2018).

Annual production, after accelerating in 2018, reaches just over 2 million clean tonnes per annum in 2019 and 2020, followed by a gradual decline as the lower recovery South block is mined. The annual production averages 1.7 million clean tonnes per annum until the final partial year of operation.

It has been assumed that coal loss and out-of-seam dilution (OSD) occurs at every rock/coal interface except where partings are mined as part of the ROM product. Evaluation of site-specific conditions, and review of both local and other comparable operations, have resulted in the assumption of coal loss (pit loss) of 0.15m per contact, and concurrent OSD of 0.10m. Best practice selective mining will be employed over much of the Crown Mountain project area. ROM cutoffs for estimated plant yield result in any coking coal under 15 percent yield and PCI under 25 percent being treated as waste.

Mined ROM coal is hauled from the pit to a de-rocking device (rotary breaker or equivalent) where some of the larger size out-of-seam dilution (OSD) is removed.

As with all Canadian metallurgical coals, a wash plant is required. The PFS locates the plant proximate to the mine site. This accomplishes multiple goals: (a) it reduces trucking costs for the ROM material, (b) it allows plant reject disposal to occur at or near the mine site, and (c) plant reject (high in shales and clays) will be used to form barriers across the spoil piles, thus reducing permeability and mitigating the



potential for metal leaching (metal leaching, particularly but not limited to selenium, is an issue in the Elk Valley).

Plant yield peaks in the early years when the North block makes the major contribution. North block plant yield is 59 percent. The East block plant yield is 55 percent, followed by a 48 percent plant yield in the South block. The life-of-mine plant yield is 52 percent. The primary processing method is heavy media cyclone and reflux classifier, supplemented by column cell flotation for fines recovery. A thermal drier is included in plant design.

Washed coal will be conveyed down the mountain (3 km) and then trucked approximately 9 km to a stockpile/loadout area where the product would ultimately be loaded via 16,000 tonne capacity silo onto railcars on a new rail loop to be located adjacent to Canadian Pacific's ("CP") existing common-user railway. The loadout facility includes silo storage with a batch weigh bulk loading system for accurate load control and freight cost management.

Infrastructure

The Project is located in an infrastructure-rich area. Teck operates a total of five coking coal mines in the Elk Valley and general vicinity: two of these operations are south of Crown Mountain and three are north. As a result, mainline rail, power, and supporting communities are all nearby.

CP's rail is 14km from the mine site, and just 11km from the discharge of the Project's overland clean coal conveyor.

Power lines will be extended 14 km from the main transmission line to the preparation plant. A natural gas line of similar length is planned to provide heat for the thermal drier and support facilities.

Existing access roads to the Project will be upgraded: these roads have already been used for logging operations and product transportation by a local quarry.

Water supply will originate from a storage pond to be located adjacent to Grave Creek. Seasonal flow studies and estimated Project water requirements indicate this is a viable solution.

The towns of Sparwood, Elkford, Fernie, and Crowsnest Pass will be the source of the Crown Mountain work force, and house numerous mining-related service industries.

Transport

Once loaded onto rail, carrier CP will transport the coal to either Westshore Terminals ("Westshore") near Vancouver, or to Ridley Terminals ("Ridley") near Prince Rupert, where it will be loaded into ships. Westshore, at a distance of approximately 1,200 km, is the terminal of choice for Crown Mountain coal, with an estimated transportation cost (combined rail and port) of US\$32.20/tonne.

Capacity expansion continues at the two main Vancouver ports (Westshore and Neptune) and it is believed Westshore will have available capacity when the first coal from Crown Mountain is available to be shipped.

As an alternative, Norwest also evaluated shipping the longer distance to Ridley (at a combined US\$46.92/tonne transportation cost). With two rail carriers involved (CP and Canadian National) additional costs have been included for interchange. There are no significant capacity constraints with either of the railway carriers.

All clean coal production from Crown Mountain is assumed to be exported. Coal is sold FOB vessel.

Coal Quality and Product Mix

Based on the results of 2013's bulk sampling program, Norwest has determined that the majority of Crown Mountain product will be hard coking coal. A minority amount of PCI coal will be produced. There will be no material amount of thermal coal produced at Crown Mountain.

