



# Historical Review

Of  
Former  
United Keno Hill  
Mines Limited  
Quartz Claims

Keno Hill  
Volume 1

Prepared for  
Assessment and Abandoned  
Mines Branch  
Energy Mines and Resources  
Government of Yukon

By  
McQuesten Lake Enterprises

March 2007

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Former  
United Keno Hill Mines Limited  
Quartz Claims

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## **Executive Summary**

The initiative for the continuation of this project stemmed from research and work that was done over the previous four years by McQuesten Lake Enterprises and The Silver Trail Tourism Association for the Department of Indian and Northern Affairs Waste Management Program and the Heritage Resources Unit, Yukon Government. The focus of these projects was to document sites, determine safety issues, and to create a record of sites with heritage resources.

From the positive response to these projects it was evident that there was a need to document the heritage sites in the area using Heritage Resources Unit methods. This more in-depth recording and focused historical research would assist in creating a record of the historical data before it is lost by development or the elements.

Under these premises McQuesten Lake Enterprises submitted a proposal and was awarded a contract from Energy Mines and Resources, Yukon Government to document six hard rock mine sites formerly owned by United Keno Hill Mines Limited on Keno Hill. The information collected during this project can be used to assist land use planning and the management of the resources in the area. McQuesten Lake Enterprises conducted archival research in Whitehorse and at the Keno City Museum and documented the sites to Yukon Government standards.

During the past four years McQuesten Lake Enterprises has documented over 31 historical sites which have encompassed over 150 buildings and features on Keno Hill, Galena Hill and Sourdough Hill in the Silver trail region.

## **Historical Background**

The development of the Yukon and the end of its isolation began in 1839, when the Hudson Bay Company sent John Bell, a Scottish fur trader came into the country. He traveled into the country by boat, following the Mackenzie and Peel Rivers. Bell built a series of trading posts and established Fort McPherson on the Peel River.

The Hudson Bay Co. then sent a second person by the name of Robert Campbell who followed Bell but started a Trading Post at Frances Lake. Trading goods were hard to get and good fur was hard to acquire without some means of trade, the Chilkat Tlingit could supply better trade goods because of their contact with the American trading ships that traveled the Alaskan Coast line.

In 1887 the government began to survey the boundary between the Canadian and Alaska border. Right behind the fur traders were the missionaries who established themselves at Fort Yukon and Fort McPherson. This generally covers the first contact the local native people had before the advent of the mining era.

This started when Arthur Harper, Leroy Napoleon (“Jack”) McQuesten, and Alfred Henry (“Al”) Mayo entered the central Yukon in 1873. These men all married local women and had large families thus starting the base for the incoming prospectors that were to follow, by the establishment of a network of trading posts and the development of good relations with the native people. The first reported contact with actual mining took place in September of 1883, when at the confluence of the Tanana and Yukon River where Mayo and his wife had been operating a store for eight years, a number of men showed up with news of their success at prospecting the bars of the Stewart River. These men wintered over at the Post and in the spring McQuesten took them back up river, with his new boat called the “New Racket”. He and a few other men had arrived late in the fall and also wintered over.

The men that showed up usually made their way back over to the coast at Juneau where they could put together a grubstake working for the Treadwell gold mines there. Treadwell miners played a large part in the Silver discoveries that were to come later in the Central Yukon. Soon news of the Stewart River gold findings got out and there was a small short lived stampede into the area, which soon ended upon the discovery of coarse gold at Forty-mile. Stewart River Post was abandoned in 1887, but upon the arrival of the 1898 stampede to the Forty Mile it was officially named Stewart City. The earliest information about the Mayo area came from The Government's land surveyor, William Ogilvie, who was sent to determine where the Pelly River crossed the 141<sup>st</sup> parallel.

Once most of the good ground was staked up in the Dawson area there were a lot of young prospectors that started to fan out in the hopes of finding newer strikes. The first to bring coarse gold from the Mayo area were three Swedes, a father and two sons by the name of Gustavson, who each year returned to Dawson laden with nuggets. The Swedes had no claims staked and this was too much for some, and they were followed many times but to no avail, until 1901 when four prospectors saw the father and two sons poling down the South McQuesten River. In the morning the four prospectors were off, two on each side of the McQuesten River looking for where the Swedes had trailed off. It wasn't long before they found the trail that lead over to what is now called Duncan Creek, as Duncan Patterson was the one that staked the discovery claim. The Swedes never returned after the big rush to the area took place the next year, there are reports that there were over 200 miners on Duncan Creek and the surrounding area at one time.

From this staking rush, Gordens Landing which is located above Mayo was established, and the town of Mayo was starting to be built not long after, with Alex Nicol being the first prospector to build a cabin there.

The placer miners for years kept finding the heavy granulated Galena in their sluice boxes and it was considered a considerable nuisance, little did they suspect that there were vast fortunes of silver that would pale the production of even the placer industry. The government then went ahead in 1904 to develop a wagon road system, from the mouth of the Mayo River to Duncan Creek. More gold was being found in the area and

this was causing a boom in the Town of Mayo, as the area developed a school was put in and in 1910 an RCMP detachment was established. Many men worked the Stewart River bars and it is said that a man could make \$6000.00 in a summer; many worked the river as a grubstake. There were many small gold rushes during this period and then World War 1 came along and put a stop to the gold strikes due to the high prices, shortage of labour and the fixed gold price at \$35.00 per ounce.

Silver pulls the Yukon through hard times, is what the old timers say, except for World War 2 the Yukon was sustained by the production of Silver from the Mayo area and was the cause for the development of Hydro dams and Highway development.

The very first man to find silver in the Mayo area was a prospector from Duncan Creek named Jake Davidson that happened to try panning for gold in a small box canyon that is named Galena Creek

In 1901 he broke open some Galena float that came out of his Gold pan and was not impressed and carried on prospecting, but two year later came back and staked the Hell Gate lode claim over the site. He did some prospecting and then took down some samples to his partner, Harry McWhorter at Minto Bridge, asking him to get it assayed for him. Davidson was on his way out of the Yukon and headed for the gold camps in Cobalt Ontario, where new discoveries were being made, McWhorter did get the samples assayed and they returned 300 ounces of silver to the ton but no gold so he was not impressed, the claims lapsed.

Seven years after Davidson and McWhorter had left the country, McWhorter returned and teamed up with Jack Alverson, and continued prospecting the valleys( the reason McWhorter left the Yukon was primarily due to the incident were he accidentally shot and killed Albert McKay, thinking he was a bear coming up to his cabin late at night off the Stewart river). With not finding any good lays, McWhorter finally remembered the assay result that Davidson had dropped off when he was pulling out and on February, 23, 1913 McWhorter re-staked the claim in the box canyon as the Silver King claim. McWhorter and Alverson worked trough the winter and had a small vein showing on the box canyon wall edge, McWhorter was feed up, so he gave a 100% lease of his portion to Grant Huffman who had also staked claims in the area.

Alverson and Huffman went to work and by the spring of the next year had a small stock pile of sacked ore on the river bank in Mayo for shipping. When the smelter returns came in Huffman and Alverson each cleared \$5,000.00 apiece after expenses, with these results the stampede was on, and men flooded out into the surrounding hills with a different perspective on the materials that had been plugging the riffles of there sluice boxes. The next claims staked in the area were on look out mountain, in Big Horn Gulch, this area is called Mount Haldane now a days. The claims were staked by a Swede named Andy Johnston, he let an option on the claims to Jack Pickering, James Greenfield, James Anderson and Randy MacLennan, in 1918. These men put together a small company to drill the ground, but it proved unsuccessful and folded the next year.

The history that has been covered to this point is a prelude to the six mining areas that were investigated and documented this year (2006/2007), we will focus more on the development of these six sites within the report, keep in mind that there were other developments that were taking place during the following chronological history of these sites. Further sites will hopefully be documented and brought into the larger landscape picture of the development of the Keno Hill, Galena hill and Sourdough Hill history, in years to come.

## **Project Team**

Sonia Stange and Keith Hepner make up the project team of McQuesten Lake Ent. Both are long term Yukon residents with a good familiarity with working in an isolated environment. Both have successfully completed the University of Victoria Cultural Resource Management course “Inventory and Evaluation of Historic Resources” in 2004. Both have also undergone field training on the identification, mapping and documentation of heritage sites, with Barbara Hogan, Historic Sites Registrar, Heritage Resources Unit Yukon Government. Keith and Sonia are familiar with Yukon and national standards when recording and documenting historical sites.

## **Methodology**

Preliminary research determined which sites were to be investigated. Reports from the Department of Indian and Northern Affairs Waste Management Program were studied and a list of sites was determined based on geographic location, type and historic resources at the site. This year’s sites were determined by public safety concerns and remediation site plans on the former UKHM mining claims. Field work on six sites was done during the months of August to October. The vastness of the sites was such that more than several days were needed to document each of the larger sites. Archival research was done at the Yukon Archives and via the internet during the fall and winter. Electronic databases such as the Minfile from Energy Mines and Resources of the Government of Yukon, Keno Valley/ Dublin Gulch Environmental Baseline Assessment, March 2000 held much of the history of the mining claims. The local mining recorder’s office served as a good source for past ownership of claims and the publication of the Gold and Galena/ Mayo Historical Society, Heart of the Yukon/ Lynette Bleiler-Christopher Burn-Mark O’Donoghue, Dr. Aro Aho’s manuscript and Geological Survey of Canada Field Reports also proved to be valuable source of information.

Each site was recorded with documentation of all historic features and buildings. The site elements were described, and conditions noted by Keith. All sites were individually photographed by Sonia with color negative film, slide film and digitally. The sites: Top of the Hill, Shamrock, Wernecke/ Sadie Ladue, Lucky Queen, Black Cap/Lucky Queen Adit/Sheppard Adit, and Keno 700 were established with a Garmin, Global Positioning System (GPS); the buildings and features were measured and then a field site map drawn by Keith. This information was then entered into the Yukon Heritage Site Inventory database by Sonia; photos were described and numbered by Sonia and Keith drawing the site maps to scale showing orientation and size of the buildings and features.

Records in the database were updated with thematic and functional information. Management information was updated by Sonia. There was an extensive collaboration between Heritage Resource Unit (Barb Hogan) during the data entry process. Interim report was compiled by Keith and Sonia and Sonia did the lay out of the reports. Keith and Sonia compiled the final report. Research was done at Yukon Archives. All sites have a paper file and electronic record.

Reporting timelines were outlined in the contract with Heritage Resources, with one sample sites being submitted to the Heritage Unit for review. The project was completed with six copies of “Historical Review of Former United Keno Hills Mines Limited Quartz Claims” Keno Hill Volume 1 submitted to Energy Mines and Resources, Yukon Government. Also three copies of a “Historical Report” and one copy of a “Final Field Report” on the progress of the seasons work; these were submitted to Heritage Resources Unit, Yukon Government. This historical data and information is also compiled in digital format, and submitted along with the hardcopy reports.

### **Recommendations**

- To continue documentation of historical mine sites in the area to preserve historical and cultural information to the people in the Yukon.
- It would be prudent to begin these types of projects as early as possible
- (April-May)

### **Conclusions**

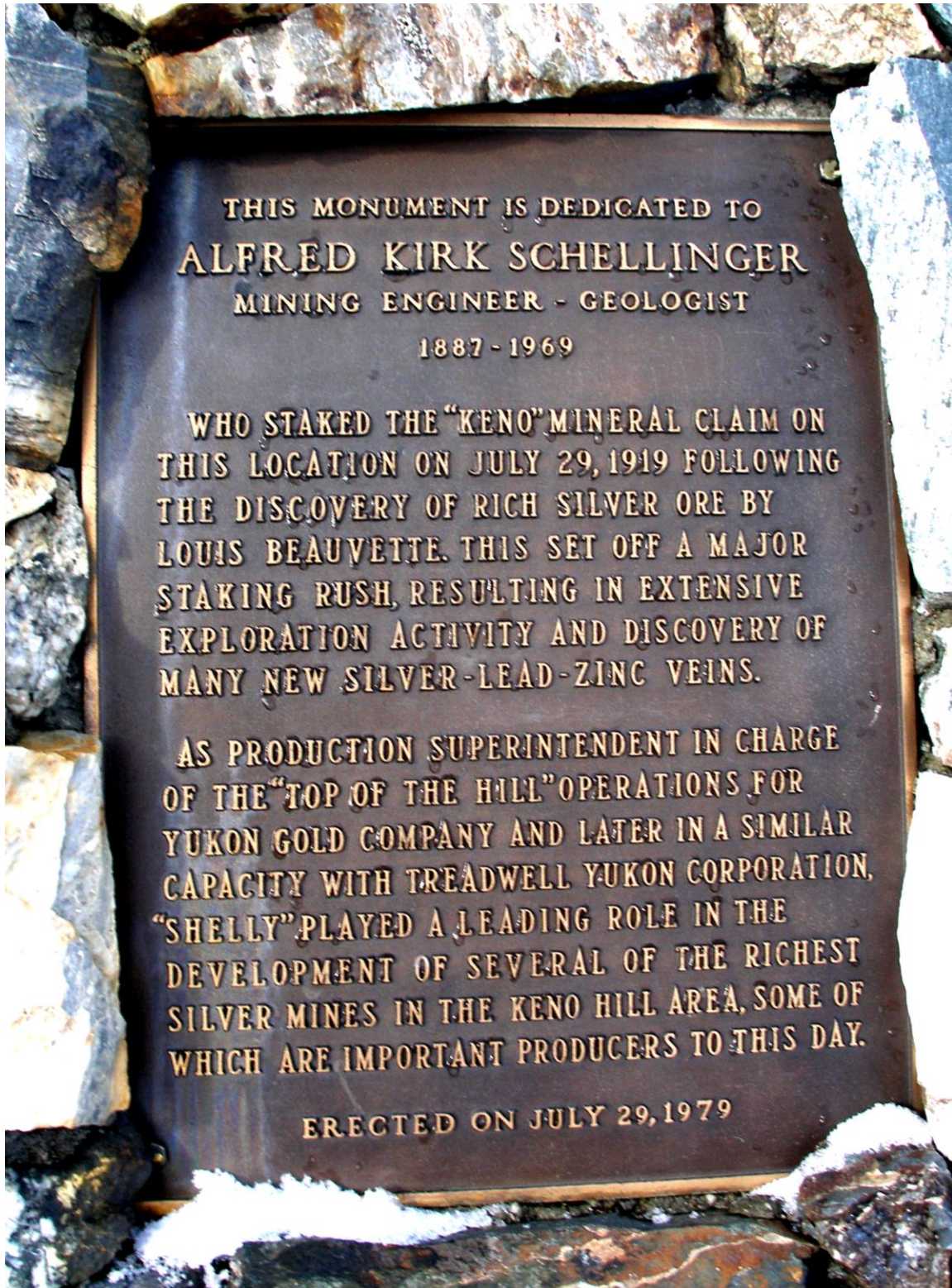
The Keno Hill and Silver Trail sites will provide important historical and cultural information to the people in the Yukon. It will show in time the larger picture of the individuals who first pioneered the area, and thus provide the current owners and others the information needed for land use planning, possible tourism ventures and most important assist in teaching and preserving Yukon history.

The Silver Trail inventory projects will help develop a strong cross-cultural awareness for all the people.

The majority of the historical and cultural sites in the Silver Trail area have yet to be documented and it is essential that the actual fabric of the history be recorded, before the elements or development removes this opportunity.

We would like to thank all the people who were involved in this project.

## *Top of the Hill Site 36*

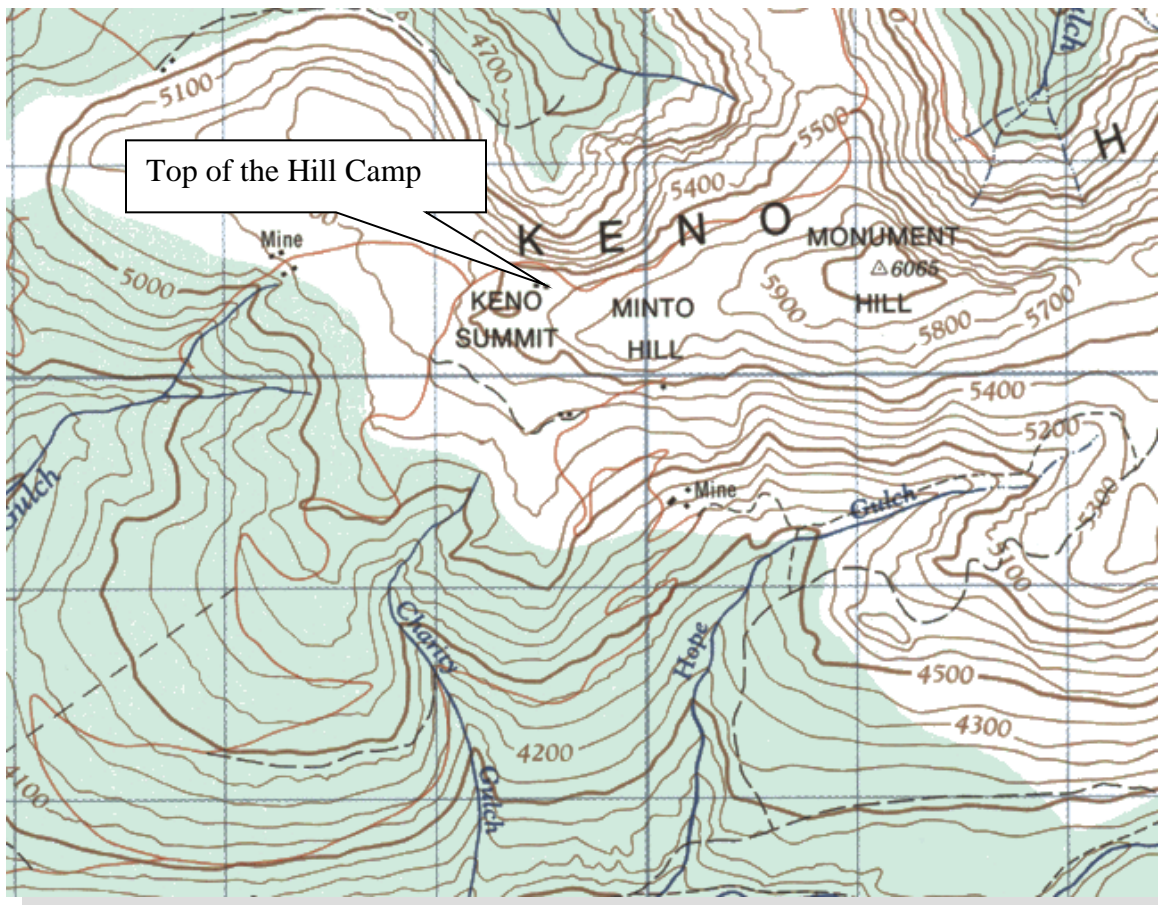


### **Location and Site Access**

The Top of the Hill Camp is located at the Keno Summit. Access to the site is by the Sign Post road from Keno City. The #3, #9 vein adits are located at the Keno Summit. There are two deep trenches located to the east of the signpost; the first trench has exposed a portion of the #3 Vein Adit close to the edge of the Faro Gulch cirque.

At the top east wall of the second trench and also at the edge of the cirque are the remains of the #9 vein portal. Further east and on the face of the cirque at approximately the 200-meter level is the Faro Gulch Portal.

Access to the #5-2 Vein and the #4 Vein Adits are along the upper 700 road. The workings and building are located upslope on the north side of the road.



*Keno Hill, Yukon Territory. Part of Map 105 M/14. Energy, Mines and Resources Edition 2*

### **Historical Background**

In 1918 while hunting sheep Louis Bouvette came across galena float similar in content to the galena found at the Silver King. Winter was near so he collected samples to have assayed, and if they proved well he would return the next season.

Bouvette decided to winter on his claim next to Alex Nicol's claim Number 35 on Duncan Creek and in spring waited for the snow to melt off the Northern cirque basin where he had found the Galena the previous fall. Around July 6<sup>th</sup> 1919 he traversed the cirque collecting samples. Believing the ground was a worthwhile prospect he staked the Roulette claim on July 10<sup>th</sup> 1919.

Bouvette traveled to Mayo in hopes of finding Fred Bradley, president of the Treadwell Company who had come to the area to inspect the Lookout Mountain property located on Mt Hinton. Bradley had left Mayo and was on his way by boat to Dawson. Instead, Bouvette met Jack Pickering and showed him his findings. Pickering took the samples to Dawson by boat to find Bradley and to also have the samples analyzed but again Bradley had left up river with an engineer named Livingston Wernecke.

Pickering took the samples to the Yukon Gold Company owned by the Guggenheim brothers where he met their chief assayer Alfred Kirk Schellinger. The samples ran between 200 and 300 ounces per ton. While Pickering was in Dawson, Louis Bouvette and James A Anderson prospected the hill and Anderson staked the Rico claim.

Together Pickering and Schellinger returned to Mayo and a party of 5, Bouvette, Anderson, Pickering, Schellinger and Mowatt (Pegleg Scotty) with horses and grub and went back to the mountain to stake additional claims. Schellinger staked the Keno claim after which the mountain was known as Keno Hill. Alexander Mowat staked the Scotty claim and John Ernest Pickering staked the Pinochle claim.

Schellinger, Bouvette and Pickering took the samples from the claims back to Dawson for analysis and a tentative agreement was struck with the Guggenheim brothers. Building material was barged to Mayo in the fall and freighted by horses to the Keno Hill claims to build a camp.

By 1956 approximately 9 adits, 4 shafts and extensive prospect pits and trenching occurred on the #1, 2, 3, 4, 5, 6, 7, 8, 9 and 12 vein fault systems. The #9 vein carried the most profitable ore mined, from 200 ounces to 400 ounces per ton with an estimated 9,000 tonnes extracted.

By 1975, the Guggenheim camp had been abandoned with only piles of tin cans and bits and pieces of iron and wood where the camp once stood.

*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Top of the Hill Camp Site 36. Keno Hill. Volume 1*



*View of Louis Bouvette with a pick over his shoulder at his claim on Keno Hill.*

*This was the discovery that sparked the mining boom in the district and brought in the Guggenheim and Bradley interests.*

*Schellinger Fonds, photo 5810  
Courtesy of Yukon Archives*

*Below; A view of about 30 miners posing at the Keno Hill Mine site.*

*Bill Hare is the 14<sup>th</sup> person from the left. The head frame and other buildings are in view in the background.*

*Bill Hare Fonds, photo 6657  
Courtesy of Yukon Archives*



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Top of the Hill Camp Site 36. Keno Hill. Volume 1*

*A view of the mine site and the workings of veins #3 and #9 of Keno Hill. In 1920 Keno Hill Ltd. was formed and after rapid construction, the first coarse ore shipments began in the winter of 1920.*

*Schellinger Fonds, Photo 5829  
Courtesy of Yukon Archives*



There is an outhouse in the photos at the edge of the cirque. Dr Aro Aho noted there was a rope for the men to follow during strong winds to prevent them from slipping over the edge.

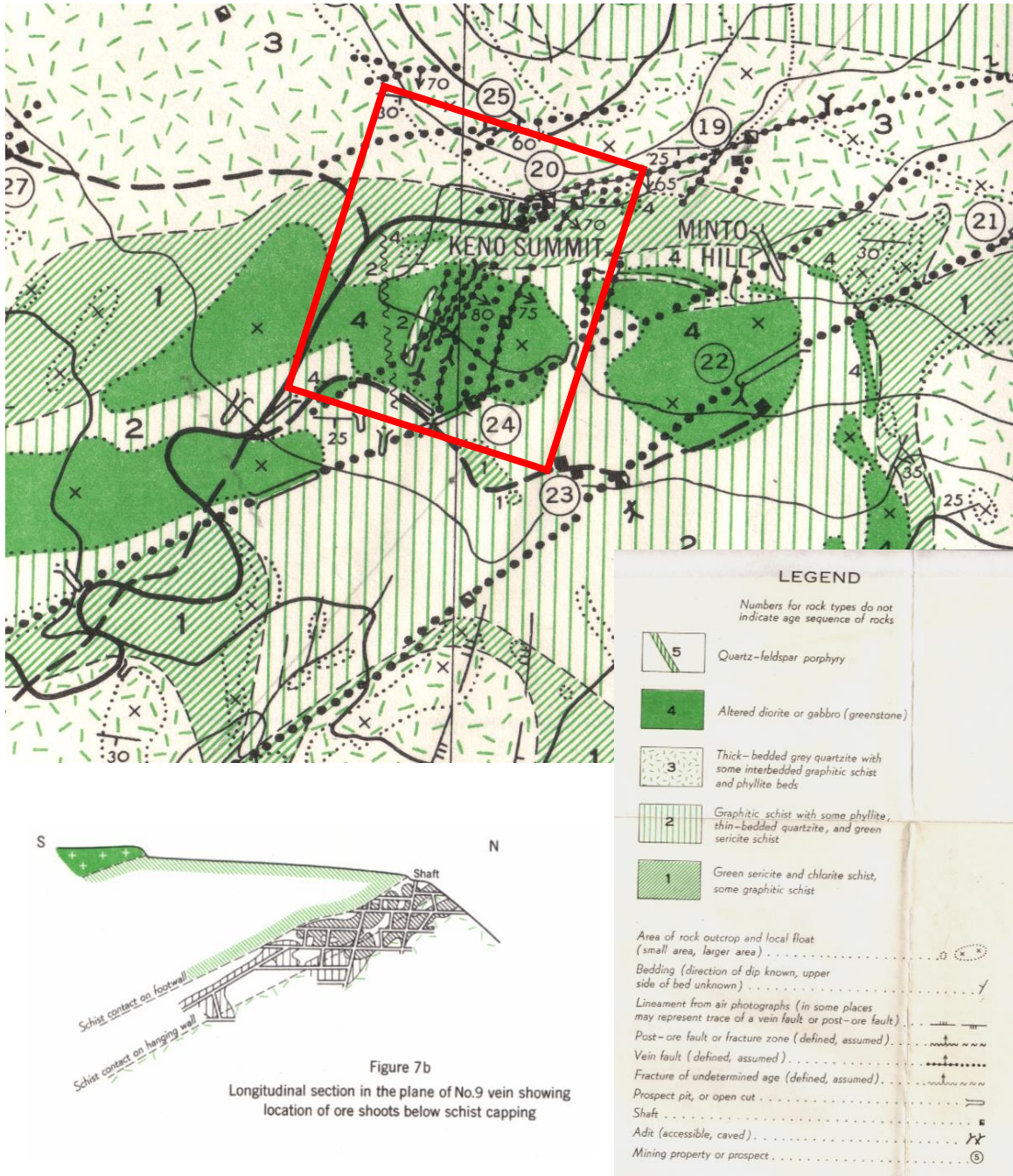
Photos show the progression of the mine site, with additional buildings, portal and dump. It looks as if an additional outhouse was constructed near the edge of the cirque



*Hoist house, a few buildings, portal and dump at the mine site on Keno Hill  
Schellinger Fonds, photo 5831  
Courtesy of Yukon Archives*

Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
 Top of the Hill Camp Site 36. Keno Hill. Volume 1

Map below shows workings on 20 No 9 Vein and 24 No 6 Vein



Geological Survey of Canada Paper 55-30 By R. W. Boyle Ottawa 1956 Part of figure 5

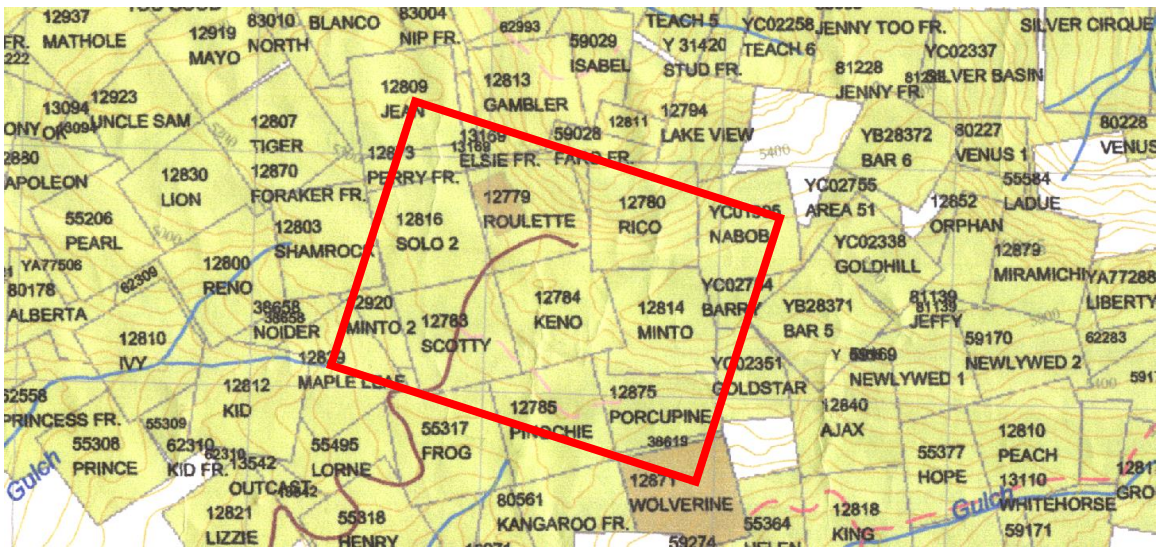
**Review of existing studies, confirmation and/or update of current site conditions**

Site conditions have remained the same since the last inspection, though 1 building and 2 additional shafts were found on the old workings.

