THE BOUNDARY MINING CAMP

History of Discovery and Development

1859 – 1925

G.R Peatfield, Ph.D., P.Eng,
Minerals South, Oct. 2009
Geographic Setting

Map from geological excursion

Guide Book No. 9 Transcontinental Excursion C2: GSC 1913
(12th International Geological Congress – Toronto, 1913)
Initial Discoveries

Rock Creek – 1859 or 1860?
Two American Soldiers?
Adam Beam? Adam Beame?
Adam Beure?

BCMMAR 1900
Initial Discoveries

Rock Creek – Early News

from “The British Colonist” – Victoria
(A. de Cosmos – proprietor)

Letter from Rock Creek
Forks of Kettle and Rock Creek
June 25th, 1860

New and Rich Diggings – Reliable Information
Fort Hope, July 9th, 1860
Initial Discoveries

Boundary Creek – placer

Photo courtesy of Greenwood Museum
“The Rock Creek War”

Gold Commissioner Peter O’Reilly retreats:
“The Rock Creek War”

Gold commissioner Peter O’Reilly retreats:

Governor James Douglas arrives:
“The Rock Creek War”

Gold commissioner Peter O’Reilly retreats:
Governor James Douglas arrives:

The Governor “reads the Riot Act”
“The Rock Creek War”

Gold commissioner Peter O’Reilly retreats:
Governor James Douglas arrives:
The Governor “reads the Riot Act”

The war ends peacefully

1860 - 61?

National Archives Canada
Sir James Douglas

Dedication

TO THE MEMORY OF
Sir James Douglas
GOVERNOR
OF THE CROWN COLONIES OF
Vancouver’s Island
&
British Columbia
WHO BY HIS COURAGE,
INDUSTRY AND
UNDERSTANDING, PRESERVED
THESE
TERRITORIES FOR BRITAIN

From:
Discovery Press, Vancouver.
Early Transportation Routes

The Dewdney Trail

Similkameen – 1860;

Rock Creek – 1861

BCMMAR 1924
Early Transportation Routes

The Dewdney Trail

It was ‘too little, too late’
“... a resounding failure ....”

But Dewdney went on to greater things:
Here in full regalia as Lieutenant-Governor of the Northwest Territories.
Early Transportation Routes

1888 - to Camp McKinney from the Okanagan Valley.

“... a first-class trail ....”
(built by the Government at a cost of $1,915.51)

but

no waggon road = no machinery = no development
Early Transportation Routes

1894 - from the Okanagan Valley, through Camp McKinney, and on to the Boundary area and Grande Prairie (now Grand Forks).

“... new waggon road ....”

Photo taken in 1899 or later?

Photo courtesy of the Greenwood Museum
Early Lode Mining

Camp McKinney – Au, Ag:

First claims – 1887

Development – 1888 to 1894
“waiting for the waggon road”

Road reaches camp – 1894

Stamp mill erected – 1894

Production – 1894 to 1904
Early Lode Mining

Camp McKinney – Au, Ag:

1897

Stamp mill, “Cariboo” Mine, Camp McKinney

BCMMAR 1897
Early Lode Mining

Greenwood Area:

Defiance – Au, Ag – a few tons to Puget Sound (1893, 1894)

Providence – Au, Ag – 15 tons to Puget Sound (1893)

Skylark – Au, Ag – 68 tons to Puget Sound (1894)
Early Lode Mining

Greenwood Camp (Phoenix Area):

Stemwinder – Cu, Au, Ag reported to have shipped about 5 tons in 1895 as a mill test – grade not known but probably several percent copper.

Brooklyn – Cu, Au, Ag reported (BCMMAR 1949) to have shipped 120 tons in 1898 – grade and destination not known – a few percent of copper?
Early Lode Mining

Deadwood Camp (West of Greenwood):

Mother Lode – Cu, Au, Ag
development through the late 1890’s, but
no production until late 1900.

Sunset – Cu, Au, Ag
exploration in 1897 and 1898; minor
production beginning in 1900 – never a
serious producer.
“Apex Law”

Did you think that B.C. never had extralateral rights ("apex law")?