Based on assumptions employed by Norwest in the PFS, the clean coal product mix is estimated as:

Hard Coking coal	84%
PCI coal	16%

Norwest has stated the North block hard coking coal should be equal to the best hard coking coal exported from Canada, and will thus command near benchmark pricing. The South block hard coking coal product has been discounted to reflect certain parameters that are not as attractive as the North block counterpart; there is the potential for this evaluation to change if additional coal quality exploration is performed on the South block.

Blending of North and South Block coals, evaluated during the extensive lab testing performed on core, shows potential to increase life-of-mine revenue, and will be investigated by Jameson moving forward. Blending was not part of the optimization process for the PFS, and thus there does exist potential upside in this area.

Table 10 presents a summary of Crown Mountain coal quality compared to other western Canadian sources, as contained in the PFS. Of particular note is the relatively high (and attractive) CSR (coke strength after reaction), a property of great importance to coal buyers:

	Crown Mountain Coking Coal ¹		Canadian	Canadian	Central
	North and East Blocks	South Block	HCC ⁴	HCC ⁴	Alberta⁴
Total Moisture (% as received)	8 - 9	8 - 9	8 - 9	8 - 9	8 - 9
Volatile Matter (% dry)	20.5	18	23 - 24.5	21 - 27	17 - 27
Ash Content (% dry)	9	9	8.3 - 8.6	8.5 - 9.6	8.5 – 9.5
Sulphur Content (% dry)	0.6	0.6	0.45 - 0.55	0.35 - 0.75	0.45 - 0.5
Free Swelling Index (FSI)	7 - 8	4 - 5	7 - 8	6 - 8	5 - 7
Vitrinite Reflectance R _o Max (%)	1.45	1.59	1.15 - 1.25	1.10 - 1.35	1.10 - 1.60
Maximum Fluidity (ddpm)	30	5	150 - 300	40 - 300	15 - 700
Phosphorus in Coal (% dry)	0.060	0.100	0.008 - 0.040	0.010 - 0.065	0.016 - 0.050
Base/Acid Ratio of Ash	0.07	0.05	0.12 - 0.18	0.07 - 0.10	0.11
CSR (Coke Strength after Reaction)	75	67	58 - 60	68 - 72	58 - 60

Table 10 – Quality Comparison of Crown Mountain Coal with Other Canadian Export Coking Coals Notes:

¹ Results are based on laboratory scale washing and testing of exploration samples.

² North east British Columbia.

³ South east British Columbia.

² Results are based on full washing plant under operating conditions.

Data source: Kobie Koornhof Associates

Coal Pricing

Norwest retained Kobie Koornhof Associates ("Koornhof"), a well-respected coal market specialist, to provide coal price forecasts (USD) over the life-of-mine for Crown Mountain's two products (main product: hard coking coal and secondary product: PCI coal). Koornhof provided a forecast for the period 2018-2020, and a second forecast for years 2021 and beyond, a period Koornhof believes will witness a "step-change" in pricing due to its assessment of long term supply and demand. Further, pricing was segregated by mining area (North and South Blocks) as the North Block's coal quality is exceptional (benchmark grade):

PERIOD	COAL TYPE	NORTH	SOUTH
2018-2020	Hard Coking	\$170	\$151
	PCI	\$113	\$113
2021 and beyond	Hard Coking	\$190	\$169
	PCI	\$126	\$126

Table 11 - Coal Pricing Assumptions (USD)

It should be noted that while the above prices form the base case analysis contained in the PFS, Norwest has also performed considerable work related to price sensitivity, the results of which are presented later in this announcement.

Environmental Issues

The PFS and ongoing Environmental Assessment ("EA") effort have significantly added to the Company's understanding of environmental issues at Crown Mountain. Importantly, with the Project located in an area populated by operating coal mines, the environmental factors are relatively well defined.

One of the major environmental issues in the Elk Valley relates to metal leaching and its effect on water quality. In particular selenium (and to a lesser degree cadmium, calcite, and other elements) has reached elevated levels in the Elk River watershed. As a result, the province formed a task force headed by Teck that has recently developed the Elk Valley Water Quality Plan (draft report was submitted by Teck on 22 July 2014). Mitigation and control methodologies to address these issues have played a large role in the design of the Crown Mountain spoil piles and the use of wash plant reject to systematically "cap" spoil areas to reduce water infiltration. The Company is committed to utilize environmental best practices across the entire operation, and will closely monitor actions by other local mines, and emerging technologies, during the course of mine design and construction.