**Past and Current Site Tenure/ Owners**

Louis Bouvette staked the first claim on Keno Hill named the Roulette claim. A K. Schellinger staked the Keno claim after which the mountain was known as Keno Hill. Alexander Mowat staked the Scotty claim, James A. Anderson staked the Rico claim and John Ernest Pickering staked the Pinochle claim. United Keno Hill Mines Limited took over the claims between 1946 and 1948

The claims are under receivership by Pricewaterhouse Coopers. Alexco Resources is applying for a water license and is responsible for the care and maintenance of the properties during such time. Exploration was done in the fall of 2006; further exploration is scheduled for the 2007 season.



*Keno Hill claims. Part of Mayo district mining claim map No.105-M14 2003*

*#3 Vein Adit*

The #3 vein adit is located east of the Sign Post. There is extensive trenching approximately 7 meters in depth that has exposed the #3 adit. There are a number of sinkholes occurring along the exposed cribbing, the depth to which they extend has not been determined.



Water has collected in the south end of the trench. Due to safety concerns, the #3, #9 vein trenches and the Faro Gulch portal are only estimated distances.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Top of the Hill Camp Site 36. Keno Hill. Volume 1*

The portal extends to a sheer drop off into the Faro Gulch cirque.



Below the # 3 adit is a tower used in the 1920s when the mine was operational.  
(See historical photo page 5 photo 5831)



*The Faro Gulch Portal*



The Faro Gulch portal drift was built by UKHM during the development of the 200 level main vein systems.

It was used as an end dump for waste rock and as a vent shaft. The portal was not collared from the outside but pushed out from the underground workings into the Faro Gulch cirque.

*#9 vein adit*

All that remains at the #9 adit is exposed timber, canvas and sections of wood scattered down slope.



### # 6 Vein Shaft Building

The shaft house has fully collapsed and is covering the open #1 shaft. The foundation of the frame building is made up of 8x8 beams placed directly on the ground and the east end foundation supported with vertical 8x8 posts.



The walls are constructed with 2x4 studs that are sheathed on the exterior with 1x6 shiplap boards. The building had a gable roof with 2x6 rafters that were sheathed with 1x6 shiplap boards. No other exterior sheathing was evident.

There are a number of 8x8 beams under the collapsed building, which indicates that there probably was a head frame and winch assembly for raising the ore.

The interior of the open shaft is collared one meter above the surface of the ground.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Top of the Hill Camp Site 36. Keno Hill. Volume 1*

The shaft can only be seen through the two side windows of the collapsed north wall. The shaft is open and the depth is approximately four meters to the top of frozen ice and pipes.

There is a sorting table on the north side of the building with evidence of ore scattered about. The shaft house is approximately 150 meters north of the upper Keno 700 access road.



*The 5-2 vein adit*

The adit has fully collapsed due to the bulldozing and trenching that has taken place in the area.

To the west of the collapsed adit, there is a rock retaining wall, which is approximately 10 meters in length and .8 of a meter tall.

This adit is located approximately 450m to the west of the shaft house.



*The #4 vein adit*

This adit is located approximately 150 meters northeast and upslope of the #5-2 vein. This adit is fully collapsed. There a small waste dump associated with it located to the south.



*Shaft #2*

This shaft is located approximately 300 meters north of #4 vein adit, and is collapsed approximately 1m from the surface.

This shaft is located at the top of the hill and overlooks the #3 vein and the #9 vein workings.

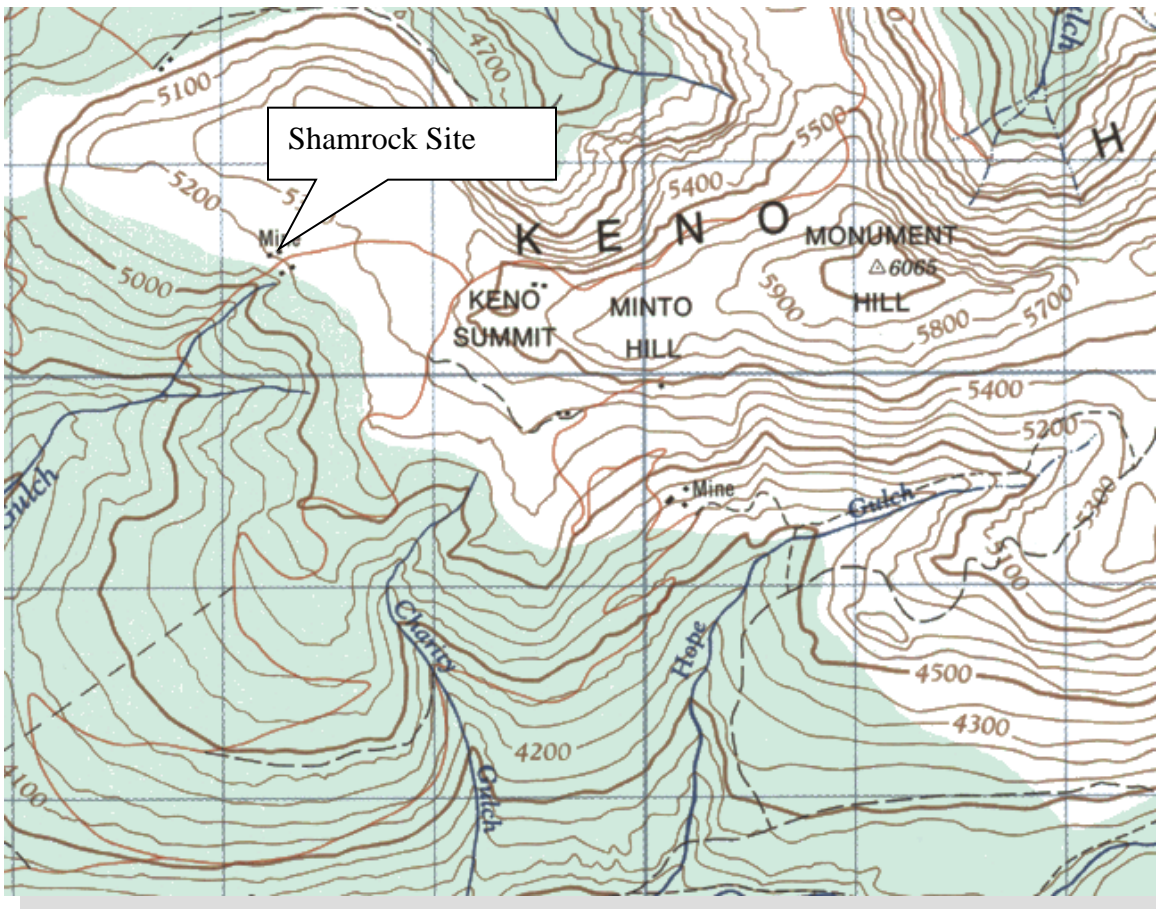


# *Shamrock Site 28*



**Location and Site Access**

Shamrock B-1 can be located by following the sign post road out of Keno City until one is within 350 meters of the Signpost look out. At this point there is a road branching east and follows the top of the flat ridge for approximately 4 kilometers. There the road empties into a very steep cut and the building is located on the edge of the trench.



*Keno Hill, Yukon Territory. Part of Map 105 M/14. Energy, Mines and Resources Edition 2*

### **Historical Background**

The Shamrock claim was originally staked by Thomas MacKay on August 4, 1919. Alex Ericson staked the Reno claim just below it on August 5, 1919. The two claims were grouped on August 31<sup>st</sup>, and the two men became partners on the new showings. We believe this is how Ericson Gulch acquired its name. The men drove their adit until they hit the vein and soon had their first load pulled down into Keno with a dog team. Mackay then decided to hire a worker to take his place and spent his time in Keno.

Alex Erickson teamed up with a couple of fellows by the name of Patty McIvor and Hans Formo. They all set to work and after two winters had a stockpile of ore that when shipped brought them \$70,000.00 dollars. They worked the vein for 4 or 5 years, with Formo eventually buying out Ericson's percentage. The mineshaft was extremely hazardous to work in, due to the high arsenic content in the dry ore. The dust was so thick that men would have to go outside and vomit and soon had that sweet deadly taste in their mouths. McKay held on to his portion of the Shamrock claim, which kept producing well over the years. McKay always took a 15% commission on his workings and died still owning the claim.

The claims were eventually bought by UKHM Ltd. who got 100% ownership on November 7, 1952. UKHM then carried on an exploration program on the Shamrock adit lower levels, but were disappointed when their efforts were not rewarded. In 1953 and 1954 a new adit was driven at the 200-foot level, and that is what you see from the top of the hill now. The new adit produced sufficient tonnage for a couple of years, but due to the small vein age and high costs UKHM Ltd. decided to turn it into an open pit.

In 1985 they started to open-pit the ground around the shaft and excavated all the way to the upper levels, leaving the large open pit trenches you see today.

Map below shows workings on 27 Shamrock



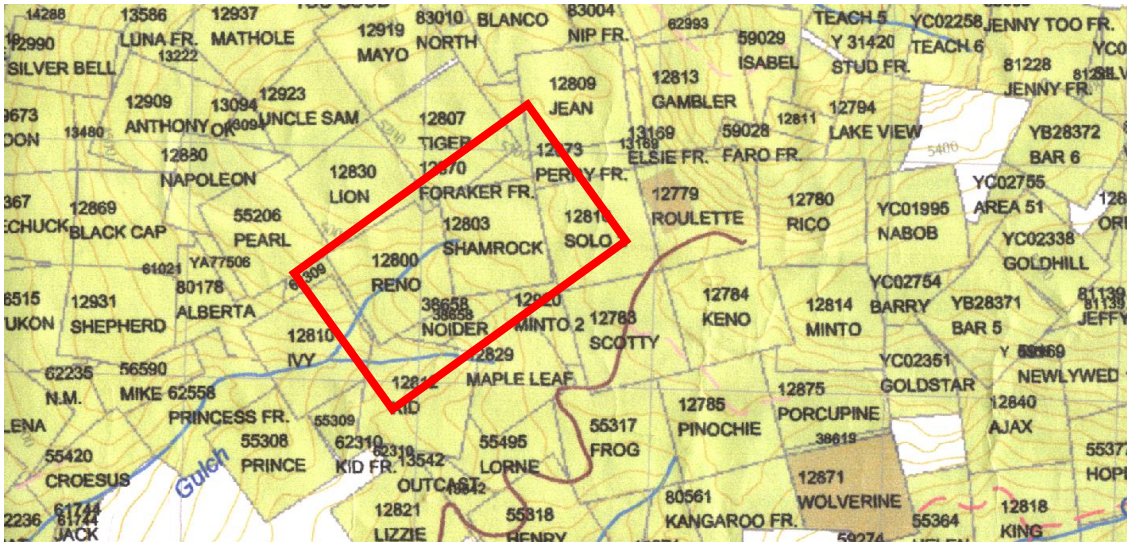
Geological Survey of Canada Paper 55-30 By R. W. Boyle Ottawa 1956 Part of figure 5

**Review of existing studies, confirmation and/or update of current  
site conditions**

The site remains in relatively the same condition with the adit and some of the shafts having fully collapsed.

**Past and Current Site Tenure/ Owners**

Thomas McKay first staked the Shamrock claim in 1919; Axel Erickson first staked the Reno claim in 1919. Other owners of the claims were Louis Bouvette, Wm. Hargraves, Hans Formo, Don Morrison, Howard Colley, Ellef Bjonnes, Keno Hill Mining Company Ltd., Regina Dorothy Erickson; they sold to United Keno Hill Mines Limited in 1952. The claims are currently under receivership by Pricewaterhouse Coopers. Alexco Resources is applying for a water license and is responsible for the care and maintenance of the properties during such time. Exploration was done in the fall of 2006; further exploration is scheduled for the 2007 season.



*Keno Hill claims. Part of Mayo district mining claim map No.105-M14 2003*

*Building #1*

The foundation of the main building is made of 2x6 boards laid flat on flat bedrock stone. Floor joists are laid on edge and sheeted with 1x6 planks to form the floor. The walls are constructed of 1x6 and the roof with 2x4 rafters. The outside walls are covered vertically with rough 1x8 boards.



There are two additions built off the east and north walls.

The east addition is a board and batten style with rough 1x8 and 1x3 boards. The north addition is sheathed horizontally with cove siding.

There was a small porch that covered the main entrance way. The porch has fully collapsed and all that remains is the floor and some of the remnants of the 2x6 stud walls and roof.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Shamrock Site 28. Keno Hill. Volume 1*

The exterior roofs are sheeted with 1x8 boards and green asphalt rolled roofing. Black plastic was added to the roof of the main building and strapped with various sized boards.



There is extensive trenching immediately west of the building. A section of orange snow fencing was put up off the south side of the building to warn the public has blown down.





The main building has a gable style roof, which is constructed of 2x4 rafters. 1x6 boards were nailed 1/3 of the way up the rafters to create a barn style frame on the interior.

The ceiling is 1 meter by 3 meter thin veneer wood paneling and strapped with 1/2 inch by 2-inch wooden strips.

The walls and floor are covered with 1x6 shiplap boards.



There is a shelf and sink in the northwest corner and a single bed frame and mattress against the west wall.

There is a cupboard, small shelves and a sorting table on the east wall.

The storage room off the east wall has been boarded up.



There is an old winch located approximately 150 meters southeast, on the other side of the main trench that runs north to south by building #1. "HENRIE & BOLTOFF MFG AND SUPPLY CO. DENVER COLD manufactured the steel one cylinder winch. PAT. D May 18 1897.

One hundred meters south of the winch assembly is a tramline bucket with the wheel cage assembly still attached? YUKON FOUNDRY is forged into the wheels of the assembly.



Southeast of building #1 is an outhouse located behind a large pile of ground. Flat stones have been piled 1 meter high and there is a 15-gallon fuel keg that is used for a toilet.

*Shamrock B-2*

This building is located 23 meters north of B-3 and has fully collapsed. From the remains there is evidence that the foundation was originally constructed of logs piled on flat rocks. There are pieces of wood scattered down the slope from what remains of the gable roof that once covered the building.



The walls are constructed of 2x4 studs with 1x6 shiplap boards used for exterior sheathing. The roof is constructed with 2x4 trusses that are sheathed in with 1x6 shiplap boards. There is no evidence of any roofing material having been used. It looks as though some of the material from the building has been savaged.



*Building #3*

The foundation for this building is made of 2x6 that have been laid directly on the ground. There is no floor in the building and the walls are constructed with 2x4s that are sheeted on the exterior with 1x6 shiplap boards. The building was more than likely used to house a generator. Sections of the ground inside are soaked with oil.



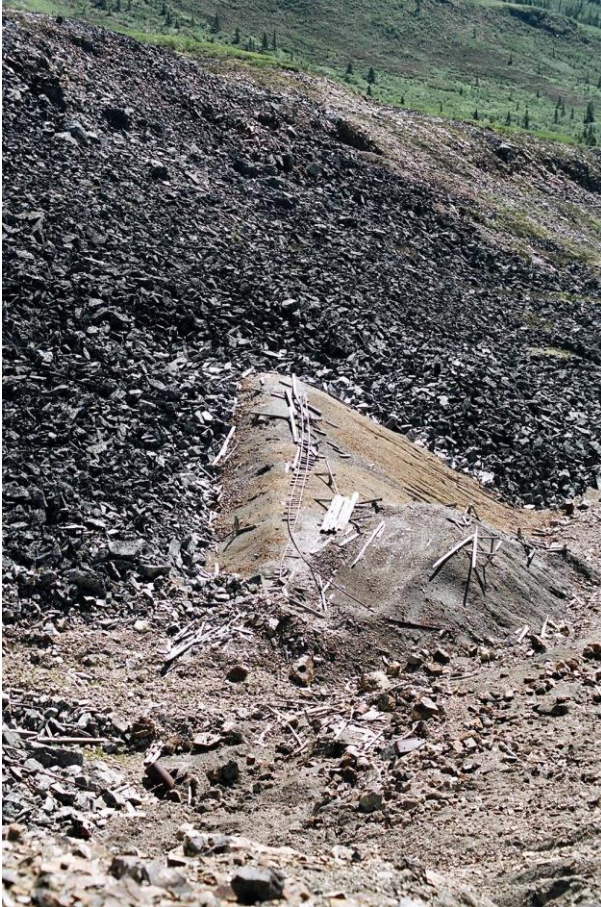
There is an almost flat shed roof that is built with 2x4 trusses and sheeted over with a combination of 1x8 and 1x10 planks. There are some remnants of black tar paper, most likely used as roofing material.



The doorway is located in the southwest corner of the building, and an opening has been cut in the corner of the southeast wall.

*Shamrock Adit*

The adit is located approximately 100 meters south of building #3 and can be accessed on foot by following a cat trail that splits off the main trail approximately 200 meters before you reach building #1.



The adit has been driven northwest into the west flank of the hillside, with two considerable dumps extending south towards the valley.

The adit has fully collapsed and there is no water discharge. The track is narrow gauge steel and the trestle assembly is constructed from round and square timbers.

There are remains of 8x8s running parallel to the cat trail that accesses the adit. It appears as though it was used as a track assembly or tramway system to raise and lower material up and down the hillside.

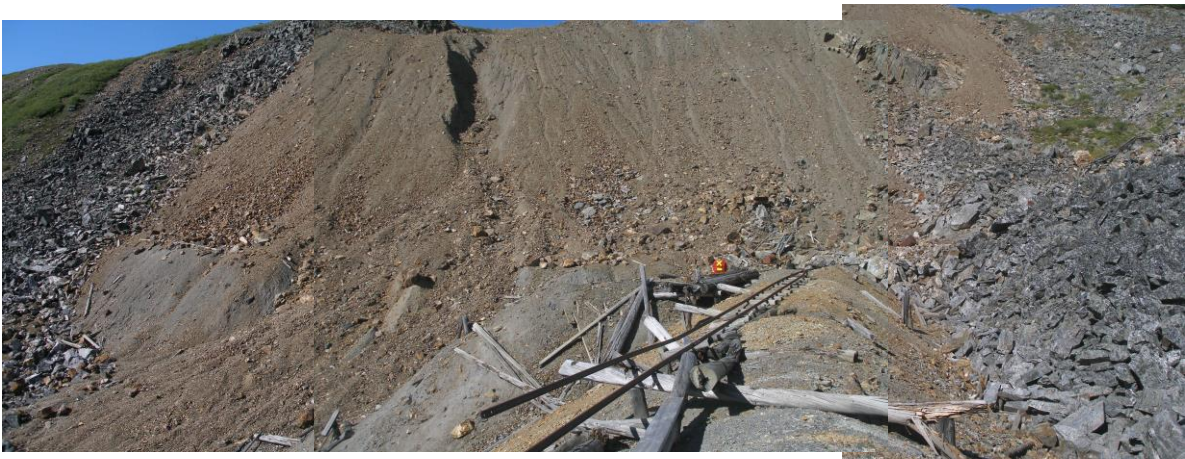
There is a large winch platform at the top of the hill and the old winch, previously documented west of building #1.





Not far from the adit portal there is a large air receiver tank and mine bucket, along with 6, old 90-gallon drums as well as numerous lengths of 2-inch pipe and wood debris scattered along the bottom of the dump.

To the west of the adit there are remains of a second dump that may have been connected to the adit. It is mostly covered over and eaten away by the erosion of the waste dump above.



### *Shamrock Adit #2*

Slightly south and on the west bank approximately 50 meters from the bottom of the draw is an old, collapsed adit and the remnants of a portal shed. There is no visible discharge from the adit entrance.



*Shamrock shaft*

One hundred and fifty meters south of the adit and on the east side of the gully there is a 2.2-meter by 1.5-meter shaft with a considerable waste dump surrounding it. The shaft has been built using round log timbers with the corners saddle notched at the top.



The depth of the shaft extends down a minimum of 2 to 3 meters and is then filled with boards that have jammed into the walls of the shaft. There are remnants of a possible shaft house that once covered the shaft opening, as there are various sized boards and canvas remains scattered around the shaft and waste dump.

East of the shaft by 5 meters is a 2 meter high, hand stacked stone wall, with old buckets and a pick leaning against the feature.

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Artifacts at the shaft include a pickaxe that is leaning against the rock wall, along with wooden buckets with wire handles and a few cooking pots.

Also found was a metal rod with a cloth wrapped around it that is soaked in oil or grease, lying beside a metal can with a wire handle containing the same substance.

We also found chunks of coal in a small pile.



*Shamrock building #4*



One hundred meters south of the shaft is the first of a series of cat trenching that runs adjacent to the creek.

The first of these trenches stopped just short of completely covering a small log pole and frame building.

Log poles were squared using an axe for the main frame of the building with rough hand cut 2x4s for the wall studs.

The exterior of the walls are sheathed with 1x10 boards and covered with canvas.





The refuse dump is 15 meters to the south of the building. We did not find the outhouse for this building though it could have easily been covered by the trenching.

Artifacts at the site include a spoon, various sized tin cans and a sawhorse.



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To the east of cabins #1 and #2 are open pits and trenching.

There are empty fuel drums and a battery situated along side the west entry road.

Along the same access road, prior to the open pits is a heap of bent pipe and rail.



## *Wernecke Camp and Sadie Ladue Site 21*

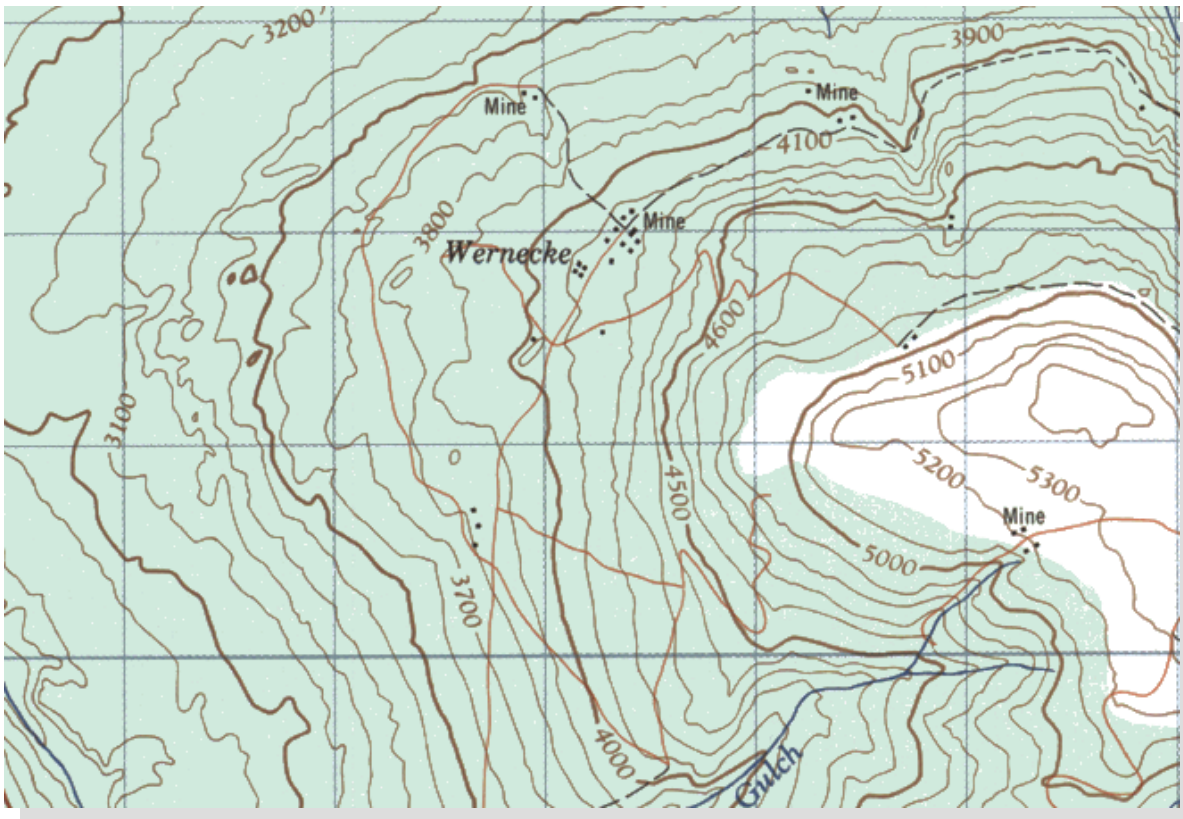


### **Location and Site Access**

The Wernecke site can be accessed in the summer by two-wheel drive vehicles. The site is located approximately 5.7 km from the junction of the Sign Post road and the Wernecke road located in Keno City. The site is situated on the Northwest slope of Keno Hill just below tree line, and overlooks the Ladue and McQuesten valleys.

The UTM coordinates for the approximate centre of the camp are 7092000m N x 486400m E.

The centre of the Wernecke Camp has been largely disturbed by bulldozers thus removing most of the original buildings that made up the center of the town site. There is a considerable amount of wood and metal debris scattered throughout the site. The remaining buildings are located around the perimeter of the site in dense alder and willow.



*Keno Hill, Yukon Territory. Part of Map 105 M/14. Energy, Mines and Resources Edition 2*

### **Historical Background**

The Wernecke Camp initially began as two separate operations in 1921 by the Keno Hill Limited and the Treadwell Yukon Company, Ltd. It is of some interest to note that Keno Hill Ltd was a subsidiary company of the Yukon Gold Company. The Yukon Gold Company was a strictly high-grade operation so as the veins diminished on top of the hill their operation started to come to a close, on May 31, 1924, Keno Hill, Limited closed its operation on the hillside. The two different operations were called the Sadie- Friendship and Ladue mines and operated separately until 1923, when the Ladue mine was flooded. This turn of circumstances required the development of a 2600-foot drainage tunnel (600 level), and also prompted the Treadwell Yukon Company Ltd. to option the Sadie-Friendship mine and amalgamate the two mines in 1924. The Treadwell Yukon Company Ltd. carried on operation in the area for another twenty years.

During the years 1921 to 1923, all the ore that was moved was done by the freighting company Greenfield and Pickering. They used horses to move the ore the 40 miles to the Mayo waterfront for pick up by steamboat when the rivers opened. In the fall of 1923, Treadwell Ltd purchased two 10 ton Holt tractors to move the ore to Mayo and firewood back up the hill to the town site, this replaced the 96 horses that use to have that job, and cut the costs considerably. Because of the lower costs of shipping and the amount of lower grade tonnage that still existed in the Ladue vein, Treadwell Yukon entered into a ten year lease on the closed Keno Hill Limited (Yukon Gold Company's) Sadie –Friendship claims.

In 1921 Fred Bradley, President of the Treadwell Corporation sent Livingston Wernecke to the area and gave him complete authority to represent and negotiate for the company. In 1924 the building of the mill and campsite at Wernecke was started. The mill had the capacity to process 125 tons per day and was completed on January 6, 1925; it ran at 97% efficiency under the watchful eye of Alec F. Berry who was hired as mill superintendent by Livingston Wernecke. The majority of the underground work was done between 1925 and 1929. This mill was the first to ever be constructed in this area and processed ore for seven years before being moved to the Elsa site to continue operations there.

