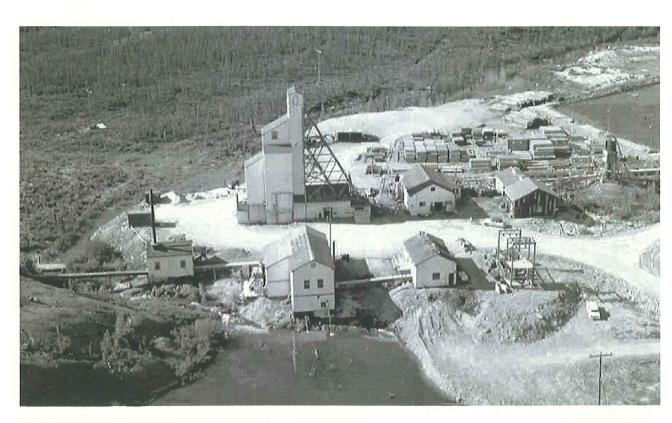
# Report on Minesites in the Yellowknife Region

## by RYAN SILKE



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#### **Editors Note:**

It is not often in this day and age that young people take the opportunity to follow their passion. I would like to congratulate the author, a Yellowknife high school student with a love of local mining flavour and history on this fine research work. Ryan has single-handedly brought the Yellowknife area mine sites and their rich history back into the lime light they deserve so that they may be enjoyed and preserved for generations to come.

Please note that the intention of this paper is not to report exact production numbers and dates, but to outline general mining trends. Much of the information is drawn from unofficial sources such as local papers or is even hearsay from local "old timers." In some cases tonnages will be reported as tons whether they are short tons or metric tonnes, and dates will be approximate. Despite the relaxed format of this paper, however, it is a gold mine of information.

The author and his associates would like to remind readers that abandoned minesites can be extremely dangerous to visit due to the presence of dilapidated structures, open ground, and hazardous materials. Extreme caution must be utilised when visiting these sites.

This document can be viewed at <a href="http://www.geocities.com/baja/outback/5223">http://www.geocities.com/baja/outback/5223</a>

Joe Heimbach Archives Geologist DIAND Yellowknife

# Report on Minesites in the Yellowknife Region

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Front cover photo: Giant Mine B-shaft area 1950's, NWT Archives photo N-1979-052-1925

#### Introduction

For the past 70 years mining has been the heart of Yellowknife. Since long before World War II mineral development has been the backbone of the NWT economy. In the 1930's, an incredible gold boom in the Great Slave Lake region spawned many mines. The Burwash Mine was staked in 1934, and developed during 1935-1936. These years saw the first flood of activity on Yellowknife Bay, where the Giant, Negus, and Akaitcho properties were staked. Geological Survey of Canada (GSC) discoveries at Yellowknife in 1935 went on to spark the discovery of Con. Thompson-Lundmark, and Camlaren Mines, as well as the staking of many other undeveloped areas. The second boom occurred after Giant mine was discovered as being underlain by a massive series of shear zones around 1944, which boosted the mineral potential for the Yellowknife region. This boom was further driven by the end of World War II, which had hampered prospecting and mining endeavors in the north for several years. The result was a staking rush, along with the development of several previously staked properties. In efforts to harvest valuable minerals such as gold, tungsten or silver, the land was stripped, the earth hollowed, and camps erected....all in the name of mining. Eventually, as the last ton of ore was milled, or the last dollar of investors money was spent, these mines would shut down. But these mines even today are causing quite a boom; a tourist boom! They may no longer have economic ore reserves, but they do have potential for historic interest. Nothing is more appealing to an explorer than a 50 year old mine.

This report was originally planned to be a detailed investigation into these "Abandoned Minesites of the Yellowknife Region". It came as a surprise that no publications dealt with this subject in detail, therefore, it was felt that a paper dealing with the abandoned mines was long overdue and should be written. This task, which was envisioned only months prior to the write-up of this paper, proved impossible to master at the time. Instead, it was chosen to produce a simple historic report on these mines. Many months were spent researching and getting valuable information to produce a simple informative paper summarizing data from numerous sources. Not only are the abandoned mines documented, but those mines which are in operation today, for example the Con and Giant Mines in Yellowknife. In this report you will find historic data, development information, mine production numbers and the outcome of each mine. Also, a small paragraph dealing with the present condition of each abandoned mine-site is included. This information is not usually first-hand for those mines located away from - Yellowknife, but is derived from the most recent "Environmental Assessments Reports on Abandoned Mines" done by various engineering firms.

One question must be answered when dealing with mines. What defines a mine? From doing this report, I have come to realize that there are many different stages of development defined as mining. What does it take to constitute a mine? First, you need mineral extraction. Methods for this are plentiful, but the most common means for extracting mineral deposits from the ground is via a shaft, an open pit, or a trench. A mine also requires the production of ore, and it's refinement into a valuable commodity. Large mines will have huge mills, but smaller sites may only have small, or temporary mills. Some mining sites do not have their own mill, and ore is sent off to another site for milling. Does this fact make it any less of a mine? When one thinks of a mine, they see tall head frames, smoke filtering from a huge greasy mill, large open pits and dump trucks full of rock barreling about. A full production mine is what they see. The Yellowknife Region has seen only about 7 "Full Production" mines in the last 50 years, along with a dozen other fair sized mines. What about the score of smaller sites? These are still

considered mines, at least to some. Most sites have only extracted a small bulk sample of ore which was sent it off for refining. This sounds more like exploration than mining, which is true, but for the sake of this report, these mine sites will be considered to be mines. For the sake of this report a mine requires extraction and production. As well, all mines listed in this report have had underground development conducted. This accounts for those sites which were in the development stage of exploration. These are labeled as Past Prospects. Most other sites would have merited themselves as mines through the use of a mill on the property. As soon as underground development started, for the sake of this report, mine operation has begun.

Since it's beginnings, the main purpose of this paper was to write up the histories of the various mining camps, some of which are still in place today. Through it's creation, and during research, it has been necessary to correct the methods of designating these mines. Currently my methods seem sound, but to others they may not seem totally accurate. In this report, the mine is abandoned when the mining and milling operations and camp inhabitation stop, but in some cases operations continue through exploration for many years.

Nevertheless, I hope that this report will give a good impression on how diverse and important mining is in the Yellowknife Region, and the historical aspects that accompany it.

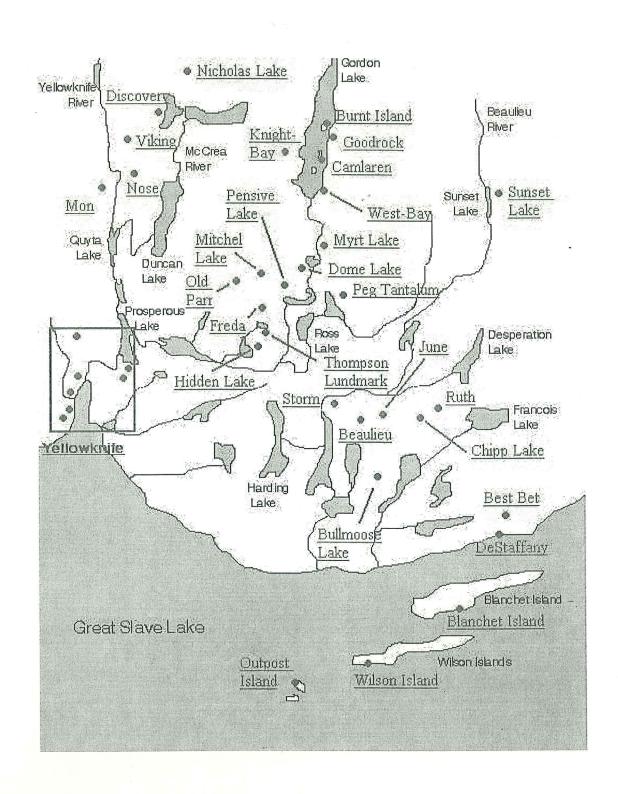
I hope to soon complete my work on "Investigations of Abandoned Mines" within the next period of time, which will hopefully cover most of the sites listed in this report. This work is already underway as of the summer of 1999.

#### Minesites in the Yellowknife Region

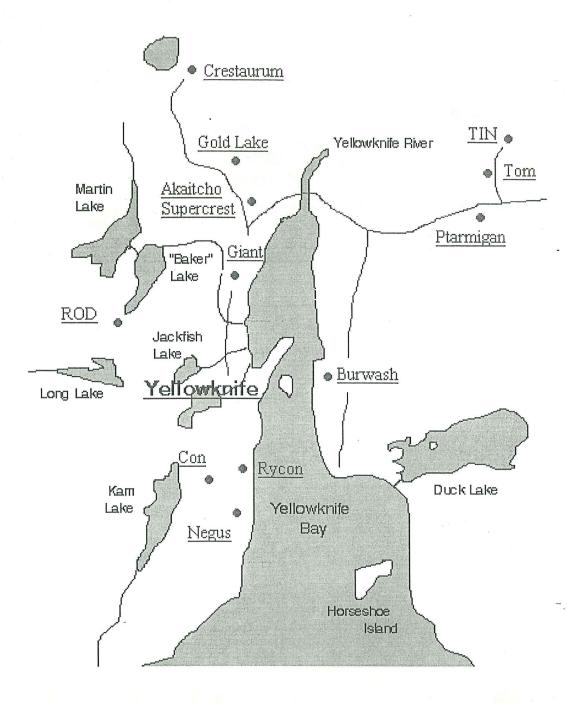
The boundary of the Yellowknife Region envisioned for this report is as follows. It includes locations directly east of the city of Yellowknife for about 120 kilometers spanning a semicircle extending to the south as far as the Outpost Islands and to the north beyond Discovery Mine. It is bordered on the west by Yellowknife's city limits. This area comprises of about 17,000 sq kilometers, a relatively small area. However, scattered throughout the area are many mining locations. Many of these sites are not distinctive, but about 20 of them have been marked on maps and been spoken of enough to be well known. The majority of these sites have not been in operation in over 40-50 years, and are abandoned. The operational mines, such as the Giant and Con mines, are well known.

The Geology of the Yellowknife Area leads to the mining booms. This area of land is located in the Yellowknife Group of the Archean Age rocks. Most of the east side of Yellowknife Bay is located on what is known as the Burwash Formation which extends all the way to Gordon Lake. On the west of Yellowknife Bay is the Yellowknife Archean Supercrustual Belt, which houses many formations, such as the Banting or Kam groups. The upper portions of the Beaulieu River near Sunset Lake is called the Bealieu River Volcanic Belt. Several smaller formations make up the properties located along the shores of Great Slave Lake. Intruded in the rock-faces are many ore-bodies hosted in shear zones and veins or dykes and sills. The main product of mining around Yellowknife is gold. Other operations throughout the region have produced a steady tungsten concentrate, which is heavily associated with the same ore that the gold is in. Special industrial and technological materials such as tantalum or beryl have also been mined by a few mines near Yellowknife. There are many different mines, and many different parts in history.

On the following pages are entries for most of the known mine sites in the Yellowknife Region.



Regional Map of Yellowknife Area Mines



Local Map of Yellowknife Area Mines

# **Operating and Non-Operating Mine Sites**

| Con Mine        | High tonnage gold producer from 1938 to the present at Yellowknife, except for a two year shutdown during World War II and a 1998 strike. The only operating mine in Yellowknife today. |
|-----------------|---|
| Dome Lake       | Prospect Operation during the 1980's and 1990's   |
|                 | High tonnage gold producer from 1948 to 1999 at Yellowknife that is now shutdown  |
| Knight Bay      | Underground prospect operation for gold during the 1980's   |
| Mon Mine        | Small tonnage gold producer during the 1990's; currently shut-down  |
| Myrt Lake       | Underground prospect operation in the 1970's and 1980's   |
| Ptarmigan Mine  | Producer of gold in 1941 and 1942, and again from 1988 to 1997 before being shut-down   |
| Supercrest Mine | Extension of Giant Mine property that is being actively mined and produced by Giant, from the 1960's to the 1990's. Now shutdown with the closure of Giant.                             |
| Tom Mine        | Small underground operator, as an extension of the Ptarmigan Mine during the 1980's and 1990's  |

#### **Operational/Non-Operational Mine Sites**

Operating Mines are those sites which are currently undergoing development and production. Non-Operating Mines are those which have been temporarily closed down and put on care and maintenance, sometimes due to a worker's strike, operation problems, financial problems or economic reasons. The Non-Operating sites have not been abandoned, and have the possibility of re-opening at a latter date.

The layout of the pages on Operating/Non-Operating Mine Sites is as follows.

#### Name of Mine

| Company<br>Name(s)  | Designation   | Production<br>Years                        | Also<br>Known<br>As  | Location  | Coordinates                                |
|---|---|--|--|---|--|
| Companies that had owned and operated in the mine, and the year | Current<br>development<br>designation<br>(Producer, Past<br>producer,<br>Operator, Past<br>Operator,<br>Prospect, Past<br>prospect) | The time of mine production, if applicable | Some mine sites have adopted other names, and the ones known by me are listed here | The location of the site in kilometers from Yellowknife, and in the vicinity of major water bodies, other mines. etc. | Latitude-Longitude coordinates of the mine |

Usually a map of the mine site is displayed at this spot, where avaliable. Usually from a Topographical map.

Geology: A brief article on the geology of the area that the mine is situated on.

History and Development: History of staking and current development of the mine site.

Mine Production: Information dealing with details of mine production at the site.

Town Life: Some of these mines have built small town sites on the properties.

The Outlook: A look into the future of this mine..

Notes: General notes, explaining certain points.

#### Con Mine (Operational)

| Company Name(s)   | Designation | Production<br>Years     | Location  | Coordinates                             |
|---|-------------|-------------------------|---|---|
| The Consolidated Mining and Smelting Company of Canada 1938 (Cominco Mines Ltd.), Nerco Minerals Inc. 1986, Miramar Mining Corporation 1993 | Producer    | 1938-1943,<br>1946-1999 | West shore of<br>Yellowknife Bay,<br>east of Kam Lake | LAT 62* 26' 22"<br>LONG 114* 22'<br>08" |



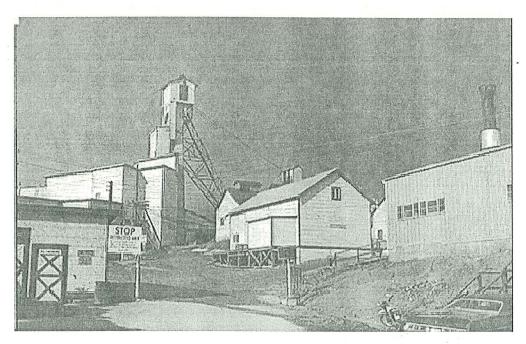
Map of Con mine, Rycon mine and Negus mine sites. Circled areas are shafts. When this map was photographed in 1985 Negus and Rycon were no longer in operation and some buildings had already been removed. Con mine has two shafts on site. The shaft closest to Yellowknife on the top is the C-1 shaft, and the lower is the Robertson shaft, sunk in 1978.

A photograph of the headframes are below. (NTS 85 J/8)

**Geology**: The Con mine is situated in the Kam Formation of the Yellowknife Supergroup. The formation comprises a series of volcanic, sedimentary and intrusive rocks that have been metamorphosed. These are among the oldest of the Yellowknife Supergroup. The thickness of the Kam Formation is at an estimated 7500-9000 meters, however the true thickness is not known as it is intruded by the Western Granodiorite and is not completely exposed (NMI).

At Con, most of the mining activity in the last 40 years has come from the Campbell Shear zone, which was discovered by N. Campbell in 1944. The Campbell Shear Zone lies along the west shore of Yellowknife Bay. Early production at Con came from the Con and Rycon-Negus Shear Zones, which yielded low potential after 10 years. The gold in the quartz is confined to these very large continuous structures which cut cross Archean basalts. These gold formations have been subjected to many episodes of deformation over the last thousand years. Since production began, these shear zones have produced more than 4 million ounces of gold from 7 million tons of ore (NMI).

**History and Development**: Soon after N. Jennejohn's discovery of gold near Stock Lake (now referred to as Jackfish Lake), the Consolidated Mining and Smelting Company of Canada moved their prospectors in from the Walsh Lake area to Yellowknife Bay to stake claims. In early October 1935 D. McCrea, J. Russell and M. Finland staked 14 claims called the CON claims. In late 1936, Consolidated set up plans to quickly install a 100 ton/day mill on Con property. In 1937, the C-1 (3-compartment) shaft was sunk to 235 feet adjacent to a 50-foot inclined prospect shaft that had been sunk a year earlier. On September 5, 1938, Con Mine became the first major gold producer in the NWT. (Lord, 1941) By 1942, the C-1 shaft was 1,463 feet deep and the headframe had been upgraded to serve the deeper shaft. Although milling was discontinued, underground developments continued during the remainder of World War II. At this time, reserves in the Con Shear system were estimated at 251,970 tons (Lord, 1951).



Con Mine, 1970's. (Miramar Con Mine photo)

After the discovery of Giant Shear Zone systems in 1944, Con hired N. Campbell to research the geology of their property. Campbell speculated the existence of a much larger and substancial shear zone which was a faulted extension of the shear systems at Giant property. This theory was proved to be correct as a drift was extended on the 2,300-foot level easterly towards the shear zone which was intersected in October 1948. By this time, Con was already back in production, but this discovery meant a longer life for not only Con Mine, but for the Negus and Rycon mines (Lord, 1951). To assist in exploration of the shear system, a vertical (B-3) winze was developed on the 2,300 foot level and sunk to the 2,800-foot level. The Campbell Shear Zone was being actively mined by 1956 with drifts from Con Mine, along with Negus mine which Cominco now controlled. The cost of purchasing the Negus ground cost Consolidated Mining and Smelting \$77,881 (CM&S; Mine property Report, Con Mine 1954). By 1958, full attention was on this shear system, as the Con Shear zone was almost mined out. In 1959, Cominco extended a drift towards the NKANA area which they purchased and in 1964, Vol Mines Ltd. was formed by Cominco and Conwest Exploration Company (the previous owners of the group). The B-3 winze was advanced to the 4,900-foot level by 1966 and developed with 14 levels. The YELLOREX claims were also purchased by Cominco in 1967 who began a drive from the 2,300-foot level to find an extension of the Campbell Shear Zone. In 1971, Cominco began plans for a second (C-2) winze, collared at the 4,900-foot level

directly under the B-3 shaft which would access further depths of the Campbell Shear Zone (NMI).

During this time, the mine was in threat of closing down due to high operation costs, which were mainly focused on the transportation of mined material. The problem was that ore had to be hoisted three times and trammed two times in order to get to the mill. In 1978 the Robertson shaft was sunk in order to eleviate this problem. It was also developed to gain access to further ore reserves below the 4,500-foot level. This improved the efficiency of the mill which increased it's capacity from 450 to 650 tons/day. Early in the 1980's, a water treatment and an arsenic plant were commissioned, the result of political and environmental issues concerning mine waste. In 1986, Nerco Minerals Inc. bought the Con property, and operated the mine for six years and investing \$135 million into capital improvements and reserve development (NMI). By the mid 1980's, the Robertson shaft was 6,235 feet deep, and reserves were calculated at 1,700,000 tons at 0.42 oz/ton. The old C-1 head frame was torn down in 1988, and a newer head frame was erected by 1989. C-1 shaft and B3 winze were rehabilitated in order to commence mining on the upper levels of the Campbell Shear Zone. Mining during this time was mainly from the 3900 and 5500-foot levels. The C-1 shaft was decommissioned in October of 1992, due to the lack of ore in the C-1 vicinity and because ore could be mined via the Rob Shaft at lower costs. An autoclave was also installed at the Con Mine in 1992 to process refractory ore from the upper levels of the Campbell shear and to re-process arsenic rich roaster by-products. Approximately 27,000 tonnes of concentrates, calcines and arsenic sludge can be processed through the autoclave per year. In October of 1993, Con mine was sold to the Miramar Mining Corporation, who changed it from a junior resource mine to a fair sized Canadian gold producer. Operation cut-backs at the mine improved production. Operation costs were down to US\$293 an ounce/gold from US\$335 an ounce/gold by 1994. The low prices and strike actions by workers forced the mine shutdown in early 1998. These strike issues were resolved a year later, and operations continue (NWT Exploration Overview, 1989-1998, DIAND annual reports).