Jameson installed multiple ground water monitoring stations in 2013 and collects quarterly data. Norwest has evaluated that information and utilized the results to address issues such as pit dewatering



and groundwater contamination. The PFS does not anticipate any material environmental challenges associated with groundwater.

Additional permits must be acquired by the Company before mine construction can commence. To apply for these permits, significant study must be performed on areas such as wildlife, water quality, air quality, archaeological issues, etc. While the Company has not submitted any permit applications at this stage, it has been busy collecting the requisite data, and it is Norwest's opinion that the required permits are reasonably expected to be obtained, and the timing schedule provided in the PFS (initial mine production by late 2017) is reasonably achievable, provided Jameson executes the required critical path activities in a timely and administratively complete manner.

First Nations, Governmental, and Third Party Issues

Crown Mountain is located in traditional First Nations territory. Specifically, both the Ktunaxa and Shuswap bands claim such traditional use. Jameson has been in contact with these organizations and has established a policy of close cooperation and communication moving forward. First Nations are intimately involved in the mine permitting process through the referral and commenting routines established between First Nations and provincial government. It is incumbent on the province, and in turn Jameson, to understand and address the issues brought forth by First Nations.

In addition to First Nations, there are governmental and private entities that have certain interests with respect to land use, and can be expected to participate in the permitting process through referral and comment. Such entities include, but are not limited to, local governing authorities and special use organizations such as recreational clubs, etc.

Norwest has evaluated potential issues that may arise during the permitting process and believes it is reasonably likely Jameson will be able to adequately address these issues and receive the required permits per the project schedule.

All mining and coal processing activities, including refuse and spoil disposal, will occur on land either now controlled, or under application, by Jameson. The water supply, access and haulage roads, and preferred rail loop/loadout site are on property controlled by one or more third parties. It is assumed in the PFS that the necessary access and surface disturbance rights will be acquired without major issue.



Capital and Operating Costs

Start-up capital expenditure to support the mining and processing operation has been estimated by Norwest to be \$339.7 million as detailed in Table 12. This represents the base case for the project.

Pre-Production Capital	US\$M
Major Mobile Equipment	108.1
Minor Mobile Equipment	8.3
Wash Plant	57.8
Infrastructure (rail load-out, roads, power, offices, shop etc) and permitting	93.7
Pre-Strip	40.9
SUBTOTAL – CAPITAL	308.8
Contingency @ 10%	30.9
TOTAL CAPITAL	339.7

Table 12 – Pre-Production Capital (Base Case)

The base case mine operating cost estimate has been developed from first principles and considers all aspects of the mining operation, including coal processing, coal and waste loading and haulage, topsoil salvage and replacement, road maintenance, water management, reclamation and site administration. Operating costs are summarised in Table 13.

Cost Category	Cost Per Clean Tonne Life-Of-Mine US\$
Waste Removal	41.41
Coal Mining	8.00
Plant	8.66
Clean Coal Handling	2.61
Reclamation	1.24
Marketing/Corporate	1.24
Administration	5.02
Total Costs – Site	68.18
Rail and Port Costs	32.20
Total Costs - FOB (pre-tax and royalty)	100.38

Table 13 – Prefeasibility Base Case FOB Costs (Pre-Tax Basis)

Alternate financing scenarios have also been examined by Norwest designed to reduce start-up capital whilst preserving the overall performance of the project.



It is possible, indeed common, to lease mobile equipment rather than expend capital (Table 14). Although less common, it is also possible to utilise a third-party to construct and operate the wash plant and associated facilities, again saving up-front capital (Table 15).

Pre-Production Capital	US\$M
Major Mobile Equipment	0
Minor Mobile Equipment	8.3
Wash Plant	57.8
Infrastructure (rail load-out, roads, power, offices, shop etc) and permitting	93.7
Pre-Strip	40.9
SUBTOTAL – CAPITAL	200.7
Contingency @ 10%	20.1
TOTAL CAPITAL	220.8

Table 14– Pre-Production Capital – Lease Major Equipment

Pre-Production Capital	US\$M
Major Mobile Equipment	0
Minor Mobile Equipment	8.3
Wash Plant	0
Infrastructure (rail load-out, roads, power, offices, shop etc) and permitting	62.7
Pre-Strip	40.9
SUBTOTAL – CAPITAL	111.9
Contingency @ 10%	11.2
TOTAL CAPITAL	123.1

Table 15– Pre-Production Capital – Lease Major Equipment, Plant and Associated Facilities

Sustaining capital requirements, included in the NPV and IRR calculations below, are US\$211 million for the base case, and US\$37 for the leasing scenarios.