Later towards 1929 the discovery of the Lucky Queen site to the south, added much needed ore reserves and an aerial tramline was built to cover the 2.5 km to the mill. Once the mill was completed the Wernecke Camp/ town site, developed very quickly, with the development of a 200 man mess hall, a recreation hall, bowling ally, library and radio room, curling rink, assay office, powerhouse, boiler house, laundry service, plus many private residents cabins scattered near the camp. We estimate that the entire camp size exceeded forty square hectares.

The town was active until 1932, and then things began to slow down, in 1931 the silver price fell to 26 cents and this was on top of the 1929 stock market crash.

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There was no development work done during the 1931 and 1932 season so the last of the ore was mined from the Lucky Queen, and the mill shut down on Nov 16, 1932. With the development of the Silver King and Elsa sites the mill from Wernecke was dismantled and move to Elsa in 1935 and 1936. There was very little work or exploration done in the years to follow at the Wernecke /Sadie Ladue site there was some rehabilitation work done on the 600 level in 1960, but this work did not disturb the surface area at the Wernecke site

The primary alteration to the Wernecke Camp occurred in 1980, when Archer Cathro & Associates Ltd. took an option on the property and commenced extensive stripping and mining of the mine crown pillars from the surface. This high-grade operation proved to be profitable with all the ore being shipped to smelters in the South. It was at this time that a lot of the central infrastructure of the town site was removed or altered.

The area to date is actively promoted as a tourist destination in pamphlets and newsletters and is currently in the state of option with a new mining company “Alexco Resource Corp”. Alexco Resource Corp completed a drilling program on the periphery of the town site near the Lucky Queen claims in the summer of 2006.



*An early aerial view of the Wernecke mine site on Keno Hill. Sept.4<sup>th</sup>, 1929*

*Schellinger Fonds, photo 5866  
Courtesy of Yukon Archives*

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*A view of the buildings, cabins and tents at the Wernecke mine, July 1922.  
Photo shows the Lookout/ Meat Cache and the log section of the kitchen (B1 and B2)  
in the Northwest section of the Wernecke Camp that still remain at the site to date.*

*Schellinger Fonds, photo 5844  
Courtesy of Yukon Archives*



*Photo shows Northwest Wernecke (right to left) B7 Stable, B8 Boiler house and part  
of the east wall and the roof of outhouse B10*

*Cooper-Carr collection, photo 99\_48\_32  
Courtesy of Yukon Archives*

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*Photo shows Northwest Wernecke shaft and mill, the mine manager's house can be seen at the top of the photo. A fire burned down the compressor house, men are visible working.*

*Cooper-Carr collection, photo 99\_48\_43  
Courtesy of Yukon Archives*



*Wernecke Street Scene. A view of two cats hauling in tandem a trailer with a new 100hp Enterprise mine compressor to replace the one destroyed by the fire in the diesel room fire of 1927. The fire of 1927 caused \$50,000.00 worth of damage.*

*Bill Hare Fonds, photo 5846  
Courtesy of Yukon Archives*

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*Wernecke Camp, facing south with Galena Hill in the background. Scene of buildings, railway and ore cars.*

*Cooper-Carr collection, photo 99\_48\_31  
Courtesy of Yukon Archives*



*Wernecke Camp, facing north, Scene of buildings and underground lagging and or firewood off to each side of the photo.*

*Cooper-Carr collection, photo 99\_48\_28  
Courtesy of Yukon Archives*

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*Photo shows (right to left) Northeast Wernecke, B2 outbuilding, B5 mine managers outhouse (to the west of the outbuilding) and the mine managers house B3. Photo also shows the addition on the kitchen (right side of photo) and the tramline that hauled ore from the Lucky Queen claim to be processed at the Wernecke mill.*

*Cooper-Carr collection, photo 99\_48\_37  
Courtesy of Yukon Archives*



*Photo shows a view of the Southwest section of the Wernecke camp. The Cross Property Cabin is the second building to the left (B 10 in the report) and the tent frame (B 9) In the background are southwest Wernecke buildings 1-5.*

*Cooper-Carr collection, photo 99\_48\_19  
Courtesy of Yukon Archives*

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*Photo shows a view of the Tramline hauling ore from the Lucky Queen mine downhill  
to the Wernecke mill*

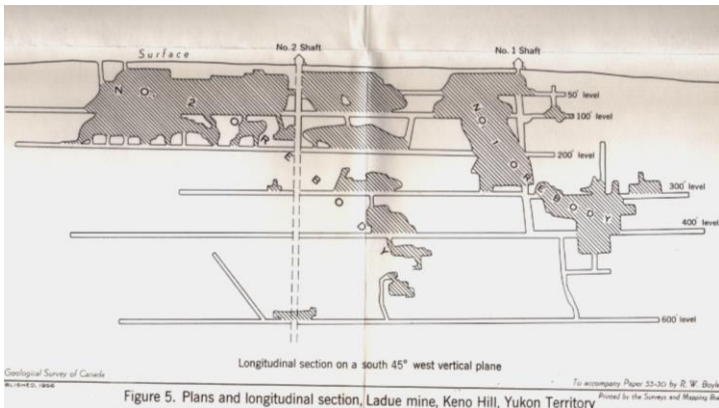
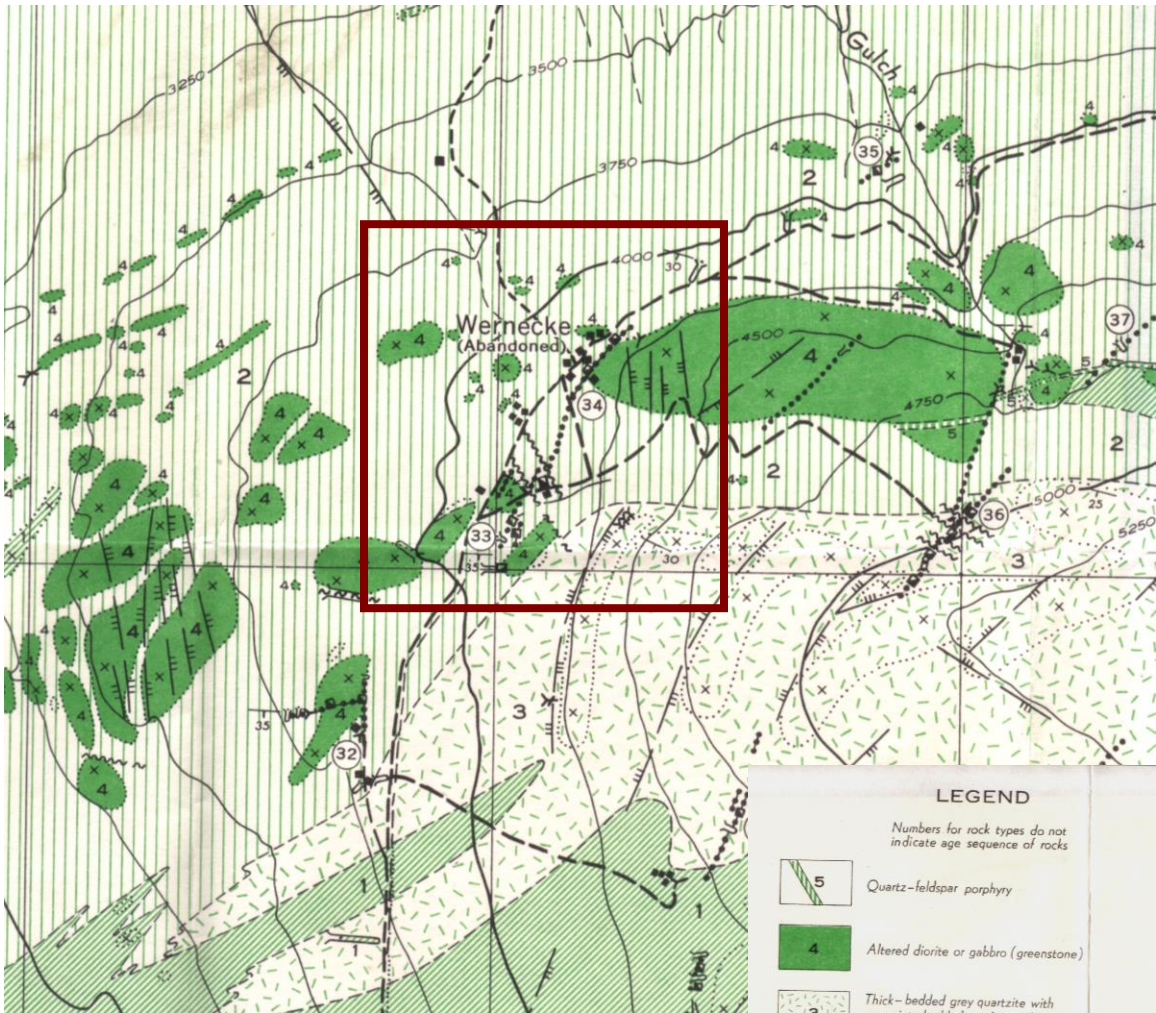
*Cooper-Carr collection, photo 99\_48\_36  
Courtesy of Yukon Archives*



*A view of eight men outside the hoist house/ compressor room at the Wernecke mine.*

*Bill Hare Fonds, photo 6808  
Courtesy of Yukon Archives*

Map below shows the workings on 33 Sadie- Friendship, 34 Ladue



**LEGEND**

Numbers for rock types do not indicate age sequence of rocks

- 5 Quartz-feldspar porphyry
- 4 Altered diorite or gabbro (greenstone)
- 3 Thick-bedded grey quartzite with some interbedded graphitic schist and phyllite beds
- 2 Graphitic schist with some phyllite, thin-bedded quartzite, and green sericite schist
- 1 Green sericite and chlorite schist, some graphitic schist

Area of rock outcrop and local float (small area, larger area) . . . . .

Bedding (direction of dip known, upper side of bed unknown) . . . . .

Lineament from air photographs (in some places may represent trace of a vein fault or post-ore fault) . . . . .

Post-ore fault or fracture zone (defined, assumed) . . . . .

Vein fault (defined, assumed) . . . . .

Fracture of undetermined age (defined, assumed) . . . . .

Prospect pit, or open cut . . . . .

Shaft . . . . .

Adit (accessible, caved) . . . . .

Mining property or prospect . . . . .

Geological Survey of Canada Paper 55-30 By R. W. Boyle Ottawa 1956 Part of figure 5



*Northwest Wernecke Kitchen/Mess Hall B1*

The kitchen / mess hall is a combination log and frame structure. The north end of the building is log construction and was built in 1924 – 25. A frame addition with a Quonset hut roof was later constructed. The building is in poor condition. The roof and interior walls have collapsed and the foundation is considerably deteriorated.



The original log structure forms a “T” shape with the leg of the “T” pointed in a northeasterly direction. The log construction is all hand hewn with saddle notched corners and sod roof. Later poles and heavy corrugated metal was added to the sod roof.

The foundation sill logs are laid directly on the ground. The flooring consists of 2x6s laid flat on the ground and then sheeted diagonally with 1x3 shiplap boards.

There are three sets of three purloins that span the roof structure from east to west, with the north log addition having the same style with three log purloins in a gable roof. Smaller log poles were split in half and laid with the flat side down on purloins and then sod was added to cover the split poles.





Small poles were doveled onto the purloins and boards were placed and nailed on edge to contain the sod roof.

In the kitchen area there are a few broken tables cups and plates. There are portions of a rubber material remaining on the north wall.



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There are two shed style additions adjoining the west wall of the most northerly section of the log building. These are frame construction with the foundation placed directly on the ground.



The walls are 2x4 studs sheathed with 1x6 and 1x8 plank boards. The shed roofs are 2x4 rafters also sheathed with 1x6 and 1x8 boards and heavy gage corrugated metal. The exterior is also heavy corrugated metal clad. There is entry to the kitchen through the left shed door.



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The west log section has a few cupboards remaining inside. The roof is collapsed and foundation sill logs are rotten.



Extending from the south side of the log building is the frame mess hall. This addition was cut into the south side of the log wall. The openings in the log walls were reinforced by the addition of 8x8 timbers that were bolted into place around the frame.



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The foundation of the addition is 2x8 planks laid directly on the ground, with 1x8 rough planking laid diagonally across this to form a sub-floor. Then 1x3 tongue and groove fir was nailed in place lengthwise along the length of the building. Walls are constructed of rough-cut 2x4 on 2-foot centers. This was sheeted with 1x12 boards diagonally, with then another covering of 1x3 siding material to finish the outside. The inside of the walls are sheeted with 1x 6 shiplap boards.



The arched trusses have collapsed. These are built from 2x4s and 2x8s and then are cross-braced many times with 2x4s. The trusses were reinforced with vertical steel rods that were threaded on both ends allowing them to be tensioned appropriately to strengthen the frame truss.



To hold the trusses together 4x4 beams were laid north to south, over which 1x8 boards were laid and bent into place forming the arch roof.

Tarpaper and rolled roofing was then laid to finish the exterior of this roof section.

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To the west of the building, a stone retaining wall was built by hand stacking flat stones to approximately 1.5 meters in height. The retaining wall extends 20 meters in length and ends at the steep slope of bedrock immediately north of the kitchen.



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The kitchen refuse dump site is located directly north of the kitchen and the meat cache, where the ridge follows the natural topography of the hillside. The dump is approximately 30 meters long and follows the ridge contour. It extends outwards 10 meters and has a depth of approximately .5 of a meter. The dump is comprised of mainly household refuse, cans, glass and bones. There is no evidence of any potential contaminants of concern.



Following a trail west of the kitchen there is an old wood and steel wheel propped up against a balsam tree. The trail continues west to the kitchen outhouse.

*Northwest Wernecke Meat Cache/ Lookout B2*

The meat cache/lookout is constructed of log and frame material on 4m stilts. A log ramp connects the structure to the bank approximately 15m directly north of the kitchen.



The structure and building are very unstable so exact measurements were not taken due to safety concerns; all distances will be approximate only.



The floor of 2x8s was laid north to south over 4x4 floor joists that spanned the log ramp framing. The rectangular 2x4 frame building being approximately 2.5meters x 3 meters, has a gable style roof sheeted with 1x8 boards and large overhangs on the north and south ends.

On the west side of the building an additional eve was built to possibly help shade the contents. The top half of the structure is open but possibly was screened in at the time of use.

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The lower half of the walls are sheeted with 1x4 and 1x8 boards, in a board and batten fashion and it looks as if 4x4 beams were used as corner posts for the building.

The kitchen refuse dump is directly under and to both sides of the cache.



*Northwest Wernecke kitchen outhouse B3*

The outhouse is down slope and to the west of the kitchen by approximately 30 meters. At the time of inspection it was fully collapsed. The foundation of the building was constructed with log stilts (the same as the lookout building) and protruded outwards from the relatively steep slope.



On this pole structure the frame floor was built using 2x4s for floor joists and covered with 1x10 planks.



The walls were framed with 2x4 studs covered with 1x6 vertical boards. The shed style roof was sheathed with 1x8 planks. The outhouse dimensions are 1.3 meters by 2.3 meters.

*Northwest Wernecke Storage Shed B4*

The storage sheds North West corner is located 9.6 meters east of the Wernecke kitchen. The building has collapsed and has been partially salvaged.



The floor foundation is comprised of 2x8s on two-foot centers that have been run into the hillside, and nailed to trees on the lower side.

These trees were then cut off at floor joist level to allow the completion of the building.

The floor was sheeted in with 1x8 boards, and re-covered with 1x6 tongue and groove flooring.

The walls were constructed of rough 2x4s on four-foot centers and cross-braced horizontally every three feet. The outsides of the walls are sheeted vertically with 1x 12 rough-cut boards.

There are some remnants of the gable roof structure that once covered the building along with pieces of black tar paper.



The area is very hazardous to walk through given the decay of the wood and the nails that are protruding.



There is a good possibility that what we are calling a storage shed was a bunkhouse, given that there is an outhouse located behind to it.

### *Northwest Wernecke Outhouse B6*

There is a set of rotten frame stairs that lead from the northeast corner of the storage shed approximately 3meters down slope to the 2 meter by 2meter outhouse. This outhouse is log and frame construction, with the foundation being cribbed up with logs and then frame material used to finish the building.

The floor and walls have rough-cut 2x4s used for the joists and studs. The floor is sheeted in with 1x6 planks and the wall with 1x8 boards.



There is a considerable amount of tin scattered about the outhouse, possibly used for exterior roofing or siding.

*Northwest Wernecke Assay Office B5*

The North West corner of the assay office is located 16 meters southeast from the southeast corner of the Wernecke kitchen. The foundation of the assay lab/office is constructed of 6x6 beams placed on top of 6x6 upright blocks that are acting as foundation posts. These have been placed directly on the moss.



The floor joists are comprised of 2x6 boards placed on two-foot centers and sheeted with 1x10 rough-cut plank boards and re-sheeted with 1x3 tongue and groove fir flooring.

All of the walls except for the South wall have collapsed outwards. The walls are constructed of 2x4 studs on four-foot centers and sheeted with 1x10 plank boards. The building had a gable style roof.



It looks like most of the lumber has been salvaged from this building.

*Northwest Wernecke Stable B7*

The remnants of this log and frame building are 62.5 meters south west of the Werneke kitchen. In previous reports this building has been labeled as a storage shed, but through archival research we now know it was a stable for the horses that hauled the ore loads down to Keno City. The access road that runs to Sadie Ladue turns down slope at the north side of the buildings.



The foundation is constructed of logs that have been placed directly on the ground. The logs are notched three rounds high, with 2x8 boards used as floor joists.

The log stringers that the 2x8s were laid on are approximately 1m in length. The 2x4 frame walls have fully collapsed except for the northeast corner.

The walls are sheathed with 1x8 boards. Very little remains of the roof, however during inspection, we could determine from one of the end walls that the roof had been a gable style roof. There is a 4.5-meter by 2.5-meter frame shelter that extends from the southeast corner of the building and extends along the east wall foundation.



There is a heavily built; 13.6x1meter chute or feed box that is 2.5 meters to the north west of the buildings northwest corner. This chute is constructed with 2x10 rough-cut planks and the joints are screwed together.

From this building extends a major amount of refined ball mill tails that have worked their way down the hillside slope to the Sadie Ladue site and beyond. In previous reports the major peninsula that extends into the large pond at the base of the mountain is the result of the mills tailing settling there. There is an extensive kill zone that outlines the flow of tailings with very little revegetation having taken place in these areas.

There is mention of a retaining wall at the bottom of the tails slope. The flat 60x20 meter tailings impound structure has not changed significantly from the previous inspection.

The large community refuse dump has spread more than the 60 meters along the bottom of the tailings retaining structure.

In studying early archive photos the retaining area was well established and conspicuous in the winter months, just as it is at the present time. This leads one to speculate that this could have been the area that was flooded and used for the community skating or curling rink, as it is about the appropriate size.

*Northwest Wernecke Boiler House B8*

The boiler is situated approximately 150 meters due south of the Wernecke kitchen.



The building has collapsed or has been torn down.

The floor and foundation was excavated into the hill and is comprised of rotten 2x8 and 2x6 planks.

There are no sections of walls or roof remaining except for 2x6 planks in disarray around the boiler.

The boiler is a one pass, wood/coal fired unit that is mounted into a concrete floor that is broken and crumbling.

The boiler is 1.6 meters wide by 3.5 meters long and much of it is riveted together.

All tags and plates have been removed and we were unable to determine the make and model.

The steam and water lines exit the north west side of the foundation, on their way to the shower building.



On the south side the boiler there is a 2-inch Midwest water pump.



*Northwest Wernecke Shower Room B9*

The shower room is located 18.3meter north west and down slope of the boiler. The building size is 4.2-meter by 2-meter rectangular frame structure with a 1.2-meter porch and stairs that are attached to the north wall.



The pipe box from the boiler house enters into a 60-gallon drum located under the southwest end of the shower house. This drum was used as a homemade header /receiver tank for the hot water delivered by the boiler house. The riveted drum is marked with a tag “US Signal Corp 26”.

The foundation is built with 6x6 upright posts. The tops of these posts are capped with 6x6 headers, on which the 2x4 floor joists are laid on 16 inch centers.



The pony walls are sheathed with vertical 1x8 boards with the north and south ends cross-braced with 2x4 boards. The floor joists are 2x6, with a sub-floor of 1x8 boards that run lengthways to the building and a second floor of 1x8 boards that run in the opposite direction.



There are two sets of 1-inch holes drilled in the floor lengthwise to allow for water drainage.

The floor is 1.5 meters above the ground. The walls are constructed of rough 2x4 studs on 1.2-meter centers and are sheathed in horizontally with 1x8 boards.

The roof and the majority of three walls have been removed with the north gable wall still standing.

There is a set of 2x8 steps that run to the ground from the north wall of the building. These tie in with a boardwalk that runs to the south east, upslope. The boardwalk is in very poor condition and ends some 10 meters into overgrowth of alder.

*Northwest Wernecke Large Outhouse B10*

To the southeast 18 meters from the shower house is a large frame outhouse. The building is a combination of log pole and frame construction.



The foundation (below) is made of 4 to 6 inch log poles that have been placed vertically into the ground with logs nailed on the inside for bracing.

The tops of the log poles are capped with 6x6 square set timbers, floor joists run on two foot centers lengthways across the 6x6 beams and are sheeted with 1x8 boards for the flooring.

The walls were constructed of 2x4 studs placed on 2.5-meter centers, then cross-braced in the middle with a single rough-cut 2x4 and additional 2x4 corner bracing. The exterior is board and batten siding.

The outhouse has a shed style roof with 2x4 rafters, sheeted with 1x8 rough-cut boards. There is no evidence of additional material used on the roof.



Covering the length of the interior west wall is a single 2x4 laid flat on a small pony wall that is .8m tall. A second 2x4 was nailed to the cross bracing that extends from the 2x4 seat to the wall. This second 2x4 was a back rest and safety feature so that the occupants would not find themselves at the bottom of a hole they did not want to be in.



Opposite the outhouse seat, on the east wall is a piece of galvanized corrugated metal that has been bent into a trough and nailed to the wall sloping south. This was used as a

urinal. There is another piece of galvanized metal bent into a funnel used to drain the contents under the floor.



Beside the urinal is a wooden box that is nailed to the wall and the urinal as you walk in, could possibly be used for placing mitts or gloves, or held supplies for the outhouse.

*Northwest Wernecke Outhouse B11*

This toppled over log frame outhouse is located 2.5 meters from the south east corner of the large outhouse and approximately 8 meters to the south east above the small access road that runs parallel to these structures. This outhouse also has vertical poles dug into the ground that form the pony wall for the floor. Logs were used to cap the upright poles, then rough cut heavy 2x6 boards were used for the floor joists. The floor is sheathed with 1x6 boards.



The 2x4 stud walls were also sheathed using 1x8 and 1x6 boards in a board and batten fashion. The shed roof has 2x4 rafters sheathed with 1x8 boards.

*Southwest Wernecke Outhouse B12*

Approximately 50 meters past the tailings retaining area is an old outhouse hidden in the willows 26.5 meters to the west of the cat trail.



The outhouse has settled .5 of a meter into the moss and is of log pole and frame construction.

The size of the outhouse is 1.2 meters by 1 meter with the door placed in the east wall.



The pole framework consists of one vertical pole in each corner, which is braced with 1x4 boards and one 2x2 cross-bracing on the north wall

The south and west wall of the outhouse is skirted in with heavy corrugated metal roofing.

The outhouse seat is a shipping box that has had a hole cut in one side.

On the northeast corner there is a dynamite box nailed to the structure for holding necessities.

The roof is constructed of 1x4 boards as trusses and then sheathed in with 1x8 rough planks.

There is evidence that the outhouse was wrapped in burlap as there is still some nailed to the bottom of the west wall.



*Southwest Wernecke Stone House B13*

The stone house is located approximately 186 meters to the southwest of Outhouse B12. The foundation of the stone house is the bed rock that the building has been erected on.



A wood frame structure that makes up the inside of the stone house is built with a combination of hand hewn logs and frame material.

The floor is constructed by laying three logs from east to west as floor joists, and then smaller log poles were laid from north to south across the floor joists.

The poles that make up the floor are hand hewn to create a flat surface on which to walk.

Pole logs were cut into 4x4 square timbers and placed approximately 1.2 meters apart as studs, and then sheeted in with 1x6 planks.





There is a large ridge pole that is centered from north to south, with the South end being set directly into the hill side bedrock which makes up the south wall of the building.

The north end of the ridge pole is supported by a heavily constructed log door frame.

The door frame is made of logs that have been hewn flat on two sides with the top sill caps being doubled to give further support for the ridge pole; these have been square notched together and then spiked.

There is also a large vertical support log that is centered in the middle of the building to add further support to the ridge pole. 1x8 boards are used for the ceiling and a layer of sod was spread between the ceiling and the log roof.

Large logs were then placed across the building from east to west to form the shed style roof. The exterior of the building was then constructed by piling varying sized flat stone around the perimeter of the wood frame.



The roof poles were then sheeted with heavy gage corrugated metal that extended up the rock face from the south end of the building. The wooden peaked box sitting on the roof is an air vent that continues through to the inside of the building.



*Northeast Wernecke Tent Frame B1*

The tent frame and is located approximately 35 meters northeast of the mine managers out building.



The foundation of the tent frame is three 3x6 x 3.5 meter beams that are set on flat rock. The floor joists are 2x6 on 24 inch centers, which are then sheeted with three quarter inch plywood for the floor.

Walls studs are 2x6, sheeted on the outside with three eights plywood; this skirting extends 1.2 meters up from the ground. The gable style roof is built from light 1x6 boards and plywood gussets, the bottom of the 1x6 are flush with the outside walls for the addition of a canvas tent.

There is a 1.5 meter by 2.4 meter deck that has been built off the west wall, decking is covered with 2x6 laid flat on 2x6 floor joists.

There is one wooden bed frame in the north east corner, with some shelves that are located in the northwest corner.

The tent frame was most likely constructed during the 1980's when the property was optioned and the site was used as a field camp during exploration.

*Northeast Wernecke Mine Managers Outbuilding B2*

The mine managers outbuilding is located 6 meters to the NE of the Mine Managers residence.



The foundation of the building is comprised of 8x8 timbers that have been placed directly on the ground, the west end is blocked with timber to level the foundation.

The floor joists are rough 2x4 on 16 inch centers which then are cross sheeted with 1x6 boards.

Black tar paper was then used to cover the interior floor which was then sheeted again with 1x3 tongue and groove flooring.



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The walls have 2x4 studs, sheeted on the exterior with horizontal 1x10 boards and then re-sheeted with 1x4 siding. The gable style roof has collapsed on the south side, leaving the north roof rafters bowed and in an unstable condition.



The rafters are 2x4, covered with 1x10 boards. The doorway is centered in the west wall that has a 1 meter by 2 meter porch extension with steps that lead off to the south.

There is now a sink in the north east corner and shower stall in the west corner of the building along with a partial courtesy wall that extends from the middle of the west wall half way across the room floor which covers the view from the entrance to the shower.

The sink, shower and partition are renovations made to the original building by mining companies that used Werneck as a field camp.

There is a hole in the northwest section of the roof that indicates where a heater was situated.



*Northeast Wernecke Mine Managers House B3*

The building is frame and log construction with the foundation being built from square 6x6 timbers as floor foundation beams. Log uprights were used to support these beams in places, while in other locations blocking was put in place for extra support. Rough 2x10 planks were used for the floor joists over the 6x6 beams, these joist were then sheeted with 1x10 boards as a sub-floor, and cross sheeted with tongue and groove fir.



The walls are constructed of 2x4s, the interior walls are sheeted with veneer panels.

