

NORTHEAST REGION

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SUMMARY AND TRENDS

Exploration and mining in the Northeast region was highlighted by the approval and construction of two coal mines, the Trend Small Mine and Wolverine Mine, and a surge in exploration to a level not witnessed since the 1970s and 1980s. Interest in the region was centered squarely on the Peace River coalfield. The coalfield lies within the Rocky Mountain Foothills and trends northwest from the Alberta border to the Peace Reach. Coal measures of principal economic importance are contained within Lower Cretaceous strata of the Gates and Gething formations. The Gates Formation is known for its medium to high-volatile bituminous coals, suitable for producing coke used in the steel-making industry. The underlying Gething Formation hosts both low-volatile, high-rank bituminous coal (in demand as a Pulverized Coal Injection (PCI) coal product utilized as a replacement for coke in the steel-making process), and medium to high-volatile bituminous coking coals. Outside of the coalfield there were relatively few exploration programs. Of note, however, was an early stage reconnaissance-style program in search of iron oxide-copper gold deposits in the Muskwa Ranges west of Fort Nelson.

An estimated \$27.1 million was spent on exploration in the region during the year. This total represents more than a seven-fold increase over the \$3.6 million spent in 2004. The amount of exploration drilling totaled approximately 94 000 metres, more than seven times the amount drilled last year (*c.f.* 13 000 metres). A total of 162 coal licenses were issued to or applied for by industry during the first eleven months of 2005. These licenses cover 129 023 hectares and represent a more than three-fold increase over the area claimed in calendar 2004 (*c.f.* 81 licenses covering 36,048 hectares). Unseasonably wet weather throughout the summer and fall led to the temporary suspension of activity at several properties. As a result of the delays, a number of projects operated well into December.

There were sixteen major exploration programs in the region (*c.f.* five in 2004), most of which had expenditures exceeding one million dollars. In general, the larger programs included deposit appraisal drilling in order to establish reserves and resources that are compliant with National Instrument 43-101 reporting standards. Aggressive mine planning, including pre-feasibility and feasibility studies and base line environmental data collection and analysis, was conducted on the Burnt

River, Five Cabin, Lossan, Trend and Wolverine properties. The location of significant exploration projects, and smaller exploration projects believed to have regional significance, are shown on Figure 7.1.

The development of new coal mines in the Peace River coalfield continued in earnest during 2005. Construction of the Trend Small Mine of NEMI Northern Energy & Mining Inc was nearing completion at year's end and is expected to reach production in January, 2006. Construction of the Wolverine mine of Western Canadian Coal Corp progressed rapidly through the year and will likely be complete by the third quarter of 2006. The Willow Creek PCI coal mine of Pine Valley Mining Corporation, which opened in July, 2004, and the Dillon PCI coal mine of Western Canadian Coal Corp, which began operations in December, 2004, are the regions two operating mines. An estimate for 2005 coal production from the two mines is listed in Table 7.1.

The two former producers in the coalfield were Quintette and Bullmoose. The two operations produced coking coal for export markets. The Quintette mine operated from 1983 to 2000 producing 68.1 million tonnes of coal. The Bullmoose mine operated from 1983 to 2003 and produced approximately 34.1 million tonnes of coal. Combined production from Quintette and Bullmoose from 1984 to 1999, a period when the mines were operating at or near capacity, averaged 5.9 million tonnes of clean coal per annum. This annual clean coal production figure may be eclipsed in 2007 when the regions new mines are operating at or near capacity.

The robust international coal markets maintained much of their strength during the year. By the end of the year contract prices for coking coal were in the US\$125/tonne range while contract prices for PCI coal softened somewhat as supply began to match demand and settled into the US\$60-80/tonne range.

