

TEACHER'S RESOURCE GUIDE

WELLS, BC

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WELLS

BRITISH COLUMBIA, CANADA

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INTRODUCTION

This booklet provides advance information for your upcoming visit to Wells. Much of this material is intended for your use in classroom preparation and follow-up. It is intended that classes participating in a tour of Wells can maximize the learning opportunities if they have been given sufficient classroom preparation.

With this in mind, we have developed this booklet which deals with specific themes or approaches to the history of Wells and hard rock mining. Teachers are encouraged to use this material for a basis for developing their own lesson plans. Further information and assistance can be obtained from us by calling or faxing at 994-3422.

We look forward to seeing you in the near future.

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HISTORY OF WELLS

When Fred Marshall Wells came to the Barkerville area in the early 1920s, there was nothing at the future site of his town except a sawmill and a roadhouse that had been there since the 1890s. Wells, a prospector with experience all over Canada, formed the Cariboo Gold Quartz Mining Company in 1926 with W.R. Burnett to investigate a series of claims on Cow Mountain.

Unable to raise money in Canada due to unfavourable geological reports, they found in O.H. Solibakke of Seattle a promoter who was able to sell shares in various parts of the USA, England and Europe. Work on the first adit was started with only six men employed. When good values were discovered work was stopped and the adit locked until enough money to finance the complete mine development had been raised. By June 1932 all shares had been sold. The mill began production in January 1933. Over \$1.5 M was paid to shareholders over the next seven years.

Mining in the early 1930s was substantially changed from the initial Cariboo gold rush of the 1860s. Because of the capital intensive nature of the operations, a corporate structure with long term objectives was needed as well as a stable labour force. To facilitate the provision of a labour force in a remote mine camp, it was not unusual for a company to be involved in the building of a town.

The Wells Townsite Company was incorporated in 1933. Burnett, Solibakke and Wells were directors; the balance of shares was held by Cariboo Gold Quartz. The objectives were to provide the necessary services for the town by clearing, laying out, and selling lots, providing water and electrical services, erecting houses for sale or lease, erecting a hospital, school, and community hall and encouraging construction of churches, recreational facilities, hotels, stores and other commercial establishments. It was clear from the beginning that the Townsite Company would encourage private enterprise to develop the commercial district.

The town was laid out by Ed Richardson, a newly graduated civil engineer from UBC, who later was to plan West Vancouver, British Properties, and

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Park Royal. The driest area on the knoll was chosen for the commercial district. 'Better class' houses were constructed on Bowman Crescent with a view of the mine. Other residential areas were laid out on 'the flats' below Pooley Street.

It was a small area in which to build a town that could house 4500 people. The tiny lots (33'x100') kept the infrastructure compact and encouraged neighbourliness. By the end of 1934, 40 buildings were finished including the Sunset Theatre, the Wells Hotel, Anglican Church, a small hospital, butcher shop, garage, billiard room, stores and restaurant. The townsite company also constructed a 3 storey hospital and a school in 1935, and a large community hall in 1937.

During the period of 1933 to 1967 1.2 M troy ounces of gold and 138 troy ounces of silver were produced by the mines. However, a variety of factors combined against the viability of the operations. In 1942, gold mining was classified as a non-war industry and it became difficult to get supplies and labour. After the war, production was subject to rising costs while the price of gold was pegged at \$US35. In 1954 CGQ purchased the Island Mountain Mine from Newmont. The No. 1 Shaft on Cow Mountain closed in 1959, but mining continued on Island Mountain until 1967 when all operations were closed.

Since 1967 Wells has struggled to find an alternative economic base for the community. Most residents hope that a blend of tourism, mining, forestry and perhaps light manufacturing will give the community a stable economy.

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SCRIPT FOR CHILDREN'S TOUR OF WELLS

Welcome to Wells. My name is _____ and my partner here is _____ . We will be your guides through the historic town of Wells today. Feel free to ask any questions that you think of during the tour and we will try our best to answer them.

Can I have a couple of expert rock holders please? (Give a couple of quartz rocks with iron pyrite veins to the children to carry and pass around during the tour.)

INTRO (In front of museum.)

Wells was a gold mining town during the second gold rush.

Q: Could someone tell me when and where the first Canadian gold rush was?

- The first gold rush occurred in Barkerville in the 1860s.

Q: Can anyone guess when the second gold rush occurred?

- The second gold rush occurred in the 1930s.

Q: Does anyone know where to look for gold?

- In streams, rocks, etc.

Q: Does anyone know what the loose gold in streams is called?

- Placer gold.

Q: And how did prospectors get this kind of gold?

- Gold pans, sluice boxes, etc.

Well, since the first gold rush people looked for the source of this loose placer gold – many prospectors searched for the MOTHER LODE.

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Q: Does anyone know what lode gold is?

- Lode gold is found in chunks in rocks and becomes loose gold in streams by being scraped out of the rocks by glaciers.
- (Show the children the veins of gold in the example quartz rocks.)

Q: Do you guys think that this is real gold?

- No. It is fools gold, but real gold deposits would look similar to this.

Q: Does anyone know the technical name for fools gold?

- Iron pyrite.

Q: Does anyone know how this gold ends up as flakes in streams?