Operating costs for the leasing alternatives are presented in the next section.

Prefeasibility Economic Results

The life-of-mine (LOM) is estimated at 16 years, with annual clean coal sales ranging up to 2.0Mtpa based on plant yields, which vary by mining area. A total of 26.4 million tonnes of clean coal is sold, of which 22.3 million tonnes (19.7 million tonnes Proven and 2.6 million tonnes Probable Reserve) is hard coking coal, and the balance of 4.1 million tonnes PCI (3.4 million tonnes Proven and 0.7 million tonnes Probable Reserve).

The clean coal stripping ratio (BCM of waste to tonne of clean coal) ranges from 6.5:1 to 8.8:1 during the first 4 years of operation. This is considered to be low and attractive relative to other surface coking



coal projects. The low life-of-mine clean strip ratio of 9.9:1 is due to Crown Mountain's topography and the presence of several major coal seams near surface.

Primary outputs from the PFS are listed in Table 16 (pre-tax) and Table 17 (after-tax). Results for the alternate scenarios which consider leasing all mobile equipment and leasing the plant (and associated appurtenances) and operating it on a contract basis are included.

Scenario	Start-Up Capital	LOM FOB US\$/tonne	IRR %	NPV10 US\$M	
Base Case	339.7	100.38	32.9	370.7	
Lease Mobile Equipment	220.8	111.32	43.2	405.3	
Lease Equipment & Plant	123.1	117.10	61.5	409.8	

Table 16 –	Prefeasibility	Economics ((Pre-Tax Basis)	(Capital includes	10% contingency)

Scenario	Start-Up Capital	LOM FOB US\$/tonne	IRR %	NPV10 US\$M
Base Case	339.7	100.38	26.4	223.5
Lease Mobile Equipment	220.8	111.32	35.1	255.9
Lease Equipment & Plant	123.1	117.10	50.1	263.1

Table 17 – Prefeasibility Economics (After-Tax Basis except FOB) (Capital includes 10% contingency)

From above it can be seen the option of leasing the mobile equipment and plant presents the lowest start-up capital and highest economic return.

Sensitivity Analysis

Norwest has performed a sensitivity analysis by varying certain factors over the life of the operation, the results of which are presented in Table 18. The selected parameters evaluated are:

- **Coal Sales Price:** the model is very sensitive to the coal sales price. However, the favourable economics at Crown Mountain provide for positive economics even in the face of lower prices. As the summary (Table 18) demonstrates, the project displays a 23.6% pre-tax IRR (18.6% after-tax) at a 10% coal price reduction (equivalent to US\$153 for the initial period). Similarly, when coal prices are increased above the base assumptions, the benefits are significant, as displayed in the table.
- **Port:** The PFS has assumed shipping out of Vancouver. Should that prove unachievable due to capacity constraints, there is an additional cost of US\$14.72 to transport coal to the Ridley terminal in NW BC. The base case pre-tax IRR of 32.9% would drop to 24.6% in that event.
- **Operating Cost:** A +/- 10% sensitivity to operating cost is shown in the table. The effect on economics is not as significant as coal sales price variation.



• **Capital Cost:** As with operating cost, the effect is not as impactful as varying the coal sales price. However, what the capital and operating cost sensitivities both point out is the potential to improve project economics by focusing on options such as contract mining, used equipment (where appropriate) and continuing to refine the estimates contained in the PFS.

NPV10 (K US\$'s)							
		Pre-Tax		After Tax			
	Sensitivity Range	+	-	+	-		
Base Case		\$370,669		\$223,467			
Selling Price	+/-10%	\$543,719	\$197,602	\$336,496	\$108,504		
Rail & Port	+14.72\$/tonne	\$216,467		\$120,977			
Operating Cost	+/-10%	\$302,411	\$438,926	\$178,605	\$268,035		
Capital Cost	+/-10%	\$339,765	\$401,573	\$201,056	\$245,473		
IRR %							
		Pre-Tax		After Tax			
	Sensitivity Range	+	-	+	-		
Base Case		32.9%		26.4%			
Selling Price	+/-10%	41.2%	23.6%	33.1%	18.6%		
Rail & Port	+14.72\$/tonne	24.6%		19.5%			
	.,						
Operating Cost	+/-10%	29.6%	36.0%	23.6%	28.9%		