COAL MINES

Willow Creek

The **Willow Creek** mine (MINFILE 0930 008) is situated south of the Pine River approximately 45 kilometres west of Chetwynd. It is operated by Falls Mountain Coal Inc, a 100%-owned subsidiary of Pine Valley Mining Corporation. The 900 000 tonnes per year operation started up in July, 2004, and was the first coal

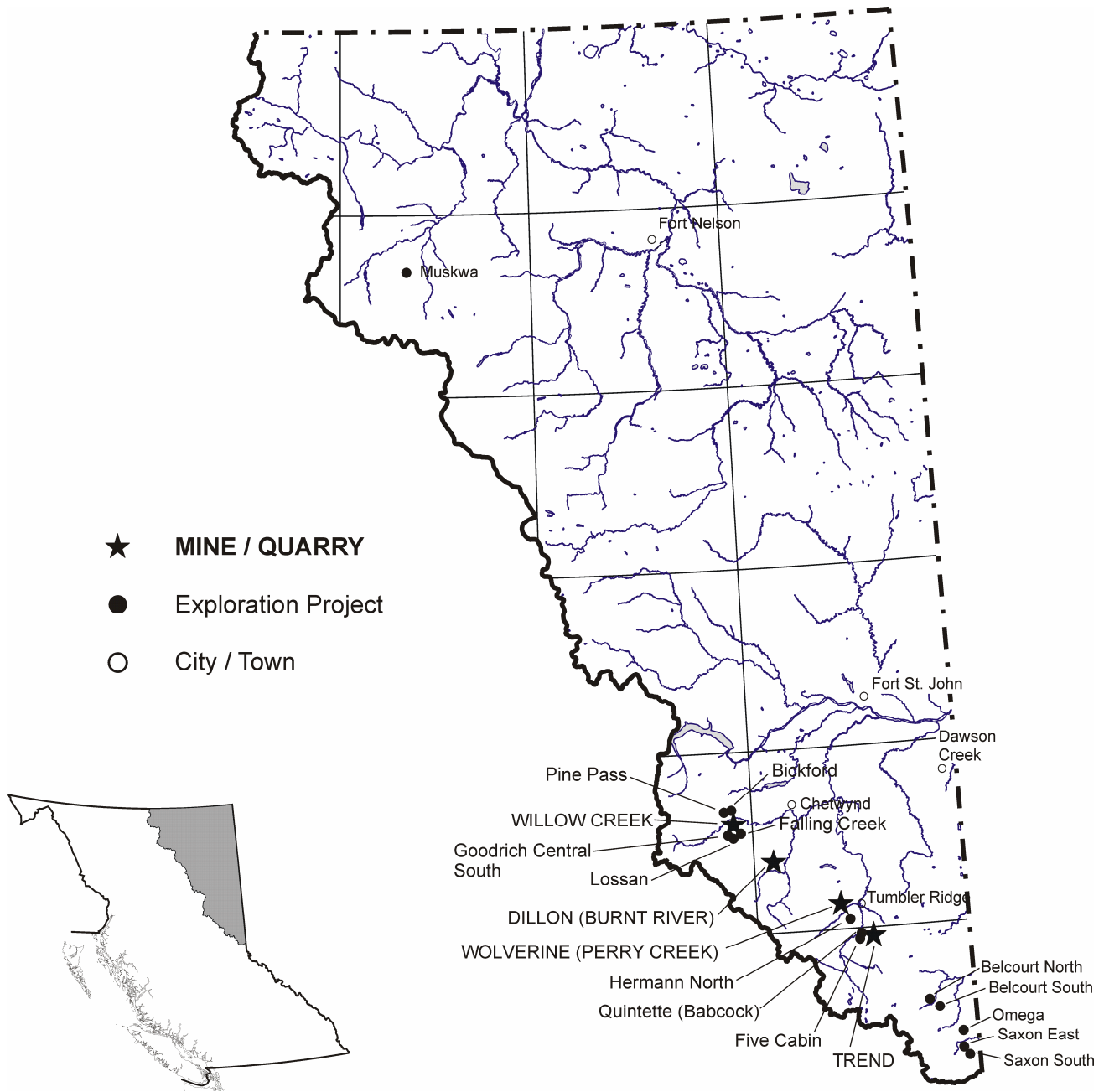


Figure 7.1. Operating mines and major exploration projects, Northeast Region, 2005.