- Glaciers scraped the gold out of the rocks.
- Gold is heavy and gravity pulls it to the lowest spots in the landscape, which are streams.

Q: Does anyone know why the gold flakes end up in streams?

- Because gold is heavy and gravity pulls it to the lowest spots in the landscape, which are streams.

Q: Where do you think the Mother Lode source of the placer gold in Barkerville was found?

- It was found in the hills around the town of Wells.

Mining for lode gold needed a lot of people and a lot of money to blast into the rocks, tunnel into the mountains and dig this gold out.

- Therefore, companies were needed to run the operation.

Q: How was the mining done in Barkerville different from this?

- People didn't need a lot of money to start off with as pans and sluice boxes were cheap, individual prospectors often pursued gold on their own or in small groups of men.

Wells was a company town.

Q: Does anyone know what a company town is?

- It is owned and built by the mining company. If a company employee lost his job, he lost his house.

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Q: How many of you know the mayor of your town?

Q: Does anyone know how he got into office?

- Elected.

In Wells there were no elected representatives. The board of directors of the mining company ran the town.

- This company was the Cariboo Gold Quartz Company.

=It was the first successful large-scale lode gold mining operation in the Cariboo.

The gold and the company dominated the town from the time that the first gold brick was poured in April of 1933.

Wells was a boom town in the 1930s.

Q: Does anyone know what else happened in the 1930s?

Q: Does anyone know what the Great Depression was?

- The Great Depression occurred after the stock market crash of 1929 and there were no jobs available and many people were poor.

As a town that was booming, Wells offered jobs, opportunities and money that were not otherwise available at this time.

-Wells was a "Pocket of prosperity in a land shackled by the Great Depression" (one miner later said in the Cariboo Sentinel).

Q: Does anyone know what a boom town is?

- Lots of jobs, lots of new people and lots of building happening very quickly.

Q: Does anyone know what usually happens to boom towns?

- They bust or turn into ghost towns.

But Wells didn't bust. As you can see it did not turn into a ghost town and it is still surviving today.

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But it is not the great center of the Cariboo that it was in the 1930s.

- In the 1930s it was the entertainment, recreational and cultural center of the Cariboo.

- The population of Wells in 1942 was 4500. Whereas now there are only 250 permanent residents.

- Wells was larger than any other town in the Cariboo at this time. It was much larger than Prince George or Quesnel.

- People from these towns used to do their shopping in Wells and now people from Wells do all their shopping in these towns.

Wells is a tenacious town with an amazing beginning and interesting people throughout its history.

- So, let's start our walk through Wells and look at the history that still exists today.

FIREHALL (Stand in fire hall parking lot.)

In 1933, Ed Richardson was hired by the Cariboo Gold Quartz Company to design the town of Wells. A recent engineering graduate from UBC, he later went on to design the British properties in West Vancouver and other land developments.

Whereas Barkerville was an unplanned community, consisting of (and run by) individual prospectors involved in placer mining, Wells was run by a company that had the capital and manpower to undertake hard rock mining.

- So the Cariboo Gold Quartz Company created the Wells Townsite Company to plan and develop the town.

Q: Does anyone know of any features that are typical of a company town?

- Built quickly, uniform architecture, organized around a center containing public buildings and stores, definite boundaries, and the dominance of a single industry.

Q: How was this different from Barkerville?

- In Barkerville men moved in and built houses haphazardly and sometimes even tunneled under each other's houses when mining, causing some buildings to collapse.

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So the town of Wells was organized into clear sections, one of these being the residential area for the miners themselves.

- Before town planning, miners actually resided in bunkhouses at the mine site. However, the mining company thought it would be in their best interest to encourage the miners to live in houses with their wives and children.

Q: Why do you suppose the company would want to employ men with families?

- Miners with families would have been more stable, and there would be a lower turnover rate at the mines. The company directors were probably correct in thinking that men with dependants would stick with a job longer rather than risk not being able to provide.

Another section of town was designated as institutional land.

Q: Does anyone know what sorts of buildings can be found on institutional land?

- The kind that provide services for the public at large – hospitals, firehalls, schools, etc.

This is the second fire hall built in Wells.

Q: Can anyone guess what happened to the first one?

- It burned down.

People usually congregated at the fire hall when the alarm went off. One day when it went off, the townspeople gathered here only to find the fire hall on fire, along with all the equipment they would need to put the fire out.

- The one you see here today was built in 1942.

(Point at the school grounds.)

The original Wells-Barkerville school stood by the backstop and was built in the 1940s.

Q: How many students are in your school?

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Well, this early school contained only one room, and sometimes housed up to 70 students.

- The school you see standing now was originally constructed with just one floor containing 4 rooms. A second floor (with 4 more rooms) was later added, and in the 1960s, a gym became the latest addition.

As Wells was a major recreational center in its heyday, such sporting arenas as a curling rink and open air hockey rink were also situated in this central area of town. Various sports teams from all over the Cariboo would come to Wells to compete.

(Point to the hospital on the hill.)

As Wells was a company town, the Cariboo Gold Quartz Hospital, which opened in 1936, was run by the mining company.

Q: What would you do today if you were playing hockey and broke your leg? Would you have any problem getting into the hospital?

