National Hockey Association Had an A Canadiens and Cobalt Opened National Hockey Association Series in a Brilliant Manner Gave an Overtime Exhibition of the Real Thing STANLEY CUP GAME ENDED IN FARCE at the Jubilee Rink Last Night With Local French Team Winning After Five Galt Pros. Not in the Same Class as Even the Weakened Otlawa Team Minute's Extra Time and Lost by Score of 12-3. There was some class to the bockey at the Juniter Rink last uight in the Gitawa, Jan. 6 .- Blockey that mas little ! better then a farce after the Brat fice Take half a dozen speed-mongers of the Lavioletts-Steve Velr-Herble Clarke-Canadians, 7; Cobalt, 8. minutes, was that displayed in the tirst Newsy Lalonde stamp-put them on a smallish abert of good ice, plant a couple first game of the National Hockey Association. of the Stanley Cup series between Ottawa of thousand or more hard ronters with an occasional shricking female, set 'emand Galt professional team, champions to playing bookey and it is surprising if you don't get something resembling of the Ontario Protessional League, here And there was no mistake about its being the real stuff in itst sight's game. Ottawa'r Icam was by ste meass as fast Soth issue-the Canadians and the Cobalte-are about evenly matched and each or as strong as last yest's several but last pigat. team is about as evenly balanced as can be expected so early in the season. they outskated and sut-played the Oat-Hammer and tongs it was from the start to the finish. The start was fast the real article. reven all the way through and outs dred and the finish was fast and it was fart in between. What more could you want: them by 12-2, without making any parin addition after stagawing through the middle portions of the game Canadiens tied things up a couple of minutes before time and a sudden death play-off was ordered by the officials, and there were more bair-raising





CRAND TRUN RAILWAY SYSTER TEMA The Papriose Tou Reg	EXC New GAM	Yol Det	NT TRAI	IN SERVIC Uffalo Chicag nto and BAL7
Leave New Yor, "Buffalo Chicago Detroit Toronto rrive Temagami "Cobalt	k 8.55 p.m. 8.15 a.m. 10.30 p.m. 11.10 a.m. 8.30 p.m. 8.23 a.m. 9.43 a.m.	Leav " Arriv	e Cobalt Temagai e Toronto Detroit Chicago Buffalo New York	7.05 p.m. mi 8.13 p.m. 7.30 a.m. 1.45 p.m. 9.25 p.m. 12.30 p.m. 10.38 p.m.
Excellent Equ rlor, Library, Bu aches, etc. Full particulars J. D. McI	from any Grand OONALD, D	uding fe Cars	Puliman Modern Sent, or Add	Sleepers, Vestibule







History of Mining in Cobalt – The Rise

- Silver was discovered in the Cobalt area in 1903
- Staking rush started in 1905 and by late 1905, 16 mines were already in operation
- In the early mines the ore was exposed or was very close to surface, so very primitive mining methods could generate huge profits
- As the richest surface veins were exhausted, the exploration for new veins intensified and existing mines started to go deeper



History of Mining in Cobalt – Peak and Fall

- Mining in Cobalt reached its peak in 1911
- By that time the town was thriving and had a population of between 10,000 and 15,000 with more in outlying areas
- In 1911 production reached 31,507,791 oz of silver, an all time high for the area
- Mining began to decline during and after World War I
- Few mines survived the 1920s
- By the early 1930s mining all but ceased and the town was in decline



Cobalt about 1910



History of Mining in Cobalt – Rebirth and Decline

- Mining started again during World War II
- Both silver and cobalt were mined
- There was a significant growth in mining post-war which continued into the 1960s
- Many mines shut down again in the 1970s as ore was depleted
- By the late 1980s mining had ceased
- Today, Cobalt only has a population of about 1,500
- One small mill operates, processing material from outside the Cobalt area





Once Upon a Time, Cobalt Danced on the World Stage ...