TABLE 7.1. FORECAST MINE PRODUCTION, NORTHEAST REGION, 2005

Mine	Operator	Deposit Type / Commodity	Forecast Production in 2005 (tonnes or kilograms)	Number of Employees	Proven and Probable Reserves (on Jan. 1, 2005)
Coal					
Dillon	Western Canadian Coal Corp	Pulverized Coal Injection (PCI) coal	715 000 t	86	1 370 000 t
Willow Creek	Falls Mountain Coal Inc (Pine Valley Mining Corporation)	Pulverized Coal Injection (PCI) coal	750 000 t	~60	12 300 000 t saleable

mine to open in the northeast since the Quintette and Bullmoose mines (now closed) began production in 1983.

The coal measures at Willow Creek occur in the Gething Formation on the east limb of the Peace River anticline. Test results showed that coal from seams 6 and 7 is a low-volatile bituminous, high-rank coal. It is sold into the PCI coal market. Several seams up section, namely seams 1 to 4, have coking coal characteristics and will demand higher prices as coke blends. The measured and indicated recoverable reserve for the Willow Creek deposit at the start of mining was 12.3 million tonnes.

In February, 2005, the company completed construction of its permanent crusher, radial stacker, coal load-out facility and rail siding (Figure 7.2). Construction of a 450 tonne per hour coal wash plant was completed in October, and commissioned in November. During the year reserves in the Peninsula pit were mined out and development of the adjacent Central pit was initiated. Clean coal production for the 2005 calendar year is expected to approach 750 000 tonnes. The current total mine workforce is approximately 60. Pine Valley Coal has applied for an amendment to its *Mines Act* permit that, when approved, will allow production of up to 2.2 million tonnes of clean coal per annum.



Figure 7.2. Willow Creek plant site and load-out facility.

Dillon Mine

The **Dillon** PCI coal mine (Figure 7.3) of Western Canadian Coal Corp, part of the **Burnt River** property

(MINFILE 093P 007-008), is situated about 55 kilometres by road southwest of Chetwynd. The project received a *Mines Act* permit in September, 2004, and production was achieved in early December, 2004. The raw PCI coal product is trucked 94 kilometres southward to the Bullmoose load-out facility where it is loaded into railcars bound for Ridley Terminals in Prince Rupert. In July 2005, Western Canadian Coal received an amendment to its *Mines Act* permit for an increase in monthly production that accelerated annual production to almost one million tonnes per year. The rate increase, coupled with a revision in the mineable reserve from 1.56 million tonnes to 1.37 million tonnes, will reduce the mine life of the Dillon pit to about two years (c.f. 6.5 years). Clean coal production for the 2005 calendar year is expected to exceed 700 000 tonnes. The Dillon mine employs about 50 mine workers. An additional 30 to 35 workers operate the fleet of coal haul trucks, run the coal load-out and staff the office in Tumbler Ridge.



Figure 7.3. Coal extraction from both limbs of the syncline at the Dillon mine.

The Burnt River property is underlain by folded coal-bearing stratigraphy of the Gething Formation. Three main coal seams identified on the property are the Lower Seam, Upper Seam and Seam 60. The low-volatile, high-rank coal measures are preserved within two northwest trending synclines. The Dillon syncline contains the Dillon deposit. The Upper Seam and Lower Seam are found in the Dillon deposit and have a combined true thickness of more than 8 metres. The adjacent and much larger Owl syncline contains the Brule deposit (MINFILE

093P 007) where all three seams are present and have a cumulative thickness of about 12.2 metres. The total measured in-situ coal resource for the Brule deposit is 36.2 million tonnes. The small Blind deposit, immediately north of the Dillon deposit, lies on the southwest limb of the Blind Creek syncline and contains a total inferred in-situ coal resource of 2.36 million tonnes.

MINE DEVELOPMENT PROJECTS

Trend

The **Trend** Small Mine (or TSM; MINFILE 093I 010) will become British Columbia's next coal mine (Figure 7.4) when it is commissioned in the first quarter of 2006. NEMI Northern Energy & Mining Inc is developing the coking coal mine and plans to be in production by January, 2006. Trend is the second coal mine to be permitted under the province's sub-Environmental Assessment process that engages a regional Mine Development Review Committee to conduct a critical review of a mine proposal prior to issuing permits and approvals.



Figure 7.4. Coal processing plant under construction at the Trend Small Mine (photograph courtesy of Kevin Sharman, NEMI).