- Well, because the mine owned the hospital, a member of the community who was not a miner was not necessarily entitled to the services it provided. However, the hospital would likely not turn away anyone who was in dire need of treatment.

But in 1937 and 1946, the miners went on strike.

Q: What do you suppose happened then?

- The hospital was closed, and anyone in need of medical care had to make the day-long bumpy ride into Quesnel.

CORNER OF SANDERS AVE AND MEADOW

Remember how _____ mentioned that this town was a planned town? Well, when planning the town, Ed Richardson and the company directors decided that not only would different areas contain different types of buildings, but that the houses themselves would reflect the position of the company employees.

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(Point to the Squash House and house next door.)

Q: Look at these two houses. Which one do you think the foreman lived in and which one do you think the common miner lived in?

- The common miner lived in the Squash House and the foreman lived in the house next door.

Q: What do you think the area that we are standing in now was designated for? Remember that the land around the fire hall was institutional land.

- This was land set aside as a subdivision for the miners and their families.

- This area is called the flats.

If you look around you'll notice that the houses are close together. This is because the Townsite company had only 40 acres on which to house 4500 people.

These houses were built in 1934, rented for \$18/month including electricity, water was separate.

If you look down the street you'll notice that a lot of houses look very similar.

- They were all built by the same construction company and designed by the same man.

- Old locals tell stories about how miners who came home from drinking at the bar would walk into the wrong house because they couldn't tell the difference between the houses in the dark.

See that marshy meadow over there? (Point at the meadow.)

Q: What do you think it was used for?

- In the 1930s there was a thoroughbred horse racing track and a nine hole golf course.

- Now there are only beaver, otter, muskrat, and moose here.

(Point to the United Church.)

This church is a united church built in 1934 and the only one of 3 built in town that is still being used to hold services.

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COMMUNITY HALL (Stand in front of it.)

The Wells Community Hall is the largest building ever constructed in Wells and was, once again, designed by Ed Richardson and run by the Cariboo Gold Quartz Company.

- Following its construction in 1938, 1000 people showed up for the inaugural ball. Typically, however, the main floor seats around 400 people, and has a proscenium stage. Upstairs is a billiard and reading room, while downstairs houses a pistol range, men's and women's lounges, shower/locker rooms, a kitchen, and a Janitors quarters.

BUCKLEY'S (Point to it.)

This building here was originally Buckley's Pharmacy.

Q: Has anyone heard of another pharmaceutical Buckley's product?

- Buckley's cough syrup.

The individual who invented Buckley's cough syrup was a relative of the Buckley that opened up the original pharmacy. Local legend has it that the family made a small fortune in Barkerville and went on to open up this business.

CAIRN (Get a child that is a good reader with a loud voice to read the inscription.)

This is a cairn, a place where a person's ashes are placed when they die.

Q: How old does that mean Fred Wells was when he died?

- 95

Q: Why do you think that the people of Wells would want something like this pile of rocks with ashes in it on their main street?

- Fred was the founder of the town.

Q: What do you think Fred found in the hills around town?

- Gold or the Mother Lode.

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Fred had been prospecting since the late 1800s in BC. He came to the Cariboo in 1922 and prospected gold in Barkerville and other creeks in the area.

- Fred believed in the Mother Lode, the source of Barkerville's placer gold, and he believed that the mythical vein of gold was in the quartz rocks of these mountains.

So Fred bought a groups of claims up there on Cow Mountain. (Point to Cow Mountain.)

Q: Can anyone guess why this mountain is called Cow Mountain?

- Because during the 1860s cows were grazed on this mountain to provide milk for the prospectors in Barkerville.

To mine the gold in these mountains, Fred needed a company and people with money, but the government geological engineers said that gold couldn't be found in the quartz rocks here.

- This means that the law in Canada said that Fred couldn't get money for his company from anyone in Canada (couldn't sell shares here).
- When engineers came to the mine to shut it down, Fred built a huge iron gate to keep them out of the mine and hung a "gone fishin'" sign on the gate.
- When the engineers found nobody there they left and Fred ordered the miners to continue working until he found people to invest from America and overseas.

In 1927 he formed the Cariboo Gold Quartz Mining Company with his two partners OH Solibakke of Seattle and Dr. Will Burnett of Vancouver.

- The mine was set up on Cow Mountain and the company soon began to employ a lot of men and make a lot of money.

Now, Fred, the company founder, was tough old man, but he was kind and the local people loved to tell stories about him.

- When the first gold brick was poured in 1933, the brick probably weighed around 30 pounds.
- Fred was so excited to get the brick down to Vancouver that he strapped the brick to his back and carried it all the way to Stanley, over 20 km away, while he was wearing snowshoes.

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- Fred was in his 70s at this time.
- According to mine employees at the time, at this age he could also outclimb any of the young miners in the mine.

Fred was also very strict with his employees.

- He didn't drink or smoke and if he caught any of his employees smoking or drinking he fired them on the spot.

But Fred was kind and cared if his employees were well-fed.

- He went to Ashcroft district every fall and personally bought truckloads of potatoes for his employees.
- People in Ashcroft laughed when he personally test boiled sample potatoes with a pot and campstove he brought to make sure that they were the best quality, but his employees were very grateful.

Fred was addicted to prospecting for new gold and sold his shares in Cariboo Gold Quartz Company when it started to turn over a good profit.