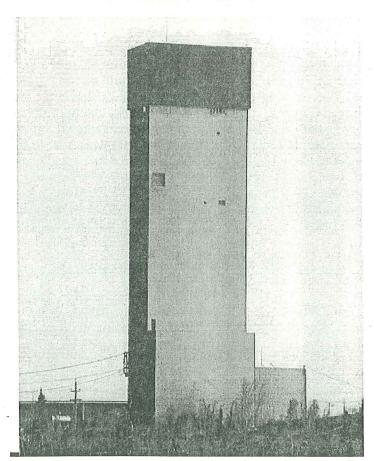
| Years     | Tons Milled        | Gold Recovery    | Silver Recovery        |
|-----------|--------------------|------------------|------------------------|
| 1938-1943 | 286,251 tons/ore   | 181,686 ounces   | 44,051 ounces          |
| 1946-1986 | 6,700,908 tons/ore | 3,749,152 ounces | 750,000 ounces (approx |
| 1986-1998 | 3,884,908 tons/ore | 1,316,248 ounces | 250,000 ounces (approx |

| Rycon Producti  | on Levels 1939-1958 | Vol Production | 1 Levels 1964-1967 |
|-----------------|---------------------|----------------|--------------------|
| Tons Milled     | Gold Recovery       | Tons Milled    | Gold Recovery      |
| +816,480 tons/c | ore n/a             | 21,961 tons/or | e 10,119 ounces    |

Mine Production: In August of 1938, the Con Mine, being the first major gold mine in the NWT started production of ore retrieved from the Con Shear Zone. The first brick was poured on September 5. A year later, the Rycon mine site delivered its first ore to the Con Mine mill, and production reports from Rycon are above. By March of 1942, the mill had been enlarged to process 350 tons/day, and a roaster was added to treat sulphide ores. Wartime restrictions prevented the full usage of the enlarged milling plant, and the roaster was only operational from April to November of 1942. Milling operations stopped in September of 1943, due to labour shortages and other conditions of World War II. From 1938-1943, the mine milled 286,251 tons

of ore yielding a recovery of \$6,957,331 worth of gold and silver (Lord, 1951).

Production resumed on August 20 1946, and 2 years later, the Campbell Shear System was discovered. From 1956 onward, these orebodies were the basis of Con production. Production from the Vol area began in 1964 and ore was milled at the Con Mine. Production numbers are included in the tables (NMI). The roaster, which reopened in 1948, shut down in 1970 when arsenical ore were depleted. The Arsenic plant was installed soon after to treat stockpiled arsenic rich materials. Mill capacity was increased during 1993-1997 to 1,200 tons/day to make up for lost income due to low gold prices. The mill was shutdown for a year during 1998-1999 due to strike action by the unionized employees, but is expected to be treating ore again by the summer of 1999. Silver content in a gold bar averaged about 20%, so numbers for silver quantities may be off and are rounded off in the above table for the years 1946-1998 (NWT Exploration Overview, 1982-1998, DIAND annual reports).



Photograph of Robertson headframe on Con property in the 1990's. This shaft was first developed in 1978 to facilitate further exploration of the Campbell Shear Zone. (Miramar Con Mine photo)

**Town Life**: The Con Townsite/camp is constructed on the shore of Yellowknife Bay across from Mosher Island, and is about a kilometer distance to the Con Mine. During the 1940's, this camp sprung up to include over 30 buildings. Facilities included a recreation hall/bowling lane/curling rink, a 12-ward hospital, 3-apartments, 4-bunkhouses, a cookhouse/mess hall, offices, staff housings, a theatre and many houses (photo evidence). The Con Mine boiler house was also located here on the shore. During the winter, a hockey rink was constructed on the ice, and hockey teams from the mines competed for many years. The Rycon townsite was located

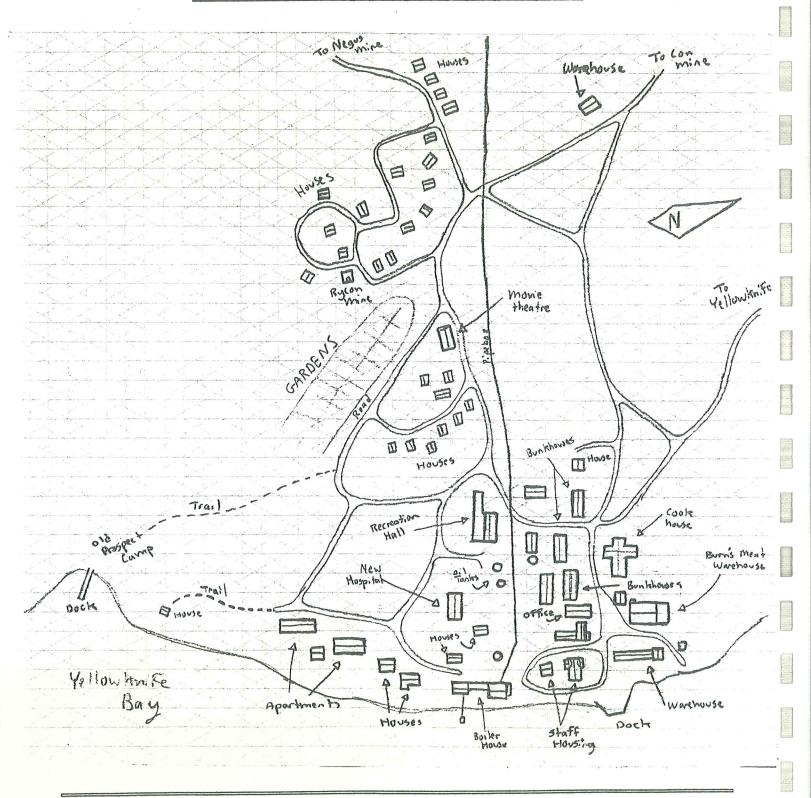
halfway between Con Camp and Con Mine. A few houses were built here alongside the small Rycon headframe and shaft.

Today, most of the old houses have been removed and the majority of Con residents live in a trailer park. Buildings such as the Rec-Hall, and the apartments are still in use today. Other buildings that have not been removed are used for storage space.

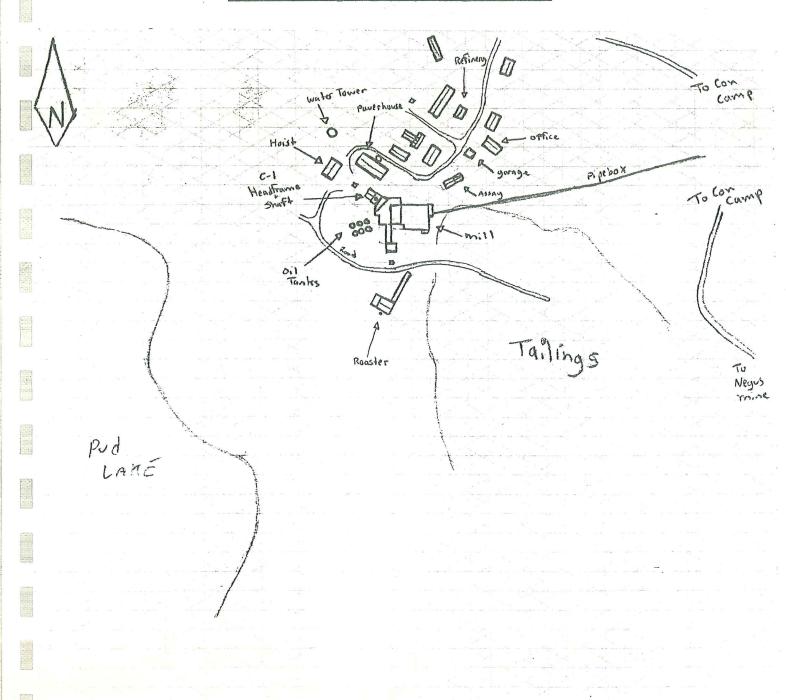
The Outlook: Con Mine, over its 60 years of production, has greatly enhanced Yellowknife's economy and image as a mining community. The mine has produced an overall of 5.4 million ounces of gold since it opened in 1938. Geology suggests that there is no up-to-date evidence of cut-off to gold mineralization at depth. This means that Con mine will continue to produce gold at further depths provided profitability in operations. Ore reserves were calculated in 1998 at about 2.5 million tons of ore grading 0.33 ounces/ton, with an inventory of 1.6 million ounces of gold (NWT Exploration Overview, DIAND Report, 1998). Further exploration programs have suffered cutbacks by Miramar Mining due to low gold prices.

**Notes**: In the 1950's, The Consolidated Mining and Smelting Company of Canada changed it's name to Cominco Mines LTD.

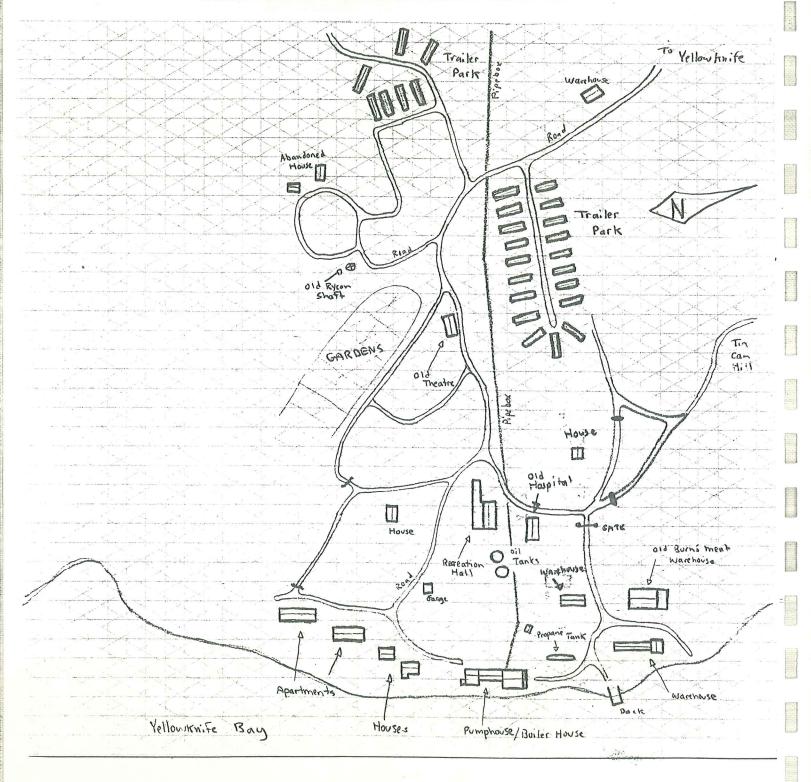
#### Con Mine Camp property map, 1940's



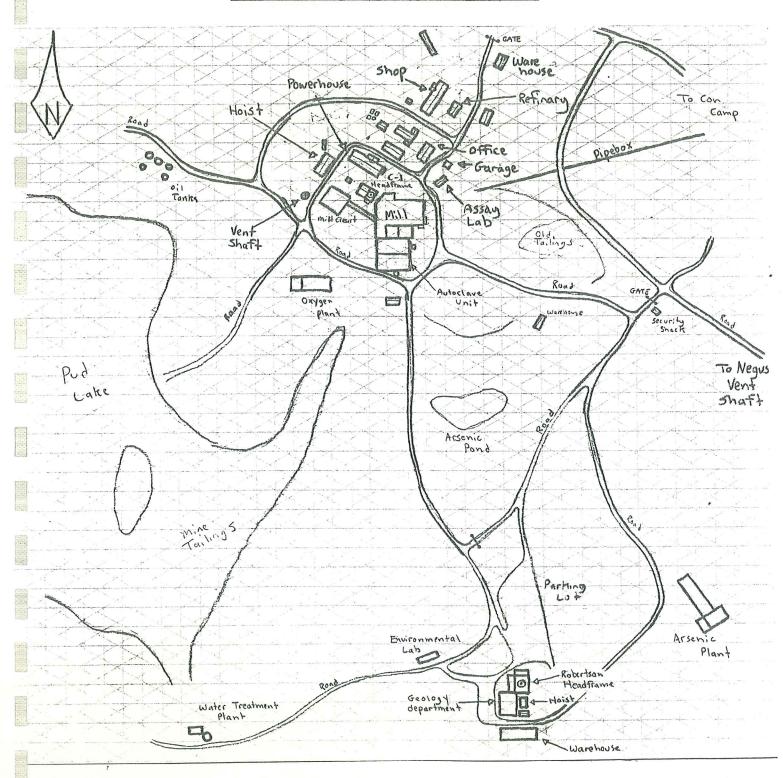
#### Con Mine property map, 1940's



#### Con Mine Camp property map, 1999



#### Con Mine property map, 1999



#### Dome Lake Mine (Non-Operational)

| Company<br>Name(s)                  | Designation   | Production<br>Years | Also<br>Known<br>As | Location   | Coordinates                             |
|-------------------------------------|---------------|---------------------|---------------------|--|---|
| Lightening<br>Minerals Ltd.<br>1987 | Past Prospect | 1996                | TT claims           | 64 kilometers<br>northeast of<br>Yellowknife,<br>Dome Lake | LAT 62* 45' 25"<br>LONG 113* 16'<br>50" |

**Site Access**: Winter routes to Gordon Lake pass through Dome Lake. Float planes can land on lakes nearby.

**Geology**: The property is underlain by greywacke, slate, impure arkose and quartzite of the Yellowknife Group. Many quartz veins and lenses occur on property. A number of these veins are of value, including the "Lambert" vein on TT claim No. 8 and the "No. 14" vein on TT claim No. 8. These gold-bearing veins lie parallel to the beading. (NMI)

**History and Development**: The CW, JOY and DOME claims were staked in 1938. Work during this period included diamond drilling and sampling. Later in 1972, J.S. Turner restaked these groups as the TT group of 15 claims. Duke Mining Ltd. bought the claims in 1973 and during the next year, a total of 1,820 feet of diamond drilling in 13 holes were completed on the No. 14 vein, and 8 holes on the Lambert vein which were reported to contain 4,500 tons grading 0.84 ounces/tons of gold. Lightening Minerals in 1987 drove a 35-foot decline on the Lambert vein (NMI).

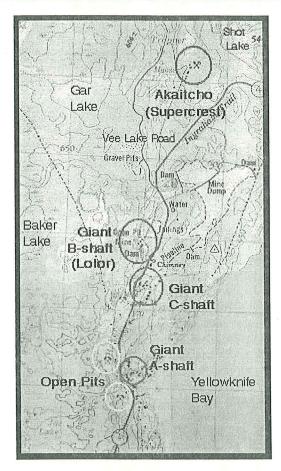
In 1996, Knud Rasmussen and Dave Nickerson conducted a small mining operation and during the spring extracted 700 to 900 tons of ore. During the winter, this was then trucked to Ptarmigan Mine for processing (DIAND Report, Dome Lake Mine, 85 I/14).

**Mine Production**: No mill was installed on site. In 1996, 200 ounces of gold were recovered from material mined on the TT property by Rasmussen and Nickerson.

**The Outcome**: The TT claims was a small bulk operation that never developed into a producing mine.

#### **Giant Mine (Non-Operational)**

| Company Name(s)  | Designation | Production<br>Years | Location  | Coordinates                                       |
|--|-------------|---------------------|---|---|
| Giant Yellowknife<br>Gold Mines Ltd.<br>1948, Royal Oak<br>Mines Inc. 1990 | Producer    | 1948-1999           | North-west shore of<br>Yellowknife Bay,<br>located along Baker<br>Creek | LAT 62* 29' 57"<br>LONG 114* 21'<br>40" (C-shaft) |

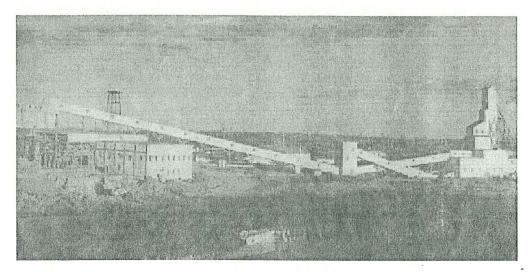


Map of Giant Mine and adjacent mines, from topographical maps taken in 1970. (NTS 85 J/9+8)

Geology: The gold deposits at Giant mine lie within the Yellowknife Greenstone Belt, in the Archean Slave Structural Province. The belt contains a steeply dipping homoclinal volcanic succession known as the Kam Group, in which most of the Giant ore bodies lie, along the West Bay Fault to the west and the Akaitcho Fault to the north end of the Giant property. Gold deposits at the mine are found within shear zones which cross-cuts the Kam Group. These shears have been traced for more than 6.5 kilometers northwest and extend at least 2000 feet below surface (NMI). The distribution of the shears are responsible for the long ridge along the west of Giant property and the Baker Creek Valley (location of open-pit mining).

History and Development: The GIANT group of 21 claims were staked in 1935 for Burwash Yellowknife Gold Mines Ltd. by C.J. Baker and H.M. Muir. Exploration between 1935-1936 led to the discovery of numerous shear hosted, narrow gold-bearing veins by Cliff Brock and Ole Hagen. These were titled the Brock veins and Ole Shear zones. Giant Yellowknife Gold Mines Ltd. was formed in 1937 to further develop the property. Charles Hershman was the engineer in charge during the 1939-1940 season on the Brock veins (Hoffman, 1947). Underground exploration developments during this period were concentrated on the Brock and adjoining areas. Work included the driving of the inclined Brock and Ole shafts which were 126 feet and 70 feet long, respectively. The Ole shaft was actually completed by the Consolidated Mining and Smelting Company under option at the time. About 120 tons of ore was extracted and small tonnages sent south for processing. Exploration on the 55-foot level of the Brock shaft stopped in August 1939 (Lord, 1941). The operation was at this time deemed unprofitable and C. Hershman was unable to acquire adequate funding for further exploration. The property was left idle for most of World War II, however in 1943, Frobisher Explorations began extensive exploration of the southern part of Giant property, after a 1941 report on the discovery of the DWC zone by D. Cameron in 1938. Frobisher Explorations and Ventures Ltd. took interest in the property and gained control over Giant Yellowknife Mines Ltd. in June 1943. During the summer of 1943, geologist A.S. Dadson hypothesized the existence of a masive gold-bearing shear system, underlying the drift filled Baker Creek valley. Diamond drill programs were initiated in February 1944 under the direction of Giant manager A.K. Muir and within a week of drilling, an ore-body was disclosed (LeBourdais, 1957).

This discovery led to a second gold boom in the Yellowknife area. Some of the properties that would be staked at this time included the Discovery, Crestaurum, Viking and West-Bay mines. In the immediate vicinity of the Giant property the Lolor claims were staked. A property which was later bought by Giant in the 1960's. As well, the Akaitcho ground, which had originally been staked in 1936 saw exploration by Frobisher during 1944-1945. This area was as also later acquired by Giant Mine. At Giant, the A-shaft was sunk in September of 1945 to explore the southern portion of the prospect. Development of this shaft stopped a year later after the installation of a new B-shaft north of the A-shaft in April of 1946, however, development of the A-shaft would continue in the 1950's. By November, a 50-ton mill was shipped in, and the construction of the power lines to the Snare River Hydro Dam was nearing completion. The mine would be fed with this power by October of 1948 (Lord, 1951). In 1947, the C-shaft was sunk near the mill and crushing plant and had plans to be developed as the main production shaft. Nearing 1948, all essential plant items were in place and the mine was ready to produce. Reserves at Giant were calculated at 2.7 million tons, grading 14.06 grams/ton at this time (NMI). By the mid 1950's, the A-shaft (3-compartment) was 793 feet deep, the B-shaft (3-compartment) 780 feet deep, and the C-shaft (5-compartment) was about 1,530 feet deep. All shafts were connected by a 7,600 foot long drift on the 750-foot level (LeBourdais, 1957). By 1961, along with the three main shafts, the mine was serviced by many portals and smaller shafts, along with 11 underground levels. The mill capacity had also been increased from 500 to 1000 tons per day and the C-shaft had been extended to 2,124 feet by 1981 (NMI).



