North Eastern British Columbia

- Fort Nelson
- Fort St. John
- Chetwynd
- Tumbler Ridge

Coal mine

Exploration/development project

TERRANES, by TYPE

- North America Continental Shelf
Northeast Region in Review - 2008

- Three open pit mines:
  - Trend: Peace River Coal Limited Partnership
  - Perry Creek and Brule: Western Canadian Coal Corp
- Exploration spending: $21 million ($10.5 million in 2007)
- Drilling: 54,800 m (37,400 m in 2007)
- Major projects: 9 (one less than in 2007)
- Environmental Assessment certificate for new Hermann Mine granted November 2008
- 2009 activity level uncertain in the context of coal prices: January 50% cutback at Brule, possible closure of Perry Creek in May
North-Central
Region in Review - 2008

• Three open pit mines: Gibraltar, Mount Polley, Kemess

• Two underground mines: QR and Shasta (both currently shut down)

• Exploration spending: $80 million ($94.1 million in 2007)

• Exploration drilling: 259,000 m (307,000 m in 2007)

• Significant projects: $100,000 or greater, 59 (65 in 2007); $500,000 or greater, 29; $1,000,000 or greater, 19

• Major target remains bulk tonnage Cu-Au porphyry deposits in the Quesnel Terrane, and porphyry Mo deposits in the Stikine Terrane

• 2009 will see a reduction in activity; but major players, and some new ones, will continue
2008 Exploration Expenditures by Category – North-Central Region

- Grassroots: 6%
- Early Stage: 12%
- Advanced Stage: 53%
- Mine Evaluation: 27%
- Mine Property: 2%
Major projects include:

- Woodjam (Cu-Au)
- FraserGold (Au)
- Spanish Mountain (Au)
- Frank Creek (VMS)
- Mouse Mountain (Cu-Au)
- Chu (Mo)
- Capoose (Ag)
- Nithi Mountain (Mo)
- Mt. Milligan (Cu-Au)
- Lorraine-Jajay (Cu-Au)
- Kwanika (Cu-Au-Mo)
- Falcon (Mo)
- Shasta (Ag-Au)
- Porphyry Pearl (Au-Cu)
- Akie (SEDEX)
North Central British Columbia

Main Roads
Railways

Cu-Au
Au
Cu-Mo
Ag
Mo
SEDEX/VMS
Industrial Minerals

Volcanic Island Arc
Ocean Floor
Displaced Continental Shelf
North America Continental Shelf

TERRANES, by TYPE

Shasta
Kemess
Fort St. James
Vanderhoof
Prince George
Nazko
Quesnel
QR
Mount Polley
Hunterstone
Gibraltar
Williams Lake

Prince George
Nazko
QR
Mount Polley
Hunterstone
Gibraltar
Williams Lake
Mount Polley
(Imperial Metals Corp)

- Cu-Au-Ag alkalic porphyry
- Reserves 55.6 Mt @ 0.36% Cu, 0.32 G/t Au, 0.66 g/t Ag
- Bell Pit mined out July 2008, Wight pit mined out mid-2009
- Planned underground mining beneath Wight Pit
- Current production focus is Springer Pit
- 2008: 16 200 m on-lease drilling to extend reserves
Gibraltar Mine
(Taseko Mines Ltd)

- Blasting/mining at Gibraltar
- Cu-Mo alkalic porphyry
- Reserves (Dec 2008) 472 Mt @ 0.315% Cu, 0.008% Mo
- Mine life to about 2035
- Phase 2 mill expansion, by about end-2009, will bring mill capacity to 49 800 tonnes/day
- 2008: 33 000 m drilling concentrating on Gibraltar East and Gibraltar West extension
QR Mine
(Cross Lake Minerals)

• Gold skarn related to QR intrusion
• Completed open pit operation in West Pit in July 2008, then moved underground in Midwest zone
• 2008: u/g exploration and 3,500 m drilling
• In October 2008, Procon Construction took on a management role

QR mining equipment
(courtesy Cross Lake Minerals)
Kemess Mine
(Northgate Minerals Corp)

- Cu-Au porphyry deposit
- Total reserves 51.8 Mt @ 0.17% Cu and 0.47 g/t Au
- 2008 projected production 27 669 tonnes Cu, 5 925 kg Au
- Projected mine life to 3rd quarter 2011
- 2008: IP survey north of tailings dam

Moving low grade ore at Kemess
Shasta
(Sable Resources Ltd)

- Ag-Au in quartz vein stockwork, 800 m+ strike length
- 2008 concentration was on Creek zone, with erratic results
- Better results obtained from D and JM zones
- Ore transported to Baker Mill, about 11 km away

Hosing down a stope following a blast
Nazko Quarry
(Lightweight Advanced Volcanic Aggregates Inc)

- Small-scale producer of lightweight aggregate and scoria for BBQ rock, construction, landscaping
- About 44 Mt resource
- Produces about 50 000 tonnes/year
- Ships to western Canadian customers by truck, rail

Nazko products and operation
Hunterstone Quarries

- Small-scale producer of specialty natural building stone from quartzite talus
- Ships to customers in Canada and USA

Photos courtesy of Hunterstone
• A meta-SHV gold deposit in deformed Quesnel River Group “knotted phyllite” host

• Particulate gold mostly in quartz veins, stringers etc.