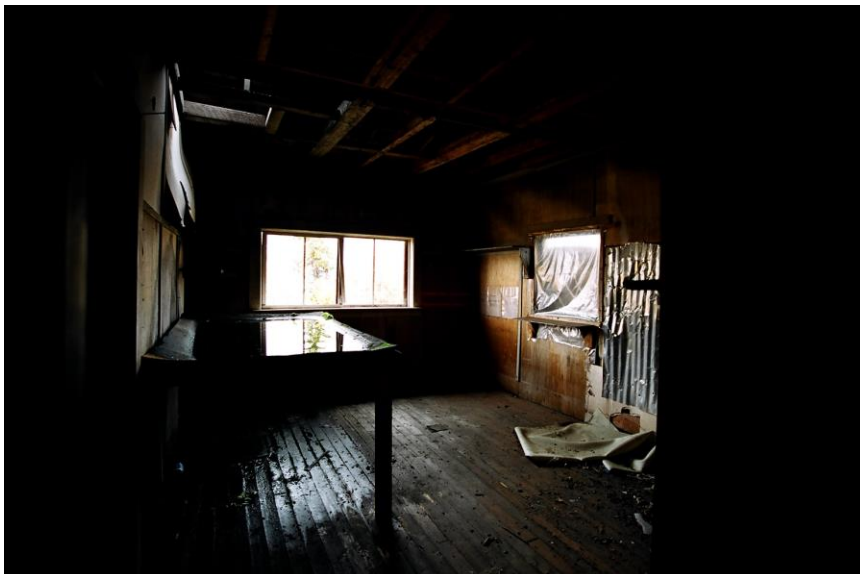
The exterior walls are sheeted with 1x10 and 1x6 planks, then covered with black tar paper and clad with 1x6 cove siding.





In the living room and kitchen, building material has been stripped from the ceiling along with sections of the walls.

Cupboard doors in the kitchen have been taken off. Vinyl material was nailed and stapled to most of the counters in the Managers house and out building.



The asphalt roofing has deteriorated and there is significant water damage to the interior.



The stairwell is on the north wall with a doorway at the top the first flight of stairs leading out to the plywood addition. The doorway was most likely put in during the 1980's to access the addition.

On the second story floor joists are rough 2x8s sheeted with 1x6 boards as a sub floor and cross sheeted with 1x3 tongue and groove fir.

Roof rafters are constructed with 2x6 and are supported by a central wall that runs the length of the building.

This second floor was divided into five rooms with vaulted ceilings covered with 1x3 boards that have a molded edge



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There is a dormer on the west side, this is a larger room that overlooks the mine site and could have been a sitting area.

There are several 2x4 bed frames throughout the second floor and were most likely built to accommodate the field crew in the 1980's.



The exterior of the main roof is covered with green asphalt rolled roofing, while the east porch roof is covered with black rolled roofing and strapped with 1x2 boards laid down every 1.5 meters to help keep it in place.



There is a plywood addition off the north wall that was added on to the house at a later date and is collapsing.



*Northeast Wernecke Sauna B4*

The sauna is located 9.8 meters to the west of the mine manager's house and is in good condition, it was most likely built during the 1980's by the field crew using material found on site.



The foundation is built with 8x8s that run out from the bank and rest on vertical 8x8 beams placed on stone footings.

The floor joists are 3x6 beams on 16 inch centers and are sheeted in with 1x6 boards to form the floor of the building.

The walls and porch frame are 8x8 beams sheeted with 1x6 and 1x8 boards.





Walls have 2x4 has strapping on the exterior and sheeted vertically with 1x6 boards.

There is a gable roof has an 8x8 ridge pole with 3x6 rafters, the strapping has then been laid closely together over the rafters and covered with wooden shingles.

Three benches are built on the east and north walls and constructed with 2x4,2x6 and 1x6 boards.

The barrel heater for the sauna is under the floor in the southwest corner and can only be accessed from the outside.

The heater is surrounded by stone. Tin has been nailed to the top of the floor joists and hang down over the top of the heater forming a dish that rocks have been placed.



*Northeast Wernecke Mine Managers Outhouse B5*

The mine manager's out house is located directly east and 16 meters from the Mine manager's out building. The foundation of this outhouse is hand stacked rocks that extend approximately .5 of a meter above the surface of the ground.



The frame building has fully collapsed to the north. The floor joists are constructed using 2x6 planks and sheeted with 1x3 tongue and groove fir boards. The walls have 2x4 studs covered on the exterior with 1x4 boards, 1x10 planks were used to cover the shed style roof.

There is evidence of some type of rubberized canvas scattered around the building, possibly having been used on the roof for weather proofing.

Further to the east is a small domestic refuse dump, with no evidence of contaminants.



*Northeast Wernecke Outhouse B 6*

The foundation of this, two seated outhouse is constructed of two 10x10 beams laid across the vent raise for Ladue #2 shaft, and is located 20 meters east of the transfer station.



Heavy 2x10 planks and 4x6 are laid across the vent raise opening on which the outhouse was constructed. Plywood was placed over the frame and was covered lightly with surrounding gravel.

The floor joists are 2x4s covered with 1x10 boards. The walls and roof frame are rough 2x4s and clad with heavy corrugated metal.



The ground is sloughing into the vent raise taking with it the rotting frame and eventually the outhouse.

It is unknown how deep the hole is, due to safety concerns we did not take measurements.



*Northeast Wernecke Residence B7*

The location of this building is 68.9 meters due south of the mine manager's house along the cat trail at the top of the ridge. The building has a main floor with stairs leading up to a partial room upstairs and another set of stairs going to a partial basement. The building is in extremely poor and unstable condition, the south, east and a section of the north wall has been removed leaving the roof balancing on three vertical 2x6 boards.



The foundation is constructed of 6x6 beams that run from the bank and extending west supported by 2 meter vertical 6x6 posts.

Floor joists are 2x10 boards that are paced north to south over the 6x6 beams, the floor is then sheeted in diagonally with 1x10 boards and cross sheeted with 1x6 shiplap boards.

The interior walls on the lower level are constructed with 2x4 studs that are first sheeted with 1x10



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boards and re-covered with 1x4 boards. The exterior of the main floor was sheathed with cove siding and the basement exterior was sheathed with vertical 1x6 shiplap.

A porch once extended off the west wall and covered a section of the basement. There is a basement door located on the south wall a set of stairs that run off the north end of the porch.



Because of the poor condition of this building we were unable to get further accurate measurements of the buildings rooms and features.

In the northwest corner of the building is a room that is mostly in tact and has been set up for a shelter, possibly by hunters. There is a barrel heater sitting on rocks and a large wooden bed, along with makeshift table and a woodbox.

Bits and pieces of wood is scattered around the house, mainly comprised of material that was not worth salvaging.



*Northeast Wernecke Transfer Station*

The transfer station is located directly upslope to the east approximately 104 meters from the boiler house. The structure is built with 2x10 boards that have been bolted together for additional strength. The walls have then been sheathed horizontally with 2x10 planks, these walls have then been further cross braced with additional 2x10s forming a large “X” on each of the four sides of the structure.



The bottom structure was filled to the top with heavy metal (mill parts, ore car wheels, large gears etc).

The structure is 2.6 meters by 2.5 meters square and 3 meters tall. There is a second section of the structure that has toppled to the north and is constructed in a similar fashion.



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There are also large log poles that extend from the bank that rise at a steep angle from behind these structures, the logs were possibly cribbed and at one time which helped support the structure in place.



There is a significant amount of wood and metal, heavy cable, chain and timbers scattered around the area.



*Northeast Wernecke Ladue #2 shaft*



This shaft is located 15.6 meters due west, down slope of the transfer station. This was the haulage shaft for the underground workings at the Wernecke site, the shaft is in poor condition with the top rounds severely deteriorated.

The opening was 1.5m x 1.5 m<sup>2</sup>. At the time of inspection the boards covering the shaft have rotted through and the ground around the shaft was sloughing in. The shaft was unmarked with no barricades around the shaft.

The depth of the shaft is unknown; the bottom of the shaft could not be seen.

Since the time of inspection due to the safety hazard this shaft posed, it has been filled in by Alexco Resource Corp.



Extending 58 meters to the south of the Ladue shaft was a collapsed Stope. This was also filled in at the same time as the shaft.

*Southeast Wernecke B1*

Building 1 is located on the Lucky Queen road. The foundation on this building is log construction, with 2x6 floor joists. The joists are sheathed with 1x10 planks and then cross sheathed using 1x3 tongue and groove fir flooring.

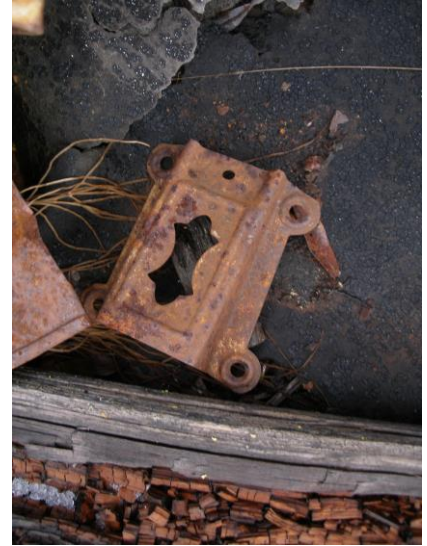


The building has collapsed and most of the lumber has been salvaged. The walls and roof have been built with a combination of 2x4 and 2x6 frame material. The roof has several layers of material consisting of canvas, burlap, black tarpaper, and split open, square metal pails.

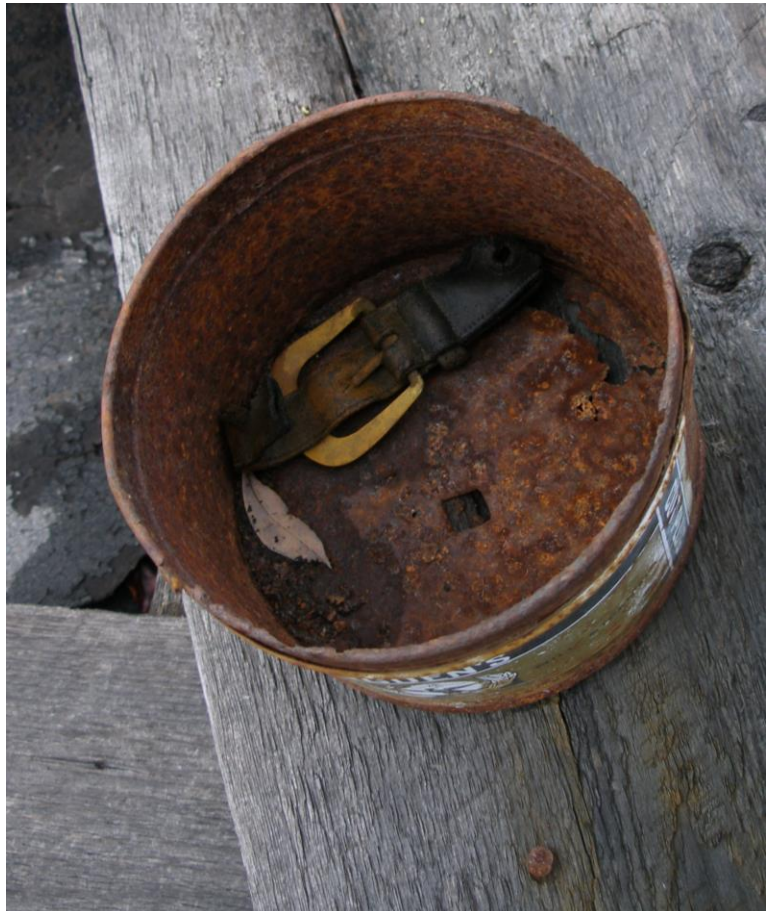
There are two small shed additions that were added to the north east corner, these remain partially upright. The sheds walls are built using a combination of 2x4 and 2x6 boards, and sheathed on the exterior with a hodgepodge of galvanized tin and split open metal oil pails, the interiors of the sheds are covered with log slabs.



There is a small porch floor attached to the north end of the main buildings floor which connects the house with the sheds. The collapsed walls are sheeted in with 1x8 shiplap boards.



The building has remains of cupboards under the collapsed roof. These cupboards hold artifacts such as butter and coffee tins, a belt buckle and a partial set of false teeth.





To the north of the building by 12 meters is what looks like a raised garden bed, there is a tin can with a wire handle with nail holes punched into the bottom for a watering can, the bed is approximately 1 meter wide by 5 meters long.



*Southeast Wernecke Outhouse Building B1A*



The outhouse is located approximately 20 meters south east of building #1 and is located across a small creek.

The foundation is built from rough 2x4s that are rotting away quickly.

The 2x4 frame walls and roof are sheeted with 1x8 planks. The shed roof lies west of the outhouse.

The building size is 1.5 meters by 2 meters square, it is in very poor condition, and has collapsed to the west.

*Southeast Wernecke B#2*

This building is located approximately 45 meters north west of building #1 and is on the left side of the Lucky Queen road.



The foundation is built of 2x6 floor joists that have been laid directly on the ground. The floor itself is a combination of 1x8 planks and split open dynamite boxes that have been notched back together and covers the entire floor. The southern porch area has plank boards, also covering 2x6 floor joists.



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The walls are a combination of log pole and frame construction. Originally the building was a tent frame and had one tent nailed up on the inside of the frame and another on the outside of the wall.



The tent frame was upgraded by the addition of frame studs augmenting the tent pole structure. The canvas from the tents were left in place and sheeted over on the exterior and interior with a hodgepodge of various sized boards, then a layer of heavy black paper being used to cover the north end of the building. There is even a leather belt is used to strap wood and canvas on the exterior north wall.



The top sill plate of the wall is build with 4x4 timbers and 2x6 rafters, the gable roof is sheeted with 1x12 boards and covered with black rolled roofing.





The builder was extremely resourceful utilizing whatever material was on hand. He used tin and boards from shipping crates to burlap, canvas and long Johns for chinking around the windows.





A bed frame, broken glass bottles and tin containers of various shapes and sizes were found in and around the building.



Tin cans and tin containers were fashioned for many uses by the old-timers, wire handles were added to tin cans.

Below is a tin container that has been cut and the sides rolled down, for what purpose it's hard to say?



*Southeast Wernecke B3*

Building 3 is located on the Lucky Queen road approximately 400meters north of building 1. The foundation of the building has been excavated into the hill side at the time of construction, log joists were placed directly on the ground once a level building site was established and covered with 1x6 boards.



Corners of the log walls are saddle notched with the interior log walls hewn flat with an axe, the exterior log walls were left untouched.

The gable roof is constructed with three logs and extends 2.7 meters out from the west wall for a porch.



The ceiling is constructed with pealed logs that run from the ridge pole and extend past the walls for the eaves. Sod was then placed on the roof and various sized boards are laid vertically, split square oil cans were then nailed to the boards.



At the back of the cabin an additional log was placed on top of the ceiling poles, and doweling is used to hold the log roof and sod in place, the tin is bent over the logs and doweling and nailed to the ceiling logs.

This design was also used on the kitchen building and is possible the same person built both buildings.

Heavy sheets of paper and canvas are nailed to the ceiling to keep the dirt from falling through the logs.

There is a metal air vent in the top east wall.



Most of the metal roofing has been removed from the top south section of the roof and the boards have rotted and are collapsing.



There is a hand made bed frame and a cupboard remaining inside of this cabin. No other artifacts were found.

The entire cabin floor is covered with about a foot of pine cone husks by the squirrels.

There is also a willow growing out of the sod roof on the northeast corner of the cabin.



*South East Wernecke B4*

Outhouse B4 is located 15.3m east of building 3, which is just across the Lucky Queen road.



The outhouse is log and frame construction. Two trees were used as the back corners of the outhouse and there was no sheeting on the walls of the outhouse.

The roof was built with poles and boards and covered with split oil pails.

The seat is built in the front half of the outhouse using 2x4s and 1x8 boards.



*Southeast Wernecke B5*

This building is located approximately 80 meters up the Lucky Queen road from building 4 and is situated 3.9 meters west from the edge of the road.



The foundation and construction of the building is a combination of log poles and frame sheeted with a hodgepodge of material.

The east section of the building was a tent frame and had poles for floor joists that were then sheeted with various sized boards. The gable roof is sheeted with the traditional split open oil pails as roof shingles. The north section of the roof has been removed along with the walls.

A small set of steps on the east side of the tent extended uphill to the road.

The extension to the west was constructed of log pole uprights with rough boards and poles used for bracing.

Split oil cans were used to skirt around the bottom of the NW corner.





The exterior east and north walls are mainly sheathed with dynamite boxes.

The exterior west wall has a horizontal board and batten style siding using 1x3 strips to cover 1x6 boards.

The exterior south wall has short pieces of 1x6 nailed vertically from the top and bottom poles to a 1x8 that runs along the center of the wall.

Canvas, burlap, shipping boxes and dynamite boxes are among the material used for the building.

Squirrels have made a nest under the floor and there is a thick layer of pine cone husks covering the floor.

There were various tin cans and an old air tight wood heater found around the building.



*Southeast Wernecke B6*

This collapsed building is located approximately 15 meters north east of building #1, and is constructed of log and frame.



There are three logs laid directly on the ground from east to west, sheeted with 1x6 boards and covered with a rubber rolled printed linoleum.

The 2x4 walls and roof have fully collapsed, and are scattered throughout the area.





At the time of inspection we could not tell what style of roof covered this building.

We found hand made shelving, a tea cup and storage boxes in and around the building. The box below has hand whittled legs.

Tins and a rubber soul from a woman's shoe were found at the east wall.



*Southeast Wernecke B7*

This building is located 23 meters along a cat trail that branches off the Lucky Queen road just west of building 2. The cat trail continues north to the northeast section of the Wernecke camp.



The building has been pushed off its original foundation, which were 6x6 timbers laid directly on the ground, the foundation size is 4.6 meters by 5.5 meters.

The building has been shoved north approximately 6 meters.

This action has compacted the building with only the porch section somewhat intact.





The south section of the building is rough 2x4s and log pole construction that was first covered with a canvas tent, 1x6 and 1x4 boards were added to the walls and 1x6 boards were nailed vertically to cover the gable end of the roof on the south wall.

The gable roof had 2x4 rafters sheeted with 1x6 boards and covered with black rolled roofing, which again was sheeted with corrugated metal.



The porch remain close to there original shape, but is cantered dramatically to the north. The construction of the porch is 1x6 boards nailed over a 4x4 frame foundation that is placed directly on the ground. The 2x4 stud walls are sheeted with 1x6 and 1x8 shiplap boards throughout.



The exterior porch walls are covered with split open metal pails.

The roof is constructed with 2x6 rafters sheeted with 1x6 shiplap and corrugated metal.





There is a small closet located in the northwest corner of the porch and a cupboard on the north wall next to the main entrance.

To the north an old trunk was found, the wood is considerably rotten but the embossed tin is mostly intact.



*Southeast Wernecke Shaft*

Continuing north about 41m from building 7 is a shaft with a small partial collapsed building.



The shaft house foundation are 8x8 beams that have been corner notched and then spiked together to form a 3 meter by 3meter square.

There is corrugated metal covering a small trench on the east side of the shaft.

The 2x6 stud walls are sheeted in with 1x10 boards and the roof is covered with plywood.

The north and west walls have collapsed and looks as though material was salvaged as the shed roof is wedged itself into the ground and covers the manway and 8x8 shaft cribbing.

The ground around the south side of the building has sloughed approximately 2.5 meters and has exposed the opening to the shaft at a depth of 5 to 6 meters deep.



The shaft is still in tack and looks as though it continues downwards for a considerable distance.



The date of the shaft is unknown and is not found on the Geological Survey of Canada Paper 55-30 by R. W. Boyle Ottawa 1956 Part of figure 5. So it's most likely constructed after 1956.



*Southwest Wernecke Residences B1*

The first of these residences are located 47 meters to the south of where the Wernecke road branches to the mine mangers residence. Residence 1 and it is located 15 meters to the west of the Wernecke road. The buildings roof has collapsed and is in poor condition.



The foundation of the residence is constructed on 6x6 upright posts that are placed directly on the ground.

The floor joists consist of 2x8 boards set on two foot centers and sheeted over with 1x10 boards.

The pony walls are .5 meter in height and are sheeted in with vertical 1x 6 shiplap boards.

The south section of the pony wall is beginning to collapse.



2x4s are used for the frame walls, with the exterior sheeted over horizontally with a combination of cove siding and 1x6 shiplap boards. The interior sheeting of the south wall is a light veneer wood, with the rest of the walls covered with 1x8 shiplap boards.



The gable roof of the building is comprised of 2x6 trusses and runs from north to south.

There is a shed roof of 2.7 meters and extends from the west side of the building, along with a second porch 3 meter by 3.7 meter. Both roofs have 2x6 rafters.

There are sections of the roof and walls that have been salvaged and a fair amount of lumber is scattered around the building.

There are some remnants of black rolled roofing material scattered about.



A small root cellar is located in the north east corner, it extended down a least a meter and has sloughed in, restricting access.



### *Southeast Wernecke Outhouse B1A*

There is a tipped over two seated outhouse to the north of building 1 and is also of frame construction.

Both floor joists and walls are constructed with 2x4s the floor and exterior walls are sheeted in with 1x8 planks.

The shed roof rafters are also 2x4s sheeted with 1x8 planks.

There is only a small portion of tin remaining on the edge of the roof.



*Southwest Wernecke Residence B2*

Building 2 is located 30 meters due west of building 1. The building is collapsed and is very poor condition with only the north wall and a section of the east wall left standing. The foundation is of heavy 6x6 frame beams with 2x6 floor joists laid every two feet.



These joists were then sheathed with 1x3 tongue and groove flooring.

The walls are rough 2x6 sheathed on the exterior of the building with 1x10 boards.

Very little remains of the roof, but from the remnants it can be determined that roof was of gable style construction.

On the northwest corner of the building is a set of stairs that lead to a small .5 x 1.3m deck.



*Southwest Wernecke Residence B3*

Building 3 is located 42 meters south of building 2 and 40 meters west of the Wernecke road. It is in very poor condition with the east and north walls collapsed outward and the west end wall and gable roof leaning precariously inwards.



The foundation of the building is frame 6x6 placed directly on the ground, the floor joists are 2x6 sheeted over with 1x3 tongue and groove flooring.

Due to the grade of the land to the west the west wall resides on a one meter tall pony wall constructed of 6x6 beams and sheeted



vertically with 1x6 shiplap boards. The rough cut 2x4 wall studs have been placed on to foot centers with horizontal bracing every four feet.



The exterior is sheathed with 1x10 boards placed diagonally and then re-sheeted with horizontal 1x6 cove siding. There is a 4meter by 3meter porch that extends from the middle of the collapsing south wall.



*Southwest Wernecke Residence B4*

This building has totally collapsed with a fair amount of lumber salvaged.

The floor foundation is made of 2x8 boards that have been placed directly on the ground.

The wall studs are 2x4s sheathed on the outside with 1x6 shiplap boards.



From the remains we can tell the building had a gable style roof, with a doorway situated in the north wall of the building.

*Southwest Wernecke B#5 Shed*

The shed is located 6m South of B 3. Three of the four walls and roof have collapsed inward.

There is no evidence of the shed having floors. The walls are placed directly on the ground and are constructed of 2x6 studs and sheathed with 1x6 boards.

The shed roof had 2x8 rafters covered with 1x10 boards and split one gallon oil pails laid in a shingle pattern to weather-proof the shed.



*Southwest Wernecke Cross Property Cabin B6*

The Cross cabin is located approximately .5 of a kilometer south of the boiler. The building is located on the Wernecke road just passed the Gambler Faro Gulch trail, a small cat road exits to the left about 30 meters from that junction. The cabin is 42.7 meters west of the Wernecke road in dense alder. We had to brush out around the building to be able to get photographs of the exterior.



Initially the cabin started as a tent frame as many of the old time cabins did, it was constructed of log poles with a canvas tent stretched over it.

Then a second set of walls and roof were built around the tent frame.



Frame timbers were placed directly on the ground and 2x4 studs were used for the second wall studs and roof trusses, these were nailed directly to the log pole tent frame where it was convenient.

The floor of the tent is covered with opened dynamite boxes in an attempt to have a wooden floor over most of the area.

The next progression of construction was 2x6 floor joist that are attached to the west end of the dynamite floor and extend outward to the west and then nailed conveniently to any trees that happened to be in rough line with the floor joists, the trees were then cut off at the floor level and an assortment of 1x6 and 1x8 rough boards were laid.



The wall studding for this section is a combination of log poles and rough cut 2x4s. The walls were covered with various sized boards.



A sheet of corrugated metal is nailed to the wall behind where the heater had been situated.

Squirrels have made a nest under the floor and there is a thick layer of pine cone husks covering the floor.



Two frame, shed style additions were added to the north side of the building, with the 2x6 floor joist again nailed to trees and sheeted with 1x6 and 1x8 planks.

The shed roofs and walls are have been sheeted with a hodgepodge of various size boards, burlap, canvas shipping boxes, corrugated metal, and cardboard boxes, and strapped with numerous scrap boards.

The roofs have rotted through and a majority of the floor is rotten and giving way.





The entire building is clad with various grades of tin and metal, from 45 gallon drums that have been split open, down to the 1 gallon square oil containers.

There is even a soup or bean can was split open and nailed to the exterior wall.





An air vent was fashioned with wood, metal screening and split oil pails, inside is a neatly constructed box with a sliding board to open and close the vent.

The stove pipe ran through a metal bucket in the roof and was wired on the inside to hold it in place.





Sonia Stange photo 2004

We discovered old newspapers dated 1926 and pieces of clothing that had been laid in between the canvas and the roof, in an attempt at developing a insulating barrier to keep the heat in and cold out.

Long Johns and Socks seemed to be the insulation of choice when it came to chinking around the roughly constructed window frames.

On the north wall of the shed there is a part of a shipping crate addressed to Livingston Wernecke care of Greenfield & Pickering.

There is the remnants of what could have been the outhouse 22m due west of the cabin, it is comprised if some 1x6 and log pole remnants next to a domestic waste refuse dump.



*Southwest Wernecke Barrel Shed B 7*

This frame building is located at the most Southerly point of the Wernecke site. It is approximately 200meters south west of the cross cabin. The building is in poor condition with the west wall having collapsed outward and the roof material salvaged.



One of the most outstanding features of this building is the amount of material that was excavated from the nearby hillside to create the foundation the building was constructed on.





Flat rock was hand stacked at the south and east ends of the building to form retaining wall.

The exterior of the building is sheathed with split open and flattened heavy gauge 45 gallon barrels. It is unclear what this building was constructed to house, possibly dynamite.





A great deal of work went into the construction of this building. Marks on the barrels indicate the tops and bottoms of the barrels were cut off by hand using a chisel and then flattened with possibly a bulldozer. Some of the metal barrels were bent lengthways on a 90 degree angle to fit the corners.



*Southwest Wernecke Tent Frame B 8*

The tent frame is located west of the Wernecke road below the Cross Cabin.



There is evidence of a foundation, floor, and wall material associated with the remains; these are lying inside of the collapsed gable roof.

The canvas on the tent roof is still in place and had been sheeted over with 1x6 boards. Heavy corrugated metal was then later used to complete the exterior cladding of the roof.



The chimney safety in the northwest corner of the roof is made from a square oil can. There are ventilation holes in the north and south ends of the gable roof.



The roof frame was built using 2x4s on 2' centers and 1x6 boards on the gable ends.

One of the boards had Mayo painted in it so the boards more than likely were salvaged from a shipping box.

*Southwest Wernecke Smarch Cabin B9*

The building is located west of the tent frame and the Cross cabin following the same cat road. The building is a log structure with the foundation round of logs placed directly on the ground.

The south end of the building has been excavated into the hillside in order to make a flat building area.



The main log building is saddle notched together at the corners. The north porch and west storage addition have Yukon style corners.



The roof is comprised of a ridge pole and purlins. The ceiling is constructed with pealed logs that run from the ridge pole and extend past the walls for the eaves. Sod was then placed on the roof.

Later grooves were dug in the sod roof and poles were laid and sheeted with corrugated metal.