Giant Mine in the 1950's, showing C-Headframe and milling plants. (courtesy Susan Jackson)

Ventures Ltd. merged with the Falconbridge group of companies in 1962, and took part in mining of the Lolor (87% owned) and Supercrest properties (50% owned) between 1967-1984. By 1972, reserves from all properties were 750,000 tons grading 0.54 ounces per ton. Lolor ground was accessed underground from Giant Mine on the 425, 575, 750 and 950-foot levels. The Lolor property ceased to be part of Giant Mine's corporate structure in 1989, after mining of the area was complete in 1984. Pit mining commenced in 1974 with a total of three main pits and several smaller to mid-sized pits on the Baker Creek Valley (NMI). During 1986, the Pamour group of companies began aquiring Giant Yellowknife Mines Ltd. shares and bought the company from Falconbridge for \$200 million (Staples and Owen, 1995). During the 1986-1987 period, Giant Mine took part in mining the GKP zone at Gold Lake through Supercrest Mines (see Gold Lake entry). Open pit mining took place from the C-Crown pit, the C-1, A-2 and the B-3 pits during this time, and the UBC zone at Giant was completed mining by 1986. In 1987, a pilot Tailings Retreatment Plant was installed to test the idea of recovering gold from mine tailings. The project proved feasible, and by the end of 1987 over \$4.4 million was spent on site preparation (Mineral Industry Report NWT, 1986-1987). During the late 1980's, many plant buildings at Giant were refurnished or upgraded. The old B-Headframe was removed sometime in the late 1980's, and was recommissioned as a ventilation intake. Further more, the C-Headframe was upgraded by October 1989, and a new Dry was built in March 1989 (NWT Exploration Overview, DIAND annual report, 1989).

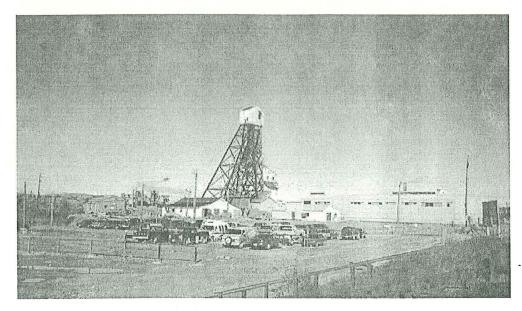
In 1990, Royal Oak Resources Inc. purchased the Pamour group of companies, along with all it's subsidaries, including Giant Yellowknife Mines, Akaitcho Yellowknife Gold Mines and Supercrest Mines Ltd.. These were bought from the banks for \$33 million and in November 1990 Royal Oak Mines Inc. was formed through the amalgamation of all of these companies. In 1990, mining of the A-1 and B-1 open pits were completed and most development being conducted was from underground. A 10,000 ton sample was mined from the Brock vein on surface at the old Brock shaft (because of this, it was feared that the old Brock headframe would be damaged, so it was relocated to be put on display at the Giant Mine Office). Further developments by Royal Oak at the mine would include major programs focused on accessing the higher grade Supercrest, Lower B, LAW and C Zones. The Tailings Retreatment Plant closed in December 1990 because it was uneconomic, during a time when costs at the mine had to be cut. A strike that began in May 1992 did not defer operations at Giant Mine, as replacement workers were brought in. The strike was settled by December 1993, after much heated conflict. In November 1995, mining of the Supercrest zone began again, after 10 years of

no developments. The new 1500-foot level tram reached its targeted capacity by the end of 1995 when higher grade ore from the Supercrest area became available on a consistent basis. In 1997, these higher-grade development headings were expected to increase the average mill head grade and rise overall production. As well, Supercrest was said to add 25% more reserves to Giant property (NWT Exploration Overview, DIAND annual report, 1990-1997). Developments continued on all levels of the mine in all areas except the A-shaft area throughout the mid 1990's. Royal Oak Mines Inc. went bankrupt early in 1999, and Giant Mine has been put into receivership. The property as of November 1999 is shutdown and under care and maintenance while awaiting a new owner.

| Years     | Tons Milled           | Gold Recovery  | Grade            |
|-----------|-----------------------|----------------|------------------|
| 1948-1966 | 4.9 million tons/ore  | 105,019 kg     | 26.12 grams/ton  |
| 1967-1983 | 5.4 million tons/ore  | 62,073 kg      | 6.8 grams/ton    |
| 1984-1989 | 12.6 million tons/ore | 189 tons       | 17.6 grams/ton   |
| 1990-1997 | 2,836,585 tons/ore    | 658,950 ounces | 0.268 ounces/tor |
| 1998      | 366,269 tons          | 109,415 ounces | 0.299 ounces/tor |

Mine Production: The first gold brick at Giant was poured in May of 1948 by Giant Yellowknife Mines Ltd.. Before this, in 1939, 75 tons of ore were extracted from the Brock vein on Giant and sent 1,200 miles distance to Trail BC. Gold recovery amounted to 647 ounces and 45 ounces of silver. Material shipped in 1940 amounted to 46.6 tons, with recoveries of 261 ounces of gold and 38 ounces of silver. Overall value return totalled to \$26,000, most of which was absorbed into the transportation costs (Lord, 1951).

Giant Mine production from May to December 1948 totalled 8,152 ounces gold, 2,000 ounces silver and +5,000 tons of concentrate (about 33,000 ounces of gold). This ore was extracted mainly from the High Grade Zone, an area of high grade ore shoots near the B-shaft. Further production levels are included in the table. Production from the Lolor grounds from 1967-1983 was 420,898 tons milled with a recovery of 181,725 ounces of gold. In 1980, Giant poured it's 10,000th gold brick, one of the few mines in Canada to reach this number in 30 years and in 1991, Giant Mine became the sixth largest gold producer in Canada (NMI). The mill shutdown in 1999 as the property is non-operational. The last gold brick was poured with little publicity on Wednesday, November 10th of 1999. Production records for 1990-1998 are through the DIAND NWT Exploration Overview annual reports.

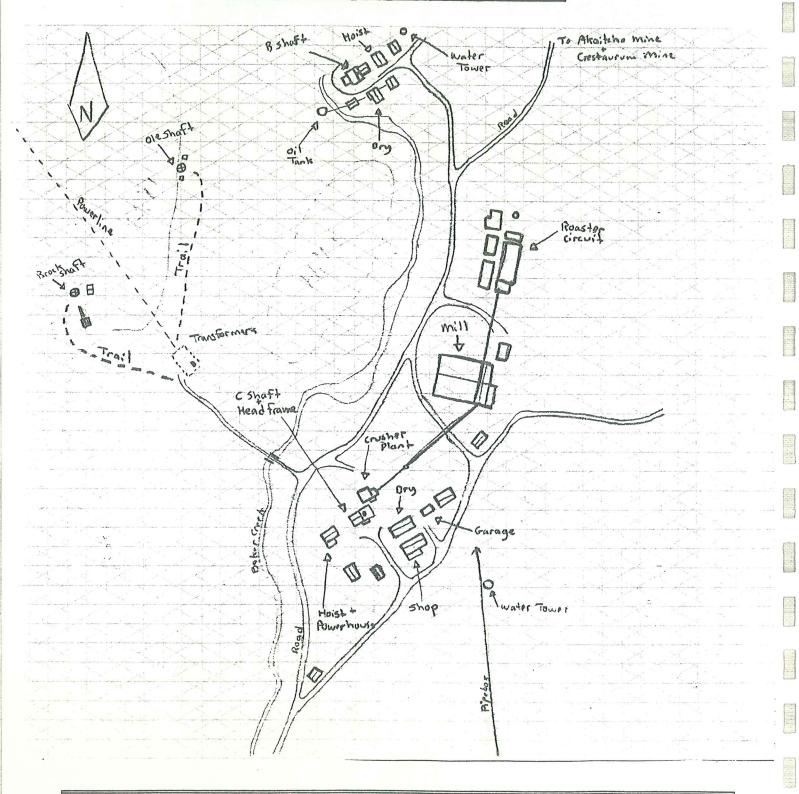


Picture of Giant Mine in 1999 (Ryan Silke Photo)

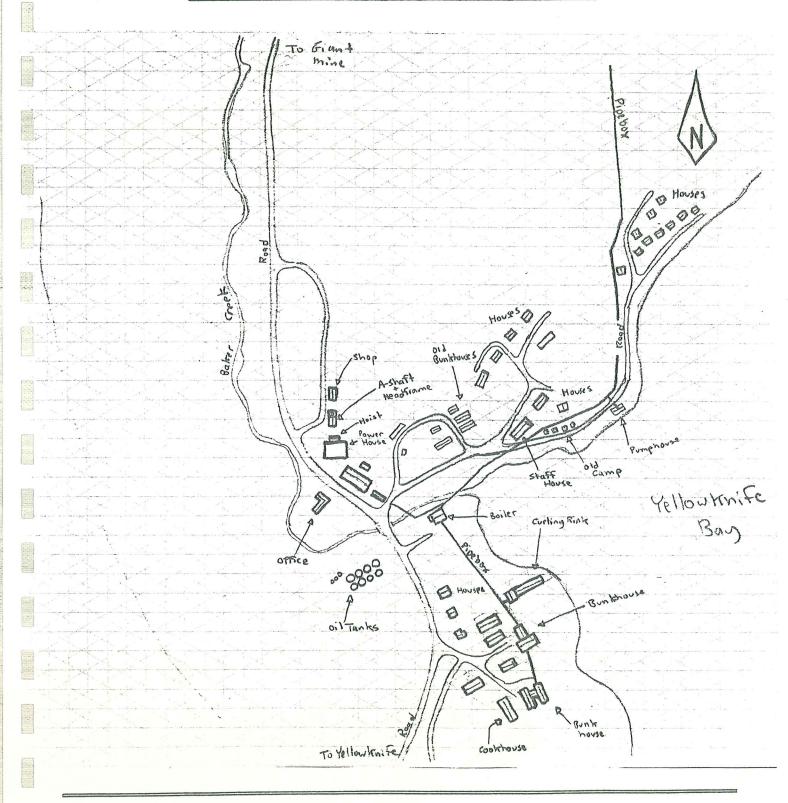
**Town Life**: Giant Mine developed a town site on the south side of the mine where Baker Creek flows into Yellowknife Bay. The buildings that make up the town site are the first structures noticeable when driving through the Giant Mine property from Yellowknife on the Ingraham Trail. About 20 houses have been built here, along with a recreation hall and a curling rink. Several bunkhouses were constructed as well during the 1950's, but as of 1998 all have been torn down.

The Outlook: Shortly after the mineralized shears were discovered on the Giant property in the 1940's, it was apparent that the Giant property would develop into the successful gold mine that it has. Throughout the 1990s, even with a poor gold market, Royal Oak Mines Ltd. had converted Giant Mine into a profitable operation by cutting back on non-essential expenses and staff. However, Royal Oak has now gone bankrupt, and Giant Mine is closed and in receivership. Currently, as of November 1999, Miramar Mining Corporation (the owners of Yellowknife's Con Mine) has showed interest in buying the mine from the banks. However, this does not mean that the mine will continue to operate in a full capacity. The property is awaiting a deal in which Miramar Mining Corporation will take over underground operations at Giant Mine. If the deal goes through with the City of Yellowknife, ore that is mined will be trucked to the Con Mine mill for processing. Currently all but 25 Giant Mine employees have been layed off, and environmental programs are soon to be underway to clean up the large arsenic trioxide vaults underground at the mine.

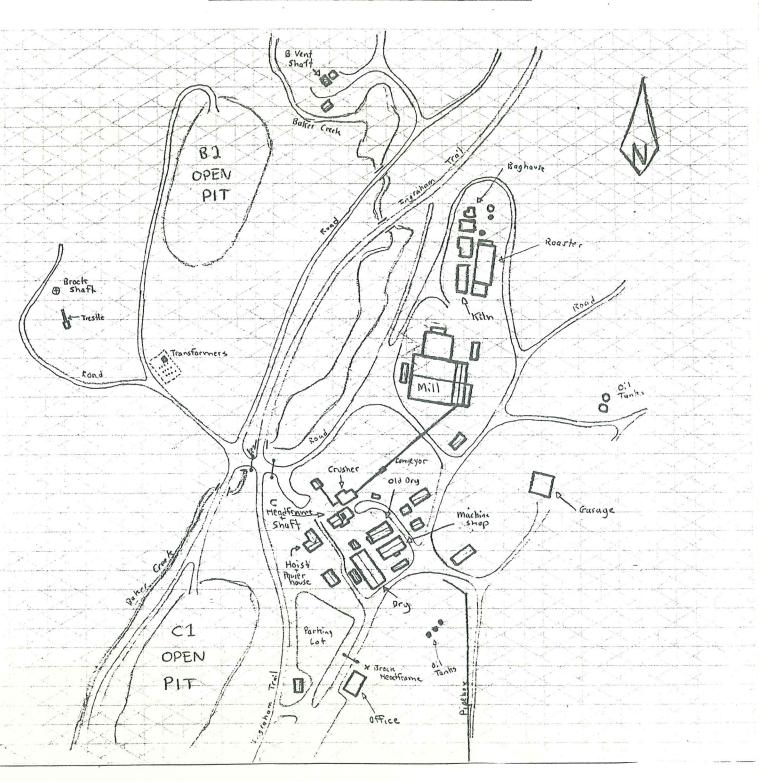
#### Giant Mine property map, 1950's



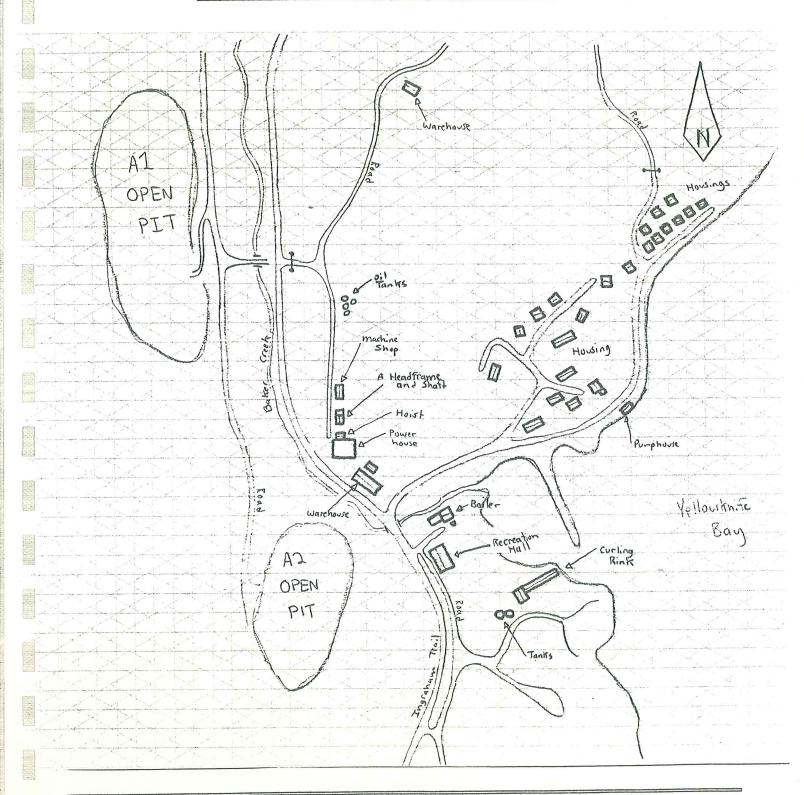
#### Giant Mine Camp property map, 1950's



#### Giant Mine property map, 1999



#### Giant Mine Camp property map, 1999



#### **Knight Bay Mine (Non-Operational)**

| Company<br>Name(s)                  | Designation   | Production<br>Years | Also Known<br>As                       | Location                   |   |
|-------------------------------------|---------------|---------------------|--|----------------------------|---|
| Giant Bay<br>Resources Ltd.<br>1986 | Past Prospect | N/A                 | MAHE<br>claims,<br>Kidney Pond<br>Zone | 5 km north of<br>Dome Lake | LAT 62* 57'<br>17" LONG<br>113* 19' 22" |

**Site Access**: Winterized roads through Gordon Lake offer access to the area. Float plane is required during the summer.

**Geology**: The deposit is a gold-bearing quartz breccia hosted in a folded, sulphide-rich siltstone situated in the Archean Aged rocks of the Yellowknife Supercrustal Belt. Exploration work has defined the deposit to be 305 meters long, 6 meters to 30 meters in width, and extending to a depth of 121 meters. (NORMIN.DB)

**History and Development**: The area was originally occupied by claims held by Sentinel Mines Ltd. in 1938. The property at this time consisted of 110 claims, which were worked on from 1938 to 1944 through diamond drilling and trenching. Poor results paved the way for the claims to lapse in 1947.

The MAHE group of claims were staked on this ground in March of 1978 by D. Nickerson, along with the AR and BEAR claims in January 1981 by J.D. Mason. Further claims were staked in 1983 and were aquired by Giant Bay Resources Ltd. through a controlling interest. Nine holes were drilled and trenches blasted on two vein showings. This main zone was tested to a depth of 125 feet, showings widths of up to 50 feet. Best assays valued at 0.540 ounce/ton. This drilling outlined a probable 500,000 tons ore reserve, average grading 0.15 ounce/ton. The main zone had been explored through 14,000 feet of drilling. A second zone, the Kidney Pond, had been tested for over 700 feet to a depth of 550 feet. Widths of 50-60 feet were reported (NMI). Later in 1986, a decline had been driven 1600 feet to at least the 200 foot level. Drifting was conducted on this level amounting to 540 feet. Amounts of ore were stockpiled on surface for future transportation. (NWT Exploration Overview, DIAND Report, 1987)

Mine Production: Gold values did not prove to be profitable for milling operations.

The Outlook: Small exploration operations, such as the property at Knight Bay, could not be profitable in today's low gold market.

#### Mon Mine (Non-Operational)

| Company Name(s)   | Designation | Production<br>Years     | Location   | Coordinates                             |
|---|-------------|-------------------------|--|---|
| Cominco Ltd. 1965,<br>Can-Mac Exploration<br>and Contracting LTD<br>1989, Ger-Mac<br>Contracting LTD 1990 | Producer    | 1965-1967,<br>1990-1997 | 48 km north of<br>Yellowknife,<br>Discovery Lake | LAT 62* 53' 45"<br>LONG 114* 19'<br>20" |

Geology: The MON claims are situated on a portion of the Sito Lake Volcanic Complex, a part of the Yellowknife Supergroup. These are seperated by the Clan Lake Volcanic Complex to the east, and by the north trending Hay-Duck Fault. The quartz vein system strike parallel of a gabbro sill and the sedimentary-volcanic rock. Veins within the system have a lens shape and the quartz is glassy and varies from white to gray in color. This system has been traced for 213 meters and at a depth of about 30 meters. Gold content in the veins is erratic, with high grades and low grades. The quartz veins contain less than 1% sulphides, and there is a correlation between gold grade and sulphide content (NMI).