The Trend property is located about 25 kilometres south of Tumbler Ridge and approximately 12 kilometres south of the dormant Quintette coal mine. It is comprised of five 'blocks' that cover coal-bearing stratigraphy of the Gates and Gething formations on the northeastern flank of the Roman and Quintette mountains. The South and Extension blocks contain a Proven and Probable Reserve of 21.2 million run-of-mine (ROM) tonnes of medium-volatile bituminous coal. The other blocks are Roman Mountain, Hambler and Q-West. Each block covers a 2 to 5 kilometre strike length of coal-bearing stratigraphy. The coal reserves of interest are contained in five seams (D, E, F, G/I and J) in the Gates Formation. These five seams

have a cumulative thickness of more than 15 metres in the South block.

The mine development is taking place on the South block of the property and will exploit a saleable coal reserve of 1.68 million tonnes from a narrow, trough-shaped pit measuring about 2500 metres long.

Timber harvesting and clearing of the pit, plant site and rail loop areas was completed in August. Stripping of waste rock from the pit area began late in the year. A limited tonnage of coal was mined and transported to the plant site for processing. Construction of the coal processing plant is expected to be complete in January, 2006. Production is targeted at up to 60 000 tonnes of clean coal per month (to a maximum of 240 000 tonnes per annum) during a 4-month mining campaign. The coal processing plant has been designed to produce between 1.2 million to 1.8 million tonnes of clean coal per annum and will enable NEMI to expand its mining operation. The projected capital cost of the mine development is CAD\$45 million.

Construction of a 2.2-kilometre rail loop and coal load-out facility, located just off the Heritage Highway, a haul distance of 25 kilometers north from the mine, was completed in November. Mine development also included the re-installation of steel rails on a 16-kilometre section of the Tumbler Ridge Branch Line that had been removed following the closure of the Quintette mine. Coal will be railed to the Ridley Island terminal near Prince Rupert for export to foreign markets.

NEMI completed a feasibility study on its Trend Full Mine (TFM) project and plans to make application for this 1.2 to 1.8 million tonne per annum mine development to the Environmental Assessment Office early in 2006. Conceptual mine planning has identified a narrow, 8 kilometre long pit that would be developed in several phases and extract coal from both the upper Gates and lower Gething formations. The project would effectively engulf the Trend Small Mine and would benefit from some of the recently built infrastructure. The TFM has a projected capital cost of CAD\$61 million and, based only on the reserves established for the South and Extension blocks, a mine life of at least 10 years.

Wolverine

Western Canadian Coal Corp received its Environmental Assessment Certificate for the development of the **Wolverine** metallurgical coal mine (Figure 7.5) in January, 2005. The project received its *Mines Act* permit in March and ground breaking and construction began in earnest in early April. The project is located in the Wolverine Valley about 25 km northwest of Tumbler Ridge and is strategically positioned adjacent to CN Rail's Tumbler Ridge Branch Line. The approved mine plan includes the development of the **Perry Creek** deposit (MINFILE 093P 025).



Figure 7.5. Western Canadian Coal Corp Vice-President/COO John Hogg and Senior Mine Engineer Gary Gould looking southward over construction taking place on the Wolverine mine-site.

In November, 2005, the company updated the Proven Reserve figure for the Perry Creek deposit to 22.8 million tonnes of clean coal with strip ratio of 8.7. The Probable Reserve for the nearby EB deposit, not yet permitted for development, is 4.9 million tonnes with a strip ratio of 8.4. The approved rate of production is 1.6 million tonnes of clean metallurgical coal per annum; however, the company has applied for an amendment that will permit an increase to 2.4 million tonnes per annum. The capital cost of the project is expected to exceed US\$240 million. Production is anticipated to commence in the second or third quarter of 2007. The mine will employ approximately 250 workers.

The coal measures of interest occur within the Gates Formation in a gently southeast plunging open syncline. Four seams (E, F, G and J seams) have a maximum cumulative thickness of up to 15 metres. The coal measures have a rank of medium-volatile bituminous and are classified premium coking coals. During the year, the company excavated two small pits within the proposed Perry Creek pit in order to produce bulk samples from each seam for coal quality testing.