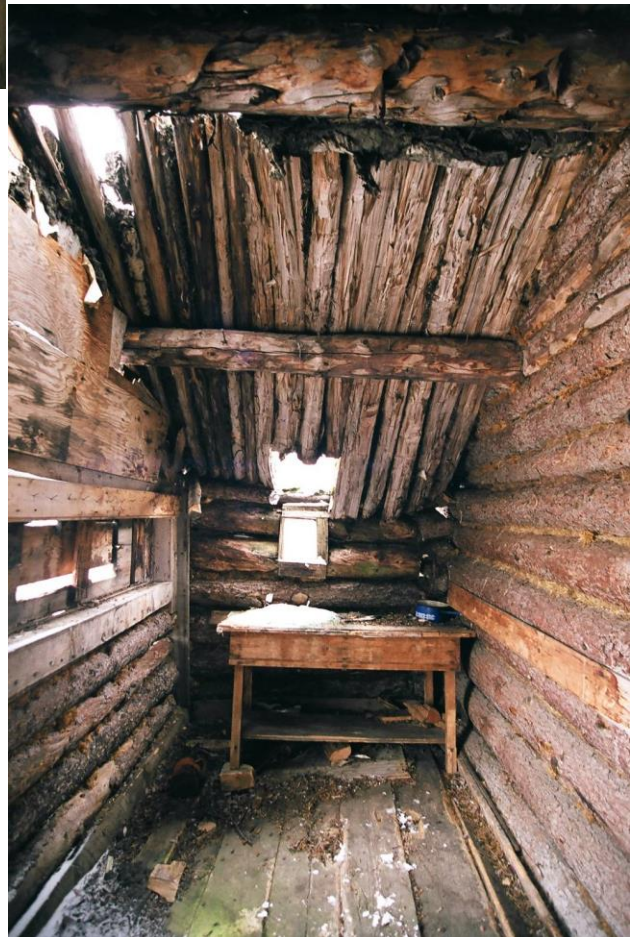
There is a 2 meter porch on north side of the building. This porch was constructed at the same time as the building, as the ridge pole and purloin supports also extends through the porch.

The ceiling is finished in the same split pole method. There are makeshift shelves against the west wall of the porch.

The door handle is made from a piece of peeled wood and the inside door latch is a piece of chopped wood with a 6 or 8 inch spike nailed through the center and to the door frame.

There is a large 1.6 meter window with a closing shutter on the exterior north wall of the porch.

There is a table, a small window in the east section of the porch and a roof opening in the ceiling over the table, there was most likely an additional heater in the porch.





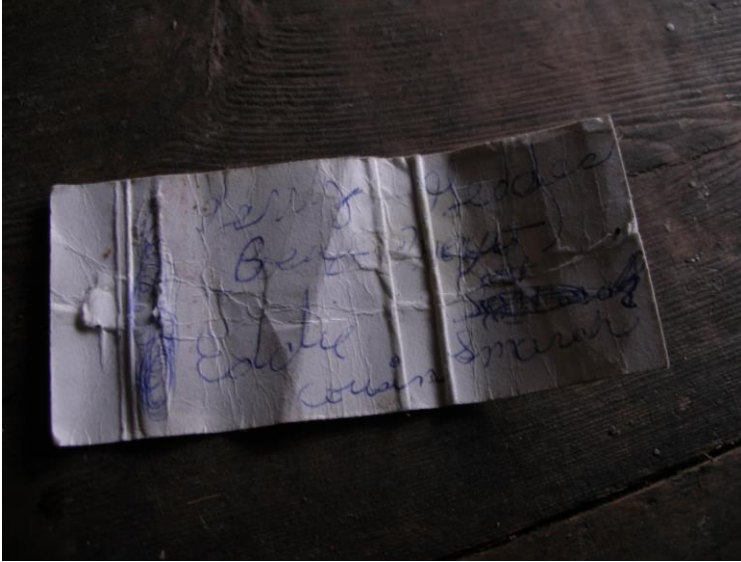
The floor is constructed of 2x8 and 2x4 boards lain on the ground and sheeted over with 1x10 planks, an additional layer of plywood has been placed over the main cabin floor.

The building is in fair to poor condition. There are two beds against the south wall with one of the beds being suspended by heavy chain from the ceiling.

An old heavy gauge riveted barrel for a wood heater is in the north east corner.

Other furnishings include a table and chair and shelves.





There is a match book on the table inside the cabin with names written on it. The Smarch family is known for their carvings.

The small west storage shed has a dirt floor and was possibly used as a wood shed. The shed is constructed with log and pole.

Larger poles are placed vertically in the four corners and smaller poles nailed horizontally on the exterior walls. This shed addition originally had a tarp for roofing material, galvanized corrugated metal roofing was added to the roof at a later date.

Below is a carving on the arm of a chair located in the shed, the squirrels and mice have carted away most of the stuffing



### *Location and Site Access*

The Sadie Ladue Site can be accessed are from an upper road extending west downhill between the stable building and the kitchen or by a lower road. This access road divides off the Wernecke road at the Lucky Queen switch back, and exits to the left approximately 3.8 km from the Keno City Junction.

### *Sadie Ladue Adit*

The adit has fully collapsed and the hillside is sloughing, possibly due to the thawing of the permafrost around the adit. The adit flow has opened a considerable cut in the hillside which we also roughly estimate at 40 meters.

The water flow is constant with an approximate estimate of forty to fifty gallons a minute, half of the discharge going into the spill box that is located 10meters from were we figure the adit once stood, the rest of the discharge spreads out and pools over the next 30 meters of the dump surface before exiting into the same gully that the 18 inch culvert also empties into.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Wernecke Camp and Sadie Ladue Site 21. Keno Hill. Volume 1*

There is considerable amount of steel track and debris scattered over the dump site, along with some foundations that are made from a combination of concrete and wood. There is an old car frame buried in the buckbrush just east of the spill box, along with the cribbed bases that once held power poles.

The sub-station was located approximately 20 meters south east of the adit and all that remains is some heavy gage metal along with a .5 meter high wooden platform made from heavy timber to support the transformers and 80meters of cable. We followed the main power line down from Wernecke and found some short sections of wire in the bush close to the Sadie site and a few additional sections along the upper access road, there are only a few poles remaining and the wire has been cleaned off.



Ten meters south of were the sub station stood is another 8meter by 5.5 meter foundation with a large cement pad in the south west corner.

A couple meters south of this foundation is a series of core boxes laid out on the ground.



The dump size is approximately 93 meters across with the track still in place at the ore dump. The cribbing on the ore dump itself has broken in the middle and has sloughed to the south, making the area above very unsafe.



### *Sadie Ladue Building 1*

This frame building seems to have slid or had been pushed over the north edge of the dump and rests in the bottom of the gulch that the mine adit water discharges into and flows through the building remains.



This building has logs around the base and log pole frame for the walls sheathed with 1x8 planks on the exterior. There is no evidence of a floor or a foundation at the top of the gulch, only boards scattered around which could be the remains of other buildings as well. There is evidence of 2x4 roof rafters, black tar paper over the 1x8 board roofing, which was then sheathed with corrugated aluminum roofing and a six inch Yukon safety in the south west corner of what used to be the roof. This was one of the most difficult buildings to discern its shape and composition.

### *Go-Devil*

The go-devil is located approximately 23 meters west of the adit spill box, and just below where the upper road access enters the dump site. The go-devil has a octagonal 4x6 floor nailed over the bolted 8x8 skids, this was probably to hold a fuel or water tank, as there are a number of 20 foot, 2 to 3 inch pipes along with two drums just below were the platform has been placed. It has been leveled with heavy blocking which indicates it was later used as a stationary platform.



### *Sadie Ladue Outhouse B2*

Ten meters further west of the go-devil is an outhouse constructed with log pole frame with cross bracing for the walls and the foundation placed directly on the ground. The seating area has been built with one log crossing in the middle of the outhouse with the splash board sheeted in with dynamite boxes.

The south wall has been left open for the entry and the shed roof was built small log rafters that have since collapsed.

The entire outhouse is sheeted in with heavy corrugated metal.



**Building B 3**

Building 3 is located approximately 85 meters east of the adit spill box, and is roughly in line with the go-devil and outhouse.

The building is log construction with the foundation logs placed directly on the ground the corners roughly saddle notched together.



The gable roof has a log ridge pole supporting the log rafters. The log rafters have been notched into the main ridge pole with three rafters on each side of the roof and cross braced from the ridge pole down to the top round of the log wall and sheeted in with heavy corrugated metal.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Wernecke Camp and Sadie Ladue Site 21. Keno Hill. Volume 1*

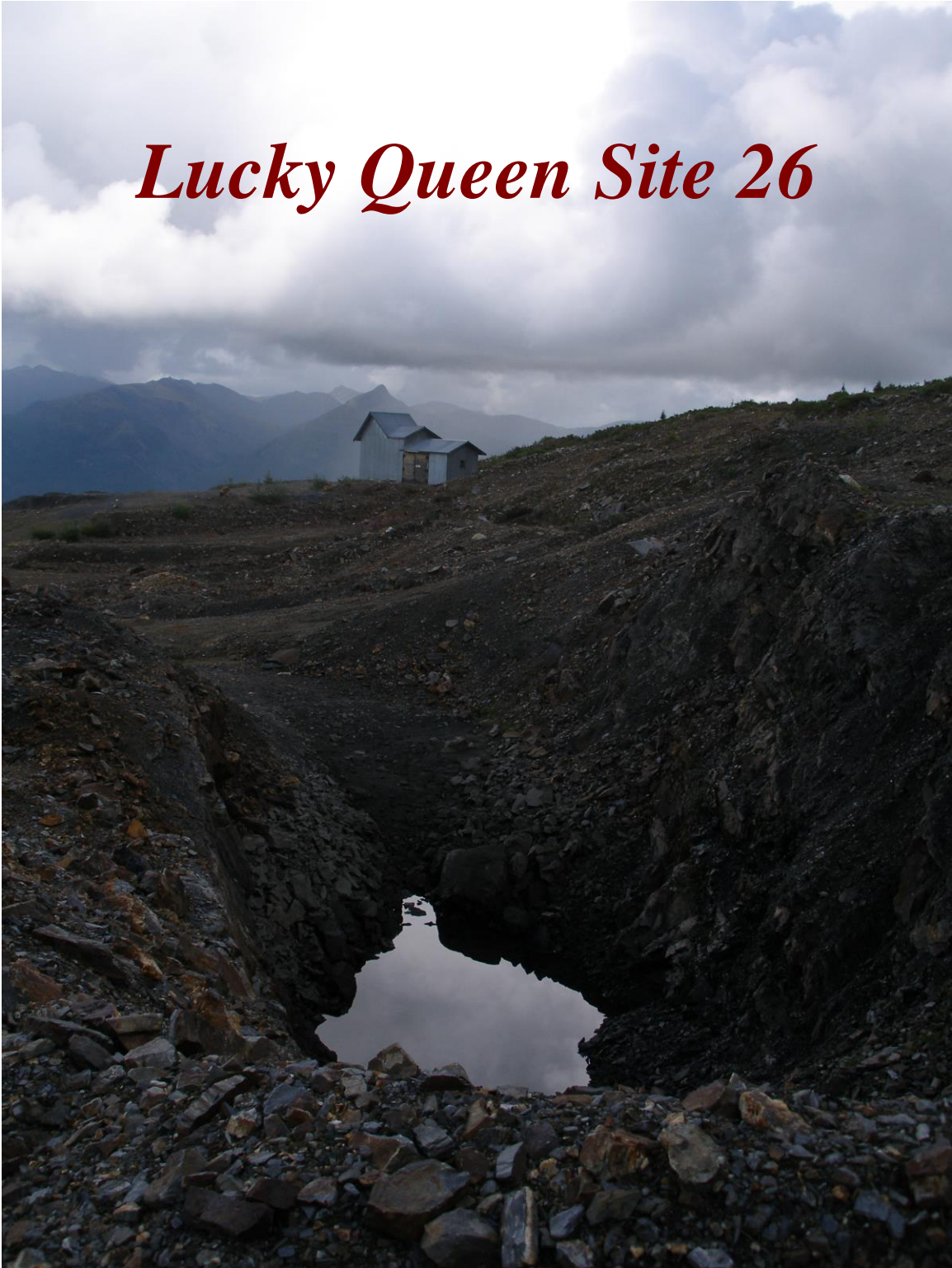
The cabin has shifted severely down slope; the northeast section of the wall has collapsed and has caused the cabin to split apart. There are no cupboards or tables, only a small bed on the south wall built form logs.



There are two identifying names written on the door frame with pencil, one we think might be Dr. Aho 1961 and the other Tom Casten 1979.

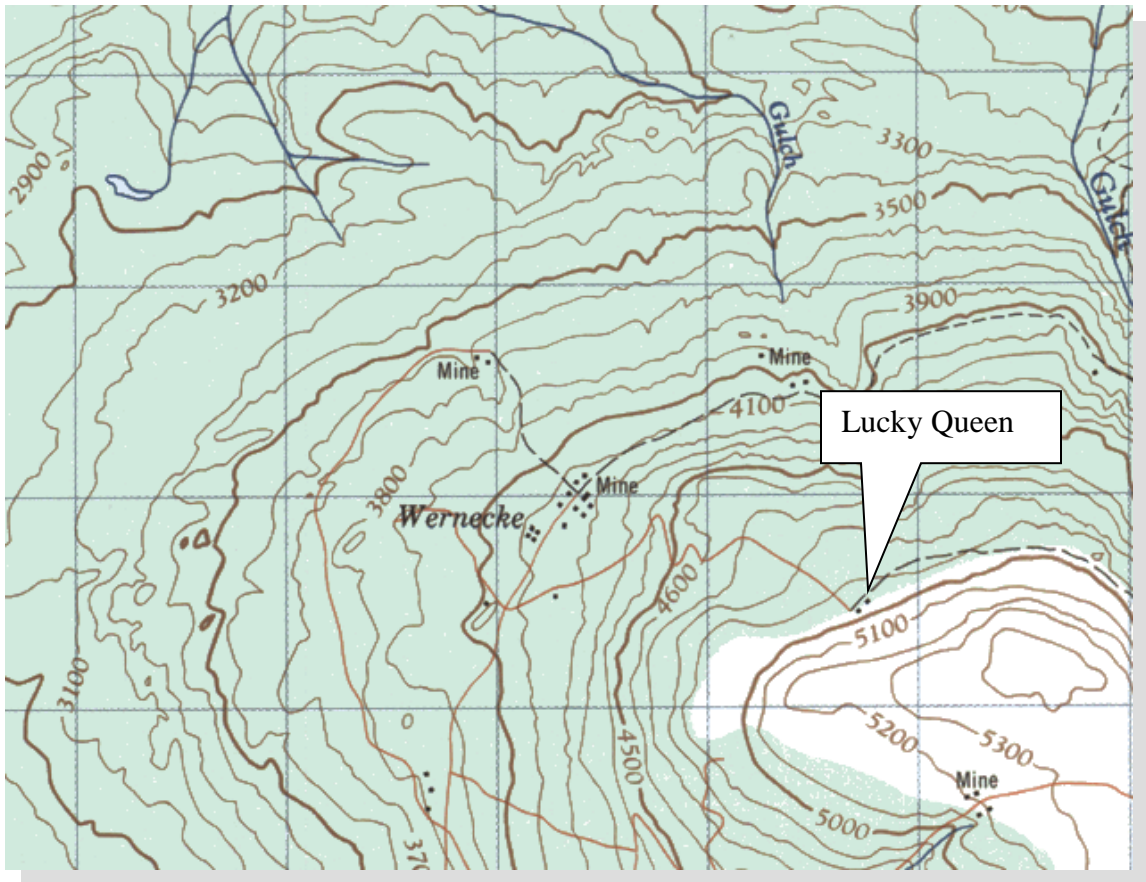


# *Lucky Queen Site 26*



**Location and Site Access**

The Lucky Queen site is accessed via the Wernecke road and the Gambler Gulch Trail. The site is located above tree line on the NW slope of Keno Hill at an elevation of 1595m. The area west of the building has been bulldozed with several trenches and workings to the East and South. There is an old shaft SW of the Headframe. To the South (uphill) the terrain is mostly talus. There is pipe and metal scattered around the building with a fair amount of metal refuse northwest of the Headframe, tin oil cans, 45 gallon drums, scrap corrugated metal and cable.



*Keno Hill, Yukon Territory. Part of Map 105 M/14. Energy, Mines and Resources Edition 2*

### **Historical Background**

Lucky Queen was first staked in the winter on February 18<sup>th</sup> 1920 by Hector Morrison, in June started his prospecting and soon found good looking float that he traced across the hillside of Gambler Gulch.

Morison then started to channel spring run off water and soon ground sluice open a cut that revealed a 2 meter wide vein.

He sent off assay samples and was rewarded with 865 ounces per ton for one of the samples. He worked for 18 months on the Lucky Queen claim but could not prove any solid ore bodies, but in 1921 the Guges paid Morrison \$5000.00 down payment and he kept working over the ground.

In 1922 Morrison still had not found anything and he became partners in a sense with an old Swedish cook by the name of Sundeen, who helped him cook and look for the big strike that Morison felt was there. In 1927 after Sundeen having a dream as to were the ore was, Morrison finally decided to dig in that area, and sure enough he soon struck rich float that assayed at 1700 ounces to the ton. As soon a Wernecke heard of the find he looked it over and offered Morrison \$50,000.00 with 10% down, they soon had a deal and Wernecke had a crew sinking a shaft the next day.

Total production from the Lucky Queen Shaft is reported to be 10 million ounces of silver. In 1929 they high graded and sacked 9000 tons of ore.

By 1931 the depression came, along with the end of the ore from the Lucky Queen shaft, with the shaft having given up 90,000 tons of ore, some of which had been processed through the Wernecke Mill. The last of the ore was moved to the site with the aril tramway and on November 16, 1932.

The Lucky Queen sat dormant until in the early 1970s, then the inclined shaft was re-timbered down to the 300 level and a new building was put over the shaft by UKHM Ltd. and from 1984 until 1988 United Keno Hill Mines continued with a 1,737 meter adit at the 500 level and did more exploration on the Lucky Queen vein.

Surface trenching and exploration continued until the late 1980s around the shaft site. All work in the area stopped until the summer of 2006, when Alexco Resources' did some diamond drilling over the Lucky Queen claim and adit.



*Lucky Queen Mine*

*A view of the upper mine shaft terminal of the Lucky Queen mine just above Wernecke mine on Keno Hill.*

*Bill Hare Fonds, photo 6825*

*Courtesy of Yukon Archives*



*Lucky Queen Mine – Miners*

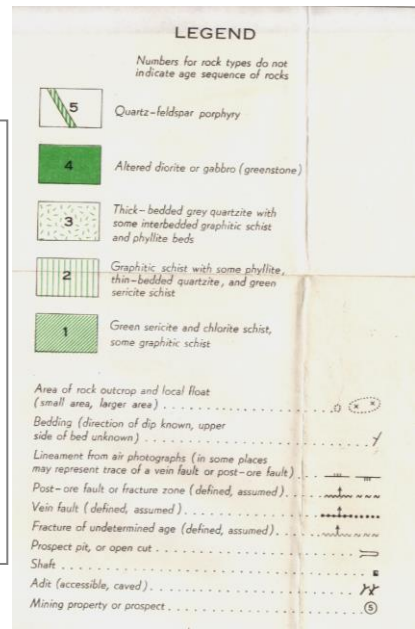
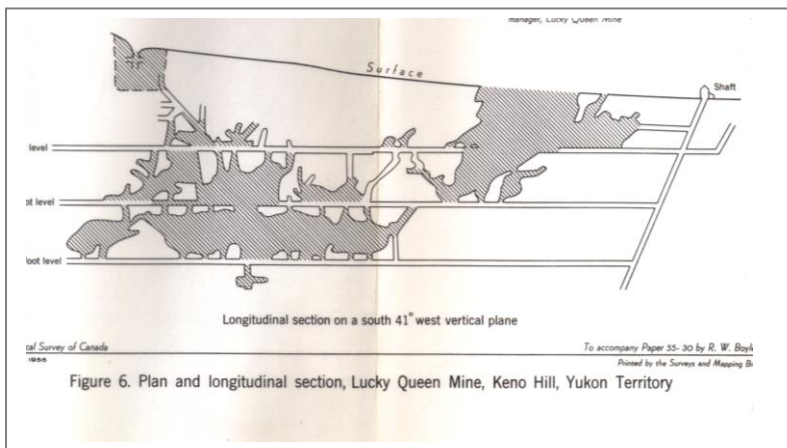
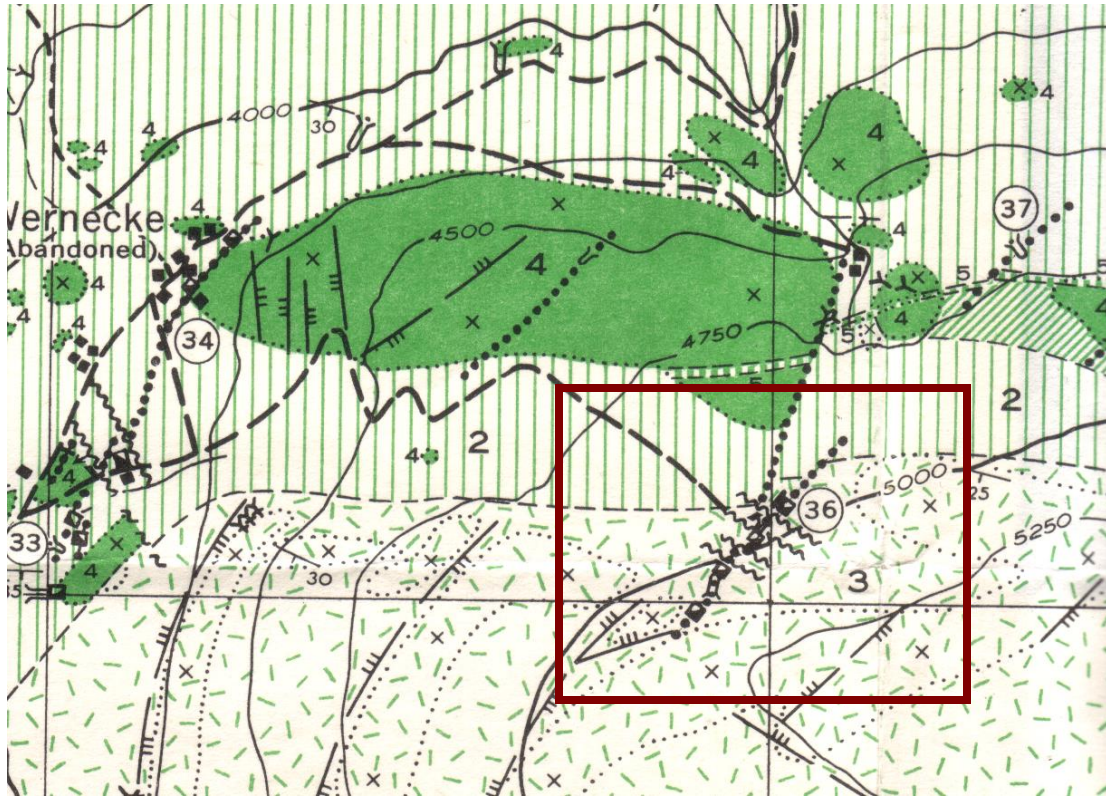
*A view of the crew at the Lucky Queen Mine on Keno Hill above the Wernecke mining camp. The only men identified are from left to right,*

*Jimmie Ballantyne and Charlie Johnson*

*Bill Hare Fonds, photo 6774*

*Courtesy of Yukon Archives*

Map below shows workings on 36 Lucky Queen



Geological Survey of Canada Paper 55-30 By R. W. Boyle Ottawa 1956 Part of figure 5

**Review of existing studies, confirmation and/or update of current site conditions**

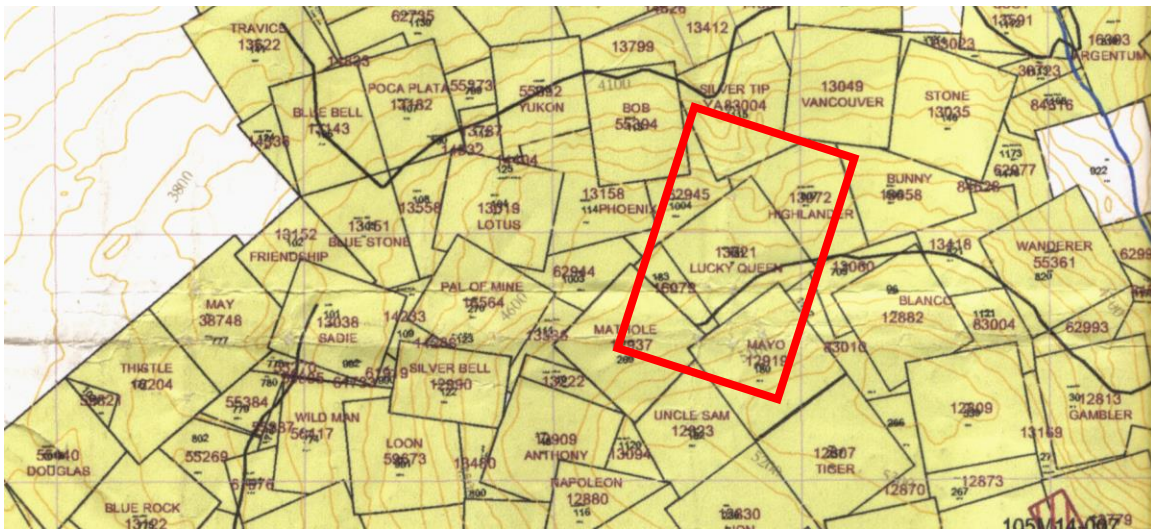
The main public safety concerns at the Lucy Queen Headframe are the open manway and the access to the back of the skip guides. Locking the main building is not sufficient a deterrent to relieve safety liability issues at this site.

There are large steep trenches to the east and upslope of the shaft building, that possibly might require further investigation as to there stability.

**Past and Current Site Tenure/ Owners**

The Lucky Queen claim was staked in 1920 by Hector Morrison, optioned to Livingston Wernecke in 1927 and transferred to Treadwell Yukon Corporation Ltd in 1931. In 1946 transfer of the claim by Jas. H. Cameron to Keno Hill Mining Company later to United Keno Hill Mines Ltd, transferred to AMT Canada in 2001 then transferred back to United Keno Hill Mines Ltd. in 2004.

The claims are under receivership by Pricewaterhouse Coopers. Alexco Resources is applying for a water license and is responsible for the care and maintenance of the properties during such time. Exploration was done in the fall of 2006; further exploration is scheduled for the 2007 season.



*Keno Hill claims. Part of Mayo district mining claim map No.105-M14 2003*

*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Lucky Queen Site 26. Keno Hill. Volume 1*

The original Headframe has been removed and a new Headframe was built. The building is well constructed with little signs of deterioration. Some of the interior cladding has been removed. Windows and doors are in good condition.



The head-frame foundation is placed on cement pads with rough 2x6 flooring, 2x6 frame walls and roof, there are 3 gable style roofs that make up the building. The taller rectangular building is where the Headframe is located and runs north to south and is intersected with a cross gable roofed structure running east to west.

This second roof intersects the main one midway with the peak of the second roof tied in halfway on the east slope of the first roof. There is a third gable roof that attaches to the east side of the middle building approximately 1.5 meters below the eaves.





This rectangular addition runs east to west and is approximately the same size as the main building. Rafters were used on the two higher roofs where the Headframe is constructed.

Exterior walls and roofs are clad with metal sheeting. There are 2m double doors on the west wall.

The 4.8m x .8m dump chute is for the skip to dump the ore or waste and extends from the head frame to the outside. It is constructed with rough 2x8 lumber lined with 1/8 metal plate sheeting.

Interior walls and roof have fiberglass insulation covered with black plastic and 1x4 strapping; the addition roof is 2x6 trusses with black plastic, 1x4 strapping and 3/8 plywood.

The log head frame is located at the North end of the building, has log posts with a steel I-Beam used to secure the four upright logs at the top.





The structure is heavily cross braced using 4 x 6 beams that are bolted to the log posts.

The head-frame is situated directly over the shaft that has a skip assembly for moving material up and down to the different levels of work within the shaft.

Parallel to the skip assembly is a manway with a 1 x 1.45m opening for access to the shaft.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Lucky Queen Site 26. Keno Hill. Volume 1*

There is a door over the front of skip guide access but no covering over the man way and the back of the skip guide. The head-frame structure was integrated into the new building and is bracing the ceiling and walls.

The floor system has a number of 4 x 6 stringers buried the depth of the stringer, in the dirt in a north to south direction. More 4x6 planks were laid edge across the stringers, east to west, and spiked in place.



On the south end of the building a hoist platform is constructed in a similar manner.

Centered in the floor at the south end of the building is a large cement block, unable to determine its depth as it is fully covered with 4 x 6 planking. There were pieces of electrical panels against the south wall.