**History and Development**: The MON claims were staked in 1937 by G.A Moberly and L.W. Nelson. In 1939, the Consolidated Mining and Smelting Company acquired and developed the property with a 19.5 meter exploration shaft with 47 metres of drift development, and about 11 trenches. Between 1947 and 1963, diamond drilling was conducted and results were good enough to warrant a small mining operation. Between 1965 and 1975, R Stevens under a lease with Cominco Ltd. mined several tons of vein material from an open cut. In 1965 a small mill was set up to process ore. In 1986 and 1987, Troymin Resources Ltd. and Coronado Resources Inc. optioned the property and conducted diamond drilling. In 1989 the property was in the hands of Can-Mac Exploration and Contracting who continued exploration in the area. A 2300 ton sample was extracted and milled at Ptarmigan Mine by 1990. As well, in 1992 another small mill was installed and a 1500 ton sample was milled. From 1992-1995, the property was under development by Ger-Mac Contracting. About nine staff were employed during the summer operations. Using winterized camps, increased mill size and fuel storage, the operation produced into the early winter months as well. In 1995 the North decline was advanced 50 meters to the 650-foot level. Operations continued up to 1997 when the operation was forced to shut down due to low gold prices. (NWT Exploration Overview, DIAND reports, 1990-1997)

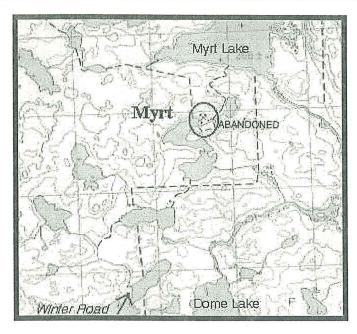
| MON Mine  | Production 1 | Levels        |
|-----------|--------------|---------------|
| Years     | Tons Milled  | Gold Recovery |
| 1965-1967 | 200 tons     | not available |
| 1990      | 2300 tons    | not available |
| 1992      | 1500 tons    | 6.2 kg        |
| 1993      | 3300 tons    | 43 kg         |
| 1994      | 1452 tons    | 23 kg         |
| 1995      | 1500 tons    | 6.2 kg        |
| 1996      | 2241 tons    | 17.5 kg       |

Mine Production: Production of small amounts of ore started in 1965 and lasted until 1967, with 200 tons of ore material processed (NMI). Later, a 2300 ton bulk sample was shipped to the Ptarmigan Mine's mill to be processed in 1990, which was said to grade 18.4 grams/ton, along with another sample operation in 1992 (NWT Exploration Overview 1990, DIAND report). Full production began in 1993 using a 100 ton/day gravity mill circuit with 87% mineral recovery. The gold concentrate was refined in Yellowknife until 1996, when a concentrator was installed in the mill circuit. (NWT Exploration Overview, DIAND report, 1992-1997)

**The Outlook**: Low gold prices of 1997 and 1998 have halted the operation due North of Yellowknife. Some of the forest fires of 1998 threatened the mine as well. The site is currently under care and maintenance, as the mine would require stronger gold prices to operate profitably.

### Myrt Lake Mine (Non-Operational)

| Company Name(s)   | Designation   | Production<br>Years | Also<br>Known<br>As | Location                      |   |
|---|---------------|---------------------|---------------------|-------------------------------|---|
| Precambrian Shield<br>Resources Ltd./<br>Numac Oil and Gas<br>Ltd. 1973 | Past Prospect | N/A                 | WT group            | 5 km north<br>of Dome<br>Lake | LAT 62* 47'<br>15" LONG<br>113* 14' 10" |



Myrt Lake area and minesite. (NTS 85 I/14)

**Site Access**: The winter ice road to Gordon Lake passes through the area. During the summer, float planes can land on Myrt Lake, or the S-shaped lake.

Geology: The property is underlain by highly deformed greywackes and slates of the Yellowknife Group. The main showing located on WT claims 1 and 2 consists of a quartz mass in contorted greywacke and slate. The main mass of the quartz lies southwest of a well defined fault, and outcrops for 200 feet with a maximum width of 40 feet. Gold is mainly associated with sulphides, which are erratically distributed in the quartz, but visible gold is present. Thirteen other showings, some of which are of ore grade, have been noted on the property (NMI).

**History and Development**: The present claims were once part of the 43 claim SDC group, staked in 1938 by Dome Mines Ltd. From March to July 1939, exploration consisted of diamond drilling and trenching. The drilling did not delineate a profitable resource. Reserves were calculated as 503 tons per vertical foot in a zone 240 feet long, and grading 0.2 ounce/ton.

Part of the claims were restaked in 1959 as the MYRT group of 27 claims by S. Oho. Another

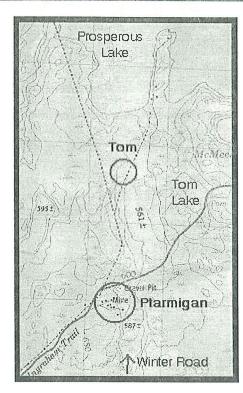
section of the SDC group were re-staked as the WT group of 3 claims in 1960 by W. Ternowski. These groups were optioned by Giant Yellowknife Mines Ltd. in 1961, and geological mapping and sampling was undertaken. In 1962, Consolidated Discovery Mines Ltd. optioned the WT group and conducted 3,930 feet of diamond drilling until 1963. This exploration confirmed reserve estimates made by Dome Mines in 1939, indicating that grade decreased with depth. The width of the ore shoot was consistent to 150 feet. In 1973, Cameron Holdings purchased the the WT claims, and staked the additional WT 4-27 claims. These claims were acquired by Shield Resources Ltd. and Numac Oil and Gas Ltd. in September 1973 through a 50% interest with Cameron Holdings. A 350 foot long decline was completed in May of 1974 to a depth of 250 feet with one level. Reserves were estimated as 64,265 tons grading 0.157 ounce/ton to the 200-foot level during this exploration period. Later during 1984-1985, further exploration was conducted with surface diamond drilling and trenching (NMI). In 1987, decline rehabilitation was conducted Westfort Petroleums Ltd. and Cameron Holdings (NWT Exploration Overview 1987, DIAND Report). Further work has not been reported.

Mine Production: Gold values did not prove to be profitable for milling operations.

The Outlook: Small exploration operations, such as the property on Myrt Lake, cannot function at present low gold prices.

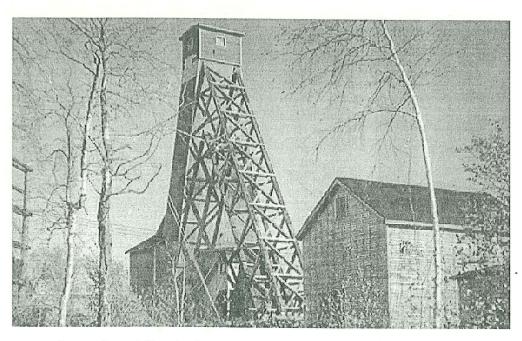
#### Ptarmigan Mine (Non-Operational)

| Company<br>Name(s)  | Designation | Production<br>Years     | Location   | Coordinates                             |
|---|-------------|-------------------------|--|---|
| Ptarmigan Mines<br>Ltd. 1941,<br>Treminco<br>Resources Ltd.<br>1987 | Producer    | 1941-1942,<br>1988-1997 | 5 km south of<br>Prosperous Lake, 12<br>kilometers northeast of<br>Yellowknife, located on<br>Ingraham Trail | LAT 62* 31' 10"<br>LONG 114* 11'<br>50" |



Map of Ptarmigan Mine, with Tom mine due north. (NTS 85 J/9)

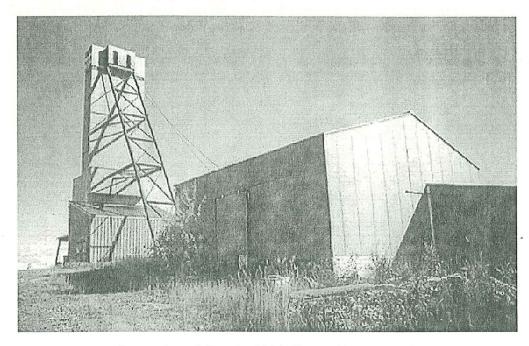
Geology: Country rock around the Ptarmigan mine is of the Burwash Formation, an extensive unit of metamorphosed greywacke-mudstone turbidites that represents the majority of the Archean basin on the east side of Yellowknife Bay. The veins on the property occupy tension fractures in the Burwash formation and are situated between the two major faults in the area; the Ptarmigan and Hay-Duck Faults. Several veins are located on the property, but only the No. 1 vein contains an orebody and has been mined. The vein is a continuous body of quartz with an average width of 12 feet, although it can be as wide as 45 feet, and has been followed for over 2,000 feet striking in a northwesterly direction. (NMI)



Ptarmigan Mine in 1948. (NWT Archives N-1991-009-0100)

History and Development: In April 1936, Archie Mandeville staked claims south of Prosperous Lake for J.A. Morrie. He staked 12 JACK claims, but was only able to record half of them, lacking money. Only one vein on the property contained visible gold, with a width varying from one foot to 45 feet. Jack Stevens and W.G. Matthews moved in on the area as well and staked 18 LILY claims, including Mandeville's un-recorded claims (Price, 1967). Soon after, the Consolidated Mining and Smelting Company bought out all claims and started development for a mine, hoping to achieve a high grade property like that of it's Con Mine. Ptarmigan Mines Ltd. was formed in October of 1938, and a 3-compartment shaft (8 x 16 feet in dimensions) was started. By the end of 1942, the shaft was 923 feet deep. The shaft accessed the "No 1" vein with about 1000-2000 feet of drifting from the 150, 300, 450, 600, 750 and 900-foot levels. A raise was also developed from the 750-foot level to the surface, intersecting mineral rich ore-bodies on it's way. Operations stopped in August 1942 due to conditions of World War II (Lord, 1951). Initial thoughts were to reopen the mine at a latter date, but the destruction of the mill by fire shortly after shut-down hampered the idea. The property was at this time regarded to have been pretty much mined out. The old headframe was removed sometime in the 1970's.

In 1982, Consolidated Mining and Smelting (now Cominco Mines Ltd.) Rehabilitated the site with a 200 foot decline and conducted underground mining. During 1982-1983, several tons of rock were extracted and sent to Yellowknife for processing. Treminco Resources Ltd. gained interest in Ptarmigan Mines Ltd. in 1984 from Cominco. In 1987, the decline was advanced to the 2nd level (300-foot level), and a new ore body was located (NMI). Terminco continued to develop the mine with the construction of a new headframe in January of 1989, and a 200 tons/per day mill in July (NWT Exploration Overview, DIAND report 1989). The shaft was re-commissioned, and five levels were being developed, with the 450 and 750-foot levels being mined in 1990. From 1992-1997, the mine was facing problems with it's future as ore reserves on the property grew more scarce. In 1992, 19 of the 30 employees were layed off, the result of mine operation cutbacks due to lower mill grade and financial problems. Reserves at this time were calculated 55,100 tons grading 0.25 ounces/ton. Exploration programs through diamond drilling failed to find ore below the 750-foot level. The mine was shutdown late 1997 due to low gold prices, and has been put on care and maintenance. (NWT Exploration Overview,



Ptarmigan Mine in 1999 (Ryan Silke photo)

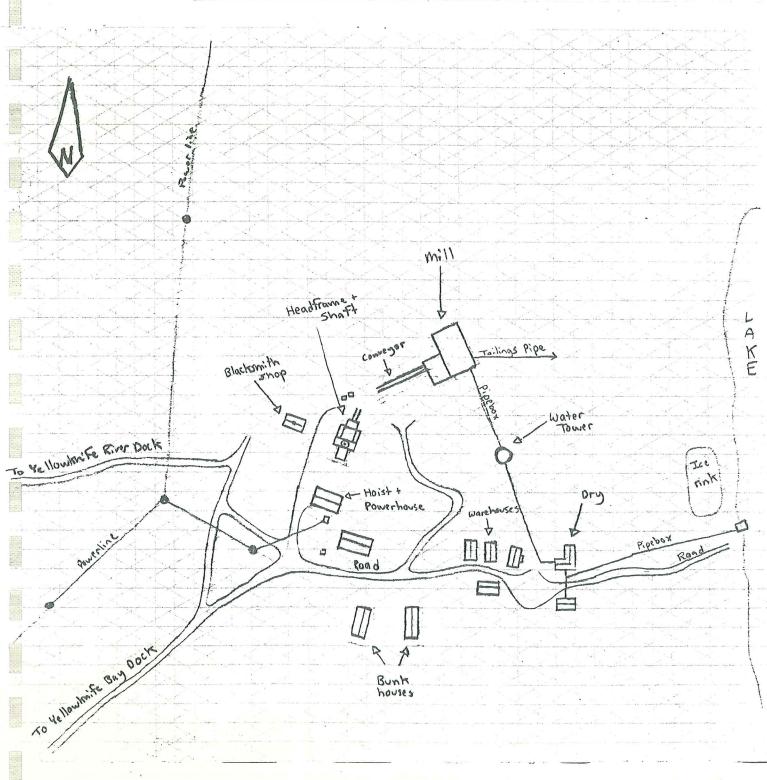
| Years     | Tons Milled     | Gold Recovery | Silver Recovery |
|-----------|-----------------|---------------|-----------------|
| 1941-1942 | 34,249 tons/ore | 11,921 ounces | 2,527 ounces    |
| 1982-1983 | 1,673 tons/ore  | 43 kg         | 10 kg           |
| 1988      | 32,900 tons/ore | 540 kg        | 130 kg          |
| 1989      | 48,140 tons/ore | 450 kg        | 108 kg          |
| 1990      | 57,000 tons/ore | 560 kg        | 134 kg          |
| 1991      | 58,100 tons/ore | 463 kg        | 111 kg          |
| 1992      | 46,700 tons/ore | 476 kg        | 114 kg          |
| 1993      | 32,659 tons/ore | 227 kg        | 54 kg           |
| 1994      | 26,309 tons/ore | 208 kg        | 50 kg           |
| 1995      | 18,688 tons/ore | 132 kg        | 32 kg           |
| 1996      | 13,000 tons/ore | 115 kg        | 28 kg           |
| 1997      | 10,000 tons/ore | 80 kg         | 19 kg           |

Mine Production: The mine first began production in November of 1941, pouring it's first brick in January of 1942, but by August was forced to close down due to war time conditions (Lord, 1951). In 1982, 43 kg of gold was recovered from ore that had been milled at Con Mine by Cominco Mines Ltd. The property of Ptarmigan Mine was later bought by Treminco Resources Ltd. in 1987. Ore was milled at Giant Mine until 1989 when a 200 tons/day mill was built at Ptarmigan Mine. By 1994, the mill capacity was increased to 250 tons/day, but was latter reduced back to 200 tons/day because of cost cutbacks. In August of 1997, the mill

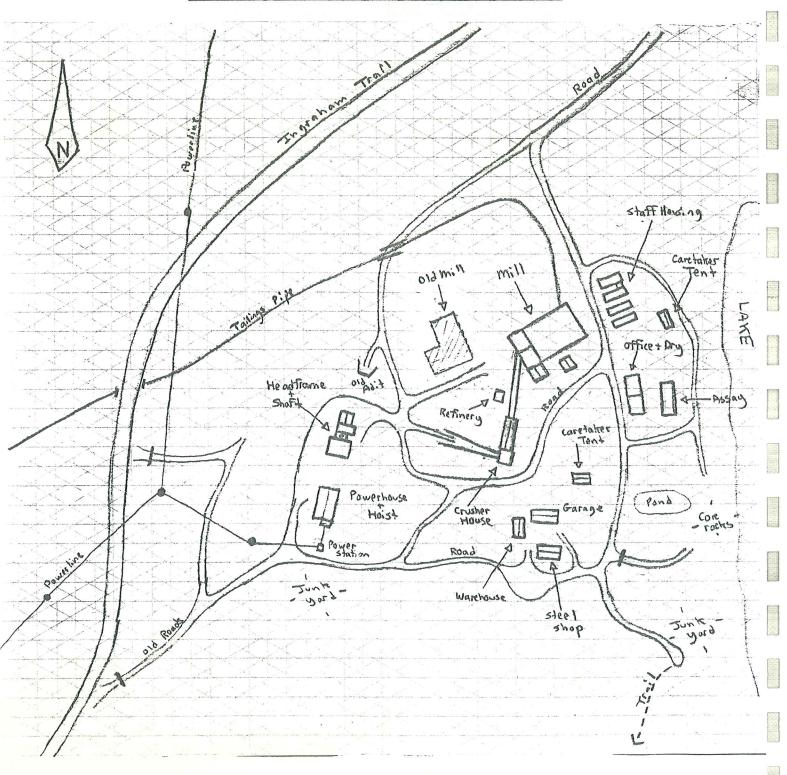
suspended operations. The mine while owned by Treminco has produced over 120,000 ounces of gold in ten years of operation. Silver content averaged about 24%, so numbers for years 1988 to 1997 are rounded in the table. Other production data for the years 1988-1997 is derived from the NWT Exploration Overview, DIAND reports.

**The Outlook**: In order to continue operations at Ptarmigan and Tom Mines, Treminco Resources must find economical ways to produce gold at the current market prices, or develop more ore reserves.

#### Ptarmigan Mine property map, 1942

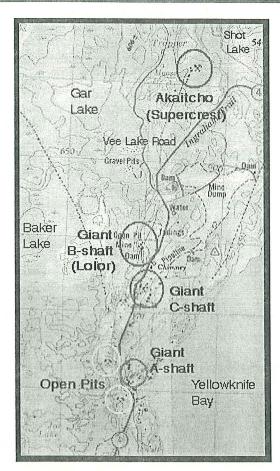


#### Ptarmigan Mine property map, 1999



## **Supercrest Mine (Non-Operational)**

| Company<br>Name(s)               | Designation | Production<br>Years              | Also<br>Known<br>As | Location                        | Coordinates                             |
|----------------------------------|-------------|----------------------------------|---------------------|---------------------------------|---|
| Supercrest<br>Mines Ltd.<br>1967 | Operator    | 1967-1981,<br>1986,<br>1995-1999 | Akaitcho,<br>GKP    | Northern property of Giant Mine | LAT 62* 31' 30"<br>LONG 114* 20'<br>45" |



Giant Mine, and the Akaitcho/Supercrest property to the north. The main shaft is circled. (NTS 85 J/8+9)

Geology: Ore bodies of the Supercrest area are located in the Yellowknife Volcanic Belt. This belt has been subjected to compressional stress and is manifested by high-angle, reverse shear zones which hosts most of the mineralization on the property. The area has been disrupted by a number of Proterozoic Faults, such as the West Bay and Akaitcho Faults. The shear zones cut various formations within the Kam and Banting Groups, however large gold bearing shears are restricted to the Yellowknife Bay Formation. This shear system that hosts the Supercrest deposit also hosts the ore at the Giant Mine. The shear strikes Northeast, and extends from the West Bay fault south of the Giant Property towards the Lynx property at Vee lake, to the North.

Several ore shoots from the main Shear Zone branch onto the Akaitcho property. The ore is a mixture of fine-grained quartz, carbonate, sericite, and metallic minerals. Visible gold is rare in these shoots. The GKP zone was discovered in 1982 approximately 1.7 kilometers northwest of the Akaitcho property. It is 150 meters long, and about 1.5 meters wide. This zone extends towards the Lynx deposit on Vee Lake as well. (NMI)

History and Development: This area was staked in February of 1936 for the Aerial Exploration Syndicate as the AES group of 24 claims, and the discovery of gold-silver amalgam on the property lead to great excitement. The claims were acquired by the Frobisher Exploration Company Ltd., and diamond drilling and surveying of the property was performed from 1944 to 1945. Akaitcho Yellowknife Gold Mines Ltd. was formed in January of 1945 by Frobisher Explorations to further develop the property. By 1947, four ore bodies comprised of 260,000 tons ore were located, and in 1948 an exploratory shaft was sunk to 36 feet (Lord, 1951). The Akaitcho property saw little activity from the mid 1950's to the mid 1960's due to a poor gold market. By the mid 1960's it was decided that a deal could be made between Akaitcho and Giant Yellowknife Mines Ltd. to jointly develop the area.