Brule

Western Canadian Coal continued with its baseline environmental monitoring program and pre-feasibility work on Brule throughout 2005. In December the company submitted its application for an Environmental Assessment Certificate for development of the deposit to the Environmental Assessment Office. The formal 180-day review period began on December 10, 2005. Brule is expected to reach production before reserves at Dillon are exhausted.

The Brule mine proposal includes the development of the large Brule deposit and much smaller Blind deposit. Mining will utilize conventional truck and shovel open pit mining methods with coarse coal crushing and screening and a coarse coal washery. The capital cost of the project is estimated to be US\$200

million. Over the projected 11 year mine-life of the operation a total of 20.7 million tonnes of clean coal will be produced from the Brule pit and 1.1 tonnes of clean coal will be produced from the Blind pit. The rate of production is targeted at 2.0 million tonnes of PCI coal per year. The project will create 300 to 360 direct mining jobs and an additional 40 – 60 coal haul jobs as well as another 6 at the coal load-out. Some of the infrastructure that services Dillon will also support the Brule operation. However, the Brule project will require the construction of a 60-kilometre haul road northward from the mine-site to a new rail loop and coal load-out facility in the Falling Creek Flats area south of the Pine River and west of the Willow Creek mine. Erection of a 69 kV powerline will also be required (from either the Duke Energy plant or the Sukunka substation).

COAL EXPLORATION PROJECTS

There were fifteen major coal exploration projects in the region in 2005 (Figure 7.1 and Table 7.2). A brief description of each project follows.

The **Five Cabin** property was one of eleven northeast British Columbia coal properties acquired by Hillsborough Resources Limited in 2005 from David Fawcett. It is part of the Murray River Group of coal licenses centered 15 kilometres southwest of the dormant Quintette mine. Following the acquisition, Hillsborough embarked on an aggressive air rotary and diamond drilling program focusing on the Horizon, Barbour and Ridge areas of the Five Cabin property.

The main geological structure on the property is the Five Cabin syncline. In the Horizon area, the coal-bearing Gates and Gething formations are folded into a northwest-trending asymmetrical syncline with gently dipping limbs. Previous work on the Five Cabin structure was conducted by Denison Mines and

Crowsnest Resources in the 1970s and 1980s respectively.

Hillsborough plans to develop two small open pits on Horizon to extract bulk samples from the 1 Seam near the base of the Gates Formation and from the B-2 Seam in the upper Gething Formation. The coal will be test marketed and subjected to a range of coal quality tests. In October, 2005, Hillsborough signed a letter of intent with Anglo Coal, a division of Anglo American plc., that may lead to Anglo's participation in the Five Cabin project.

Information from the 2005 program will enable the company to calculate a NI 43-101 compliant resource for the Horizon area of the Five Cabin property. Collection of base line environmental data also began in the summer and will continue beyond 2005. The company expects to complete mine design and feasibility studies through the winter. This information will form part of the company's application for an Environmental Assessment Certificate for a 1.2 to 1.6

million tonne per year mine.

Hillsborough also drilled the **Bickford** PCI coal prospect located north of the Pine River and east of Fisher Creek, about 50 kilometres west of Chetwynd.

On the west side of Fisher Creek, Pine Valley Coal completed a major rotary drilling program on its **Pine Pass** (MINFILE 093O 007) property. The program was designed to expand the property's reserve base from its current level of 9.5 million tonnes (NI 43-101 compliant) that was established in 2003. The Fisher Creek syncline brings coal-bearing strata of the Gething Formation to surface. The formation contains nine seams of significance. Approximately 65% are considered to be suitable for use as coking coal with the remainder classified as PCI coal. In the 1980s Gulf Canada Resources reported unclassified resources for the nearby **Crassier Creek** (57.3 million tonnes) and **Fisher Creek** (21.3 million tonnes) deposits now owned by Pine Valley Coal. Each property has the potential to host an economic deposit that could supplement