On the surface of this block is a large piece of one eighth inch steel plate that has 12 large vertical bolts used to secure the hoist mechanism that pulled and lowered the skip with material to the different levels of work underground.



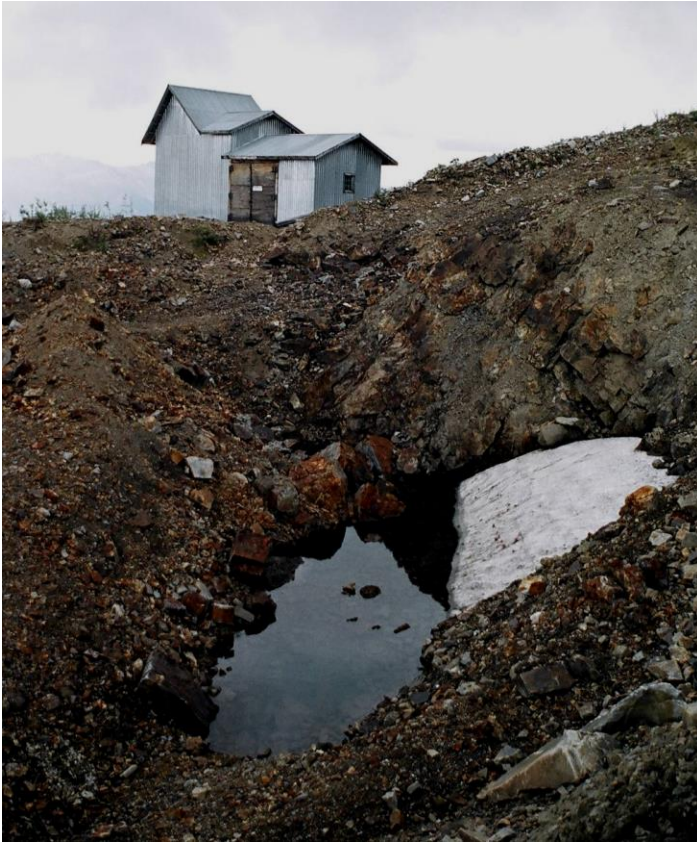
The lock and clasp have been removed from the doors with a rock holding the doors closed



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Lucky Queen Site 26. Keno Hill. Volume 1*

There is a significant amount of metal and wood debris scattered to the north and northwest of the building.





There is ground water in three areas near the Headframe.

Trench 1 (below) is around 120m south of the Headframe and has a small pond of water and is approximately 2m in depth.



Trench 2 (above) is located directly south of the Headframe and also has a pond of water

Trench 3 (bottom right) flows to the west and soaks into the moss below the workings.

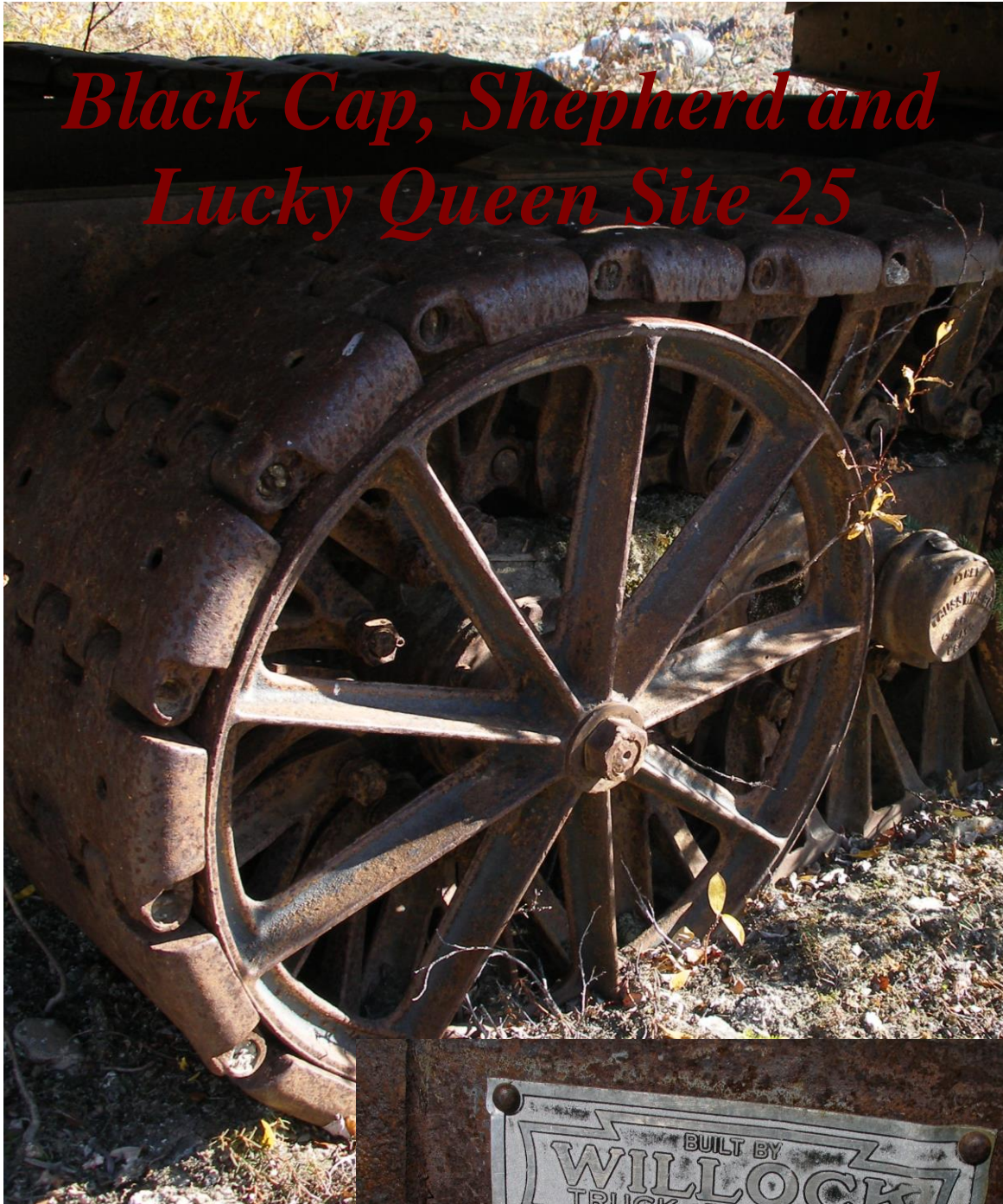
Between trench 2 and 3 there is a collapsed shaft (below)



**Public Safety Conditions and Concerns**

Lucy Queen Headframe remains open to public access. The manway and the access to the back of the skip guides are open and is a serious safety issue.



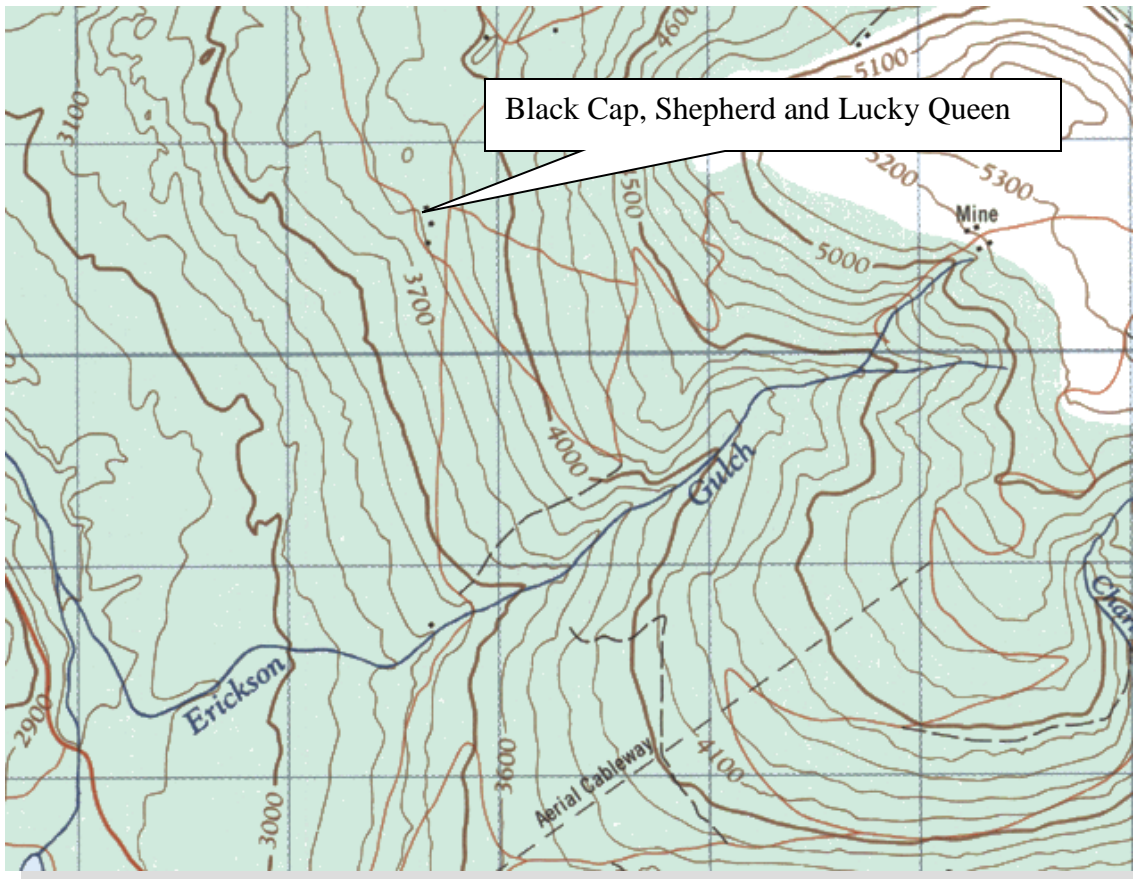


# *Black Cap, Shepherd and Lucky Queen Site 25*



**Location and Site Access**

Lucky Queen, Shepherd and Black Cap sites can be accessed by vehicle by following the Wernecke road from Keno City for approximately 7km, to the right is an access road to the sites. The road continues for a couple of km and reaches the bottom of the Lucky Queen waste dump, the first access road to the left is to the Lucky Queen adit, the second is to the Shepherd adit. The road continues past the Black Cap adit and on to an open area, from there uphill, along a washed out road is the Black Cap open pits and the shaft.



*Keno Hill, Yukon Territory. Part of Map 105 M/14. Energy, Mines and Resources Edition 2*

### **Historical Background**

Work on the site began before 1950 with a shaft being sunk on the Black Cap claim. The Shepherd adit ( Brewis Red Lake Adit ) was developed between 1950 and 1952. Approximately 340m of drifting was done on the Black Cap adit during 1967 with a total production from the adit being 44068 tonnes with 939 g/t silver.



*Wernecke Street Scene*

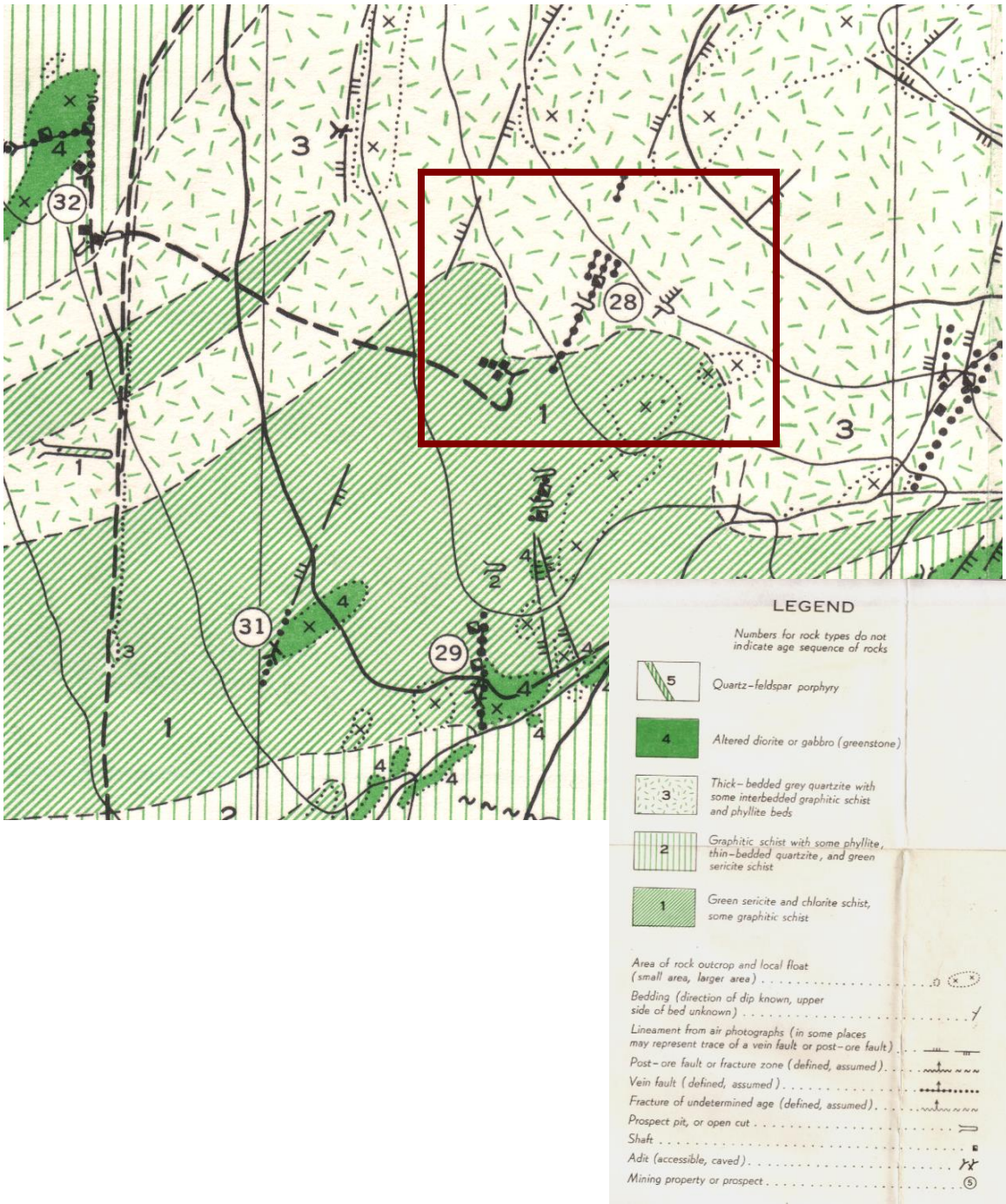
*A view of two cats hauling in tandem a trailer with a new 100hp Enterprise mine compressor to replace the one destroyed by the fire in the diesel room fire of 1927. The fire of 1927 caused \$50,000.00 worth of damage.*

*At the Shepherd adit is an old steel wheeled track wagon like the one seen in the photo. The wagons were pulled by the old Holt cats to move the bagged ore to Mayo and back haul with fuel.*

*To date photos of a similar wagon can be found on the cover page for the site and on page 155 of this report.*

*Bill Hare Fonds, photo 5846  
Courtesy of Yukon Archives*

Map below shows workings on 28 Blackcap



Geological Survey of Canada Paper 55-30 By R. W. Boyle Ottawa 1956 Part of figure 5

## **Review of existing studies, confirmation and/or update of current site conditions**

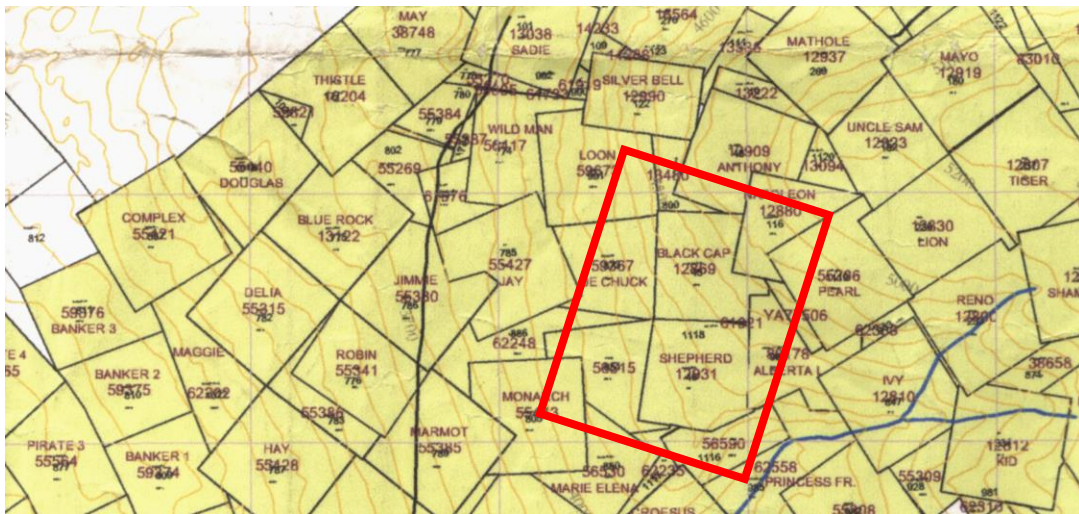
The Black Cap and Shepherd adits have not changed much since their last inspection. The Lucky Queen adit and site have changed significantly.

The Portal and dump shed have been recently salvaged and there is a considerable amount of galvanized tin roofing, pieces of insulation and boards scattered over the site. The Generator and compressor building has also been removed leaving only the remnants of the foundation. There are two receiver tanks left on the adit dump with approximately 40 meters of 6 inch pipe. The adit is open and has caved approximately 5 meters from the entrance. There was no adit discharge at the time of inspection

## **Past and Current Site Tenure/ Owners**

The Black Cap claim was first staked in 1919 by Anthony Hollenbeck, the Shepherd was first staked in 1919 by Andrew Johnson. Other claim owners were Don Morrison Malcolm S. McCown, George P. Besner, Brewis Red Lake Mines Limited. In 1961 United Keno Hill Mines Limited bought the claims.

The claims are under receivership by Pricewaterhouse Coopers. Alexco Resources is applying for a water license and is responsible for the care and maintenance of the properties during such time. Exploration was done in the fall of 2006; further exploration is scheduled for the 2007 season.



*Keno Hill claims. Part of Mayo district mining claim map No.105-M14 2003*

*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Black Cap, Shepherd and Lucky Queen Site 25. Keno Hill. Volume 1*

The portal is built with log timbers set into the ground; the exterior walls are made of 4x6 beams stacked up on the exterior of the post and beam frame, 4x6 timbers also lay across the roof headers at the outer entrance of the portal.



The adit is open and has caved approximately 5 meters from the entrance. At the beginning of the adit is the loading station for lagging and storage for wedges and other under ground supplies.

There was no adit discharge at the time of inspection.



*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Black Cap, Shepherd and Lucky Queen Site 25. Keno Hill. Volume 1*

The Portal and dump shed has been recently salvaged and there is a considerable amount of galvanized tin roofing, pieces of insulation and boards scattered over the site.



The Generator and compressor building has also been removed leaving only the remnants of the floor foundation, this was set on .5x.5 meter cement pads with 4x6 beams used for the frame base structure.

There are two receiver tanks left on the adit dump with approximately 40 meters of 6 inch pipe.



*Sheppard Adit*

The older Sheppard adit is located approximately 250 meters to the east of the main Lucky Queen Adit. The access road to the Shamrock adit is approximately 40 meters past the turn off to Lucky Queen adit.



There is an opening with an old steel wheeled track wagon that was used by the old Holt cats to move the bagged ore to Mayo and back haul with fuel.

To the east of the wagon is the adit, it has caved with only a few timbers still visible in the hill side.

The adit was constructed using round log timbers and has collapsed and does not pose any concerns.

There is no underground mine water discharge from the site and the dump area has started to revegetate.



*Black Cap Adit*

The adit is reached by continuing uphill along the main road to an elevation of 1390 meters. The Black Cap adit is located to the east on a switchback, the adit has fully collapsed and round heavy timbers and small gauge steel rail that protrudes from the adit has been pushed up into the adit collar.



The dump area for the Black Cap Adit is approximately 50 meters across the switchback to the west and over the bank

There are accumulations of adit discharge pooled to the south of the adit entrance and drains south west off the edge of the dump site.

There is a second clearing below the dump edge that holds the power poles that came over the top from the Keno 700 substation to feed this site and the main Lucky Queen adit.

These lines have since been removed and there is only evidence of log cribbing, to show where the power line had traveled.



*Black Cap Shaft and open pits*

Continuing past the Black Cap Adit There is a series of sharp switch backs and enters an open area. There is a road to the north that has been eaten partially away by runoff.



The road branches off to the west to the base of the open pits while the other section of road continues to the top of the hill to the old collapsed shaft at an elevation of 1424 meters.

The shaft is 1.3 squared and has collapsed just below the surface.

The walls of the shaft are collared with small round log poles placed vertically.

There is a significant amount of wood debris scattered up the hillside, this could possibly be the remnants of the shaft house.

Before the entrance to the open pits there are remains of four burnt out air compressors. The batteries are corroded and have long since leached into the ground.



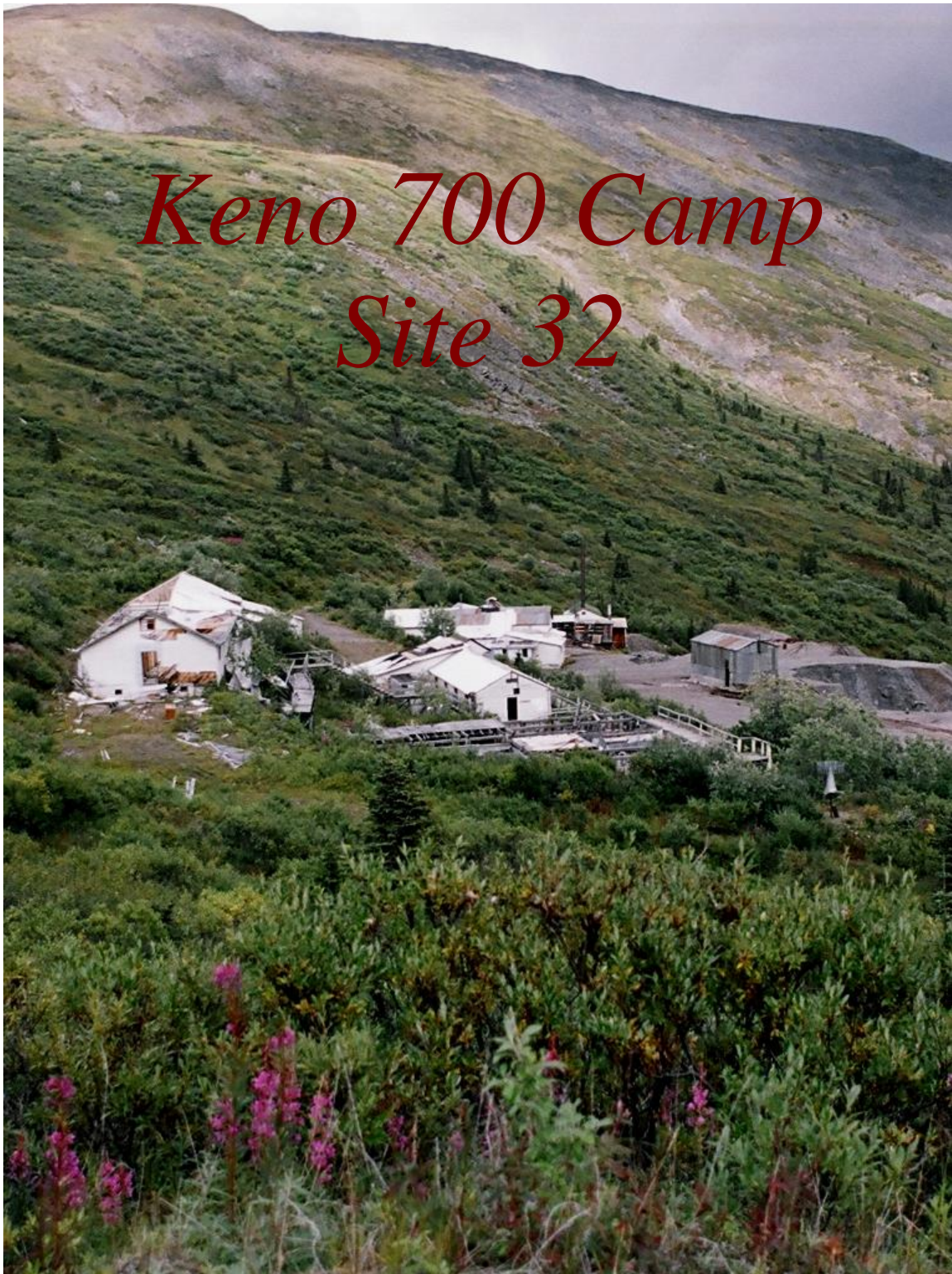
*Historical Review of Former United Keno Hill Mines LTD, Quartz Claims  
Black Cap, Shepherd and Lucky Queen Site 25. Keno Hill. Volume 1*

These compressors burnt in the mid 1980s one winter during a very cold weather spell. The compressors were kept warm over night using Kerosene pot lamps which had been used for years with no problems until this winter when two burnt and then one week later another two burnt. The shifter at that time quit his position over this incident and then was later talked into staying.



The compressors lay on the east corner of a large waste dump area that measures 225 meters east to west with a large talus slope extending down on to it from the north.

The open pits have overhanging bedrock, the north pit roughly measures 150m long by 50m wide by 40m high with two smaller excavation pits to the south.

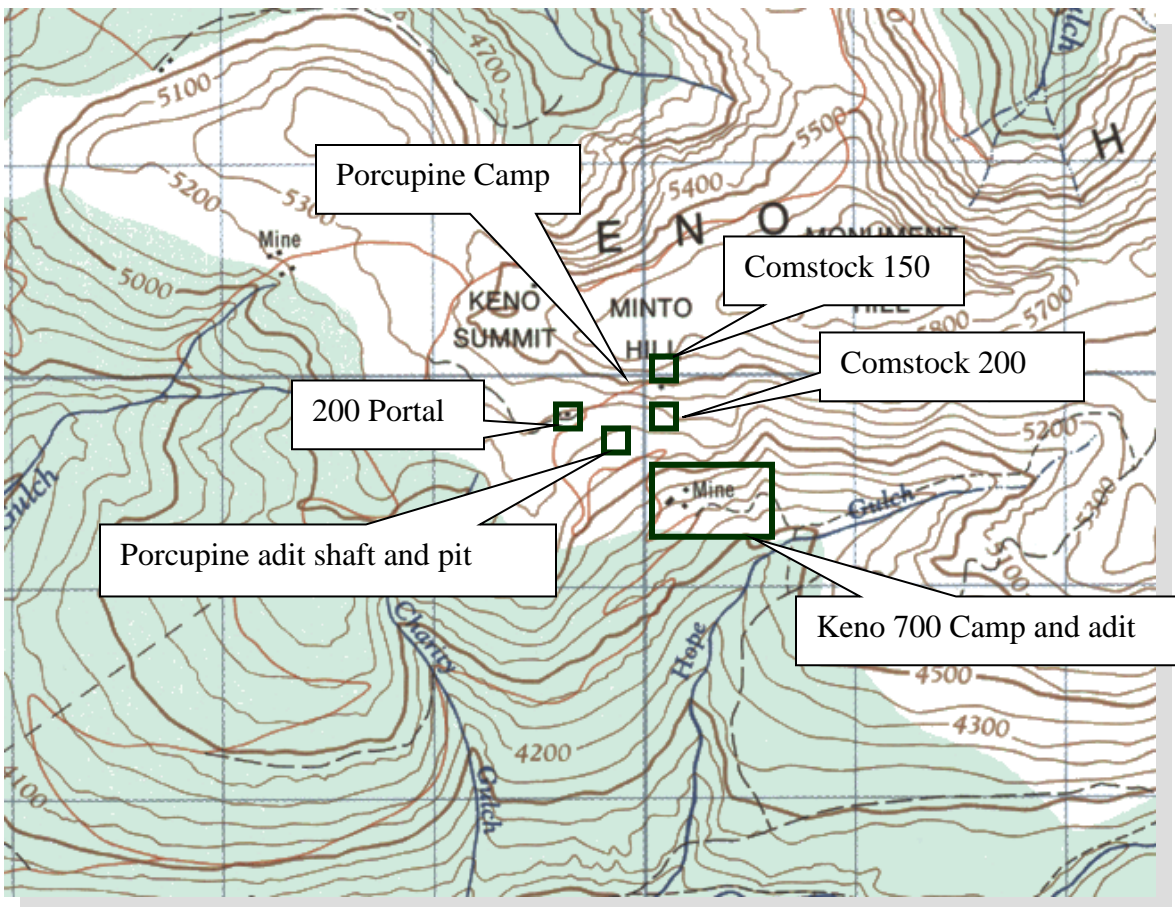


*Keno 700 Camp  
Site 32*

**Location and Site Access**

The Keno 700 Camp is located on the SE slope of Keno Hill there are two access roads leading to the site, the lower which branches off the Sign Post road to the north at 4000ft and an upper road branching off to the east at 5300ft.