He continued to prospect and start new companies for the rest of his life.

Q: With all of Fred's involvement in gold and business, do you think that he died a rich old man with bags of gold surrounding him?

-Well, Fred liked to look for gold, but he wasn't a very good businessman.

- He died at 95, poor, in a one-room apartment in Vancouver, still looking at maps and planning his next gold mine site.

POOLEY STREET (Stand at the corner of Pooley and Bowman Crescent.)

Pooley Street was the commercial district in the town of Wells. Most of the major businesses were located on this well-drained piece of property.

Q: In a company town, who would usually own the various businesses?

- The company would.

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In Wells, private merchants were allowed to operate businesses, despite the fact that it was a company town. The people of Wells wanted it to be an

“open town” – they did not like the idea of the company being able to control the costs of living.

The Wells Hotel was the first of its kind, built in 1934. It contained 15 rooms and 3 fireplaces, which are actually faced with ores from the three mines that could be seen from its elevated position – the Cariboo Gold Quartz Mine, Island Mountain Mine, and Coronado Mine.

The Good Eats Café was built in 1935, and originally housed Buck's Barber Shop and Betty's Beauty Parlour.

- The basement of Buck's was the meeting place for members of the Dominion Club, an illegal gambling establishment. When the Sunset Theatre (built in 1935) was replaced by the Lode Theatre constructed in South Wells, the Dominion Club moved into the Sunset. At this time, it was the only licensed gambling establishment in BC.

Q: What do these houses remind you of? Do they resemble the structures found in Barkerville? Do you think that building styles really didn't change between the 1860s and the 1930s?

- Well Ed Richardson, aware of the fact that Barkerville was a prosperous town in its time, purposefully imitated the structures in Barkerville when designing the town of Wells.
- Art Deco was more the style of the 1930s, but perhaps Ed thought that from similar designs in structures follows similar economic developments, and so he ignored the style of the time and went retro...

BOWMAN CRESCENT (Stand just beyond Amazing Space.)

We are now on Bowman Crescent. (Point to the row of houses on the right hand side.)

- You can see that the houses here have a nice view of the lake and are above everyone else in town.

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Q: From what we told you about planned towns, who do you think lived on this hill?

- This is the wealthy district where Ed Richardson (the Wells Townsite Engineer), the mine managers, accountants, and Fred Wells himself lived.
- This area is called Knob Hill.

Q: What do you think the miners called Knob Hill?

- Snob Hill.

This is Holy Rosary Catholic Church. (Point to Amazing Space.)

- There are churches on either end of this street – the one at the other end is an Anglican church. Neither are in use anymore, as they are now artists' studios.

There is Cow Mountain. (Point to mountain.)

There were two important things on Cow Mountain in the 1930s,

Q: What do you think these two things were?

Q: Does anyone here like to ski?

- The Cariboo Gold Quartz Mine was located on the mountain and in that cleared spot there was a ski hill.
- Remember how we said that Wells was the place for sports in the Cariboo? Well, this was one of only 3 ski hills in the area and it had the biggest ski jump.
- In 1939, the Western Canadian Ski Championships were held here and people landed record-setting jumps.

(Point to South Wells.)

That flat area with the buildings is South Wells, commonly called The Tailings.

Q: Does anyone know what tailings are?

- Tailings are the waste rocks from mining that don't contain any gold.

See that gulch, the V-shaped part of the mountain there?

- Well, that is Lowhee Gulch and that giant V was created by hydraulic mining with a water canon.

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Q: Does anyone know what a water canon (or water monitor) is? Did anyone see the giant hose monitors in Barkerville?

- Well, these giant hoses had so much water coming out of them at such a strong pressure that a boulder the size of a car could be suspended in the air by the water and not touch the ground.
- These hoses blasted the V into the mountain and created all that loose rock or tailings that the houses in South Wells are built on.

See that lake back there? (Point to Jack 'O Clubs Lake.)

- That is Jack O' Clubs Lake.
- The lake used to reach the bottom of this hill.

Q: Why do you think that the lake moved back there?

- The lake filled in with tailings and the water was pushed back.

FRED WELLS' HOUSE (Stand across the road from it.)

Fred's house was constructed in 1933. Though it was not as extravagant as one might expect of the president of the mining company with his own chauffeur and Cadillac, it may possibly have had the best view in town, overlooking Jack of Clubs Lake and the mine itself.

- Fred spent little time actually living in this house, however. Being every bit the prospector that he was, he preferred to be out trekking in the wilderness, camping with the wildlife, and seeking out new adventures and gold!
- When he was in town, he liked to sleep in a tent in the backyard, and instead allowed his house-keeper and her family to inhabit the house. He would usually only go in the house for his favorite breakfast that Mrs. Snoxell would prepare for him every day.

Q: Can anyone guess what Fred's favorite breakfast was?

- Hotcakes.

He would only eat his hotcakes with Genuine Vermont Maple Syrup, which was imported by the gallons each Spring for this sole purpose.

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ISLAND MOUNTAIN MINE (Stand in parking lot next to Sunshine Cottage.)

This is Island Mountain. (Point to mountain.)

Q: Why do you think this is named Island Mountain?