TABLE 7.2. MAJOR EXPLORATION PROJECTS, NORTHEAST REGION, 2005

Property	Operator	Minfile (NTS)	Commodity	Deposit Type	Work Program
Belcourt North	Belcourt Saxon Coal Limited Partnership	093I 014	Coking Coal	Sedimentary	A; G; RD & DD (-9550m, 42 holes); GP; CQ; PF
Belcourt South	Belcourt Saxon Coal Limited Partnership	093I 014	Coking Coal	Sedimentary	A; G; RD & DD (4313m, 43 holes); GP; CQ; PF
Bickford	Hillsborough Resources Ltd	093P 005	Coking and PCI Coal	Sedimentary	A; G; RD & DD (1176m, 14 holes); GP
Falling Creek	Kennecott Canada Exploration Ltd	093O 034-036	Coking and PCI Coal	Sedimentary	G; RD (2349m, 12 holes); GP; CQ
Five Cabin	Hillsborough Resources Ltd		Coking Coal	Sedimentary	A; G; TR; RD & DD (17 079m, 171 holes); GP; BU; CQ; PF; EN
Goodrich South Central	First Coal Corp	093O 034	Coking and PCI Coal	Sedimentary	A; G; RD & DD (~10 700m, 65 holes)
Hermann North	Western Canadian Coal Corp		Coking Coal	Sedimentary	A; G; RD & DD (5511m, 29 holes); GP; CQ; PF
Lossan	Cline Mining Corporation	093O 031	Coking and PCI Coal	Sedimentary	UG-BU (10 t); RD (4281m, 28 holes); GP; CQ; PF; F; EN
Muskwa	Twenty Seven Capital Corp	094K 050	Cu	IOCG	AB-MG; P; G; GC; DD (420m, 12 holes)
Omega	Belcourt Saxon Coal Limited Partnership	093I 014	Coking Coal	Sedimentary	G; RD & DD (1986m); GP; CQ
Pine Pass	Falls Mountain Coal Inc (Pine Valley Mining Corporation)	093O 007	Coking and PCI Coal	Sedimentary	A; G; TR; RD & DD (16 309m, 91 holes); GP; EN
Quintette-Babcock Window	Elk Valley Coal Partnership	093I 011	Coking Coal	Sedimentary	A; G; RD (12 109m, 58 holes); GP
Saxon East	Belcourt Saxon Coal Limited Partnership	093I 016	Coking Coal	Sedimentary	G; RD & DD (1986m); GP; CQ
Saxon South	Belcourt Saxon Coal Limited Partnership	093I 016	Coking Coal	Sedimentary	G; RD & DD (2578m); GP; CQ
Trend - Roman Mountain	NEMI Northern Energy & Mining Inc	093I 030	Coking Coal	Sedimentary	A; G; RD (~3000m, 23 holes); GP
Wolverine - Perry Creek	Western Canadian Coal Corp	093P 015, 025	Coking Coal	Sedimentary	OP-BU (20 t); CQ; EN

Work program abbreviations:

A = access; trail, road construction on claims; AB-EM = airborne electromagnetics; AB-MG = airborne magnetics; AB-RD = airborne radiometrics; BU (X tonnes) = bulk sample (weight in tonnes if known); CD = condemnation drilling; CQ = coal quality testing; CT = carbonization test (coal); DD (Xm) = diamond drilling totaling X metres; EN = environmental baseline studies/monitoring, remediation work; FS = feasibility studies; G = geology, mapping, etc; GC = geochemical sampling (rock, soil, silt, etc); GD = geotech drilling; GP = geophysics (general); IP = Induced Polarization; 3D-IP; MG = magnetics; MK = marketing-primarily for industrial mineral products; MS = metallurgical studies; OB = overburden drilling; P = prospecting; PD = percussion drilling; PF = pre-feasibility studies; R = reclamation; RC = reverse circulation drilling; TR = trenching, UG (X m) = X metres of underground development; UG-BU = underground bulk sample; OP-BU = open-pit bulk sample; UT = UTEM; VLF; WT = washability test (coal)

production at the Willow Creek mine.

Kennecott Canada Exploration Inc returned to its **Falling Creek** property that covers the headwaters of Falling, Hasler and Highhat creeks south of the Willow Creek mine. This property forms part of the former Gulf Canada Resources **Goodrich** property (MINFILE 0930 034-036; 093P 024). On the Kennecott tenure multiple coal seams occur near the top of the Lower Cretaceous Gething Formation and are medium to high-volatile bituminous coals suitable for the metallurgical coal market. In 2005, Kennecott used existing access roads to complete four fences of rotary drill holes covering a strike length of approximately 16 kilometres. The company is expected to continue exploring the property in 2006.