The site is above tree line in shrubs, alder, moss and lichen. There are five adits and one shaft associated with the 700 Camp, the 200 portal, Comstock 150, Comstock 200, Porcupine adit, shaft and open pit and Keno 700 adit. There are 15 buildings with the living and dining buildings connected with a boardwalk.



*Keno Hill, Yukon Territory. Part of Map 105 M/14. Energy, Mines and Resources Edition 2*

### **Historical Background**

There was only a small amount of historical information found on the buildings at the Keno 700 complex. The Porcupine claim is adjacent to the Wolverine, the porcupine claim was first staked in October 1919 by Edward E McCarthy and sold the claim to Alfred K. Schellinger / "Yukon Gold Co." in December 1919, the claim was then grouped that January. In May 1921 Yukon Gold Co sold the claim to Keno Hill Ltd. In 1939 Keno Hill Mining Co. Ltd. transferred 100% interest to the Treadwell Yukon Corporation Ltd.

In 1945 Jas. H. Cameron enter a "Bill of Complaint" to the Court of Winnipeg, with this a transfer of the claims were reverted back to Keno Hill Mining Co. Ltd. with the mortgage be let to the United Keno Hill Mines Limited. The ground stayed with UKHM until the company folded in 2001.

There was only a small amount of historical information found on the buildings at the Keno 700 complex. The first mention of the reopening is when UKHM Ltd. reopened the Shamrock vein and built a new adit in 1954 and 55. These new workings were called "Top of The Hill" site and it was this exploration that prompted the start of the Keno 700 camp. The camp was established in 1956 with the addition of two more adits being collared, The first was the Comstock 200 level, which consisted of a 100 meter drift and a 416 meter cross cut and the second was Keno 700 adit which connected an internal shaft from the 700 level to the 1075meter level.

The Porcupine Pit was excavated in 1977; this open pit destroyed the earlier porcupine shaft and adits that were developed in the 1920s.

Cat work that trenched along the #6 vein was done between the years 1948 to 1949 and a 13 meter shaft was sunk in 1952. In 1954 two more adits were driven at the 150 foot level and 275 foot level. The keno 200 level adit was developed in 1956, with a 100 meter drift and a 416 meter crosscut.

In 1956 to 57 a young Carpenter by the name of Gary Shultz was brought over from Elsa to work on the construction of the Keno 700 camp site. Eleven buildings were constructed, five that served as living quarters and a cookhouse and six buildings for water treatment that was supplied from the 150 level mine, mechanical and electrical shops and a mine dry.

The Top of the Hill Camp and Keno 700 mine camp continued to operate and extract ore from the hillside up to the late 1970s when the #9 vein started to be depleted. The camp was shut down leaving the large Camp site abandoned.

In 1989 and 90 Archer Cathro & Associates Ltd. did surface work that opened pits on the #3 and #9 veins that cut and exposed some of the old adit and shaft workings.

The Keno 700 site is now abandoned and has been salvaged for material; the site has become deteriorated due to hillside erosion, and from the more resent freezing of the 700 adit, which then blows out in the spring causing severe erosion of the dump site.

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*Porcupine Camp*

*A moonlight view of three buildings of the Porcupine mining camp on Minto Hill, part of the larger Keno Hill just above where the Keno 700 mining camp is today.*

*Schellinger Fonds, Photo 5885  
Courtesy of Yukon Archives*



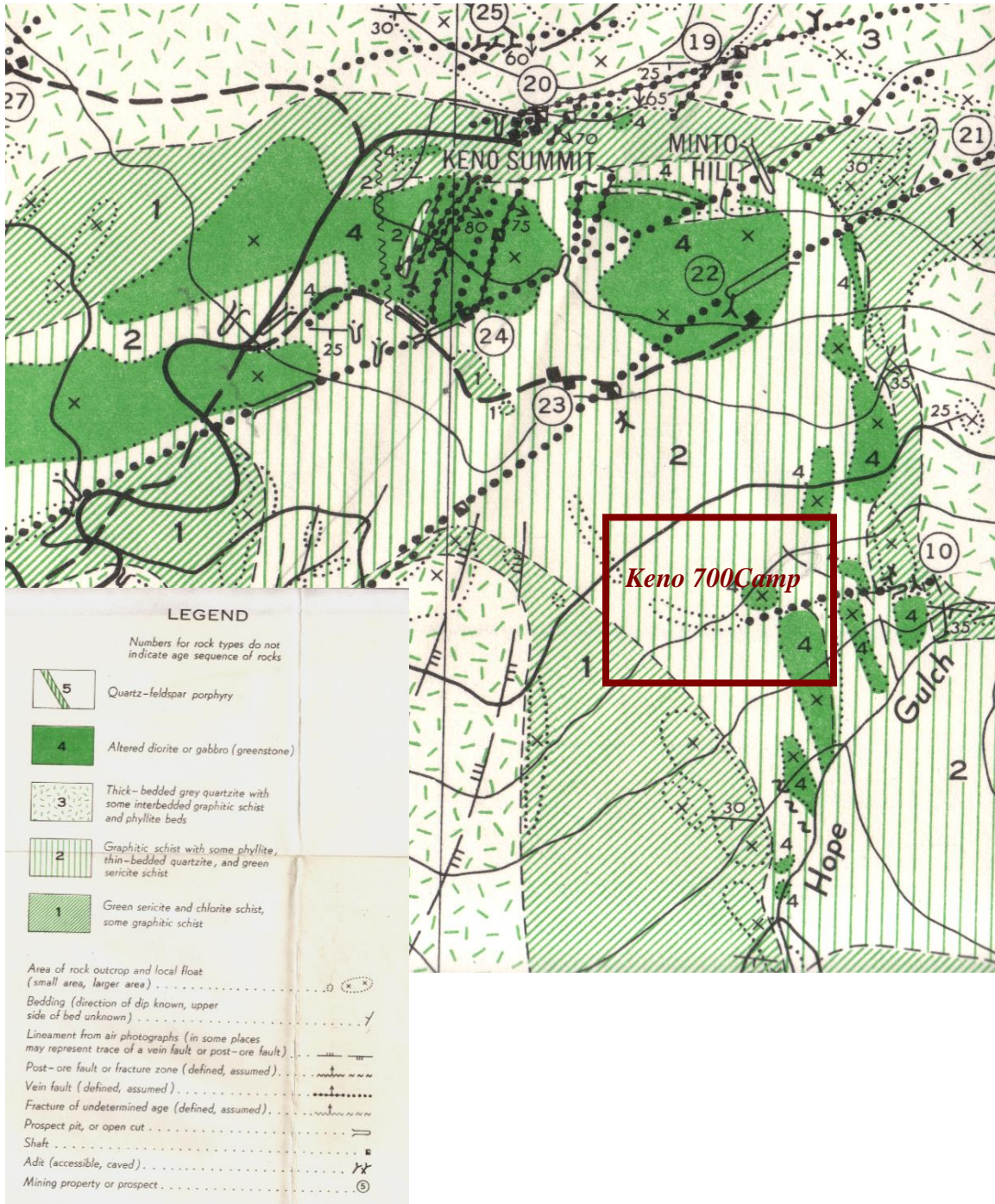
*Porcupine Camp*

*A close up view of one of the mine buildings at the Porcupine camp on Minto Hill. (Shaft house)*

*Schellinger Fonds, Photo 5829  
Courtesy of Yukon Archives*

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Map below shows 22 Comstock Keno, 23 Porcupine and 24 No 6



Geological Survey of Canada Paper 55-30 By R. W. Boyle Ottawa 1956 Part of figure 5

## Review of existing studies, confirmation and/or update of current site conditions

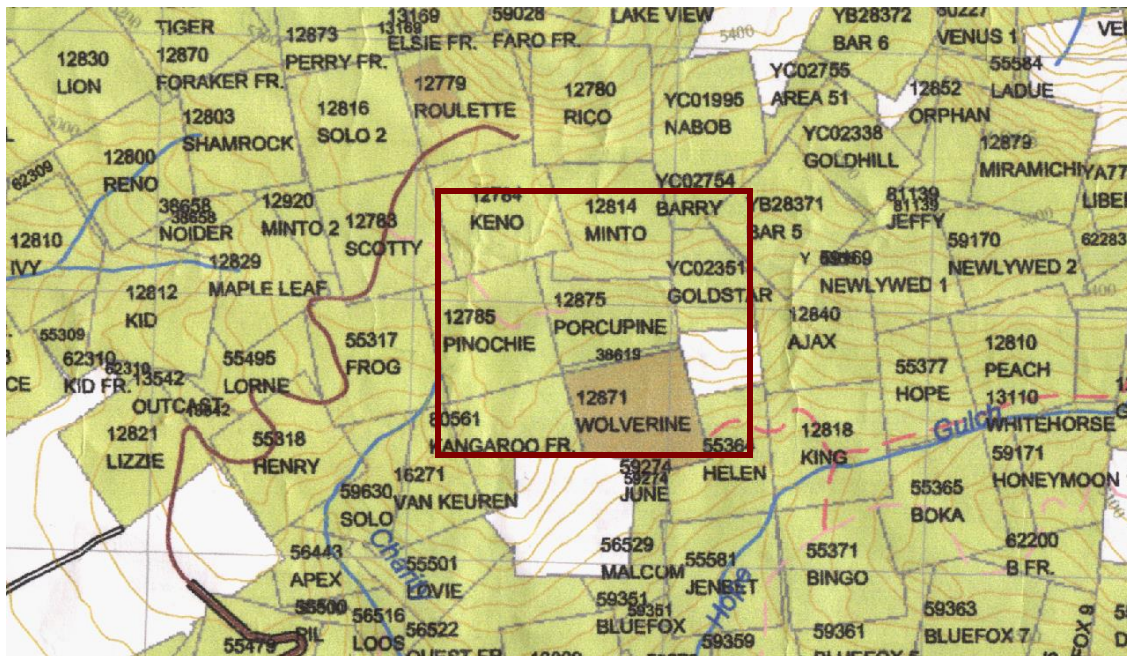
The Keno 700 camp has deteriorated significantly since the baseline assessment in 1999. The west section of the bunkhouse roof is mostly gone along with interior support walls; the building is in a state of collapse. In covering the perimeter of the camp site we found a 2000 gallon flat fuel tank that is placed into the hillside above the boiler house. The tank is almost empty with only 5 to 10 gallons around the discharge valve and possibly the same in the feed line.

The erosion that has taken place since the last inspection has increased significantly due to the freezing and then spring blow out of the Keno 700 adit. The erosion has undermined the maintenance shed and cut the trench in front of the boiler house substantially deeper. There now are large shear drop offs along outer edge of the dump surface.

### Past and Current Site Tenure/ Owners

The Keno 700 Camp is located on the Wolverine claim and was staked in 1919 by Alfred K. Schellinger. Other owners of the claim were Yukon Gold Co, Keno Hill Ltd. Treadwell Yukon Corporation Ltd and transferred to United Keno Hill Mines in 1950.

Currently the site is under receivership by Pricewaterhouse. Alexco Resources Corporation has acquired the rights for exploration and site care and maintenance and is in the process of acquiring a water license.



Keno Hill claims. Part of Mayo district mining claim map No.105-M14 2003

### 700 Transmitter Shack

The location of the transmitter shack is 83 meters south of the end of Keno 200 adit dump and 216 meters east to the edge of the ridge that runs near the top access road to the Keno 700 complex.



The foundation of the transmitter shack is built with 8x8 timbers joined together into a skid assembly so the building could be dragged to its present location or for possible later removal.

The floor joists are 2x6 boards sheeted over with half inch plywood. The walls are constructed with 2x4 studs sheeted on the interior and exterior with three eights plywood.

The shed roof has 2x6 rafters that have been sheeted with one half inch plywood and then covered with corrugated aluminum metal roofing.

The base of the metal triangular transmitter tower is bolted to the north east corner of the building, with another large section of this antenna lying on the ground south of the transmitter shack.

On the interior south east corner asbestos sheeting has been attached to the walls to insulate the electrical equipment from the plywood sheeting; the building is in fair condition with a lot of the plywood being chewed on by the porcupines.

*Keno 200 Portal*

The Keno 200 adit portal is located at an elevation of 1645 meters. The building is a combination of log and frame construction and is in poor condition.



The foundation of the portal is 8x8 beams that have been placed directly on the ground. The east and west wall studs are logs that are 1 meter tall, and have been capped with 4x6 beams.

The portal rafters are 6 to 8 inch round logs that extend from the east and west 1 meter high walls to the actual adit post and beam frame work that extends from the adits underground structure.



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The exterior walls are sheathed with rough 2x8s and the roof sheathed in with 2x6. The roof and walls have then been covered with black tar roofing and strapped with 1x3 boards to hold the roofing in place.





The west end of the portal shed roof has collapsed due to the post and beam adit entrance being in a high degree of decomposition.

In the northeast corner of the portal shed is a frame 1.7 meter partition that was used for the storage of wedges and pipe hangers for underground work.

There is no lock on the door only a metal hook that holds some chain link fence to the door frame, a marker is wedged against the door to keep it closed.

The public can access the portal very easily.





There is a cave in approximately 20 meters behind the adit entrance.

The ground is sloughing into the collapsed adit and is unstable.

The openings are fairly deep and the ground is soft. Due to safety concerns we did not attempt to measure the depth of the hole.



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The rail and trestle extends east from the portal and curves to the south, there is an ore car, metal drums, rail and a metal heater directly over the bank from the portal.



*Keno 150 Adit #2*

The 150 Level Adit has a shed frame portal building, along with a shed frame lunch room addition. The camps water supply was fed from this adit via a pipe box and was filtered at the filtration plant at the boiler house.



The foundation for the adit portal is 8x8 beams placed directly on the ground. The wall studs are 2x6 and the portal roof rafters are two 2x6 planks nailed together for strength.

The exterior walls are sheathed with 2x6 planks; the roof is sheathed with 2x12 boards.



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Black rolled plastic has been spread over the portal shed roof and the small storage shed located in the northwest side of the lunch room.



The timbers have rotted at the entrance to the adit and are collapsing on the south side as it enters the hillside; the adit is full of ice and is slowly melting though will most likely remain frozen year round.

The adit construction is comprised of heavy post and beam and is in a state of collapse.

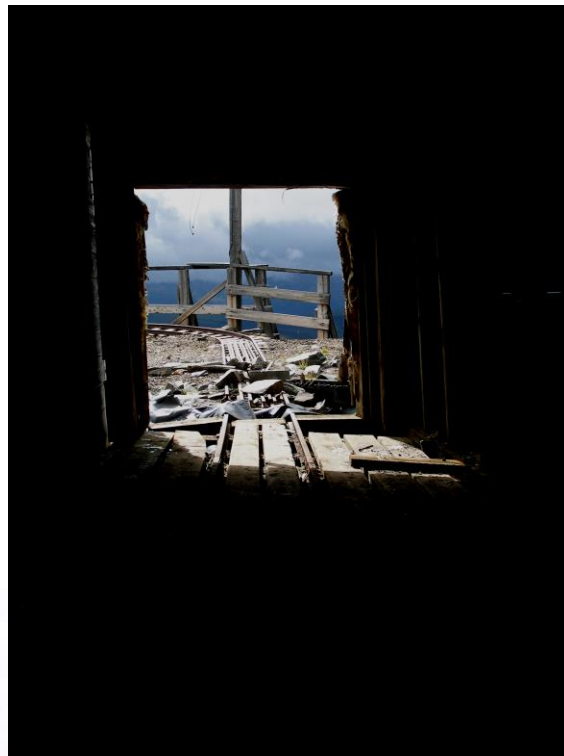


The adjacent lunch room has 2x6 floor joists and sheeted with 2x8 planks. The walls are constructed with 2x4 studs with 1x6 shiplap boards for interior sheeting.



The interior walls and ceiling is sheeted with 1x6 shiplap boards. In the northeast corner of the lunch room is the remnants of the electrical panels and a safety in the roof for an oil or wood heater.

The shed roof has 2x8 rafters covered with black tar paper, 2x8 strapping and corrugated metal roofing. The exterior of the lunch room and storage shed are sheeted with cove siding.



A utility pipe box extends from the adit northward approximately 48 meters then turns at 90 degrees and goes down slope to the main 700 complex where it ties in with the compressor and boiler house. The pipe box is constructed of 1x2 framing with plywood as exterior sheeting; it is carrying one 4 inch pipe and one 2 inch pipe.



The ground along the adit dump is eroding, and the timbers of the adit dump are rotting and are beginning to cave.

There are no locks on either of the doors and the building and adit can be accessed by the public. The lower section of the portal door has been chewed off by porcupines.

*Keno 150 Adit Outhouse#2 A*

The frame outhouse is located 48meters north of Keno 150 adit. The foundation of the outhouse is log timbers that have been placed over flat stacked rocks, the rough cut 4x7 beams have been used for floor joists.



The floor is sheeted with a combination of 2x6 and 2x8 planks.

The wall studs are 2x4s sheeted on the exterior with 1x6 shiplap boards, covered with black tar paper and then clad with corrugated aluminum sheeting.

The outhouse has a shed style roof with rough 2x4 rafters and sheeted with 1x6 shiplap boards a layer of plastic and corrugated aluminum sheeting.

The outhouse is leaning 15 degrees down slope to the east.

2-B Vent Raise



The vent raise building is constructed with 8x8 timber frames, the foundation on the east and south are 8x8s stacked on top of one another until level.

The walls and roof are post and beam construction with an additional 8x8 centered inside the building to support the roof.

The manway is located in the southwest corner of the building.

Both the door and manway are open and can be accessed by the public.

The 8x8 floor joists are sheathed with 4x6 beams. The walls and roof have been sheathed horizontally with heavy 2x8 planks and clad with corrugated aluminum roofing. There are additional 2x6s leaning on the north wall.



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There is 8x8 bracing that extends from the top of the building at a 45 degree angle down into the rock slope. There are three 8x8 on each of these two walls, with the corner braces being sheeted back to the corner of the building with heavy 2x8 planks, adding strength to stabilize the building in high winds.



*Comstock 200 Level Adit*



The adit log post and beam construction extends outward to form the portal frame. Upright posts that act as studs for the portal shed walls and are placed directly on the ground.



The exterior walls are strapped, covered with aluminum backed insulation and sheeted in with 2x10 and 2x8 planks. Exterior is clad with aluminum sheets. This adit is also full of ice and is slowly melting though will most likely remain frozen year round.



The roof is flat and constructed of large log ceiling beams that have been supported in the middle with vertical 8x8 timbers, these ceiling beams have then been sheeted on the exterior with 4x6 planks which extend across the entire flat surface of the portal shed.

There has been an attempt to change the flat roof by placing 8x8 timbers along the west wall and then laying down 2x8 strapping which has then been sheeted in with corrugated aluminum roofing. The exterior is clad with corrugated aluminum as well.

There is a large hinged adit portal access door made of plywood on the east half of the south wall, with a normal size door access located beside. In the interior of the shed in the south west corner are the electrical panels and further on in the northwest corner is the storage bin for wedges and other underground supplies.

The door to the adit has been torn off and remains in pieces in front of the portal.

The pipe box that exits the northeast corner of the portal follows the curvature of the hillside around to the east until it ties in with the main pipe box system from the Keno 700 complex.

*Maintenance Shack and Lunch Room*

There is a maintenance shack and lunch room 9.5 meters to the east of the Portal Shed, this building is frame construction, with the 4x6 floor joists being set up on 8x8 blocking and sheeted in with 2x8 planks. The walls are built with 2x4 studs and are sheeted on the interior and exterior with three eights plywood.



The building is partitioned with a maintenance shed behind the double doors and a lunch room at the back of the building. The rail ends within 1 meter of the partition wall which also holds the electrical panels and switches for the mine adit and shop area.

On the south and west wall of the maintenance shed is two heavily constructed aframes made from 8x8 frame material, these were used to support and lift heavy items for repair. The lunch room entrance is in the south east corner of the building and the same floor and wall materials are used in its interior and exterior construction as the maintenance room.

The gable roof is made with 2x4 trusses and is laid out on two foot centers. Three eights plywood is used to sheet in the interior ceiling and is also used on the exterior roof cover. The buildings roof and walls are sheeted a second time with corrugated aluminum roofing metal. There is asbestos paneling on the north wall of the lunch room were an electric heater used to be.

*Porcupine Adit*

Historically the adit was a part of the workings done prior to the start up of the Keno 700 Camp. The adit has been exposed from the trenching and open pit workings. The adit is located along the south side of the porcupine pit, adjacent to the Comstock 200 road access.



The portal entrance is 1.5 meters wide by 2 meters tall.

The front of the adit is partly boarded shut and there is a 90 gallon fuel drum off to the side of the adit entrance. The access to the adit poses a safety issue.

The adit is constructed with post and beam logs, sheeted on the exterior with rough 2x8 planks.

The ground has been stripped above the adit, and the adit cribbing is exposed for at least 30 meters in length



Continuing west in line with the adit is a shaft opening that was cribbed with round log timbers. The ground the shaft is sloughing.



The porcupine pit has been excavated into the hillside until the bedrock wall has been exposed. This excavation covers a distance of 55 meters with the pit then opening to 70 meters in width.

We estimate the highest point on the back hanging bedrock to be at least 35 meters high.

The upper 700 access road passes within 1.5 meters of this sharp drop into the pit and poses a safety concern.



*Keno 700 Staff Residence B-1*

The building foundation is built upon .4 x .4 meter cement pillars that are placed 1.8 meter apart from east to west and 2.3 meters apart from north to south. On top of these cement pillars 8x8 beams have been placed north to south to form the foundation that supports the 2x6 floor joists.



The floor has then been sheeted diagonally to the floor joists with 1x6 tongue and groove boards.

Pony wall framing around the base of the foundation is made of 2x4s. The exterior of the pony wall are then sheeted with 1 x 6 shiplap boards. The interior of the pony walls are covered with a material called A-foil vapor and insulating barrier.



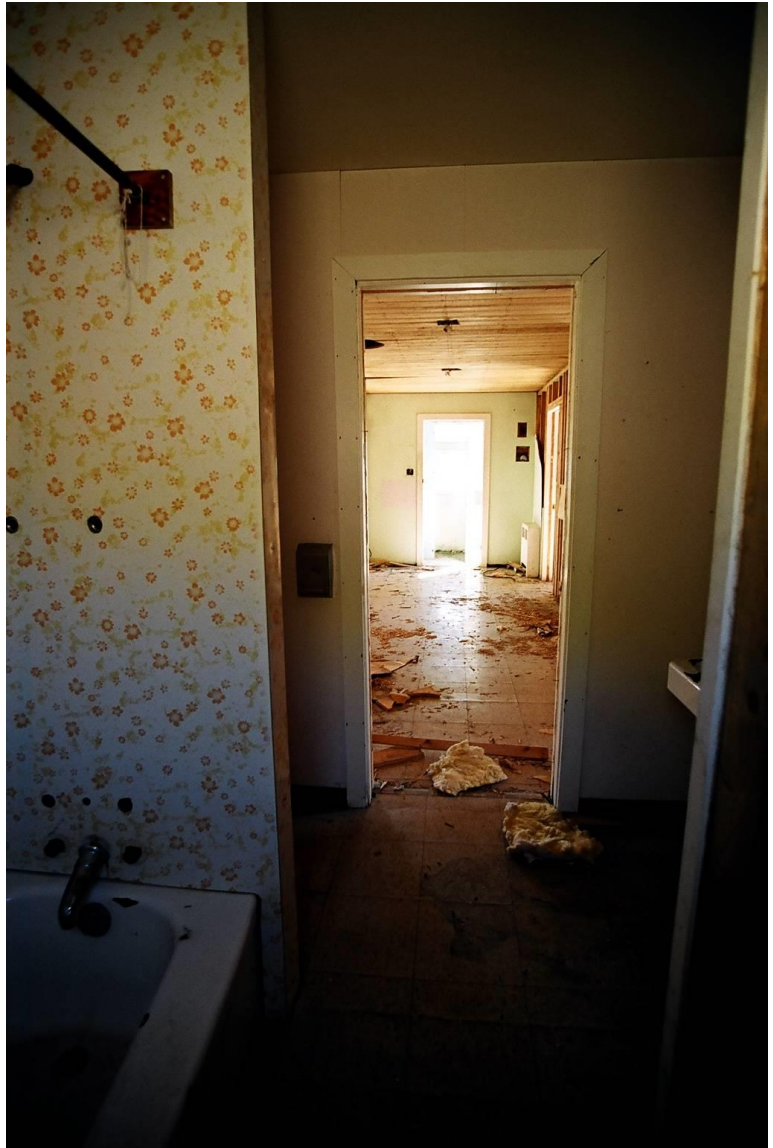
The exterior of the foundation walls are clad with corrugated aluminum roofing, laid horizontally around the base of the building, the rest of the exterior walls are sheeted with white asbestos siding that is so common on the older buildings. The walls are constructed of 2x4 studs with 1x6 shiplap boards as interior and exterior sheeting.

There is thin painted plywood covering the interior walls, the ceiling is also sheeted with 1x6 shiplap boards that are nailed to 2x6 gable roof trusses.

The exterior of the gable roof is sheeted with 1x6 shiplap boards which have then been covered with black rolled paper and finally sheeted with corrugated aluminum roofing.

There is pink fiberglass insulation in the walls and roof.

The interior walls and support walls are being salvaged.



There is a shed located directly off the NW corner of building.

Rock and fine gravel was used as fill between the 2x4 stud walls.

*Keno 700 Bunkhouse B-2*

The bunkhouse is located 11.4 meters to the south of building #1. The foundation of the bunkhouse is built on .3 x.4 meter cement pillars that have been placed 2 meters apart north to south and 4.2 meters apart east to west, the average height of the pillars is 1.3 meters.



There are three main beams that form the foundation that run north to south. These beams have been laminated together by using 2x8 planks, staggered and then spiked together to form the continuous long beam.

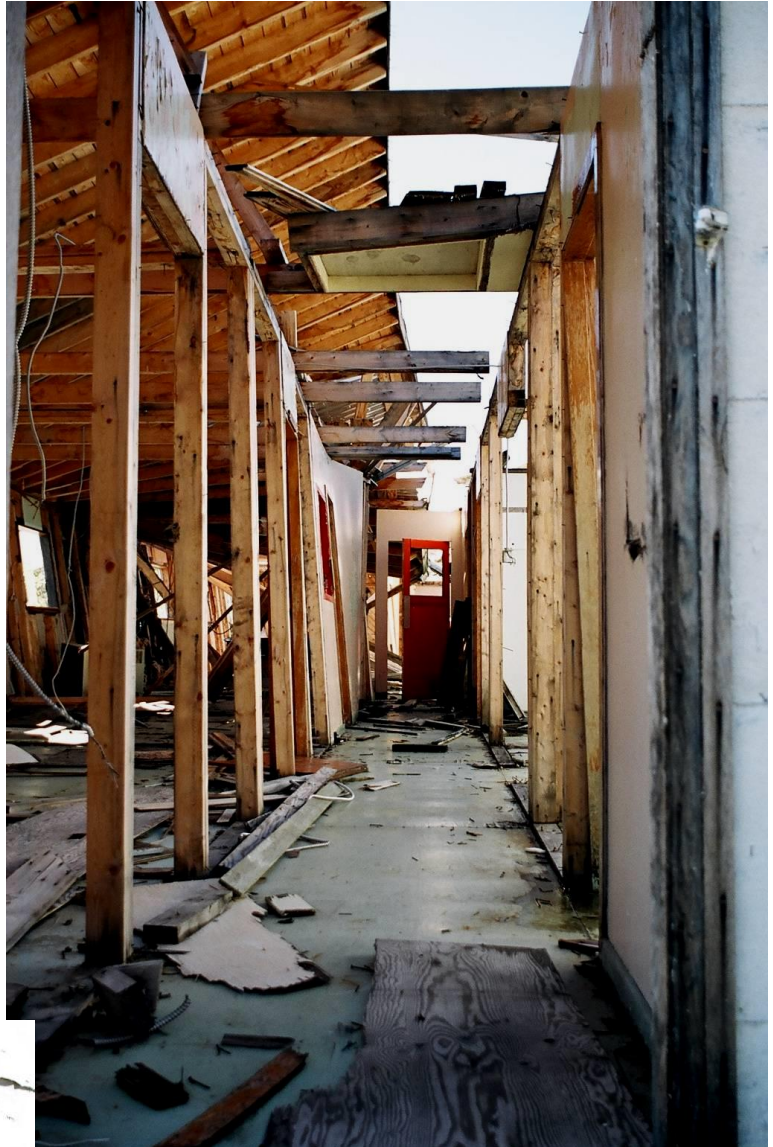


The floor joists are 2x10 planks that span east to west over the long laminated beams. The floor joists are cross braced every two meters, from the center laminated beam down to the base of the east and west pony walls.