In 1964, Akaitcho Yellowknife Gold Mines and Giant joined together to form Supercrest Mines Ltd. (jointly 50-50 owned) (NMI). A drift from Giant Mine was constructed at the 750-foot level towards the area during 1965-1967, and several raises were connected to the Akaitcho shaft workings (Supercrest Mines, annual report, 1966). During 1969 another drift was driven 4,000 feet from Giant Mine's 1,100-foot level to the Supercrest area. At this time, the zone was being mined from extensions at Giant on the 425, 575, 750 and 1,100-foot levels. Development continued into the 1970's and 1980's with more extensions being constructed from Giant into the Supercrest zone, below the 1,500-foot levels. Development in 1981 consisted of 1,545 feet of drifting, 313 feet of raising and surface diamond drilling in 23 holes totalling 10,000 feet, plus 121 underground holes. From this data, 1982 ore reserves of 27,000 tons grading 0.34 ounce/ton were calculated. Further explorations undergroud took place throughout the 1980's, but no mining operations were conducted. In 1986, a portal was constructed at Gold Lake, an access to the GKP zone (see Gold Lake entry). Supercrest mining of this area took place from 1986-1988 (NMI). In 1990, Royal Oak Resources gained full control over Supercrest Mines Ltd., after taking control over the Pamour group of companies, which included Akaitcho Yellowknife Gold Mines Ltd. (NORMIN.DB). In 1995, mining and milling operations from the Supercrest ground began again after 10 years of being idle. During this time, it was felt that Supercrest reserves increased Giant tonnage by 25 %, and added 7-8 years of life to the mine. During 1995 and 1996, explorations were being conducted to access mineral rich areas on the Supercrest property, such as the 1,100 LAW zone. High grade ore from these areas have kept Giant Mine in production into 1999 (NWT Exploration Overview, DIAND annual report, 1995-1998).

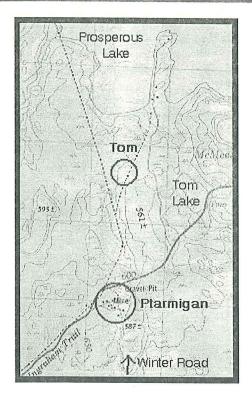
Mine Production: Treatment of ore from the Supercrest zone at the Giant mill began in 1967 at 200 tons a day milled. In 1981 due to low gold prices and a strike by workers, production of Supercrest ore was suspended. Production later resumed in 1986, from a newly discovered area at Gold Lake just north of the Akaitcho shaft called the GKP zone (see Gold Lake entry) (NMI). During the mid 1990's, Royal Oak Resources have mined the Supercrest property from the 1,100 level and 1,500 foot levels (NWT Exploration Overview, DIAND Report, 1995). Production numbers for these years were not available.

| Years       | Tons Milled Gold Recovery                  |  | Zone of Mining             |  |
|-------------|--|--|----------------------------|--|
| 1967-1973   | 323,577 tons/ore                           | 186,115 ounces                             | Supercrest ("Akaitcho")    |  |
| 1974-1981   | 194,298 tons/ore                           | 77,125 ounces                              | Supercrest<br>("Akaitcho") |  |
| 1986-1988   | 20,909 tons/ore                            | 4,561 ounces                               | Supercrest (GKP)           |  |
| 1989-curren | "included in Giant<br>Production Reports?" | "included in Giant<br>Production Reports?" | Supercrest                 |  |

**The Outlook**: The Supercrest area has aided the Giant Mine in production for many years. But with the closure of Giant Mine in 1999, the Supercrest property is now no longer operating.

# Tom Mine (Non-Operational)

| Company<br>Name(s)  | Designation | Production<br>Years     | Location   | Coordinates                             |
|---|-------------|-------------------------|--|---|
| Treminco<br>Resources Ltd./<br>Goldrich<br>Resources Inc.<br>1986 | Operator    | 1986-1987,<br>1990-1997 | 20 km north-east of<br>Yellowknife, 2 km<br>north of Ptarmigan<br>Mine | LAT 62* 32' 00"<br>LONG 114* 11'<br>45" |



Map of the Tom Mine and Ptarmigan Mine areas

**Geology**: The Tom property lies near the western side of the Archean Yellowknife Supergroup of the Burwash Formation. Four principle veins have been noted and developed, along with four other smaller veins. The No. 3 vein is of most value. The Ptarmigan Fault cuts through the property and several of the veins.

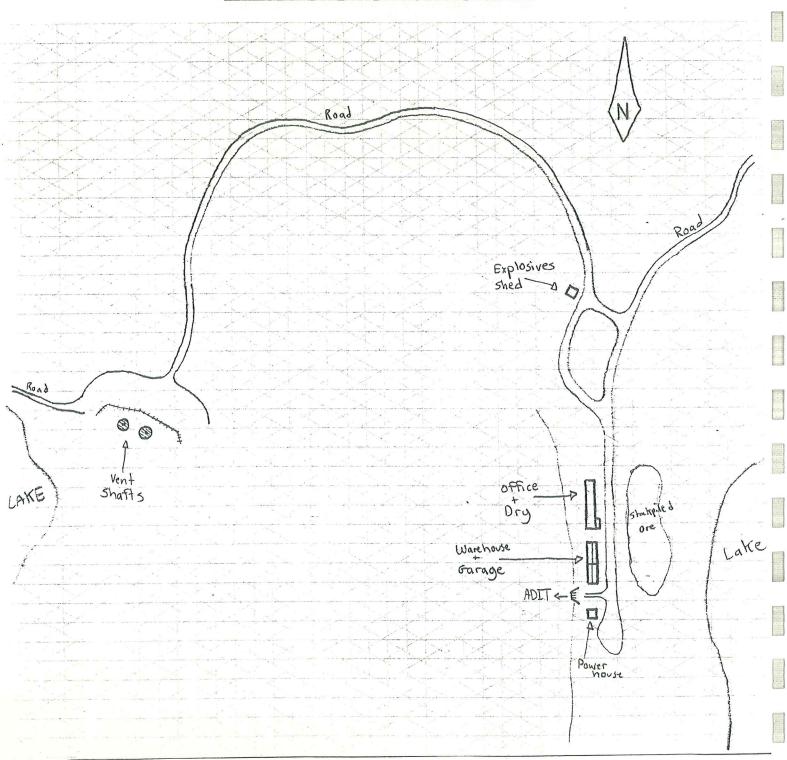
**History and Development**: The TOM claims were staked in 1936 by T. Cassidy. In 1939 the claims were optioned to Consolidated Mining and Smelting Ltd. who held the them until 1945. Exploration from 1939-1945 was conducted with the sinking of a shaft to 55 feet, and diamond drilling under Tom Lake which totalled 1990 metres. Caen Yellowknife Mines Ltd. bought the property in 1945, and subsequently changed it's company name to Cassidy Yellowknife Mines Ltd. They conducted 10,125 metres of diamond drilling in 88 holes but later dropped the claims. In 1984 Apex Energy Corporation bought the claims, and turned them over to Treminco Resources. Treminco, with Goldrich Resources Inc., developed the property with a 170 meter

long decline to the 160-foot level to access the Tom vein ore zone in 1986. By 1987, Treminco Resources bought out Goldrich, therefore assuming 100% control in Tom Mine's operations (NMI). In December 1990, a ramp to the 2nd level at the mine was completed, to at least the 230-foot level. The ramps were advanced to the 400-foot level by 1994. Mining operations at Tom mine were mainly from these levels. Operations at Tom Mine and Ptarmigan Mine halted in 1997 due to low gold prices (NWT Exploration Overview, DIAND Report, 1990-1997).

Mine Production: Goldrich Resources Inc. shipped 45 tons of ore to the Giant Mine in Yellowknife for processing. By the end of 1987, a total of 20,430 tons had been shipped to Giant Mine, yielding 4,317 ounces of gold (NMI). Further production has been included in Ptarmigan Mine reports, as ore was milled at Ptarmigan's Mill. Production at Ptarmigan and Tom mines haulted in 1997 due to low gold prices (NWT Exploration Overview, DIAND Report, 1990-1997).

The Outlook: The Tom Mine has been a small, successful mining operations just outside of Yellowknife. If not for low gold prices, this site would probably be in operation today, along with it's sister site, the Ptarmigan mine. Reserves for 1991 were 50,000 tonnes grading 8.6 grams/ton (NWT Exploration Overview, DIAND Report, 1991).

### Tom Mine property map, 1999



# **Abandoned Mine Sites**

| <u>Akaitcho</u>   | Past prospect operation for gold from 1948 to 1950  |
|-------------------|---|
| Beaulieu          | Small tonnage gold producer from 1947 to 1948   |
| Best Bet          | Open pit operation as a extension of the DeStaffany Mine; operated during the 1940's and 1950's |
| Blanchet Island   | Small mining operation during the 1960's for copper and cobalt                                  |
| Bullmoose Lake    | Small tonnage gold producer during the 1980's   |
| Burnt Island      | Prospect operation in the 1940s; Small tonnage gold producer in the 1980's                      |
| Burwash           | Small mining operation in 1935 and 1936 for gold  |
| <u>Camlaren</u>   | Gold producer in the 1960's, and in the 1980's  |
| Chipp Lake        | Small prospect operation in the 1940's for gold   |
| <u>Crestaurum</u> | Mining operation in 1946 and 1947 for gold  |
| DeStaffany        | Producer of tantalum during the 1940's, and in the early 1950's                                 |
| Discovery         | High tonnage gold producer and community from 1950 to 1969                                      |
| <u>Freda</u>      | Small tantalum producer in 1946   |
| Gold Lake         | Small extension of Giant Mine property, operated in 1986 and 1987                               |
| Goodrock          | Producer of tungsten in 1942  |
| Hidden Lake       | Mining operation in the 1940s, and a producer of gold in the late 1960's                        |
| June              | Small tonnage gold producer in the late 1970's  |
| Mitchell Lake     | Prospect operation for gold in the 1950's   |
| Negus             | High tonnage gold producer in Yellowknife from 1939 to 1952                                     |
| Nicholas Lake     | Underground gold prospect operation during the 1990's   |
| Nose              | Gold prospect operation in the 1960's   |
| Old Parr          | Small scale mining operation in the 1940's and 1950's; Small gold producer in the 1960's        |
| Outpost Island    | Producer of gold and tungsten in the early 1940's and 1950's                                    |
| Peg Tantalum      | Small tonnage producer of tantalum in the late 1940's, and possibly the early 1950's            |
| Pensive Lake      | Small tonnage gold producer in the early 1940's   |
| Rod               | Prospect operation in the 1970's and 1980's near Yellowknife                                    |
| Ruth              | Small tonnage gold producer in 1942 and 1959  |
| Rycon             | Operating extension of Con Mine in the 1940's and 1950's  |
| Sunset Lake       | Underground gold prospect in 1947   |
| Storm             | Small producer of tungsten in 1942  |
| Thompson-Lundmark | Producer of gold from 1941 to 1943, and 1947 to 1949  |
| <u>Tin</u>        | Underground gold prospect in the 1980's   |
| Viking            | Underground gold prospect in the late 1940's and into the 1950's and 1960's                     |
| West-Bay          | Small tonnage gold producer in 1948   |
| Wilson Island     | Prospect operation of gold in the 1920's  |

#### **Abandoned Mine Sites**

Abandoned minesites are those mines that have been operated on in the past, and after mining was completed the property was left. Most mines were abandoned due to mined out reserves, or because of un-economic operations at the time. Abandoned mines have no caretakers on property. When mines shutdown during the 1940's and 1950's, the sites were left intact, just incase of future developments, further more there were no restrictions on cleaning up sites. However, most operations from the 1970's to 1990's that have shutdown have been cleaned up due to new government regulations. Recently, the federal government has been enforcing cleanup on those sites abandoned during the 1940's and 1950's. In some cases, this means the destruction of buildings, or the removal of deadly mine tailings.

The layout of the pages on Abandoned Mine Sites is as follows.

#### Name of Mine

| Company<br>Name(s)                                    | Designation   | Production<br>Years                        | Also<br>Known<br>As           | Location  | Coordinates                                |
|---|---|--|-------------------------------|---|--|
| Companies that had operated in the mine, and the year | Current<br>development<br>designation<br>(Producer, Past<br>producer,<br>Operator, Past<br>Operator,<br>Prospect, Past<br>prospect) | The time of mine production, if applicable | mine<br>sites have<br>adopted | The location of<br>the site in<br>kilometers from<br>Yellowknife,<br>and in the<br>vicinity of<br>major water<br>bodies, other<br>mines. etc. | Latitude-Longitude coordinates of the mine |

Usually a map of the mine site is displayed at this spot, where avaliable. Usually from a Topographical map.

Site Access: Current information on routes to the mine site.

Geology: A brief article on the geology of the area that the mine is situated on.

History and Development: History of staking and development of the mine site.

Mine Production: Information dealing with details of mine production at the site.

**Town Life**: Some sites developed communities at the mine sites, and this section explains a bit about it.

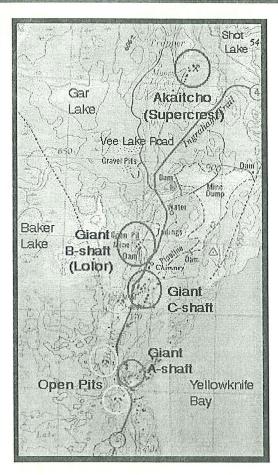
**The Outcome**: There is usually some sort of result or outcome with the mine and how it affects the mining community, plus details on other work that has been done in the area.

The Site Today: The state of the mine today.

**Notes**: General notes, explaining certain points.

## Akaitcho Mine (Abandoned)

| Company<br>Name(s)                              | Designation   | Production<br>Years | Also<br>Known<br>As | Location                         | Coordinates                             |
|---|---------------|---------------------|---------------------|----------------------------------|---|
| Akaitcho<br>Yellowknife Gold<br>Mines Ltd. 1948 | Past Prospect | N/A                 | Supercrest          | 2.6 km<br>north of<br>Giant Mine | LAT 60* 31' 30"<br>LONG 114* 20'<br>45" |

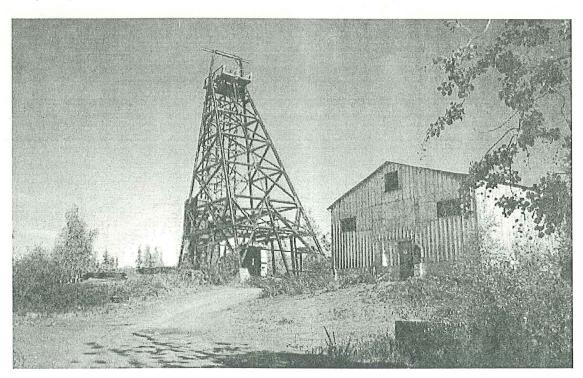


Giant Mine, and the Akaitcho/Supercrest property to the north. The main shaft is circled. (NTS 85 J/8+9)

**Site Access**: The Akaitcho Mine is accessible by road from the Ingraham Trail. However, traveling on these roads is restricted, and access to the Akaitcho site is granted under permission by <u>Giant Mine</u>.

**Geology**: Ore bodies of the Akaitcho area lie in the Yellowknife Volcanic Belt. This belt has been subjected to compressional stress that is manifiested by high-angle, reserve shear zones which hosts most of the mineralization on the property. The area has been distrupted by a number of Proterozoic Faults, such as the West Bay and Akaitcho Faults. The shear zones cut

various formations within the Kam and Banting Groups, however large gold bearing shears are restricted to the Yellowknife Bay Formation. This shear system that hosts the Akaitcho area also hosts the ore at Giant Mine. The shear system strikes northeast, and extends towards Vee lake on the Lynx property from the south of Giant Mine at the West Bay Fault. Several ore shoots from the Shear Zone branches offset into the Akaitcho area. The ore is a mixture of fine-grained quartz, carbonate, sericite, and other metallic minerals. Visible gold is rare in these shoots. (NMI)



Original Akaitcho Headframe and Powerhouse, 1999 (Ryan Silke photo)

**History and Development**: This area was staked in February 1936 for the Aerial Exploration Syndicate as the AES group of 24 claims. These showings of gold-silver amalgram lead to great excitement. They were soon after aguired by the Frobisher Exploration Company Ltd. and diamond drilling and surveying of the land was being done from 1944 to 1945. Akaitcho Yellowknife Gold Mines Ltd. was formed in January of 1945 by Frobisher Explorations to develop the property further. By 1947, four ore bodies were located containing 260,000 tons ore and in 1948 an exploratory shaft was sunk to 36 feet. Shaft sinking stopped August 1948 (Lord, 1951). Into the 1950's, preparations for further developments continued. Diamond drilling programs in many holes yielded the No. 1 ore zone at a depth of around 480 feet. Installation of permanent mining plants were begun for preparations of further shaft sinking, and a 90-foot steel headframe was erected by October 1950. Three bunkhouses to accomadate over 100 men were completed, and a cookhouse was under construction. Drilling programs through out the late winter of 1950 led to great excitement of starting full developments at Akaitcho, however by May 1951 the advancement of shaft sinking was momentarily halted due to the gold market. Throughout 1951-1957, the property was non-operational and under care and maintance while Akaitcho Yellowknife Gold Mines Ltd. awaited for better market conditions to start full scale underground developments (The Northern Miner, various articles 1950-1957). Eventually, interest in the project by shareholders was lost, and further fundings by Frobisher Explorations ran out and Akaitcho Yellowknife Gold Mines was on the verge of bankruptcy. In 1964, Giant Yellowknife Mines Ltd. rescued Akaitcho Mines through a deal in which the property would be

50% owned by both companies, and Giant would conduct the mining and milling operations. A drift from Giant Mine was constructed at the 750 foot level towards the Akaitcho area, and raises connected to the shaft (NMI). Other development work is included in the Supercrest Property report.

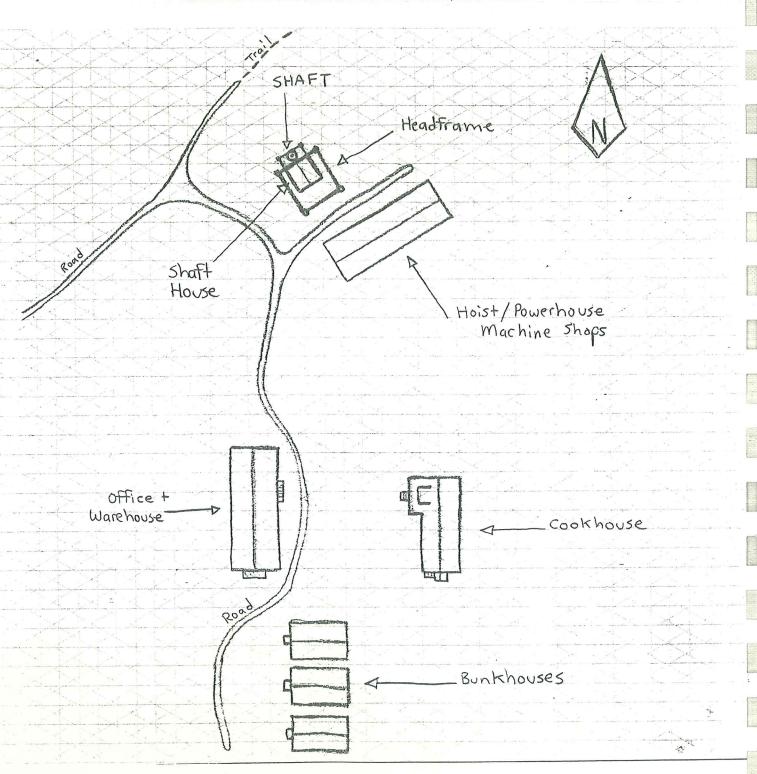
Mine Production: There was no production done on site during the 1950's.

**The Outcome**: The Akaitcho Mine never developed into a full-production area until Giant Mines took over the property in 1964 with Supercrest Mines. The property was then mined underground from Giant Mine.

The Site Today: Based on an on-site investigation on August 17 1999, the Akaitcho Mine area is still in its original shape. The black, metal headframe of the property is its distiguishing mark, and is visible from atop Ranney Hill or from numerous high points in the area. Old buildings, which include three bunkhouses, two large steel framed structures and a cookhouse also remain.