- Remember what I said about the lake?
- Well, it used to look like an island as it was surrounded by the lake water, streams, and Willow River.

This was the site of the Island Mountain Mine Corporation, the rival of Fred Wells' Cariboo Gold Quartz Mining Company and established in the same year.

Q: Does anyone know what a rival is?

= A rival is someone or thing that you compete against – like when playing on sports teams against the teams of other schools you want to win against them.

- Well, miners felt very loyal to their companies and employees from either company wanted their mine to do better than the other.
- Locals tell stories about miners from either company walking down opposite sides of the street on Friday night to pick up their paychecks, as they wouldn't walk on the same side of the street as employees from the rival mine.

(Point to mine buildings.)

Down below us are the mine buildings that are still standing. There are no mine buildings standing on Cow Mountain, but the Cariboo Gold Quartz Mine Site would have had similar buildings.

- The large teal building was the bakery, which was built in 1934. The building housed a dining hall and kitchen for the mine employees. The bakery sold baked goods to the community.

- The yellow building was the mine office, built in 1933. It housed the accounting and engineering staff. There are two walk-in vaults in the building.

Q: What do you think the two vaults were for?

= One was to store gold in and the other was to store money.

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- The long pink building was the Island Mountain Mining Company Dry.

Q: Why do you think that this building was called the Dry?

=Miners would get very muddy and wet during their shift, so they hung up their clothes and got changed in the dry. The clothes would be dry by their next shift.

Newmont Mining Company started Island Mountain Mine the same year that Cariboo Gold Quartz was established in 1933.

In 1954, the Cariboo Gold Quartz Mining Company won the rivalry and bought Island Mountain Mine Company.

- By 1959, the mine on Cow Mountain was shut down for lack of profits.

- By 1967, large-scale mining ceased altogether in Wells.

Between both mines during their years of operation, 150 km of tunnels were created that meet right under Jack 'O Clubs lake and some reach as far as Barkerville.

- Between the two operations they produced over \$35 million worth of gold.

END OF TOUR (Stand in front of museum.)

This building was originally a Chinese Laundry. In 1944, it became the Miners Union Hall, and from 1974 onwards it was converted into the Wells Museum. The tractor in front of the museum was used by Fred Wells to drive an air compressor into Cow Mountain.

Q: What do you suppose the dominant industry is in Wells today?

- Tourism.

The fact that there are only around 250 permanent year-round residents today is something of note, as many boom towns of this era inevitably turned into ghost towns. That Wells still persists as a lively community today is testament to the fact that Wells is as tenacious as its founder, Fred Wells.

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MUSEUM (Before opening door.)

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Before I let you in I want to tell you something.

Q: Does anyone know what artifacts are?

- Artifacts are objects from our past that cannot be replaced. They are a part of our history.

Q: And how do you treat artifacts?

- Don't touch the artifacts as even the oil from your fingers can ruin them beyond repair.

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Self-Guided Wells Townsite Tour

Wells History

Fred Marshall Wells, a seasoned prospector, came to this area in 1922 to search for the legendary “Mother Lode.” In 1932, Wells found what he believed to be the Mother Lode and obtained financial support to begin the Cariboo Gold Quartz Mining Company in 1933. To attract a large, stable (i.e. married) work force, the Cariboo Gold Quartz Company created the Wells Townsite Company to design and build housing and community facilities for the miners and their families. Ed Richardson, a recent UBC engineering graduate, was hired to plan the townsite with a view to aesthetics and its social and economic function. During its peak, Wells was the center of culture and activity in the Cariboo. As a boom town during the Great Depression, Wells offered jobs, opportunities, and money that were not otherwise available at this time. During the late ‘30s, Wells had a population of about 4500 inhabitants.

Buildings of Interest in Wells

1. **Miners’ Union Building**
Originally a Chinese laundry, it became the Miners’ Union Hall in 1944. It has been the Wells Museum since 1974.
2. **Hill Meat Market**
As the name suggests, it was originally a butcher shop. It was restored from near collapse in 1987 by Island Mountain Arts for use as their office and Art Gallery.
3. **Pacific 66**
Built in 1938, this was a garage belonging to Johnson Motors. It is currently under restoration.

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4. Wells Hotel
The first building in Wells to be designed by an architect. Building materials were imported from California, Germany, Spain and France. The building has three fireplaces faced with ore from the three mines that could be seen from the hotel (Cariboo Gold Quartz, Island Mountain, and the Coronado Mine on Cornish Mountain).
5. Good Eats Café
One of the few wood flatiron buildings still standing in B.C., this building originally housed Buck's Barber Shop and Betty's Beauty Parlour. It was converted into the Good Eats Café in 1959, where the 'sticky buns' and warm hospitality were renowned.
6. Sunset Theatre
The first movie and live show theatre in Wells. It lasted until the 1940s, when it became the first licensed gambling hall in B.C., The Dominion Club.
7. Holy Rosary Catholic Church
Built in the 1940s. It is now an artists' studio and display space.
8. Managers' Houses
Were among the largest in the townsite and were occupied by the townsite manager, mine mechanic, mine accountant and mill superintendent. Bowman Crescent was called "snob hill" by the miners in Wells.
9. Fred Wells' House
Overlooks the mine he discovered. Popular stories tell us that Mr. Wells, a man addicted to prospecting, lived in his workshop in the rear and gave over the entire house to his housekeeper, Mrs. Snoxell, and her family.