• 2008: 10 400 m drill program

• 31 of 58 holes completed contained visible gold

• NI 43-101 resource estimate to come
Spanish Mountain  
(Skygold Ventures Ltd)

- “SHV” Au deposit in complexly-deformed graphitic argillite/mudstone
- March 2009: NI 43-101 report on Main Zone, indicated 102.26 MT @ 0.785 g/T, inferred 11.65 MT @ 0.787 g/T, 0.50 g/T cutoff for both
- 2008: 40 000 m drilling concentrated on the “Main zone”
- 2009: drilling to extend Main Zone to north, south and at depth

Geologist Roger MacDonald, and Main Zone core grading 33 g/t Au
Bonanza Ledge, Cariboo Gold (International Wayside Gold Mines Ltd)

- Bonanza Ledge a mesothermal vein Au deposit
- Intent is to apply to open a small, seasonal open-pit mine
- 2008: 2 740 drill program to extend resource
- Cariboo Gold has had an Environmental Assessment process underway since 2000
- Would exploit a vein and replacement Au deposit by open-pit

Winter drilling at Bonanza Ledge
Woodjam
(Fjordland Exploration Inc)

- A Cu-Au-Mo porphyry deposit
- 2008 activities concentrated on the “Southeast zone” discovered in 2007, with every hole drilled to date bottoming in mineralization
- Hole 08-84 returned 0.93% Cu and 0.40 gm/t Au over 129 m
- Drilling started on the newly-discovered “Deerhorn zone”
- 2008: 7 400 m drilling completed
Mt. Milligan
(Terrane Metals Corp)

- Alkalic porphyry Cu-Au deposit
- Measured + indicated resource 591 million tonnes @ 0.193% Cu, 0.352 g/t Au
- Mine plan is for 60,000 t/day processing over a 15-year mine life
- Updated feasibility study expected late 2009

Jim Logan examining core

Mineralization in hole 07-974, 258 m
Kwanika
(Serengeti Resources Inc)

- Cu-Au-Mo alkalic porphyry
- Mineralized system in three zones, oriented NNW, 750 m long by 200 m across and up to 500 m deep
- 2008: 30 000 m drilling, IP, geochemistry
- Feb 2009: NI 43-101 estimated 182.6 Mt @ 0.29% Cu, 0.28 g/t Au (0.25% Cu Eq cutoff) indicated resource
Chu
(TTM Resources Inc)

- Mo porphyry hosted by hornfelsed siltstone
- Mineralized zone 2 km NW-SE, 300m wide and 650 m deep, still open at depth and to SE
- 2008: 48 000 m drilling and 3D-IP survey
- NI 43-101 estimate in March 2009 of 139.9 MT measured @ 0.061% Mo with a cutoff of 0.04% Mo

Molybdenite on quartz selvage, hole 16
Capoose – Silver Trend
(Silver Quest Resources Ltd)

- Disseminated Ag-Au (minor Pb, Zn) in volcanic and sedimentary host rocks in 2 mineralized zones, possibly connected at depth.
- 2008: 1,596 m drilling following-up encouraging IP and geochemical anomalies
- Updated resource estimate planned for early 2009

Setting up at Capoose
(courtesy Silver Quest/Dave Pawliuk)
Nithi Mountain
(Leeward Capital Corp)

• A porphyry Mo deposit in a potassically-altered quartz monzonite setting similar to Endako, 18 km to the west

• Several mineralized zones in a 4 km x 2 km area at least 200 m deep

• Sep 2008: Inferred resource estimate 165.25 million tonnes @ 0.026% Mo using a 0.020% cutoff

• 2008: 10 500 m drilling focussed on Delta zone

Molybdenite seam in Nithi Mtn. core
Falcon (Geoinformatics Exploration Inc)

- Early 2008, company reported encouraging results from two initial holes (2007) on its grassroots porphyry Mo prospect
- 2008: 8 new holes, 2,996 m drilling with visible molybdenite in all holes defined a mineralized zone at least 440 m x 475 m x 418 m deep, open in all directions

Molybdenite on quartz selvage, hole FN-07-12, 200 m
North Central British Columbia

Main Roads
Railways

Cu-Au
Au
Cu-Mo
Ag
Mo
SEDEX/VMS
Industrial Minerals

TERRANES, by TYPE
Volcanic Island Arc
Ocean Floor
Displaced Continental Shelf
North America Continental Shelf

Akie
Fort St. James
Mackenzie
Vanderhoof
Prince George
Quesnel
Frank Creek
Williams Lake
Frank Creek
(Barker Minerals Ltd)

- Identified as a kuroko-style VMS deposit on the bottom limb of a large recumbent fold
- Veins disseminations, stringers, semi-massive and massive sulphides interpreted as footwall-type stockwork mineralization
- 2008: 2,375 m drilling program confirmed model

Polydeformed quartz-intruded volcanic rock at Frank Creek
Akie (Canada Zinc Metals Corp)

Sphalerite (silver-coloured) in pyritic sediments, A-07-51

- Sedimentary exhalative (SEDEX) Pb-Zn-Ag deposit
- Host is folded shales and siltstones of Upper Devonian Gunsteel Fm
- 2008 NI 43-101: inferred 23.6 million tonnes @ 7.60% Zn, 1.50% Pb, 13.0 g/t Ag
- 2008: major access road construction, 6 226 m drilling on Cardiac Creek and North Lead zones

North Lead zone drilling
The End
Any Questions?