Cline Mining Corporation completed 28 rotary holes and extracted a 10-tonne bulk sample from a small underground development on its **Lossan** coal property (Figure 7.6), centered about 15 km southeast of the Willow Creek mine. Coal measures at Lossan occur in the Gething Formation and are brought to surface by the complex Goodrich Synclinorium. Earlier work identified two principal coal seams that average 4 and 8 metres in thickness. Coal is classified as medium to low-volatile bituminous and quality is variable with both coking coal and PCI coal being recognized. The property hosts a measured and indicated resource of 5.94 million tonnes and an inferred resource of an additional 14.16 million tonnes. Cline envisages the development of a 250 000 tonnes per annum operation that would require a wash plant, rail loop and coal load-out facility.



Figure 7.6. BC Ministry of Energy, Mines and Petroleum Resources geologist Dr. Barry Ryan (right) discussing geology of Lossan coal deposit at bulk sample adit.

Immediately to the north on the **Goodrich South-Central** property, First Coal Corp, a private company formed in 2005, completed a major rotary and diamond drilling project. The project area was part of the Gulf Canada Resources Goodrich property in the 1970s, but received little exploration at the time. Subsequently, Goodrich South-Central is considered to be a

‘greenfields’ project. The property is underlain by coal-bearing Gething Formation. Construction of roads used to provide access to drill stations resulted in the exposure of several steeply dipping coal seams.

Western Canadian Coal completed a major exploration drilling program on its **Hermann North** property, located south of the Wolverine River, about 5 km southeast of the Perry Creek deposit. Interestingly, the coal seams extend under the inactive Quintette conveyor assembly that at one time fed run-of-mine coal from the Wolverine and Mesa pits to the processing plant. The program at Hermann North provided data that the company will use to revise the deposit’s current Measured and Indicated Resource of 43.2 million tonnes. Coal measures are within the Gates Formation and are expected to have qualities very similar to coal mined at Quintette. If economic, Hermann North would be developed as a satellite deposit to the Wolverine mine.

Exploration on the flank of Babcock Mountain at the **Quintette** mine site took place for the first time in many years. Elk Valley Coal Partnership completed more than 12 000 metres of rotary drilling that targeted the Little Windy and Big Windy pit areas and the undeveloped Window area. The program was designed to prove up additional coal reserves. The company expects to continue with its exploration program in 2006, but does not have any immediate plans to reopen the mine.

In addition to developing the Trend small mine, NEMI conducted a drilling program on the Roman Mountain block of its **Trend** property. A total of 23 rotary holes were drilled and an additional 10 holes, dating from the mid-1970s, were opened and re-logged. The work was aimed at defining the dimensions of a tight northwest trending syncline, that hosts the coal-bearing measures of the Gates Formation, and at increasing the resource base of the property. Presently the Roman Mountain block contains 26.2 million tonnes of coal classified as ‘inferred, in-place and of immediate interest’. The Roman Mountain and Hambler blocks offer potential to greatly expand the property’s overall resource.

A new entity, the Belcourt Saxon Coal Limited Partnership (BSCLP) was formed by a joint-venture agreement between NEMI and Western Canadian Coal to explore and develop the **Saxon** and **Belcourt** properties. BSCLP managed a major exploration program that covered five discrete metallurgical coal properties between the Redwillow River and the Alberta border in the southeast portion of the coal belt. Each of the five properties, Belcourt North (Red Deer), Belcourt South (Holtslander), Omega, Saxon East and Saxon South were explored in the 1970s and 1980s by Denison Mines and Gulf Canada Resources. Nine potentially economic coal seams were identified in the Gates Formation which has been deformed by northwest-trending folds and southwest verging thrust faults. On

the Belcourt property these seams have an aggregate thickness ranging from 22 to 28 metres. An 'in-situ raw coal resource' of 706 million tonnes was estimated for the Belcourt North and Belcourt South properties in 1982 by Wright Engineers Limited. Regional resource estimates of 179 million tonnes for Saxon South and 265 million tonnes for Saxon East were calculated by Monenco in 1977. At the time Saxon East was being proposed as an underground operation.