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10. St. George's Anglican Church
Funded in part by the Cariboo Gold Quartz Mining Company, this church was built to overlook the town and give it an aura of permanence and stability.
11. Wells' Cairn
This tribute to Fred Marshall Wells, the founder of Wells, contains his ashes.
12. Wells Community Hall
Built and operated by the Cariboo Gold Quartz Company, this building housed a large gym with permanent bleachers on each side, a stage, dressing rooms, reading room, billiard room, banquet rooms, kitchen, men's and ladies lounges, shower/locker room, pistol range and janitor's quarters. The inaugural ball was held in 1938 and was reportedly the first time that Fred Wells had danced in 50 years. At this event, nearly 1000 people packed themselves into the hall, though it is meant to seat only 400 people.
13. The 'Squash House' and Foreman's House
The town was planned to reflect order and stability: certain sections of land were designated for specific purposes and even house designs were meant to reflect a mine employee's position in the company. The 'Squash House' (named so by Wellsians as it is orange and looks 'squashed') was likely rented by a common miner and the house next door (with two full stories) was likely rented or owned by a mine foreman. The houses in this area of Wells were built in 1934 and most were rented for \$18.00/month.
14. United Church
Built in 1934, it is one of three churches built in town and the only church in which services are still held.

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15. Meadow
During the 1930s there was a horse racing track and a nine-hole golf course on this meadow. A 2 km nature trail to 1 Mile Lake and back now winds across the meadow.
16. School
The original Wells-Barkerville school, built in the 1940s, stood by the backstop. This early school contained only one room and housed up to 70 students. The current school building has 8 classrooms and a gym.
17. Wells Volunteer Fire Department Hall
The current fire hall was built in 1942. The original fire hall burned down.
18. Cariboo Gold Quartz Hospital
Opened in 1936, the hospital could accommodate as many as nine patients. It had an operating room, nursery, emergency ward and accommodations for the nursing staff and janitor. Employees of the Cariboo Gold Quartz Company received free medical care. The hospital closed when the Cariboo Gold Quartz Company ceased operations in 1967.
19. Assay Office
In the assay office, long cylinders of core samples drilled from the mine tunnels were subjected to chemical tests or “assays” to determine the gold content of the rock. Test results showing high gold content indicated to the mining company that further mining might be profitable.
20. Island Mountain Dry
In the dry, the miners changed into their mining gear before going down into the mines. After their shift they would shower here and hang their wet clothing to dry before their next shift.
21. Island Mountain Mine Office
This building housed the offices of the accounting and engineering staff of the Island Mountain Mine Company.

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22. The Bakery

Used as a kitchen and a dining hall for the men at Island Mountain Mine, this building also supplied bread and baked goods for sale to the community.

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Recreation in Wells

The Wells Townsite Company helped build sports and recreation facilities to attract miners and their families to the town.

At one time, Wells boasted tennis courts, a golf course, two race tracks, a curling rink and a ski slope and ski jump on Cow Mountain.

World-class ski jumpers competed here, and record Canadian jumps of over 60 m were set during the 1930s. Wells hosted the Western Ski and Snowshoe Championships in 1939 and the Provincial Ski Championships in 1942.

Sports clubs brought the community together. Snowshoeing, downhill and cross-country skiing, hockey and curling were popular during the winter. Hockey teams from the Cariboo Gold Quartz and Island Mountain mines competed with each other. Summer sports included softball, badminton, soccer, basketball and even roller skating.

Fishing and hunting were also popular and the “Wells Rod and Reel Club” was quite active in the 1930s, ‘40s and ‘50s.

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Cariboo Gold Quartz Mine Milling Process

The milling process consisted of three basic procedures: sorting the ore by size, crushing the rock and extracting the gold.

At the Cariboo Gold Quartz Mine, gold bearing ore was hoisted out of the mine and transported downhill to the mill. Upon arrival at the mill, rock fragments were sorted according to size in a grizzly, a device consisting of steel rails above an onward conveyer belt to a jaw crusher.

After this secondary crushing, a shaker screen allowed fragments of less than ½ inch diameter fall into a fine ore bin. Larger ore fragments were pulverized in a cone crusher. Fine ore was fed by conveyer belt to a ball mill, a rotating steel cylinder filled with tumbling steel balls, where the rock was further crushed to a consistency of fine sand or talcum powder. This powder was then fed into the thickener with a cyanide and water solution to create a sludge. The thickener was a cylindrical tub 20 feet long and 10 feet deep, inside which rotating rakes mixed the sludge to make sure that the ore was saturated by the cyanide solution.

The liquid portion of the sludge was diverted into holding tanks and was called the pregnant solution because it contained 70% of the gold. The pregnant solution was drawn from holding tanks through a clarifier, a device which removed all remaining rock or clay from the solution. A de-aerator tank removed bubbles to further refine the clarified solution. Zinc, which has an affinity to gold, was added in dust form to the de-aerated solution. The resulting solution was drawn under pressure through a filter press which caused gold and zinc to precipitate onto canvas filter leaves. The zinc-gold precipitate was then cleaned from the filters. Extreme heat burned off the zinc.