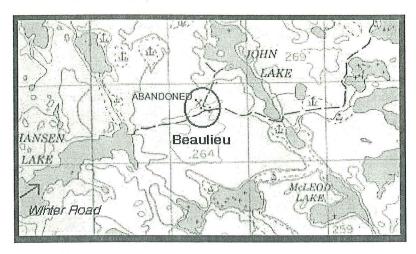
**Notes**: The Supercrest Mine, developed under the Akaitcho site by Giant Mine, has its own seperate section.

#### Akaitcho Mine property map, 1950



## Beaulieu Mine (Abandoned)

| Company<br>Name(s)                            | Designation      | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|---|------------------|---------------------|---------------------|---|---|
| Beaulieu<br>Yellowknife<br>Mines Ltd.<br>1945 | Past<br>Producer | 1947-1948           | Norma,<br>Brandy    | 79 km east of<br>Yellowknife, 3 km<br>north of Campbell<br>Lake, Beaulieu<br>River District | LAT 62* 24'<br>46" LONG<br>112* 54' 22" |



Map of Beaulieu Mine Region, from Topographical maps taken in 1978. (NTS 85 I/7)

Site Access: During the summer, float planes can land on either Hansen or John Lakes, and an airfield is located west of the mine site. This airfield is not maintained and the condition is unknown. The main winter route into the Beaulieu River Region and mine sites in the area are from the Ingraham Trail. From Reid Lake, trails extend towards Harding Lake, then east into Hearne Lake. The route channels across Hearne towards Trout Lake and into the Hansen Lake area where Beaulieu Mine is.

**Geology**: The property is underlain by well-bedded greywackes. The main vein of the claim group, the "Norma" Vein, is composed of grey quartz which contains low grade gold. The vein averages 6 inches in width and is 1,800 feet in length. Another vein, the "Easton" vein is located on the NORMA claim as well, but is of a higher grade, varying from 0.01 ounces/ton to 4 ounces/ton. The Easton vein is up to 6 feet wide and 150 feet long. (NMI)

History and Development: After the 1930's gold boom in Yellowknife was over many prospectors remained and worked in the Region. In 1939, S. Hanson travelled towards the Beaulieu River District. In an area just east of Hearne and Trout Lakes he staked the NORMA 1-12 group of claims which would lead to the discovery of the Beaulieu Mine.. Immediately following this, Norma Tungsten and Gold Mines Ltd. was formed to work on the claims, and retrieved about 15 tons of ore from two pits (A and B). Beaulieu Yellowknife Gold Mines Ltd. was formed around 1945 and took over operations on the NORMA claims. In 1945, construction of a mine by Beaulieu was underway on the site. Diamond drilling was being done

and searches for some high grade ore shoots were promising (Lord, 1951). Indicated reserves reported by the company were 14,000 tons grading one ounce/ton to a depth of 230 feet. These reports for vein size and grade were apparently greatly over exaggerated. With gold trading at \$35 an ounce in 1946, this ore shoot was too low grade to be mined at a profit, but the company went ahead to initiate a development program fueled by the excitement of the discovery of massive gold-bearing ore systems on the Giant Yellowknife Mine property. In May-July of 1947, a 2-compartment shaft was sunk to a depth of 320 feet with lateral drifts on the 175 and 300-foot horizons, and a mill was quickly erected, along with other major camp buildings. Underground development consisted of 475 feet of drifting on the 170-foot level, and 368 feet on the 300-foot level. As well, a ventilation raise was driven from the 300-foot level to the surface (NWT Assessment Report file 081798). By the end of 1947, the reserves were reported to amount to over 105,000 tons grading one ounce/ton. It was soon proved that the figures were highly inaccurate, either due to drilling errors or due to a company coverup for such a highly hyped and costly development program. In December of 1947, A.D. Hellens, an engineer, was brought in to calculate ore reserves. He reported only 1200 tons in reserve, grading 0.65 oz/t; enough ore to last the mine 2 weeks. This ore was later mined during the summer months of 1948. The Beaulieu operation folded in chaos and bankruptcy in the end of 1948. (Lord, 1951)

|                       | or to professor on colonical special colonical special |               |
|-----------------------|--|---------------|
| Years                 | Tons Milled  | Gold Recovery |
| October-November 1947 | 252 tons/ore   | 7.5 ounces    |
| August-October 1948   | 210 tons/ore   | 40.87 ounces  |

Mine Production: Under the work of Norma Tungsten and Gold Mines LTD in 1942, 15 tons of ore was treated in a small mill on property (Lord, 1951). The amount of gold recovered in unknown. In October of 1947 a 30-50 tons/day mill was erected and the mine was in production under Beaulieu Mines. However, the mineral output of the mine was too low, with the mill spurting out at an average an ounce a day. It was planned to obtain a furnace from the shutdown Ptarmigan Mine, but many believed that there would never be enough gold to have a satisfactory gold pour. They were right, and near the end of 1947 the gold pour was called off (Price, 1967). The site resumed sporatic milling in August until October of 1948. The total amount of gold produced was about 49 ounces. (Lord, 1951)

The Outcome: The Beaulieu Mine was a site with little potential. There were several reasons for the premature development of this mine, mainly dealing with the falsely calculated potential of the Norma Vein. The reported high values have been labelled as being either honest mistakes in the drilling, or as a company scandal to sucker shareholders and investors. Nevertheless, the ore to be mined was not there and things went down under for Beaulieu. The company had spent more money on the mine; on exploration, development, property, the mill and an airstrip along with individual salaries; than they produced in gold. Total expenditure amounted to \$795,052 (Lord, 1951 p.84), and only \$1,715 was valued at the gold recovery (Price, 1967, p.250).

This site has undergone extensive staking over the past 20 years. In 1982, the lapsed claims were re-staked as the BRANDY claims by Genesis Resources Corporation and work was done of the site until 1987 when the claims were allowed to lapse because of no potential (NMI). They claims staked again in 1992, but other information up to this point is not known by the author.

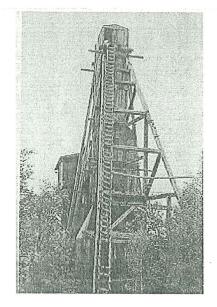
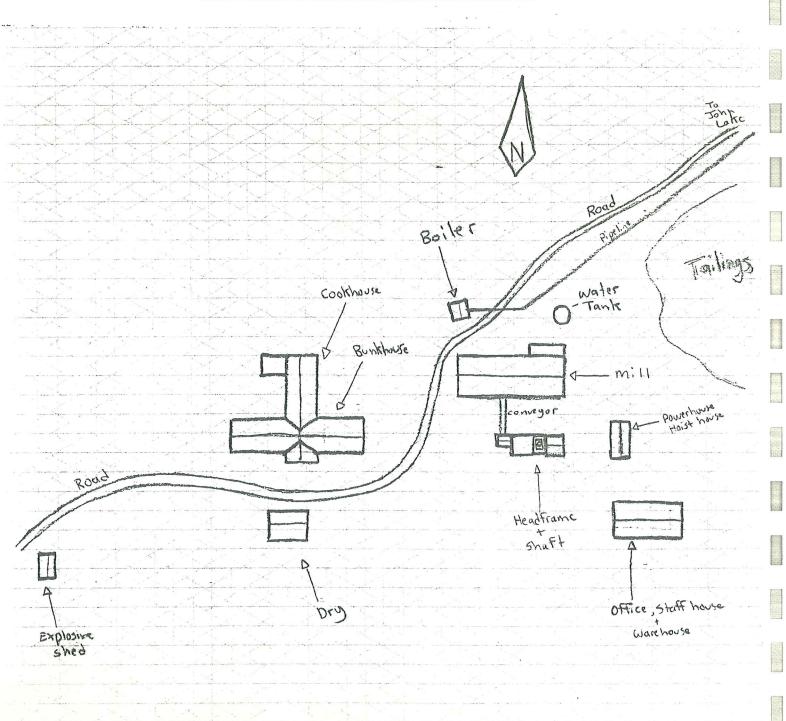


Photo of Beaulieu headframe in 1995-1996. (courtesy Vista Engineering)

**The Site Today**: The site as of 1993 was in a satisfactory state. Nine structures were found on the site in a report by Thurber Environmental. In 1995-1996, Vista Engineering in Yellowknife did environmental and safety assessments on the site as well. The entire site was cleaned up in 1996 by DIAND, all buildings and equipment removed or torched.

#### Beaulieu Mine property map, 1948



### **Best Bet Mine (Abandoned)**

| Company Name(s)  | Designation   | Production<br>Years | Location  | Coordinates                             |
|--|---------------|---------------------|---|---|
| DeStaffany<br>Tantalum-Beryllium<br>Mines Ltd. 1947, Boreal<br>Rare Metals Ltd. 1953 | Past Operator | 1947-1948,<br>1953  | 118 km east of<br>Yellowknife, 7<br>kilometers north of<br>DeStaffany Mine,<br>north shore Drever<br>Lake | LAT 62* 13'<br>42" LONG<br>112* 18' 05" |

Site Access: A winter road from DeStaffany Mine extends towards Drever Lake.

**Geology**: The Pegmatite sill that the claims lie on is 290 feet long and 25 feet wide. Observed rare-minerals in the body include amblygonite, spodumene, tantalite-columbite, beryl and lithiophilite. The sill is 50% amblygonite. Other minerals such as tantalite-columbite make up less than 1% of the pegmatite sill. (NMI)

**History and Development**: The BEST BET claims were staked in 1944 to cover a scheelite showing of pegmatite dykes. The property was obtained by DeStaffany Mines in 1946, and the large open pit-trench was developed on from 1947 to 1953 (NMI).

**Mine Production**: DeStaffany Mines treated 3,800 pounds of material from the Best Bet Mine at the DeStaffany Mill from September to October of 1947. It is said that 1,400 pounds of concentrate was recovered from the Best Bet #1 claim in 1948. Later in the 1950's, the Best Bet site became a major contributor to operations at DeStaffany by Boreal Metals, who extracted a block of ore 15 x 30 x 8 feet of a 50 pounds/ ton grade for milling in 1953. (NMI)

**The Outcome**: The Best Bet mine was a small extension of the DeStaffany Mine, with some successful tantalum-columbite extractions.

**The Site Today**: A Thurber Environmental report from 1992 shows the large open trench at Best Bet as the only visible workings of the mine. Two structures, which are both reported as bunkhouses, are collapsing near the mine.

### Blanchet Island Mine (Abandoned)

| Company<br>Name(s)         | Designation   | Production<br>Years | Also<br>Known<br>As | Location  | Coordinate                              |
|----------------------------|---------------|---------------------|---------------------|---|---|
| Jason<br>Explorers<br>1969 | Past Prospect | N/A                 | HRL<br>claims       | 115 km southeast of<br>Yellowknife,<br>southern shore of<br>Blanchet Island | LAT 61* 59'<br>00" LONG<br>112* 23' 00" |

**Site Access**: The site can be accessed from boat or float plane from Yellowknife, Hay River or any other settlements on Great Slave Lake.

**Geology**: The claims are underlain by a 2.5 km long diorite-monzonite intrusion, part of the Great Slave Supergroup. At the margins of this intrusion, cobalt, nickel, copper arsenides, and some silver has been discovered. The mined vein was reported to be 10-12 meters long and about 0.5 - 2 meters wide (NMI).

**History and Development**: The LUX claims (1-4) were staked in 1968 by A.V. Giauque after noticing Cobalt stains on Blanchet Island from his aircraft. These were optioned to Jason Explorers in 1969, who then staked the DEE 1-17 claim group. In 1969 D. Lent staked the DL claims east of the DEE claims. From 1969-1970, Jason Explorers mined the nickel-cobalt arsenide ore from an open cut which was 10 metres long by 7 meters wide and 6 metres deep, and from a 25 meters long adit. A small trench was also cut. This ore was hauled by rail cart to a loading dock south-west of the mine to be loaded on barge. (NMI)

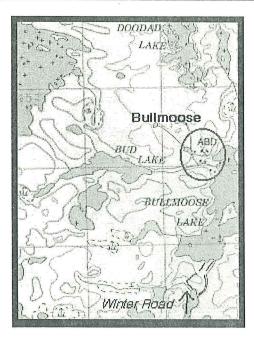
**Mine Production**: A total 130 tons of rock mined (NMI) but no mill was installed on site. Material was shipped south to Hay River, and later to France for processing.

**The Outcome**: After mining operations stopped, Jason Explorers continued with exploration on the property. In 1984, the current HRL claims were staked over the old ground of the LUX and DEE claims. Exploration work in 1987 yielded low assays on the property (NMI).

The Site Today: Unknown

### **Bullmoose Mine (Abandoned)**

| Company<br>Name(s)  | THE DAY OF HER BUILDING BUILDING | Production<br>Years | Also<br>Known<br>As | Location   | Coordinates                             |
|---|----------------------------------|---------------------|---------------------|--|---|
| Consolidated Mining and Smelting Company 1940, Terra Mining/ Duke Mining 1986 | Past<br>Producer                 | 1986-1987           | TA                  | 83 km east of<br>Yellowknife, 10<br>km south Beaulieu<br>Mine, 8 km east<br>Campbell Lake,<br>shore of<br>Bullmoose Lake | LAT 62* 20'<br>40" LONG<br>112* 44' 50" |



Map of Bullmoose Lake region and Bullmoose Mine taken in 1978. (NTS 85 I/7)

Site Access: The summer route into the Bullmoose mine area is by float plane, which can land on any of the lakes in the area. An airstrip has also been cleared, but it is no longer maintained. The Bullmoose winter route is the same as the Beaulieu Mine route up to the point of Hearne Lake. From Hearne, the winter roads extend into Zigzag Lake, over to the north end of Campbell Lake. From there, routes extend to the east to Bullmoose Lake and the minesite.

**Geology**: The property is underlain by greywackes and argillites of the Yellowknife Group. Quartz veins and seams are numerous and commonly lie parallel to bedding. A total of fifteen veins were mined during operations in the 1980s. Three major veins were found with the the 3-4 vein showing the best grade. Gold occurs in fine blebs and fracture fillings within the quartz, and is found associated with pyrite and galena (NMI).

**History**: This area was staked in September 1939 by U. J. Arsenault and C. S. MacDonald for the Consolidated Mining and Smelting Company. The amount of gold found on the TA claims was enough to warrant a small mining operation. Several veins were explored by trenches and

diamond drilling, and a 2-compartment inclined (70 degrees north-east) shaft was driven to at least 50 feet, with 80 feet of drifting at this depth by 1941. This shaft development was done without the use of mechanized equipment. Six men were employed during this time. Work stopped in the summer of 1941, and the property was soon after abandoned and the shaft was flooded (Lord, 1951).

In 1961, the TA claims were restaked by W.L MacDonald, who worked on the area until 1967 when the property was sold to Duke Mining Ltd. They worked on the site from 1968-1972 with exploration, trenching, sampling (13.72 oz/ton grade in one sample, 1968), and diamond drilling of 10,485 ft in 62 holes. Duke Mining intersected narrow gold bearing veins averaging one ounce per ton. During 1975, underground developments done by Terra Mining included the driving of a 1,300 foot long decline to the 220-foot level, with lateral work on the 50 and 70-foot levels. Total underground development amounted to 2,669 feet. This work earned Terra Mining a 50% interest in the property. About 2,600 tons of ore was mined and stockpiled before operations ceased in 1976 due to low gold prices. During 1981, Terra Mining and Exploration carried out a diamond drill program to depths of 1,000 feet in order to test the numerous vein systems. To a depth of 220 feet, reserves were calculated to be about 25,000 tons grading 0.34 ounces/ton. In November 1981, Terra Mining bought Duke Mining and changed it's name to Terra Mines Ltd. By the end of 1983, the decline was advanced to the 350 foot level, and the 200 and 300 foot levels were developed through 1,600 feet of drifting. Specific areas of the underground working encountered gold values of over 0.8 ounces/ton for a distance of 240 feet in a vein. As well, diamond drill programs encountered fairly high gold values at greater depths of the veins to the 980 foot level. A 1983 estimate for reserves was 160,000 tons grading 0.32 oz/ton to the 400 foot level, and over 400,000 tons to the 1,000 foot level. An airstrip was cleared at the minesite in 1985, to handle freight planes such as DC-3's. By 1986 the mill began to treat stockpiled ore. In June of 1987, operations shut down permanently due to low gold prices (NMI).

| Years     | Tons Milled | Gold Recovery |  |
|-----------|-------------|---------------|--|
| 1940-1941 | 12 tons/ore | 10 ounces     |  |

**Mine Production**: During the 1940-1941 period, no mill was installed on site. Twelve tons of ore was shipped to Yellowknife's <u>Con Mine</u> with gold values amounted to ten ounces. (Lord, 1951)

Later in 1972, a joint venture between Duke Mining and Terra Mining and Exploration Ltd yielded futher ore reserves. By 1986, stockpiled ore and other mined materials were being processed on site a small test pilot mill. Production numbers from the Northern Minerals Database (http://www.inacnt.internorth.ca) report production as 665 kg produced from 49,400 tonnes of ore. The NMI cards report total production as over 20,000 ounces, but of an unknown tonnage milled.

**The Outcome**: Gold prices during the late 1980's hampered the possible success of this small mining operation. In 1988, Terra Mines Ltd sold the TA claims at Bullmoose Lake to Pickwick Explorations Ltd, who carried out geological sampling work. As of 1999, mineral claims in the area are owned by K. Rasmussen.

**The Site Today**: The site was cleaned up after operations ceased in the 1980s. It is not known if any historic structures, such as a headframe from the 1940's, were still on-site.

### **Burnt Island Mine (Abandoned)**

| Company<br>Name(s)  | Designation      | Production<br>Years | Also<br>Known<br>As             | Location   | Coordinates                             |
|---|------------------|---------------------|---------------------------------|--|---|
| Zolota Yellowknife<br>Mines Ltd 1946,<br>Burnt Island Gold<br>Mines Ltd 1983,<br>Cameron<br>Mining/New Era<br>Developments Ltd<br>1989-1990 | Past<br>Producer | 1989-1990           | Ardogo,<br>Good<br>Hope,<br>GOO | 90 km north-east<br>of Yellowknife,<br>north of<br>Camlaren Mine<br>on Gordon Lake | LAT 63* 01'<br>55" LONG<br>113* 09' 45" |

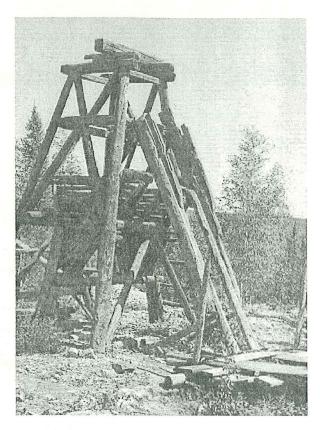
Site Access: Burnt Island is located on Gordon Lake. A float plane is required to reach the site.

**Geology**: Burnt Island is underlain by a sequence of slate, siltstone, and greywacke of the Archean Yellowknife Group. Gold mineralization is found in small quartz veins which are seldom more than 100 feet in length.(NMI)

**History and Development:** This area was first staked in 1939 as the ARDOGO group. Trenching work was done by the Mining Corporation of Canada in that year (Lord, 1941). The claims were re-staked sometime in the 1940's as the GOOD HOPE group, and the property was developed by a 43 foot deep inclined prospect shaft by the owners in 1945. The shaft was sunk on a number of closely space quartz veins in a zone 5-6 feet in width (NMI). The zone was found to trace south of the shaft, but narrowed to a foot in width. Later by 1946, Zolota Yellowknife Gold Mines Ltd. optioned for work on the claims (News of the North, November 8, 1946). They also acquired control of the adjacent EAST HOPE and HAZEL groups, previously controlled by Gordon Lake Prospectors Ltd. (NMI). Zolota Mines held the property into the 1950's, when they contemplated deepening the shaft (News of the North, April 21, 1950). In 1959, the property was re-staked as the GOO group by G. McDonald and J. Woolgar (NMI). Portions of these claims lapsed and were re-staked by various parties through the 1960's and 1970's. In 1980, Burnt Island Gold Mines Ltd. presumably held all the GOO claims. They conducted 991 metres of diamond drilling near the old shaft area in 1981 or 1982. The driving of a decline towards the old shaft was undertaken during 1983 and 1984, but lack of funds caused the project to be aborted (Seaton, 1985). In the late 1980's, the decline was further developed to 155 metres and during the summers of 1989-1990, a 2,000 ton bulk sample was extracted and stockpiled. In 1990, 1,700 tons were processed in an onsite 25-ton/day mill through a joint venture by Cameron Mining Ltd. and New Era Developments Ltd. It was decided to not go ahead with full operations on the site by 1991 (NWT Exploration Overview, DIAND annual report, 1989-1991).