Table 18– Sensitivity Analysis

Key Risks

The 2013 PEA identified several risks applicable to the Crown Mountain Project. The summer 2013 exploration program, ongoing environmental field work, and certain PFS-related tasks, were designed to address, and where possible, mitigate those risks. The material risks identified in the PEA, and their current post-PFS status, are listed below:

- **Market Risk**: While the Norwest economics are based on pricing forecasts from reputable and respected sources, there is no guarantee these forecasts will prove accurate. The PFS has used sales prices significantly lower than those used in the PEA.
- **Coal Quality**: A definitive understanding of coal quality at Crown Mountain was not available for the PEA: the summer 2013 exploration program was designed to obtain that information, and it was highly successful. The PFS is based on significantly more reliable and detailed coal quality information; there remains some risk until actual sample shipments have been made from Crown Mountain to prospective customers and accepted as compliant to their specifications.



- **Plant Yield**: As with coal quality, plant yield had not been defined in the PEA, other than a broad 40-60 percent range that bracketed available data at that time. Significant information on coal washability was acquired during the summer 2013 bulk sampling and evaluation program. This data is deemed to be sufficient for PFS level engineering. Plant yield has now been specifically estimated for each mining area (North, East, and South). The risk of these estimates being materially in error is judged to be low.
- Environmental: Any mining operation must be engineered and operated to meet existing environmental standards, including but not limited to air and water quality. While the summer exploration program and ongoing Environmental Assessment data collection has greatly expanded the knowledge base at Crown Mountain, Jameson is not in a position at this time to accurately determine the government's reaction to what environmental and mining permits Jameson may in the future submit.
- **Port**: At this time, it appears likely that port capacity will exist once Crown Mountain commences operation. However, there are several other coal projects under evaluation in western Canada which also contemplate export. Jameson does not at this time hold a contract for port capacity. Until a contract is executed (currently under management discussion) there remains a risk associated with this category. In addition, should a contract be signed, a risk may be present should that contract contain any economic penalties such as take-or-pay stipulations.

Next Steps and Potential Upside

The PFS examined Jameson building and operating the Project as a company-owned stand-alone entity. This represents a worst-case with respect to capital. Additionally, the South block reserve is mined immediately after the North and East reserves, ignoring the potential value of the Southern Extension.

Over the next few months Jameson will be evaluating several value-enhancing alternatives, including but not limited to the following:

- Discussions will be held with contract mining firms to develop a cost estimate for utilizing contract mining.
- Alternative annual production levels will be examined to test their effect on overall project economics.
- Blending of North and South Block coals was evaluated during coal quality testing. The PFS was performed based on a logical progression of mining North, East, and South. A mining strategy based on optimizing coal quality (and resulting in higher overall sales prices life-of-mine) will be evaluated.



- Emerging technologies will be evaluated as potential replacements for the use of a traditional thermal drier in the plant.
- The potential of the Southern Extension will be examined in greater detail to determine the viability of mining the Southern Extension immediately after the North and East Blocks. There is limited information available; meaning some level of additional exploration will be required.
- Synergies between Crown Mountain and other regional projects will be evaluated, and the appropriate parties approached to engage in discussions.
- The Company intends to initiate a Feasibility gap analysis within a few months to identify outstanding data collection requirements for a Bankable Feasibility Study ("BFS"). The results of that evaluation will determine the scope of any 2015 field work required to support the BFS.

Concurrent with the above items and recognizing the value of Crown Mountain, Jameson intends to continue fast-tracking the EA process with the objective of having the Project ready to enter the construction phase once market conditions improve.

The most significant critical path item on the road to production is completion of the requirements for an EA and submitting the associated permit application. Jameson has dedicated significant resources to this effort and is in the final stages of preparing to submit a Project Description document to commence this process. Meanwhile the Company continues the collection of a wide array of environmental data in the field.

Summary

The Crown Mountain project is located in an infrastructure-rich area, has a favourable clean coal stripping ratio and will produce predominantly hard coking coal generating attractive economics. Jameson intends to continue to fast-track Crown Mountain with the objective of meeting the PFS' mine development commencement of 2016 and projected first production in late 2017.



CONCLUSIONS

The 2012 and 2013 drilling exploration programs, culminated by completion of the PFS in 2014, have identified Crown Mountain as a valuable and potentially viable low cost, high quality surface coal mining operation.