Water passing through the filters was chemically tested for gold residue before it was discharged into tailings ponds. Gold bearing water might be run through the filtering process several times to remove all the gold. Gold recovered from the ore through the milling process was poured into gold bricks that were shipped to the Royal Canadian Mint for further refinement.

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The milling process can have quite an effect on the landscape. Tailings cover much of the ground in Wells. Tailings are the non-gold-bearing rocks left over after mining operations. There are three types of tailings created by the mining process. Hydraulic mine tailings are rocks that are washed down the mountainside with water monitors. The second type of tailings consists of those rocks taken out of the mountainside during tunneling. The third type are called mill tailings and are those rocks left over after processing through a mill. Tailings cover many of the hillsides in Wells. They have also filled in and pushed back swamps and parts of Jack of Clubs Lake to such an extent that an entire section of the townsite of Wells (South Wells or "The Tailings") is built on what was a marsh before gold mining occurred in the area.

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Worksheet – Mining the Motherlode

1. Compare placer and hard-rock mining with respect to:
 - a) where and in what form the gold is found
 - b) the methods of gold extraction
 - c) the scale and nature of each type of mining operation
2. How did the type of mining done in Barkerville and Wells (placer and hard-rock mining, respectively) shape the towns themselves?
3. What is a company town, and what are some of its typical features?
4. In what respect was Wells different from a typical company town?
5. Give an example of how the physical layout of the town reflected social requirements? functional requirements?
6. What are tailings? Name and describe three different types of tailings.
7. How has mining changed the local landscape?
8. Based on your impressions of the town and the museum exhibits, describe life in Wells as you imagine it to have been in the 1930s. How might this compare with circumstances elsewhere during this time period (the Great Depression)?
9. Barkerville and Wells were both boom towns in the first and second gold rushes, respectively. What usually happens to boom towns? How do Barkerville and Wells differ in this respect?
10. Why is Wells still here? What sustains the town and its people today?

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Worksheet – Answer Key

1. In placer mining, gold is found in small flakes loose in a river or stream. In hard-rock mining, it is typically found in larger chunks in quartz veins in a mountain.

Placer gold can be extracted from the streams by any individual with a pickaxe and gold pan. Sluice boxes can also be used. Lode gold, on the other hand, requires the use of heavy machinery to blast into a mountain and extract the gold. Dynamite is used to tunnel into mountains, and water monitors are used to wash parts of a mountain away to get at the gold.

Placer mining is relatively small scale – it requires only one individual with the basic equipment to be done. There is no organized labour and so a town based on placer mining (such as Barkerville in the late 1800s) can appear to be quite a chaotic place. Hard-rock mining is large scale, as it necessitates a lot of manpower and capital to afford and operate the machinery used to blast into the mountains and extract the gold. Typically, a company will be in charge of a hard-rock mining operation, and will organize a large workforce to labour in the mines.

2. Because Barkerville was based on placer mining, the individuals who flocked there in the first gold rush were not organized into large workforces. There was an “every man for himself” sort of attitude, and thus the town took on the appearance of disorganization. Miners would set up camp wherever they pleased. Wells, dependant instead on hard-rock mining, was quite the opposite. The Cariboo Gold Quartz Company, upon finding the motherlode, created the Wells Townsite Company to plan and develop the town. The planning of the town meant that certain areas of it were designated for specific functions, whether this be institutional land or residential areas.

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3. A company town is one that is owned and built by a company. The company can even own and rent houses to its employees, so losing your job with the company might also entail losing your house. Some features that are typical of a company town include a relatively quick building of the townsite, uniform architecture, definite boundaries, dominance of a single industry, and they are organized around a center containing buildings and stores.
4. Wells was different from a typical company town in that the company did not own all of the local businesses. Private merchants were allowed to set up businesses, making Wells an “open town.” This may have been done to pacify the townsfolk more than anything, as the Wellsians were likely not happy with the idea of the company being able to control the costs of living.
5. The physical layout of the town reflected social requirements in various ways: the miners lived in an area called the flats (which is lower than the rest of town) while individuals with higher status jobs in the company (i.e. engineers, accountants, the president) lived on Bowman Crescent (a hill overlooking the rest of town). Furthermore, the common miner lived in an one-storey house, while the ‘elite’ lived in larger one-and-a-half storey homes. Thus, social hierarchies were perpetuated through the planning of the town and in the style and size of the buildings themselves.

The physical layout of the town reflected functional requirements in that it was organized into clear sections, with all businesses concentrated in one area (specifically on Pooley Street) and institutional buildings in another. The homes of the upper class and the businesses were built on an area of elevated land, thus allowing for better drainage.

6. Tailings are the non-gold-bearing rocks left over after mining operations. The first type, hydraulic mine tailings, are those rocks that are washed down the mountainside with water monitors. A second type of tailings consists of those rocks taken out of the mountainside during tunneling. The third type are called mill tailings, and are those rocks left over after processing through a mill.