Mine Production: No mill was installed on site during the 1940's, but in 1990 a small test mill processed stockpiled ore, which amounted to about 1,700 tons. Gold content values have not been reported (NMI).

The Outcome: Neither periods of operation resulted in any major mining developments.



The old Burnt Island headframe and shaft as shown in 1985 (extracted from a DIAND report by Seeton)

**The Site Today**: According to Walt Humphries who currently holds the claims, the old headframe still remains standing today. He also notes the presence of a few old cabins in stages of collapse. More recent mining developments on Burnt Island are also still apparent.

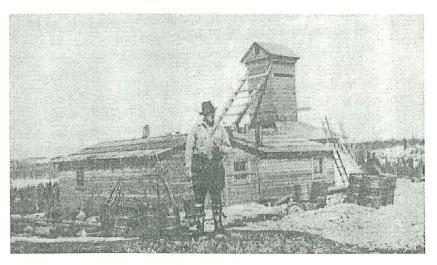
# Burnt Island Mine property map, 1990's Gordon Lake Dock AOIT 01d Headframe Burnt Island

### **Burwash Mine (Abandoned)**

| Company<br>Name(s)                               | Designation   | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|--|---------------|---------------------|---------------------|---|---|
| Burwash<br>Yellowknife<br>Gold Mines Ltd<br>1935 | Past Prospect | N/A                 | Rich                | East shore of<br>Yellowknife<br>Bay, Burwash<br>Point | LAT 62* 27'<br>50" LONG 114*<br>18' 50" |

**Site Access**: A canoe trip across Yellowknife Bay will take you to Burwash Point and the site of the first mine site in Yellowknife. A trip to the Dettah road and a kilometer hike into the bush will also get you to Burwash Point.

Geology: The Burwash Mine is situated in the Burwash Formation of the Archean Yellowknife Formation on the east side of Yellowknife Bay. The sedimentary basin extends eastward towards Gordon Lake. The Burwash basin is 120 kilometres wide and at least 180 kilometres in length. The formation is of economic importance because it hosts several small, high grade gold bearing deposits. The Burwash mine is on a high grade, yet small size vein. The gold grade unfortunately diminished with depth (NMI), which was a factor in the eventual closure of the Burwash site.



Combined powerhouse-hoist house-shaft house and headframe at Burwash, April 1936. (courtesy Susan Jackson)

**History and Development**: In the fall of 1934, C.J. Baker and H. Muir prospected Yellowknife Bay for B.E.A.R. Explorations and Radium Limited. At this time of the year, it was starting to get cold and the winds picked up on the Great Slave Lake. They were forced to camp in a small cove on the east side of the Bay to wait the storm out, and while in this cove across from [the future] Latham Island, they did some exploring and noticed a vein containing gold. The RICH group of 24 claims were staked. This was reported to Major Burwash who was working on other claims north of Yellowknife Bay. Burwash Yellowknife Gold Mines Ltd. was formed as a subsidary of Yellowknife Gold Mines Ltd. (Price, 1967). Fifteen men were employed during

1935, in camp construction and developments. The first open cut on the property was 25 feet long and 30 feet deep. In September 1935, a 2-compartment shaft was started at the bottom of the open cut in order to explore the vein at deeper depths. The open cut was at that point mined out, so was backfilled in order to construct the shaft house and headframe over the shaft (McMeekan, 1967). By the end of the year the shaft was 151 feet deep, however upon construction of a 70 foot long drift and several crosscuts on the 125-foot level, it was found that the surface had more gold concentration than the subsurface. During 1936, more trenching was done (about 300 feet) along with 2,000 feet of diamond drilling (Lord, 1951). The camp was shutdown in September of 1936, and later abandoned by 1940.

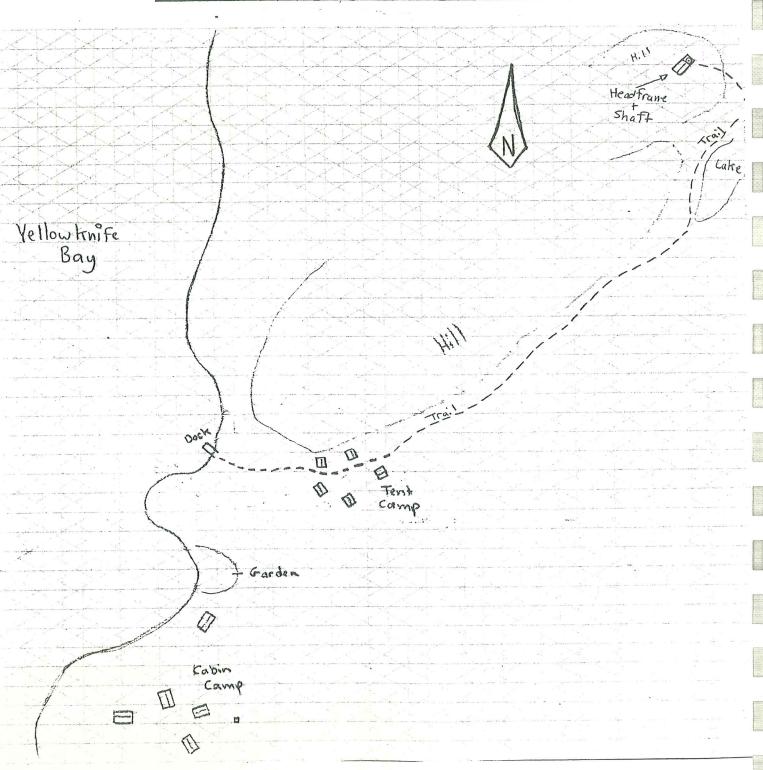
**Mine Production**: No mill was installed onsite. Sixteen tons of ore from the open cut were sent south to Trail, BC in 1936 to be treated. Gold content was reported as 87 ounces (Lord, 1951).

The Outcome: Being the first mining site in the Yellowknife Bay area high hopes were held for the Burwash Mine. Unfortunately, neither the trenching nor the diamond drilling yielded much hope for the vein and the camp was shutdown by late 1936. The development of Burwash did however help to lay the ground work for further mining operations in the Yellowknife Bay area, and during 1935 and 1936 a great deal of prospecting was done and many deposits were staked. C.J. Baker went on to stake Giant; the AES ground was staked (which later became the Akaitcho); Major. Burwash participated in the stakings of Negus; and GSC mappers made the discoveries that led to the Con, Rycon and other properties to be developed.

In 1945, Rich Yellowknife Gold Mines was formed and optioned the RICH claims at the abandoned Burwash site. The company did exploration and diamond drilling on site, but ceased work in the area soon after (Lord, 1951). No known work has been done since. Walt Humphries currently owns the RICH claims and reports some good grades in some of the veins.

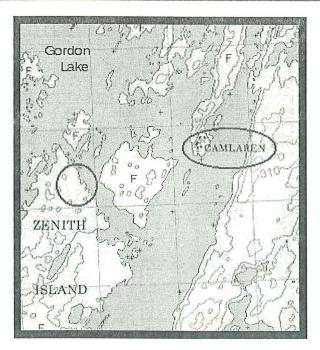
**The Site Today**: Based on an on-site visit on July 31 1999 and other dates by Ryan Silke, no structures remain at Burwash Mine but many foundations and remains of the old cabins can be found. The shaft has been filled in. The headframe was knocked down in 1969 as part of a city clean-up.

#### Burwash Mine property map, 1935-1936



## **Camlaren Mine (Abandoned)**

| Company Name(s)   |               | Production<br>Years     | Location | Coordinates                             |
|---|---------------|-------------------------|----------|---|
| Camlaren Mines Ltd/<br>Discovery Mines Ltd<br>1962, Mining<br>Corporation of<br>Canada 1980 | Past Producer | 1962-1963,<br>1980-1981 |          | LAT 62* 59' 05"<br>LONG 113* 12'<br>15" |



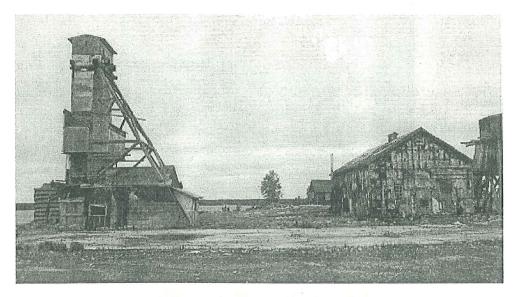
Camlaren Mine from topographical maps taken in 1978. Circled area are the locations of mine activities by Camlaren Mine. (NTS 85 I/14)

**Site Access**: The Camlaren site is accesible by float plane, or the Gordon Lake winter road. Upon completion of the Ingraham Trail as far as Tibbet Lake, a winter road was cut through Ross, Pensive, and Gordon Lakes. This route continues north to Lac De Gras, and the Lupin Mine.

Geology: The property on Gordon Lake is underlain by thinly bedded slates and greywacke of the Yellowknife Group. There are three main veins which were explored on the Camlaren property, the "Hump" at the main camp, the "31" on Zenith Island, and the "H", located also on the Camlaren main camp. The "Hump" vein is an outcrop in the shape of a saddle, 18 x 20 ft in diameter. This vein has been investigated at the 350 foot level with no apparent decrease in size or grade of ore. Gold showings are shown as fine powder in the quartz. The "31" vein on Zenith Island is similar to the "Hump" vein, however, sulphides in the quartz are not as common. The vein occurs as a series of irregular, discontinuous, quartz lenses along the crest of a fold. The "H" vein is similiar to the "Hump" vein as well, and sulphides are common. This small, narrow vein has been exposed over a length of 110 feet with an average width of 15 inches and a grade

of 1.22 oz/ton (NMI).

History and Development: The Gordon Lake area was bustling with activity during the late 1930s and early 1940s, with many claims being staked along it's 24 mile length. One block of 21 claims was jointly owned by the Mining Corporation of Canada and the A. X. Syndicate. In 1936 the companies formed Camlaren Mines Ltd. and began to develop the site on Gordon lake in July 1937. During the years of 1937 and 1938, there was heavy exploration, diamond drilling (14,994 feet), trenching, camp and shaft development. The first 2-compartment shaft was sunk to a depth of 380 feet on the "Hump" vein, with crosscuts at the 200 and 350-foot levels. A second shaft was soon afterwards sunk to 220 feet on the "31" vein on Zenith Island. Lateral developments in these shafts totalled 2,241 feet in the No. 1 shaft, and 309 feet in the No. 2 shaft. A headframe was erected during the latter part of February 1938 to service the No. 1 shaft, along with a smaller structure on Zenith Island (photo evidence, NWT Archives photos, John Anderson collection). Development costs between July 1937 and December 1938 amounted to \$411,874. Reserves were suggested at this time to be 13,177 tons of ore grading 0.62 oz/ton on the "Hump" vein (Lord, 1941).



Camlaren Mine as seen in 1984. Headframe and Hoist/Powerhouse (courtesy Bert Varcony)

In 1958 Consolidated Northland Mines Ltd. conducted exploration on site and yielded a reserve of 15,000 tons on the "Hump" vein grading 0.9 oz/ton. Early in 1962, an agreement was made between Consolidated Discovery Mines Ltd. and Camlaren Mines Ltd., whereas Discovery would conduct development, and mine ore above the 350-foot level with profits on a 50-50 basis. During 1962 and 1963, mining of this level was underway, and ore was shipped to Discovery Mine for processing. In November of 1964, Discovery Mines Ltd. gained a controlling interest on the property, and in 1968 plant rehabilitation was underway. In 1974, the Camlaren shaft was deepened to the 838-foot level and two new levels were opened up on the 600 and 800-foot levels, as part of an exploration program. Three years later the leases were sold to Noranda Mines and Pamour Porcupine Mines. During 1980-1981, work done by the Mining Corporation of Canada deepened the shaft to the 1050-foot level and development was now on the 600, 800 and 1000-foot levels. Attaining a further depth of the shaft than 1050 feet was at this time considered un-profitable, with gold prices trading at \$500 an ounce. Exploration programs through diamond drilling on the 1000-foot level located an extension of the Hump vein as far as the 1150-foot horizon, grading about 2.5 ounces/ton across 21 feet. By mid-1981 mining of the "Hump" vein above the 1000-foot level was almost complete, and small tonages of ore being mined in the 11 vein. Ore grades and gold recoveries were below expectations, and mining operations stopped in August of 1981. Milling stopped in September, and the property was abandoned shortly thereafter (NMI).

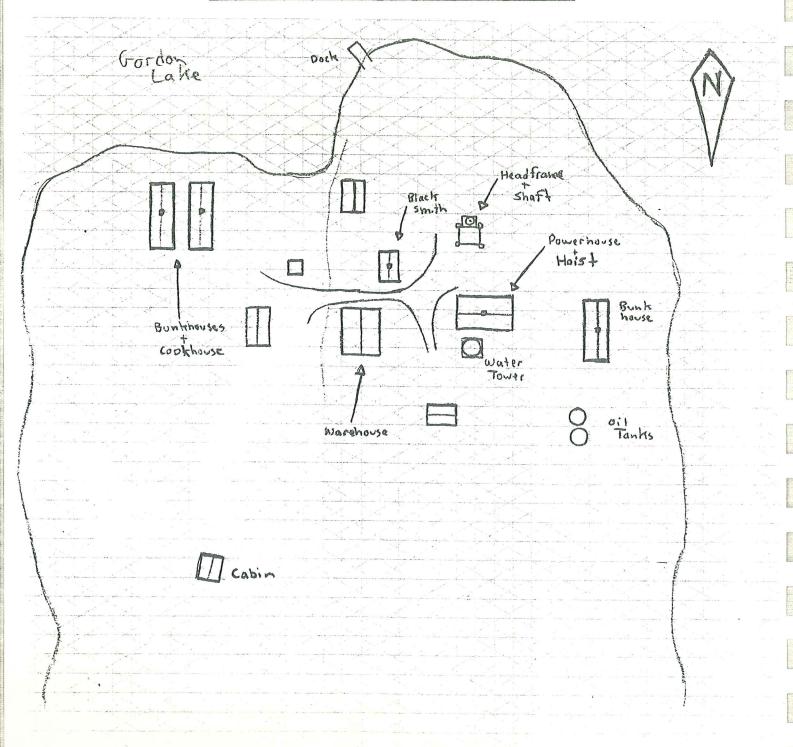
| Years     | Tons Milled      | Gold Recovery | Silver Recover   |
|-----------|------------------|---------------|--|
| 1963      | 12,174 tons/ore  | d L           | and the second of the second o |
| 1980-1981 | +22,634 tons/ore | +9,188 ounces | +2,416 ounces  |

Mine Production: Production at the Camlaren site started in 1962 by Discovery Gold Mines, the owners of the Discovery Mine just north-west of Gordon Lake. Over 12,000 tons of ore were extracted and milled at Discovery Mine up to 1963. In July 1980 production resumed with a 150 ton/day cyanide mill facility on site under contract by the Mining Corporation of Canada. Due to low gold prices in the 1980s and because of the un-profitable operations, the mill shut down in August 1981 (NMI). Recorded production during 1980-1981 through the NMI records lists the dates as July 1980 to March 1981, and does not account for further monthly dates to September 1981, when the mill was actually shutdown. However, it is known that from March-September, 12,174 tons were milled (as jotted in the NMI record by someone).

**The Outcome**: The Camlaren Mine is one of the most recent past producers in the Yellowknife area. It was a fairly successful mine, with on-and-off production. Currently, ownership on the property is by Walt Humphries.

The Site Today: Around 1990, the abandoned site was cleaned up with all buildings and equipment removed (as told by Shorty Brown).

### Camlaren Mine property map, 1938



## **Chipp Lake Mine (Abandoned)**

| Company<br>Name(s)                            | Designation   | Production<br>Years | Also<br>Known<br>As | Location   | Coordinates                             |
|---|---------------|---------------------|---------------------|--|---|
| Consolidated Mining and Smelting Company 1941 | Past Prospect | N/A                 | EILEEN<br>claims    | 86 km east of<br>Yellowknife,<br>directly west of<br>Ruth Mine | LAT 62* 27'<br>50" LONG<br>112* 39' 05" |

**Site Access**: Float planes can land on Chipp Lake.

**Geology**: The Chipp Lake area is underlain by massive greywacke and quartzites of the Yellowknife Supergroup. These strata strike 35 degrees and house a number of quartz veins which have generally poor gold values. The mined vein is exposed for more than 250 feet, with a width of 3 to 7 inches (NMI).

**History and Development**: This area was first staked in the late 1930's. The area was restaked by E. Skarin and H. Cohen, and during the 1941-1942 period, the Consolidated Mining and Smelting Company of Canada held the property and drove a 32 foot (8 x 6) shaft as well as blasting at least 6 pits along the vein. Approximately 10 to 20 tons of rock were extracted. Exploration was also conducted through diamond drilling (NMI).

Mine Production: There are no reports of a mill or milling done on or off site.

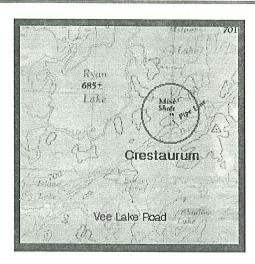
**The Outcome**: The property was optioned to Andex Mines Ltd. in 1975 who conducted diamond drilling. The claims were allowed to lapse, presumably due to bad drilling results (NMI).

The Site Today: Unknown.

**Notes:** This site was not mentioned by CS Lord (1951), nor has it been covered by any Environmental Reports.

## **Crestaurum Mine (Abandoned)**

| Company<br>Name(s)                   | Designation   | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|--------------------------------------|---------------|---------------------|---------------------|---|---|
| Crestaurum<br>Gold Mines<br>Ltd 1946 | Past Prospect | N/A                 | Ryan<br>Lake        | 13 km north of<br>Yellowknife,<br>between Ryan Lake<br>and Daigle Lake. | LAT 62* 35'<br>03" LONG 114*<br>21' 10" |

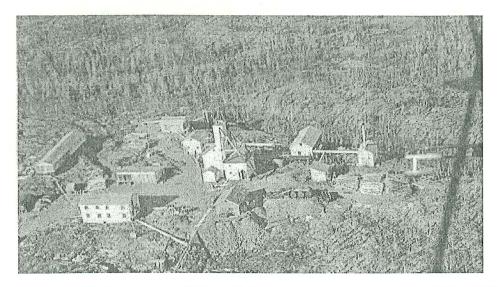


Crestaurum Mine from 1970 topographical map. (NTS 85 J/9)

**Site Access**: The site can be reached by an all weather road which is an extention of the road to Vee lake.

**Geology**: The volcanic rocks on the property are mainly andesite lavas of the Yellowknife Greenstone Belt and are cut by numerous dykes and sills of altered intrusive rocks. These lavas trend northeast and are steeply inclined. They are cut by shear zones and quartz veins with medium grade gold values. (NMI)

History and Development: The claims in the Ryan Lake area were staked during the summer of 1944. H. E. Weaver staked the MIDAS claims, and C. Campbell staked the GOLDCREST claims. Soon after Transcontinental Resources Ltd. bought the claims and started work in the area with diamond drilling and trenching. In October of 1945, Crestaurum Mines Ltd. formed to develop the property. During the summer of 1946, fifty-five men were employed with camp construction, shaft sinking and exploration. Most of this work was done on the GOLDCREST claims. The shaft was sunk to 420 feet, and developed on the 170, 295 and 420-foot levels with drifts and crosscuts driven about 200 feet in a north-easterly direction. In January of 1947, the VARGA group of claims were purchased, but a month later work ceased underground, mainly due to financing difficulties and labour conditions. Camp construction and surface exploration continued into 1948, and the No. 2 vein was discovered (Lord, 1951). The property was inactive from 1948 into the 1950's, as the company reported gold market conditions along with low labour and high transportaion costs as the main reasons for delaying further operations (News of the North, June 16, 1950).