NWP intends to continue to develop the project with an eye toward entering commercial production over the next few years.



AUTHOR'S QUALIFICATIONS

I, Mr Art Palm, P.Eng., do hereby certify that:

- 1. I am a Mining Engineer and have been employed by the parent Company of NWP Coal Canada Limited, Jameson Resources Ltd, or Perth, Australia since August 2009.
- 2. I received a B.S. Mining Engineering from the Colorado School of Mines in 1976, and a Master of Business Administration from the University of Wyoming in 1983.
- 3. I have worked as a Mining Engineer since 1976.
- 4. I am a registered Professional Engineer in British Columbia, Canada and the United States of America (AL,AR,AZ,CA,CO,GA,ID,IL,KY,MD,OH,PA,NM,NV,UT,VA,WA,WV,WY).
- 5. I was directly involved with the Crown Mountain exploration programs conducted in 2012 and 2013, as well as Norwest's completion of the 2014 PFS.
- 6. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 7. I satisfy the requirements of a Competent Person as defined under the JORC Code, International Reciprocity of Competent Persons, as I am a member of APEGBC, which is listed by JORC as current ROPO/RPO's. As required by JORC, I satisfy the other code requirements of a Competent Person.

Dated at Vancouver, Canada this day of January 21, 2015.

Art Palm, P.Eng.



REFERENCES

- 1. Norwest Corporation (2013): NI 43-101 Technical Report Crown Mountain Coal Property. Public report originally prepared for Jameson Resources Limited and NWP Coal Canada LTD.
- 2. Canadian Securities Administrators. 2011. National Instrument 43-101 Standards of Disclosure for Mineral Projects, Form 43-101F1, Technical Report, and Companion Policy 43-101CP.
- 3. CIM Standing Committee on Reserve Definitions. 2004. CIM Definition Standards on Mineral Resources and Reserves.
- 4. Hughes, J.D., Klatzel-Maudry, L. and Nikols, D.J. 1989. A Standardized Coal Resource/Reserve Reporting System for Canada. Geological Survey of Canada Paper 88-21.
- 5. Grieve, D.A. and Kilby, W.E.(1989): Geology and Coal Resources of the Dominion Coal Block Southeastern British Columbia – British Columbia Geological Survey Publication Paper 1989-4;
- 6. Grieve, D. A. (1993): Geology and Rank Distribution of the Elk Valley Coalfield, Southeastern British Columbia. British Columbia Geological Survey Bulletin 82.
- 7. Pearson D. E., and Grieve, D. A. (1985) Rank Variation, Coalification Pattern and Coal Quality in the Crowsnest Coalfield, British Columbia CIM Bulletin September 1985;
- Pearson D. E., and Grieve, D. A. (1979) Elk Valley Coalfield (82J/2); in Geological Framework 1979, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1980-1.
- Dawson, F.M., Lawrence G.F., and Anderson T.C. Coalbed Methane Resource Assessment of the Dominion Coal Blocks, Southeast British Columbia, Geological Survey of Canada Open File 3549 (1998); Parcel 73 Dominion Coal Block.
- 10. Norwest Resources Limited: Evaluation of the Coalbed Methane Potential, South Fernie Basin, Southeast British Columbia (1990). Confidential report prepared for Saskoil Resources Inc.;
- British Columbia Ministry of Energy Mines and Petroleum Resources (1992): British Columbia Coal Quality Catalog, Information Circular 1992-20
- 12. Norwest Mine Services Ltd. (2001): Technical Review of the Elkview Coal Mine (2001). Public report originally prepared for Teck Corporation.
- 13. Norwest Corporation (2009): Technical Report Fording River Operations. Public report originally prepared for Teck Coal Limited.
- 14. Teck Coal Limited (2011): NI 43-101 Technical Report on Coal Resources and Reserves of the Fording River Operation. Public Report originally prepared for Teck Resources Limited.



- 15. Norwest Corporation (2008): Technical Report Greenhills Operations. Public Report originally prepared for Elk Valley Coal Corporation.
- 16. Teck Coal Limited (2011); Line Creek Operations Phase II Project Description Update. Public report originally prepared pursuant to the British Columbia Environmental Assessment Act.
- Norwest Corporation (2013): Preliminary Economic Assessment (NI 43-101) Crown Mountain Coal Property. SE British Columbia. Public report originally prepared for Jameson Resources Limited and NWP Coal Canada LTD.