In 2005 the two northern properties, Belcourt North (Figure 7.7) and Belcourt South, were assessed by road-based rotary and diamond drilling programs aimed at increasing the confidence level of geological databases. Results from infill and confirmatory drilling will enable BSCLP to upgrade the resources of each property to NI 43-101 compliant "Indicated or better" resource classification. The deposits are narrow and elongate following a northwesterly trend.



Figure 7.7. Rotary drilling on the Belcourt North property.

Exploration on Omega, Saxon East and Saxon South was helicopter-supported as the properties are not currently accessible by roads.

Only five holes had previously been drilled on Omega. The 2005 exploration program added 13 diamond drill and 3 rotary drill-holes to the data set for the property. It is expected that information from these additional drill holes will allow BSCLP to establish a NI 43-101 compliant inferred resource for the property.

The Saxon East property was evaluated with a number of drill holes that were primarily confirmatory in nature. Previous workers focused on seams 1, 2 and 3, each thicker than 3 metres, as potentially economic in an underground mining scenario. Drilling on the Saxon South property, located close to the Alberta border, tested one-third of the historic resource.

A conceptual development plan announced by BSCLP outlines an 8.7 million tonne per year mining operation with a minimum mine life of 20 years. The capital cost for the mega-project was estimated at between \$800 million and \$1300 million with the onset of mining scheduled for 2009-2010. The resources on the Belcourt properties would be developed initially

followed by those on Omega and the Saxon properties. Plans for 2006 include the development of road access to Omega, Saxon East and Saxon South to facilitate more cost effective deposit appraisal exploration programs.

METAL EXPLORATION PROJECTS

Twenty Seven Capital Corporation initiated its search for iron oxide-copper gold (IOCG) mineralization on the **Muskwa** property. The property is centred 150 kilometres west of Fort Nelson and encompasses approximately 1000 square kilometres of Proterozoic stratigraphy. The area is known for several high-grade copper vein occurrences including the Magnum/Churchill Copper mine that operated from 1970 to 1975 producing 14 673 tonnes of copper, the Davis Keays prospect (containing an historic resource of 1.12 million tonnes grading 3.43% Cu) and the Toro prospect (containing an historic resource of 1.57 million tonnes grading 3.38% Cu). In 2005 the company undertook a largely reconnaissance-style program and discovered the 2-metre thick Matnik high-grade copper vein. It is comprised of chalcocite and lesser bornite in a gangue of quartz-carbonate and hematite. A 1.7-metre chip sample across the vein averaged 41.3% Cu. A subsequent diamond drilling program tested the vein at depth and along strike. Twenty Seven Capital also completed a 9000 line-km aeromagnetic survey. Data from the survey was received late in the year and will be assessed over the winter months to determine priority targets for follow-up in 2006. Preliminary data has outlined a significant magnetic anomaly that coincides with a hematite- and siderite-rich breccia.

Aries Resource Corp optioned tenure that covers the Churchill Copper and Davis Keays properties specifically. They form part of the company's **Trident** project and are expected to be the focus for an aggressive exploration program in 2006.

OUTLOOK FOR 2006

Coal production in the Northeast region will increase as the Trend Small Mine and Wolverine Mine are brought on stream in early and mid-2006, respectively, and as the Willow Creek and Dillon (Burnt River) mines mature. Coal production for 2006 is estimated to be in the 2.5 to 3.0 million tonne range.

The pace of new mining proposals is predicted to continue. An application for the development of the large Brule deposit was received in early December. An application for development of the Trend Full Mine is expected to reach the province's Environmental Assessment Office in the first quarter of 2006. In addition, an application for the development of one or more deposits on the Five Cabin property is expected to

follow later in the year and an application for development of the Lossan 'small mine' may be submitted to the regional Northeast Mine Development Review Committee. If approved, site clearing and mine construction could proceed on one or more of these projects before years end.

The level of exploration and deposit appraisal activity witnessed in 2005 is expected to remain high, but may decline modestly as several projects advance to the permitting and mine construction phase. Major exploration programs will likely proceed on at least ten properties, including the Belcourt–Saxon group, Falling Creek, Five Cabin, Goodrich South-Central, Quintette-Babcock and Trend.

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