- People from all over the world flocked to Cobalt, creating a thriving multi-cultural, multi-lingual community
- Newspapers as far away as England, South Africa and New Zealand regularly featured articles about Cobalt
- You could buy anything, from basic necessities to the finest fashions from New York and Paris
- There was a stock exchange in Cobalt
- Cobalt had several theatres, bringing in some of the hottest performers from North America and Europe
- The first YMCA north of Toronto opened with a bowling alley and an indoor swimming pool



Lyric Theatre on the Cobalt Square



But There was an Ugly Side Too

- In 1906, the New York Times touted Cobalt as "having all the sensations of the most modern city on the continent"
- Despite that claim, Cobalt was plagued by disease because of a lack of clean water and sanitation
- There were devastating fires in 1906 and 1909
 - Worst outbreak of typhoid in Ontario's history occurred in the aftermath of the 1909 fire
- Water issues were resolved in 1910, and Cobalt has had a safe, protected drinking water supply ever since
- In the mines, safety standards were non-existent, and many miners were killed or maimed in the quest for silver



North end of Cobalt in 1906



Fetching water from Cobalt Lake



Fetching water from Cobalt Lake



Cobalt fire of 1909



Cobalt fire of 1909



What Was all the Fuss About -The Cobalt Silver Deposits

- Silver occurred as veins from a few millimetres to over 1 m in width
 - many veins were exposed at surface and were heavily weathered
 - few extended below about 300'
- The mineralogy of the veins was very complex
 - gangue minerals included calcite, dolomite, quartz and chlorite
 - veins contained a unique suite of arsenic-bearing arsenide and sulfarsenide minerals
 - many of these minerals also contained nickel and cobalt





- Since many veins were exposed at surface, the earliest mining operations were simple and primitive
- Ore was recovered by hand with picks and hammers and removed with wheel barrows and buckets
- This meant that very little capital investment was needed in the early days
- As surface veins were exhausted mines started to go deeper, using mechanical hoists











Ore Processing in Cobalt

- The complexity of ores in Cobalt presented many challenges to metallurgists
- Initially, ore was hand sorted and shipped to the US, but this was expensive and a lot of silver went unrecovered
- First mills opened in 1907, using gravity process
- Cyanidation introduced in 1909
- Flotation introduced during World War I
- Two mills processed high grade ores by grinding in a mixture of mercury and potassium cyanide





- In short ... there were none. Tailings were dumped as close as possible to the mill, in convenient depression, creek or lake
- The Coniagas Mine, in the middle of town, exemplified the extreme sorts of tailings disposal practices and the challenges posed for the environment, human health and safety
- In 1908, the Town of Cobalt took legal action to stop Coniagas from dumping tailings too close to Argentite Street
- Tailings often flowed down the street and flooded homes and businesses



Coniagas Mine Tailings



Coniagas Mine Tailings



Coniagas Mine Tailings



Waste Rock Disposal "Practices"

- Like tailings, waste rock was dumped as close the mine headframe as possible, usually via a rail trestle extending outwards from the headframe
- In 1914, Coniagas built a shaft right in the heart of town and the waste rock pile was very close to the homes and businesses
- The waste rock pile approached the Jamieson Meat Company
- The mine sent a letter to Mr. Jamieson, informing him that it was his responsibility to build a trestle to divert the waste rock pile away from his business
- He refused, and the meat market was buried under the ever expanding waste rock pile!



Jamieson Meat Market, August 28, 1914 and September 30, 1914



Jamieson Meat Market, August 28, 1914 and September 30, 1914



Right-of-Way Mine Waste Rock



Right-of-Way Mine Waste Rock



South end of Cobalt Lake in 1918 and 2006



South end of Cobalt Lake in 1918 and 2006



Aerial View of Cobalt in the 1960s



Total arsenic loading at this location is more than all operating metal mines in Canada – COMBINED

10

Historical Legacy of Mining in Cobalt

- Cobalt has left an indelible mark on Canadian history
- Recognized as the birthplace of hardrock mining in Canada
- Many prospectors and miners cut their teeth there, then fanned out across Canada to make other discoveries in Kirkland Lake, Timmins, the Abitibi, Red Lake, Yellowknife and around the world
- Profits generated here helped bankroll many other mining projects and the growth of Canadian mining
- Many others, me included, have learned their trade in this cradle of mining
- In 2002, part of the area around Cobalt was declared a National Historic Site













Please Help Save a Piece of our Heritage

- Right-of-Way headframe needs a new roof it is to survive, and volunteers are working to raise \$37,000
- Right-of-Way is the only headframe in the Cobalt area that really has a hope of standing another 50 years
- It is destined to be the oldest headframe in Canada, standing in the heart of the birthplace of hardrock mining in Canada
- As such, it represents the shared heritage of the entire Canadian mining industry
- Please help save this piece of our heritage:

http://heritagesilvertrail.ca/02-fund.html