Well – think again – we did, for a time, and what is more ……. 
Original Claims
Mother Lode and Sunset
(Deadwood Camp)

Mother Lode and Sunset Mines, Boundary District, B.C.
GSC Memoir 19 (O.E. LeRoy, 1913)
Original Claims
Old Ironsides
Knob Hill Area

The Geology and Ore Deposits of Phoenix, Boundary District
GSC Memoir 21 (O.E. LeRoy, 1913)
The Cities

Grand Forks – incorp. 1897

1899

View south-east down the Kettle River

BCMMAR 1899
The Cities

Greenwood – incorp. 1897

1900

View north up Boundary Creek

BCMMAR 1900
The Cities

Phoenix – incorp. 1900

1905

View from west – note Great Northern trestle

Public domain photograph from Wikipedia – photographer not known – said to be taken in 1905
The Cities

Phoenix – incorp. 1900

1908

View south to Knob Hill – Old Ironsides Mines

The Geology and Ore Deposits of Phoenix, Boundary District
GSC Memoir 21 (O.E. LeRoy, 1913)
The Railways

The great rivalry:

Canadian Pacific
W.C. van Horne

v/s

Great Northern
J.J. Hill
The Railways

CPR reaches Phoenix in 1900
(Columbia & Western Railway)

GN reaches Phoenix in 1904
(after surmounting a mountain
of paper work!)

The Geology and Ore Deposits of Phoenix, Boundary District
GSC Memoir 21 (O.E. LeRoy, 1913)
The Railways

1901

CPR Loading ore at Old Ironsides

BCMMAR 1901
Power Development

Initial power supply generally steam

B.C. Mine - 1899

Surface installations
Power Development

Initial power supply generally steam

Camp McKinney - 1939

Minnie-ha-ha boiler and hoist foundation

Geology of Camp McKinney and the Cariboo-Amelia Mine
BC Dept. of Mines, Bulletin No. 6 – M.S. Hedley - 1940
Power Development

Four hydroelectric facilities:

Cascade

Granby Smelter

Boundary Falls

Bonninston Falls
Power Development

Cascade
(Cascade Water, Power, and Light Company – 1900 to 1907)

1900

View from up-stream – note new railway bridge

BCMMAR 1900
Power Development

Granby Smelter
(Granby Consolidated Mining and Smelting Company Ltd.; after 1901, Granby Consolidated Mining, Smelting and Power Company Ltd.)

1900

Power house
Power Development

Boundary Falls
(Greenwood Water, Power & Light Company – 1902 to 1920)

1901

View from up-stream, above the falls

Photo courtesy of the Greenwood Museum
Power Development

Bonnington Falls
(West Kootenay Power and Light Company)

Power reached the Boundary country by 1906, and a new plant began operations in 1907.

1898

“run of river” development
The Smelters

Greenwood – 1900 to 1918
(B.C. Copper Co., later the Canada Copper Corporation)

1913

The Copper Smelting Industries of Canada
Canada Department of Mines – A.W.G. Wilson - 1913
The Smelters

Boundary Falls – 1902 to 1907
(Standard Pyritic Smelting Company; later Montreal and Boston Copper Company; then Dominion Copper Company; then New Dominion Copper Company)

1907

Report on the Mining and Metallurgical Industries of Canada, 1907-08
Canada Department of Mines (Mines Branch)
Tonnages shipped to Boundary area smelters:

- **Grand Forks Smelter**
- **Greenwood Smelter**
- **Boundary Falls Smelter**
Total tonnages shipped from Cu (Au, Ag) mines

Total tonnages shipped to smelters

Total tonnages shipped to smelters, ex Phoenix and Mother Lode
Grades, copper price and production data for the Phoenix mine

Phoenix grades and copper price

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Grand Forks Smelter

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Phoenix Mine

1899

Looking south to Knob Hill and Old Ironsides

BCMMAR 1899
Phoenix Mine

Plan of underground workings

The Geology and Ore Deposits of Phoenix, Boundary District
GSC Memoir 21 (O.E. LeRoy, 1913)
Phoenix Mine

Underground haulage

1913

BCMMAR 1913
Phoenix Mine

Simplified Cross-section

1913

view to south

original not coloured

note pit

The Geology and Ore Deposits of Phoenix, Boundary District
GSC Memoir 21 (O.E. LeRoy, 1913)
Phoenix Mine

Open Pit Operations

C.M. Campbell – The Granby Mines at Phoenix
Transactions of the Canadian Mining Institute 1919
Phoenix Mine

Technological Innovation
(the Granby self-dumping ore-car)

Photo courtesy of John Jewitt
Phoenix Mine

Technological Innovation
(the Granby self-dumping ore-car)

Photo courtesy of John Jewitt
After Smelter Closures
(1920 to 1925)

The district basically “went to sleep” until well after 1925, when this presentation ends. There was sporadic small-scale development and some shipments of precious metal ores, mainly to “The Consolidated” smelter at Trail.
“Forward Looking Statement”

In time Phoenix will rise, like its namesake, from its own ashes, and the city will disappear under the waste dumps from an open pit mine.

Photo courtesy of John Jewitt

But that, as they say, is another story.