The area between the outer walls cement pillars have been framed in using 2x4s and sheeted on the exterior with 1x6 shiplap boards. The interior of the pony walls have been covered with A-Foil paper insulating vapor barrier.

The sub floor for the building consists of 1x6 shiplap boards, which have been sheeted over with half inch plywood.

The walls are all constructed using 2x4 studs that are been sheeted on the exterior diagonally with 1x6 shiplap boards, The walls are then covered with white asbestos shingle siding.



The interior partition walls show evidence that they were at least partly sheeted with three eights plywood. What is left of the gable roof was sheeted on the exterior with 1x6 shiplap board and then covered with corrugated aluminum roofing.

The building is collapsing. The west section of the roof and interior material has been salvaged.

*Keno 700 Commissary B-3*

The foundation of the commissary is 8x8 beam that have been placed directly on the ground, the floor joist are 2x6 that have been sheeted with five eighths plywood and then covered again with one foot square tiles.



The walls are constructed using 2x4 studs, on 16 inch centers. The walls have been insulated with a black fiberglass insulation batting.

The exterior walls are sheeted with 1x8 rough planks, covered with black rolled paper and then sheeted with white asbestos shingle siding.

The interior walls are sheeted with Dona Conda and covered over with one quarter inch plywood.

The gable roof is built with 2x6 trusses on four foot centers. Ceiling joist have been sheeted with Dona Conda and strapped with 1x3 wood strips.

The exterior of the gable roof is sheeted with 1x6 planks covered with green rolled tar roofing.



*Keno 700 Cook House B-4*

The mess hall is 12.8 meters wide by 25.9 meters in length. North to south the building is divided into 3 sections, the mess hall, a preparation area with stoves and cupboards, and an office area and a wash room. There are two wooden additions and a metal cooling or freezing unit also attached to the building.



The frame foundation of the cook shack is on .3x.3 x 1.1 meter tall cement pillars and have four 2x8 planks laminated into beams running north to south. Over these beams 2x8 floor joists are laid.

At this point of my inspection I had to exit the foundation area due to an extremely noxious odor, which made me feel quite sick within only approximately five minutes exposure.



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The floor sheeting consists of five eights plywood that is covered with 1'x 1' square linoleum tiles throughout the main building. Three support walls have been salvaged in the north section along with the material on the interior ceiling and walls.



The walls are constructed using 2x4 studs with 2x6 trusses on two foot centers that extend the full length of the building north to south. The mess hall area is sheathed with press board panels on the walls and ceiling.



The kitchen and office areas are sheeted with ¼' plywood. The exterior of the building is sheeted diagonally with 1x8 shiplap boards, and then covered with white asbestos shingle siding.

Near the middle of the building is a support beam that connects the addition to the main building. The freezer/cooler unit extends off the south wall. There is a room located in the NW corner of the building.



The interior material is consistent throughout the main building.

*Keno 700 Panabode Foundation B-5*

The foundations for the two bunkhouses are located 10 meters south of building #4. The foundations are all that is left of the two buildings and central wash room. The frame foundations are supported on .3x.3 cement pillars that are .6 of a meter tall at the south west end of the building, while the north east corner pillar only reaches a height of 2.3 meters.



There are three rows of cement pillars placed 2.7 meters apart for each bunkhouse and they run east to west. There are two extra cement pillars placed 10.5 meters from the west end of the two bunkhouses. There are two more from the east end of the bunkhouses, these pillars are placed between the two bunkhouses and are the supports for the shared washroom.

Four 2x8 planks are laminated, (by staggering the 2x8) together into a 19.8 meter beam that rests on top of the cement pillars from east to west. This is the base for the 2x8 floor joists that make the foundation for the 2x6 tongue and groove sub floor. One by three tongue and groove fir was then laid across the cedar sub-floor. In the one place where the floor has not been salvaged there is plywood sheeting over the fir floor which is then again sheeted with a third layer of 12 inch by 12 inch linoleum.

Framework for the area between the outside pillars is made with 2x4s that are then sheeted with 1x8 shiplap boards. This is then covered with corrugated aluminum roofing laid horizontally. The hand rail for the boardwalk is still standing along the west side of the foundation wall.

*Board walk Keno 700 complex*



Off the east end of the bunkhouses is a 1.4 meter wide board walk that connects the two bunkhouses to building #4 (mess hall). The board walk then turns to the west and accesses the center of the bunkhouse (B-#2), the boardwalk also continues north along the west wall of the mess hall until it reaches building #3. Here again it turns to the west between building #3 and the north wall of the mess hall and accesses the Staff house,(B#1).

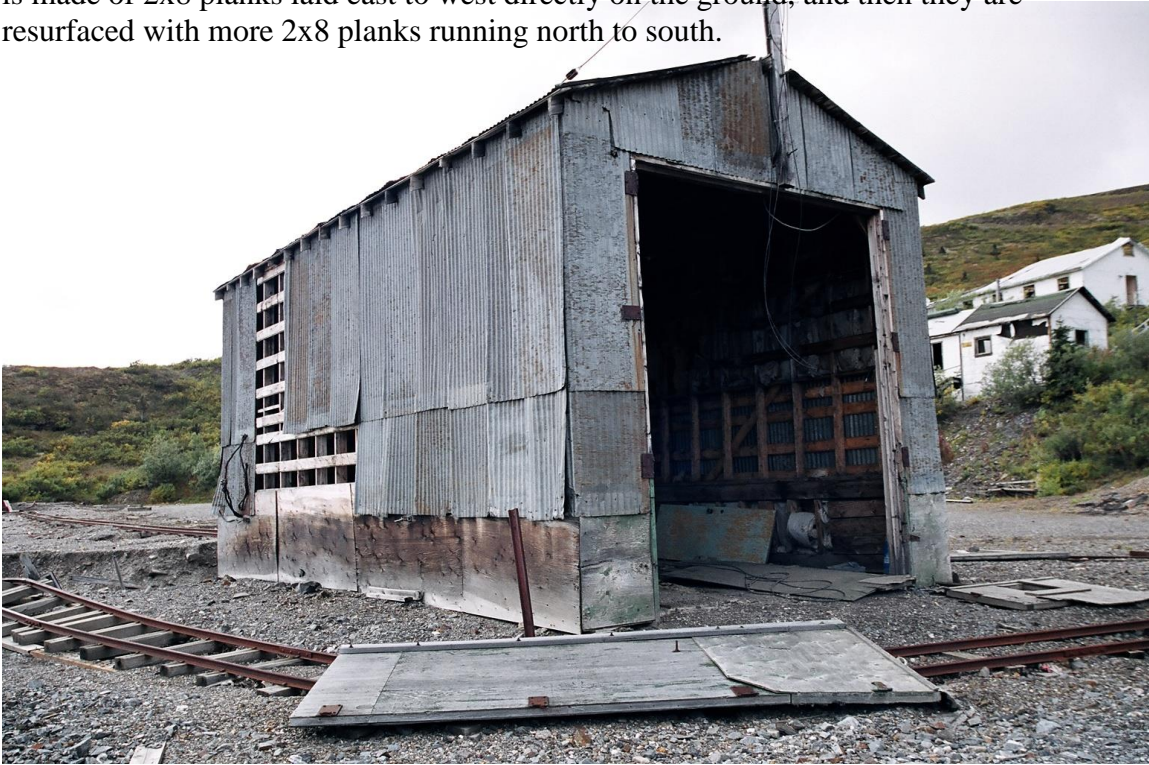


The boardwalks width is 2.9 meters wide by 1.4 meters tall; this boardwalk is basically constructed in a similar fashion as it joins all the buildings at one point or another in the 700 complex.

The boardwalk does not exist after you cross the main access road that runs through the center of the complex. This road divides the living and eating and sleeping facilities from the adit compressor boiler house and mine dry portion of the site.

*Keno 700 Maintenance Shed*

The foundation of this building is 8x8 beams that have been laid on top of round logs timbers. Heavy 8x8 rough .5 meter tall studs are then used to form a sturdy pony wall that extends around the building. This pony wall is capped with more 8x8 timbers. The floor is made of 2x8 planks laid east to west directly on the ground, and then they are resurfaced with more 2x8 planks running north to south.



Solid one meter long 8x8 blocks are stacked up on both east and west walls to almost the height of the ceiling. These are located in the center of the east and west walls and were used for supporting crossbeams that could lift heavy weights with chain hoists.



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There is a second 2x8 pony wall that is built on top of the 8x8 beam foundation that brings the height of the foundation pony wall to 1.2 meters in height. This is externally sheeted with full sheets of one half inch plywood.



From the top of the 2x8 stud pony wall 2x6 studs were then used to finish the walls. These walls were then strapped horizontally with 1x6 and sheeted vertically with corrugated metal roofing material.

Shallow gable trusses were used for the roof, with the ceiling being sheeted in with 1x6 shiplap boards. The exterior of the roof is sheeted with corrugated metal roofing.



The ground has sloughed, leaving the south west corner of the building suspended over the dump bank.

There is a second frame building that has toppled over the edge due to the erosion of the dump edge.

*Keno 700 Adit*

There are a set of stairs 10 meters to the east of building #3. From these stairs it is 23 meters north to the 700 adit Portal building.



The adit portal was locked at the time of inspection, so there is only an external description of the construction. The building is frame construction with three eights plywood sheeting covering the exterior walls. The roof is heavy 2x6 planks laid flat and then sheeted with corrugated metal roofing.

The large pipe box passes on the North West end of the portal building.



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There is a substantial mine discharge that exits under the south east corner of the building and flows through a pipe underground and exits over the bank.

The rail exits the adit and branches off around the east wall of the Maintenance shed, the other section of rail runs along the west wall and along the dump to off load ore or waste rock.

To the right, is a self dumping unit, as the ore car passes the right side of the ore car runs up and tips the load over the edge of the dump.



The dump wall is buckling



*Keno 700 Mine Dry*

The mine dry building is comprised of three sections; the south section has two office rooms and a shifters office. The middle section has a large area for drying clothes and lockers for the miners, with two smaller rooms on the south wall, one being a shower room and another room containing stalls and sinks. The third section to the north was the ambulance shed.



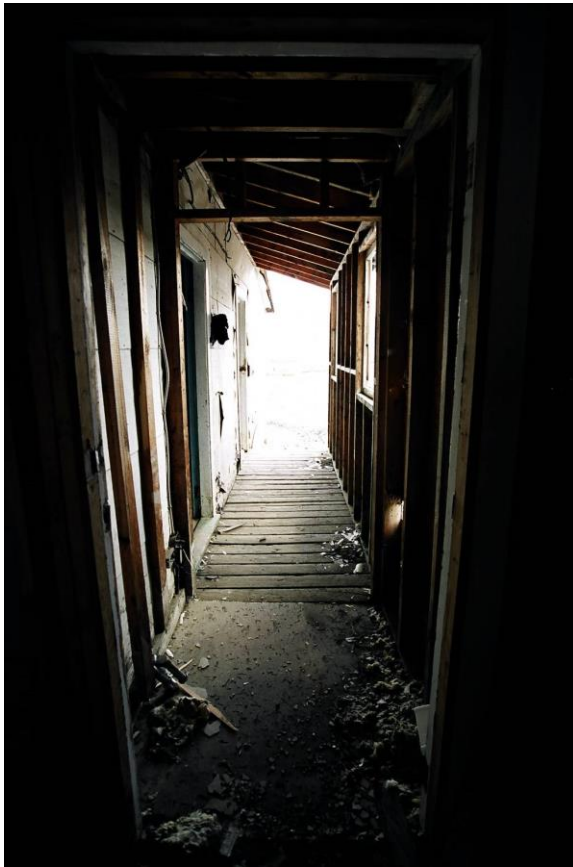
The foundations are 2x6 stud pony walls that have been placed on 8x8 beams that rest directly on the ground.

The floor has 2x6 floor joists sheeted in with 2x6 tongue and groove cedar boards for a sub-floor. The floor in the dry has been sheeted with at least two layers of three eights plywood. The north section of the building was used for the ambulance shed and has a dirt floor. The ambulance shed has 2x4 rafters on 2x6 walls.



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The walls of the building are constructed with 2x6 studs that are sheeted on the interior with three eights plywood. The dry has a gable style roof with a second gable roof joining the south wall of the building, in the opposite direction. This second gable roof addition supported an enclosed porch with a shed roof extending to the south.



The exterior of the building is clad with asbestos shingles. The roofs were covered with black tar paper and corrugated aluminum sheeting.



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Photos are of the interior mine dry,  
shower room, stalls and lockers.



*Keno 700 power plant*

The Power house plant foundation is made of concrete throughout the building. The walls are 2x6 studs that have been sheeted on the exterior with 1x6 shiplap boards. The exterior was then covered with black tar paper and white asbestos shingles. The final exterior covering were sheets of corrugated aluminum roofing running horizontally around the base of the building.



There are two different style roofs covering the compressor and power plant building.

The southern half of the building housed the compressors and a tool room. The building has a heavy shed style roof built with half trusses that are constructed with 2x10s. These are bolted together and crossed braced with 2x6 boards.

The trusses are sheeted with 1x6 shiplap boards, black tar paper and corrugated metal roofing. Material has been salvaged and the 1x6 boards are in an advanced state of decaying.



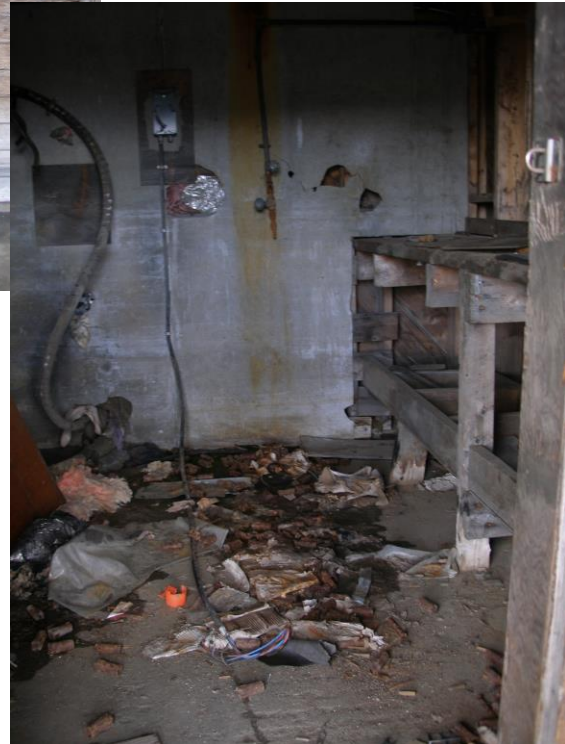
The interior walls are 2x6 studs on 16 inch centers. There are pieces of insulation and interior sheeting scattered around this section of the building, indicating that materials are being salvaged.



There is a small tool room with a roof that was probably used for sharpening drill bits and working on the smaller underground tools.

The tool room has been covered on the interior with ridged 4x8 sheets of asbestos. The exterior of the tool room is sheeted with three eights plywood and 1x6 shiplap boards.

On the south east wall of the compressor house there are four sets of hinged shed style doors that are constructed of 1/2' plywood.



There is a large 1.5 meter wide by approx 4.5 meter tall air receiver tank, which is located 2 meters from the south wall of the Power house, this feeds into the pipe

box system that follows the exterior base of the west wall as it makes its way to the Boiler house.

The roof in the northern half of the building, which housed the generator plants, electrical panels and a workshop area, is a gable roof built with rough 2x6 trusses, 1x6 shiplap boards and corrugated aluminum roofing.

The interior of this section has been sheeted in with one quarter inch plywood on the ceiling and walls with ridged 4 x8 asbestos sheets on the west wall behind the electrical panels. The electrical panels have been surrounded with a high wire mesh fence.



To the north of the panels are a generator and a work area with a bench and cupboards, this work area is covered by a small gable style shed addition that extends to the east.

This addition is used to house the diesel motor that ran the generator unit as there are slated openings and another door on the east wall of this addition. This would allow the control of air flow to the generators cooling system which fills this space completely

North of the generator is another area with a workbench and shelves.



*Machine Sheds #1 and #2*

The foundation for this buildings are two 6x6 beams cross braced with three 6x6 beams from north to south. The East end of the foundation is poorly supported by vertical 4x6 posts; the ground is sloughing under this end of the building.



The floor joists are 2x4 boards that have then been sheeted over with 1x8 shiplap boards. The walls are constructed with 2x4 studs on 16 inch centers, with the exterior of the walls being sheeted over with 3/8 plywood. The interior of the building is strapped horizontally on two foot centers with 1x8 boards.

There is a very shallow gable style roof that rests on a central 8x8 that runs from east to west. The roof is constructed with 2x4s on 16 inch centers running north to south off of these 8x8 rafters. The rafters are strapped using 1x8 boards and sheeted with corrugated metal roofing.



There is a wooden storage rack next to the shed that holds pipe and metal.

Shed #2 has collapsed and sections salvaged. The foundation is 2x4 pony walls that have been sheathed with 1x6 boards and then covered with corrugated aluminum roofing horizontally around the base. It was noted in the Minfile that this was possibly a small office associated with the compressor and generator buildings



The floor has been sheathed in with 1x6 shiplap boards and then sheathed a second time with 1x3 tongue and groove fir laid in the opposite direction.

Walls are 2x4s and it is unknown what style of roof it was. The exterior of the building is covered with white 3/8s plywood.



### *Keno 700 Boiler House*

The main gable roof for the boiler house has two shed style additions added on to it. The first and largest addition extends off the south wall and the second shed addition is built off the east wall. The addition off the east wall houses, the filtration plant for the water supply, while the south shed addition houses a second boiler. The roof is 2x6 rafters covered with 1x6 shiplap and metal roofing



The foundation on the south addition is constructed with 8x8 beams that are running east to west and then cross braced every 1.5 meters with more 8x8s going north to south.

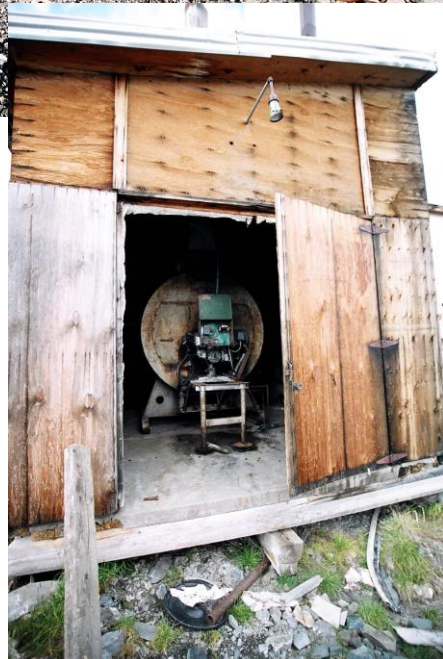
The surface of the foundation was then sheeted over with 3x6 planks, once these were in place they poured a .1 meter thick layer of cement over the whole surface.

The walls are 2x6 studs sheeted with three eights plywood on the interior. The exterior was sheeted diagonally with 1x6 shiplap boards.

There are two hinged plywood shed doors that swing outwards for access to the diesel two pass “Blain” boiler. The boiler is 4meters long by 1.6 meters wide, and is positioned

1.4 meters from the west wall. This wall holds a major portion of the electrical panels, switches and breakers with the interior surface of the wall being sheeted with ridged asbestos paneling.

The foundation floor for the main boiler house and the filtration plant is poured concrete .2 meters thick with one half inch re-bar imbedded in the cement. The walls are constructed using 2x6 studs and sheeted with 3/8s plywood on the interior. On the exterior 1x8 shiplap was nailed diagonally and then covered with white asbestos shingles. Aluminum roofing was nailed horizontally around the bottom exterior of the filtration plant.



We could not tell what dimension of frame material was used to build the trusses that cover the main boiler house because the ceiling was sheeted in completely with plywood paneling.

The filtration plant roof was made with 2x6 rafters; both roofs were sheeted with 1x6 shiplap boards, and then covered with green rolled asphalt roofing.

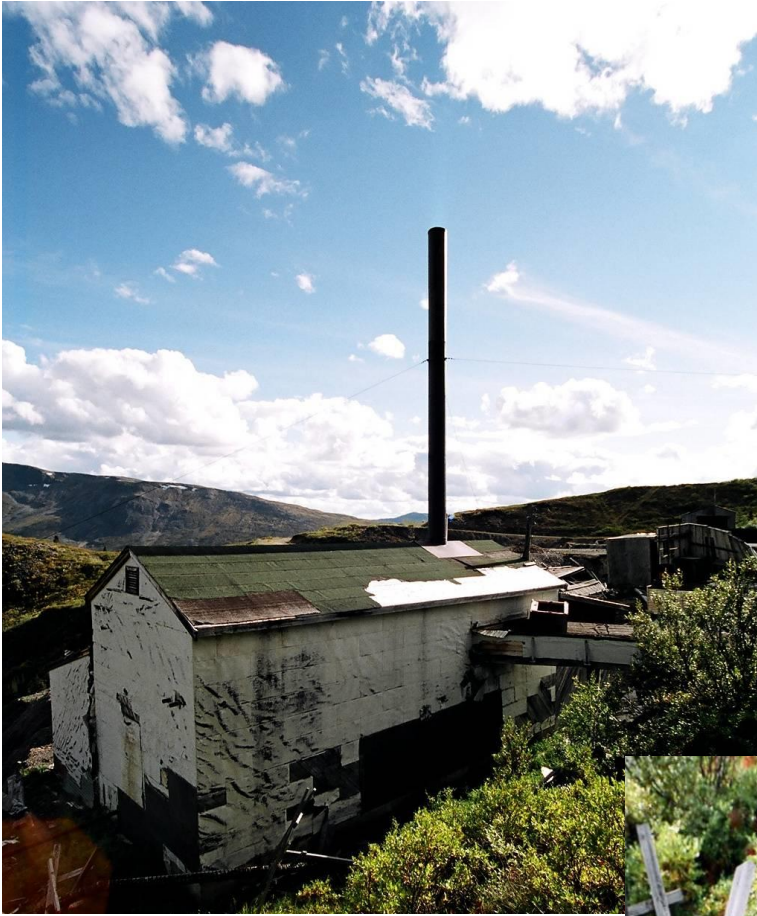


The main pipe box exits the west wall of the main boiler room. This pipe box carries the return condensate lines to the condensate tank that is located in the NW corner of the building. There is also a large water tank located against the north wall.



The east addition housed two metal re-wash filter tanks against the north wall. There is also a large water storage tank against the south and east wall.





The south wall has two large hinged shed doors that swing outwards to allow access to the main water tank and a regular sized door to the left.

Exiting from the main pipe box at the rear of the boiler house was a wood stave sewer line used for the camp.

We traced the sewer line approximately another three hundred meters down slope from the boiler house until it went into a large mound of boulders, piled earth and vegetation.

There is a 2000 gallon fuel tank located directly west of the boiler house with a small amount of old fuel left in the lines that run from the tank down into the boiler house.



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There are remains of an old trestle to the east of the boiler house.



There is a wood and metal sled found by the south wall of the boiler house.  
There are various forged and cut metal around the sheds, cat tracks, rail and metal drums.



## PUBLIC SAFETY/KENO HILL 2007

### Wernecke Site

- Exposed shaft with collapsed shaft house, the ground seriously sloughed into shaft at lower level. Depth of shaft is significant to warrant action.
- Outhouses B6, northeast Wernecke, timbers under outhouse are deteriorated and the ground is sloughing into the vent raise.
- The meat cache/ lookout north of the kitchen is unstable due to decay of floor boards and supporting log structure.
- Building 7 in the northeast section of the Wernecke camp located 68 meters south of mine manager's house has become very unstable due to the degree of salvaging that has taken place.
- Remove batteries from Building # 1 in the south east Section.

### Sadie / Ladue Site

- The main mine dump cribbing has broken in the middle, causing a shear edge that is unstable.

### Lucky Queen Headframe

- Access to the inclined shaft is open along with the area behind the shaft guides.
- The building not secured.

## *Keno 700 Site*

- Keno 200 portal accesses are not secure, with a major section of the roof collapsed in allowing access to the drift.
- There is a major sink-hole 20 meters upslope from the portal building. The sloughed area is 4 meter wide.
- 2-B vent raise; the door is not secured and the manway is open.
- Comstock 200, adit door has been broken off, timbers are rotten.
- A major section of the Keno 700 bunkhouse has been salvaged and is unstable.
- The boards walk on the east side of kitchen B-4 is weakened to the point of collapse.
- While inspecting the foundation for the kitchen, I was over come with a strong noxious odor and had to exit the building foundation area within 5 minutes exposure to this moldy smell..
- Severer erosion along edge of the 700 dump is caused by the spring blow out of the 700 adit. There are shear drops in places that are 8 to 10 meters in depth with the edges becoming very unstable. This erosion is undermining the stability of the maintenance building that is located near the east edge of the dump.
- Asbestos paneling on walls of generator building behind electrical panels and on the walls of the boiler house pose minor concerns as the public salvages materials.

## *Shamrock Site*

- The road that leads to the original Shamrock building site ends at a steep 15 meter deep trench that has steep walls. There is a piece of orange plastic snow fence placed within 2 meters of this ledge, to warn people of its presents. Although this is a good attempt at safety it would be prudent to build an actual waste retaining mound across this opening.

### **Number 3, 9, 6 veins & Porcupine Pit/Adit**

- As you travel from the Comstock 150 level down the side of the hillside, the road passes above the Porcupine pit for approximately 200 meters, there is a 10 meter section of the road allowance that is being eroded by the sloughing of the shear banks on the high eastern back wall of the pit. This at some point will need to be addressed as there is a 50 meter drop to the pit floor.
- The porcupine adit entrance is partly open, allowing relatively easy access, and as the timbers have weakened the portal entrance will need attention.
- The exposed shaft located in the Porcupine Pit is open, causing a safety concern.
- The trenches on vein pits 6, 3, & 9 that are located just past the public viewing area and monument are exceedingly deep with exposed workings and sink holes along the open vein age system.

### **Black Cap/ Shepherd and Lucky Queen Adit 500 Level**

- The Lucky Queen adit has collapsed five meters into the adit, the front section is accessible and becoming unstable.
- Battery acid has leached into the ground from the burnt compressors at the entrance to Black Cap Pit.

## References

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Gold and Galena  
*Mayo Historical Society*

Heart of the Yukon  
*Lynette Bleiler-Christopher Burn-Mark O'Donoghue*

Dr. Aro Aho's  
*Manuscript Notes on Keno Hill*  
And  
*Hills of Silver*

Geological Survey of Canada Field Reports  
*Paper 55-30 by R. W. Boyle Ottawa 1956*

Mayo Mining Recorder  
*Mayo Mining Abstract of Records*

Keno Valley/ Dublin Gulch  
*Environmental Baseline Assessment*  
March 2000

Yukon Archives  
*Cooper-Carr collection*  
*Schellinger Fonds*  
*Bill Hare Fonds*

Yukon Minfile  
2003