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7. The water monitors used in hydraulic mining have drastically altered the local landscape; on Cow mountain this sort of equipment blasted away the mountainside and created Lowhee Gulch out of what was originally only Lowhee creek. Furthermore, the tailings that washed down the mountainside covered South Wells (which was, prior to this, only a marshy sort of meadow), and pushed Jack of Clubs lake back to where it rests now. This lake reached the bottom of the Bowman Crescent hill before this mining activity.
8. Wells was essentially a boom town during the 1930s, with around 4500 residents and all sorts of recreational activities. This was unusual for the time period, as the Great Depression affected nearly every other area in BC, leaving many people without jobs and money.
9. Typically, boom towns turn into ghost towns after an average life of ten years (or they “bust”). This is essentially what happened to Barkerville following the first gold rush; most people left the town to seek their fortunes elsewhere, leaving but a handful of permanent residents (all of which are gone today). Wells on the other hand, though decreasing significantly in population after shutdown of the major local mining operations, did not turn into a near ghost town. Numerous people remained in town employed in other areas.
10. Wells is still here because, unlike Barkerville, it was a company town. Because of the organization and planning that goes into a company town, they are typically more permanent and stable. Even after major mining operations were shut down in 1967, the town of Wells had developed to a stage where residents could remain in the area and sustain themselves in other areas of work. Today the town of Wells is largely sustained by tourism. However other light industries, such as logging and mining, persist, and a relatively large portion of the residents are involved in various artistic endeavours.

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Mining Word Find

There are many terms associated with mining in Wells. Can you find and circle the following words hiding in the box below?

Adit
Drill Bits
Dynamite
Fool's Gold

Gold
Hydraulic
Mill
Quartz

Monitor
Motherlode
Placer

Shaft
Tailings

T	A	I	L	I	N	G	S	E	W
S	W	D	O	P	H	Q	S	M	T
A	P	Y	U	G	Y	U	R	O	L
O	H	N	I	S	H	A	F	T	G
M	P	A	F	A	M	R	S	H	Q
I	B	M	A	D	I	T	W	E	H
L	D	I	S	I	N	Z	F	R	J
L	K	T	J	O	I	Q	I	L	N
L	G	E	M	O	N	I	T	O	R
F	O	O	L	S	G	O	L	D	Z
X	L	K	Z	C	D	V	B	E	N
M	D	R	I	L	L	B	I	T	S
Q	W	E	V	M	R	T	M	Y	U
H	Y	D	R	A	U	L	I	C	O
I	P	A	S	P	L	A	C	E	R

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FRED WELLS PAGE

Circle the correct answer for each question:

1. Fred Wells came prospecting in the Cariboo region in the year:

1946 1861 1922 1933

2. How old was Fred Wells when he passed away?

65 95 83 76

3. What was Fred's favorite breakfast?

Hotcakes Bacon & Eggs Cold Cereal Hot Oatmeal

4. What form of transportation did Fred use to get the first gold brick into Stanley?

Car Horse Snowshoes Helicopter

5. According to his friends, Fred Wells was superior to his fellow miners in which activity?

Skiing Dancing Hockey Climbing

Answer the following questions:

6. What habits would Fred Wells never tolerate in his employees?

7. What was the name of the mining company founded by Fred Wells?

8. Where, and in what year, did Fred Wells pass away? Where are his ashes kept today? (be specific)

9. Describe a situation that exemplifies Fred Wells' genuine concern for the well-being of his employees.

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Fred Wells Page – Answer Key

1. 1922
2. 95
3. Hotcakes
4. Snowshoes
5. Climbing
6. Smoking and Drinking
7. Cariboo Gold Quartz Mining Company
8. Fred passed away in Vancouver in 1956. His ashes are kept in the cairn on Pooley Street in Wells.
9. Fred went personally to Ashcroft every Fall to buy potatoes for his employees. He test-boiled them himself to see that they were adequate.

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Glossary

Fool's Gold: miners jargon for any material that resembles and is taken to be real gold by the inexperienced. The most common substance mistaken for gold is mica, which is found in practically all the gold-bearing creeks of the West. Mica glitters in the pan in sunlight, but its properties are considerably different than gold – it tends to float in the pan (being far lighter than gold) and it splits easily when handled.

Hydraulic mining: a common method of mining in which water under pressure is used to cut away banks of gold-bearing gravels or overburden. Water is brought to the operation to form a “head;” the water is then discharged into a pipeline, at the end of which is a nozzle called a “monitor” or a “giant.” By using the water provided, the overburden can be cut away to expose the gold-bearing gravels which are then sluiced, using the water provided.

Lode: describes the place of origin of the metal being mined. Hence the “lode” or starting place was often searched for assiduously by miners in the hopes of discovering “metal in place.”

Monitor: an apparatus fitted with a nozzle and used to direct water under high pressure in order to remove overburden or to break down gold-bearing gravel in order to sluice them. Also known as “giant.”

Motherlode: the starting place or origin of a metal. A vein which contains the original metal “in place.”

Placer: These are deposits of sand or gravel which contain particles of gold or other valuable heavy minerals. Gold was, and still is, the most important mineral found in placers. This word was probably derived from a Spanish word meaning “sand bank.”

Tailings: a specialized term used to describe the residue left over after a mining operation. In placer mining, the larger boulders and rocks, discarded and often left along the banks of gold creeks, are referred to as “tailings.” In hardrock mining, the tailings can be the non-gold-bearing rock that has been washed down a mountainside during the process of hydraulic mining or the rock that has been dug out of the mountain during tunnelling.

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