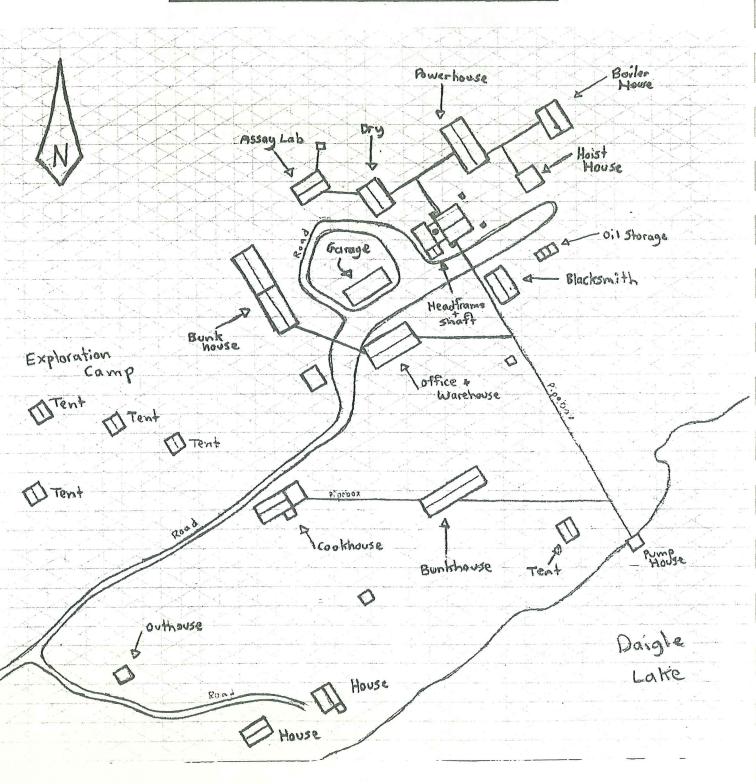
Aerial view of Crestaurum Mine, 1948 (NWT Archives, N-1991-009-0093)

Mine Production: No mill was installed on site.

The Outcome: When in 1957 a fire destroyed most of the mine (News of the North, October 31, 1957), the company announced that it would abandon the property. In 1964, Crestaurum Mines transferred the claims at the property back to Transcontinental Resources Ltd. who then joined with Falconbridge Nickel Mines Ltd. to form Northbelt Yellowknife Mines. Northbelt then amalgamated these claims with Giant Yellowknife Mine's into a continous stretch of property extending towards the Crestaurum mine along the Yellowknife Greenstone belt (NMI). In 1989, reserves on the Crestaurum property were calculated as 145,150 tonnes grading 7.54 grams/ton by Treminco Resources (NWT Exploration Overview, DIAND report, 1989). The development of the mine site near Ryan Lake helped in further exploration up the Yellowknife Greenstone Belt.

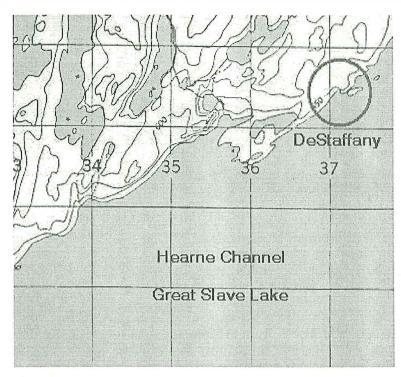
The Site Today: The mine was visited on June 23 1999 by Ryan Silke. Crestaurum is relatively clear of structures. A small house, portions stripped and gutted, is the only building left. There are a few other building foundations on the site, along with scattered debris. Concrete holdings for many of the facilities such as the headframe and hoist are also still present. The road into the minesite is in poor shape and a four-wheel drive vehicle is required to make the trip over the stretch safely. The first half of the road up to Rater Lake is accessible by any normal vehicle, but past this the road get's worse, with a few sections of the road washed out at Finger Lake. The site is popular with tourists and explorers, due to its proximity to Yellowknife.

#### Crestaurum Mine property map, 1948



# DeStaffany Mine (Abandoned)

| Company<br>Name(s)   | Designation      | Production<br>Years     | Also<br>Known<br>As | Location  | Coordinates                             |
|--|------------------|-------------------------|---------------------|---|---|
| DeStaffany<br>Tantalum<br>Beryllium Mines<br>Ltd 1945, Boreal<br>Rare Metals Ltd<br>1952 | Past<br>Producer | 1945-1947,<br>1953-1954 | Moose,<br>Boreal    | 117 km east of<br>Yellowknife,<br>shore of Hearne<br>Channel, Great<br>Slave Lake | LAT 62* 10'<br>46" LONG<br>112* 12' 42" |



Map of DeStaffany Mine area. (NTS 85 I/1)

**Site Access**: The DeStaffany mine site is reached by traveling the Great Slave Lake into the Hearne Channel. A float plane or boat is required during the summer.

Geology: The property was developed to cover two pegmatite dykes found in the area, mainly on the MOOSE claims. Three other dykes of lesser importance have been noted on site with no development done to them. These pegmatite dykes intrude the greywacke of the Yellowknife Group. The Moose No. 1 dyke has an average width of 15-20 feet and has been traced for 870 feet to a depth of 100 feet. The Moose No. 2 has been indicated to have a length of 1,400 feet and is about 25-30 feet wide. The main minerals found in these pegmatite dykes are tantalum-columbite, spodumene and ambligonile (NMI).

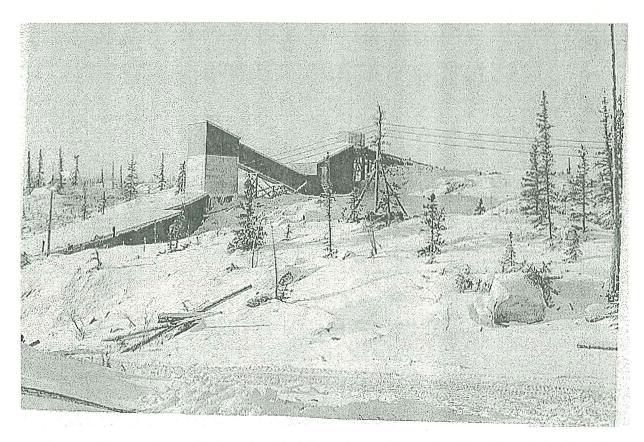


Photo of the crushing plant and mill at the mine under control by Boreal, during the period 1953-1954. (NWT Archives - N-1979-052-2021)

History and Development: During the 1940s, the Beaulieu and Francois River Districts were being staked. The MOOSE group of 15 claims were staked in July of 1942 by G.D. DeStaffany and A. Greathouse for showings of scheelite. In 1943 and 1944 the claim block was enlarged to include some pegmatite dykes, along with other claims, including the BEST BET (1 claim), TAN (4 claims) and BIG HILL (not the Big Hill Lake) groups (1 claim). Apparently, developments were underway during 1945 and it has been reported a 25-ton per day mill was installed and camp erected (News of the North, June 23, 1945). A 46-foot, one-compartment 5 x 7 foot shaft was sunk on the Moose #2 vein in 1946 and a 28-foot high headframe was erected of locally cut timber (letter signed by Meikle, July 16 1946). A total of five mining locations were developed on the site, ranging from shafts to open pits and trenches.

The importance of tantalite on world-wide markets made the DeStaffany property a major interest by the government during the 1940's. Along with the main shaft near the shore of Great Slave Lake, a pit was dug at the Best Bet area 7 kilometers north at Drever Lake, also owned by DeStaffany Mines Ltd. (Lord, 1951). By the end of 1946, the shaft had been carried to a depth of 68 feet and it was felt it would be deepened further to at least 125 feet (Nor' West Miner, Jan-Feb 1947). Boreal Rare Metals Ltd. was formed in November of 1952 to further produce on the property and mined several open pits and trenches. The 125 tons/day mill operated intermittently from December 1953 until August of 1954, when it shutdown for the winter. Several buildings at the mine burned down in January 1955, including the mill, the power house and the crushing plant. The mine was not reopened after that due to the economics of tantalite-columbite (NMI).

Mine Production: A 25-ton/day mill produced over 700 lbs of tantalite concentrates in 1945

(News of the North, June 13, 1945). It is reported that it again operated briefly in 1946 (Nor' West Miner, Jan-Feb 1947) and again from September to October of 1947, processing 32 tons of ore from the Moose pits, and 3,800 pounds from the Best Bet pit. From this, about 1,200 pounds of concentrate was recovered (Lord, 1951). In 1953 and 1954, Boreal Rare Metals milled 18,928 tons of ore containing 3.5 lbs./ton of tantalum-columbite with a recovery of 39,100 pounds. Heavy concentrates containing columbium-tantalum, amblygonite and beryl were recovered and sent to the company built refinery in Quebec (NMI).

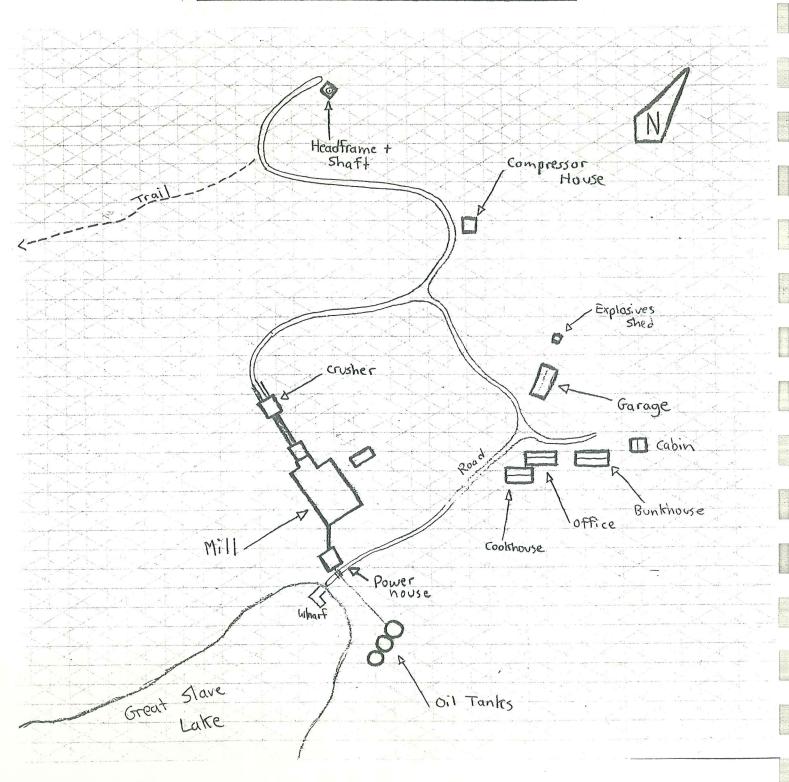
| Years     | Tons Milled            | Concentrate Recovery |
|-----------|------------------------|----------------------|
| 1945      | unknown                | 700 lbs              |
| 1946      | *minor amounts milled* | unknown              |
| 1947      | 31.9 tons/ore          | 1,200 lbs            |
| 1953-1954 | 18,928 tons/ore        | 39,100 lbs           |

**The Outcome**: Due to the fact that cheaper supplies of columbium-tantalum products were becoming available on the international markets, the mine did not reopen, however in 1955 the property was explored for possible lithium occurrences. A petition of bankruptcy was filled against Boreal Rare in 1956, and its assets were acquired by Beauport Holdings Ltd., along with 67 other claims in the area. In 1963 Beauport conducted exploration on these claims. Half of the MOOSE claims were re-staked as the ELK group sometime in the 1970's by C. O'Sullivan for the Hemisphere Development Corporation. (NMI)

The Site Today: According to Thurber Environmental in 1992, the site was in poor condition with most buildings already collapsed or in stages of collapsing.

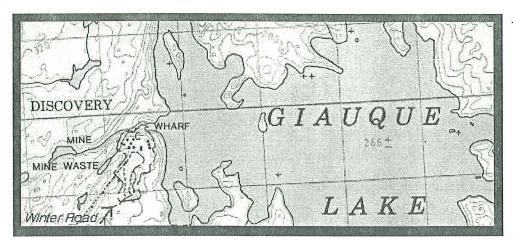
**Notes**: Old newspapers and magazines dating from 1945 to 1947 account for different information than what is provided by Lord in 1951. Apparently, a 50-ton mill was in operation in 1945 (News of the North), but later in 1946 it operated at 25-tons/day (Nor'West Miner) but again during this year it had a capacity of 5-tons/day (Lord, 1951). It can be assumed that the mill had a capacity of 50 tons/day during the 1940's, but during it's operation it only ran at an average of 25-tons a day, and even lower to 5-tons/day due to operating problems, etc. However based on the figures, the mill probably processed no more than 100 tons during these years, and actually only operated at it's 5-ton per day mill rate.

#### DeStaffany Mine property map, 1954



# **Discovery Mine (Abandoned)**

| Company Name(s)   | Designation   | Production<br>Years | Location  | Coordinates                             |
|---|---------------|---------------------|---|---|
| Discovery Yellowknife<br>Mines Ltd. 1947,<br>Consolidated Discovery<br>Yellowknife Mines Ltd.<br>1952, Discovery Mines<br>Ltd. 1964 | Past Producer | 1950-1968           | 80 km north of<br>Yellowknife, west<br>shore of Giauque<br>Lake | LAT 63* 11' 15"<br>LONG 113* 53'<br>45" |



Map of Discovery Mine and Giauque (pronounced 'Jakeway') Lake from Topographical maps taken in 1953 while the mine was in its early years. (NTS 85 P/4)

**Site Access**: This site is accessible only by float plane during the summer months, as the old airstrip is no longer servicible. The main winter route to the Discovery Mine is over Prosperous Lake from Cassidy Point, up the Yellowknife River as far as Johnston Lake, then up towards Giauque Lake.

Geology: The property is underlain by volcanic and sedimentary rocks of the Yellowknife Group. The main volcanic body forms a belt that extends for about 3,300 feet and is between 400 and 550 feet wide. North and East of this host unit lies a complex of greywacke and argillite, and west of the unit lies a 1,300 to 1,700 foot wide belt of finely interbedded quartzite and granulite. Gold-bearing quartz veins occur within a greywacke, which is enclosed in the belt of basic volcanics. There is a total of at least 4 high grade quartz veins which occur at the Discovery property. The ore mined from Discovery from 1950-1968 came from these zones, and specifically from the No. 4, 4B, and 16 veins. Other sections of gold-bearing quartz occur in the West Zone, which saw some production in 1964. (NMI)

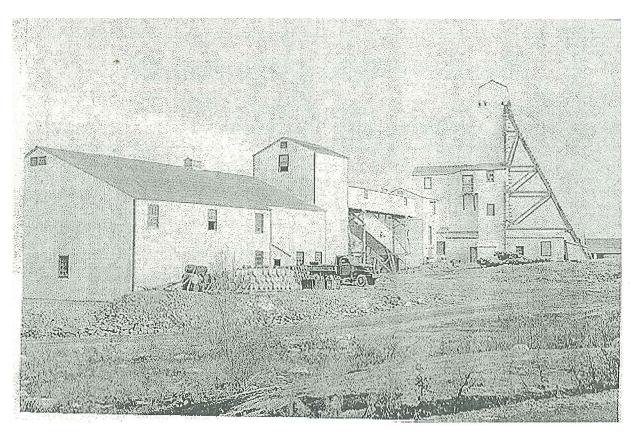


Photo of the Discovery Mill and 75-foot Headframe, 1950's (NWT Archives photo - N-1979-052-1896)

**History and Development**: During the summer of 1944, prospector A.V. Giauque under N.J. Byrne decided to explore north of Yellowknife past Johnston Lake (Price, 1967). They landed on a nameless lake and found visible signs of gold and staked the LUX, LaSALLE and BB claims. Discovery Yellowknife Mines Ltd. was organized in February of 1945 to develop the property, and exploration work began with diamond drilling and trenching. These programs were further investigated in November 1945 by N.W. Byrne. and led to the discovery of the "North vein" by prospector B. Wagenitz. A reorganization of Discovery Yellowknife Mines Ltd. was started in December 1945, and a new extensive diamond drill program was started in January 1946 to explore the "North vein". The results of the drilling programs and geological investigations showed so much promise that underground developments were layed out and mining plant items were ordered. The 3-compartment shaft was started in November 1946, and these mining plant items were flown to the property by March 1947. The three-compartment shaft was 275 feet deep and two levels were opened at 125 and 250 feet by September 1947. Financial difficulties delayed the operation during 1947, but were later resolved (Lord, 1951). In April 1948, a mill was ordered from the Mount Washington Mine in Montana, but the barge that was carrying the load sunk on Great Slave Lake after a fire on the ship. Another mill was rounded up, this time from Cariboo Hudson Gold Mines of BC, and shipped to Yellowknife before freeze-up (LeBourdais, 1957). The 100-ton/day cyanide mill was installed by December 1949 (Lord, 1951).

In 1958, an airstrip was created on the site from over 50,000 tons of mine waste rock. By this time, the property was being mined on the 125, 250, 365, and 500-foot levels. Below 500 feet there were additional levels at 125-foot intervals, resulting in a total depth of 4,060 feet by 1960. During 1962 and 1963, exploration below the 3,900-foot levels failed to find an extension

of the ore body and it was believed that Discovery would be mined out by 1964. In late 1963, however, a new vein (the 4B) was located on the 2,900-foot level. This ore structure developed into a large, high-grade system, and extended the life of Discovery Mine. Following this, Discovery Yellowknife Mines Ltd. merged with Ormsby Mines Ltd. to create Discovery Mines Ltd., and amalgamated the Discovery claim groups and property formally held by Ormsby. During 1965, underground diamond drilling at Discovery yielded potential for the new property. Tonnage at the end of the year for all Discovery property ammounted to 190,540 tons grading 0.82 ounces/ton. During 1967, stope mining was concentrated between the 2,450 and 3,950-foot levels, which accesed the No. 4B and No. 16. Underground exploration was accelerated during 1967. Following the exhaustion of economic reserves in 1968, milling stopped, and underground operations were ceased in May of 1969 (Thorpe, 1972).

| Discovery Mi | ine Produ | ction Statist | ics 1950-1968    |                     |
|--------------|-----------|---------------|------------------|---------------------|
| Tons Milled  | Tons/day  | Ounces/ton    | Gold Produced    | Value of Production |
| 1,018,786    | 149 (avg) | 1.02 (avg)    | 1,023,575 ounces | \$36,417,281        |

Mine Production: The mill first began operation on January 2nd, 1950 and the first gold brick was poured on February 10th of 1950. (NMI) In 1956, mill production was increased to 150 tons/day from 100 tons/day capacity and later further increased to over 230 tons/day in 1967, to compensate for lower mill heads (Thorpe, 1972). The mill was under steady operation for just under 20 years when it shut down in 1968 because of lower mill heads and grade. The mill was under steady operation for just under 20 years when it shut down in 1968 because of lower mill heads and grade. The mill was destroyed by a fire after it stopped operations.

**Town Life**: With the benefit of a power line run from the Bluefish hydro plant a considerable community formed at the Discovery Mine which attracted workers from all over the country. By 1962, there were 139 people employed at Discovery Mine, with over 30 houses built on the property. Modern community services, such as education, health care, and entertainment, were all intigrated in the mining camp. The Recreation hall was a combined curling rink, outdoor hockey rink, theatre, gymnasium and school. The townsite had it's own Firehall, as well as a hospital and a post office. The community had it's own sports teams, and competed against rivals in Yellowknife through hockey and baseball tournaments.

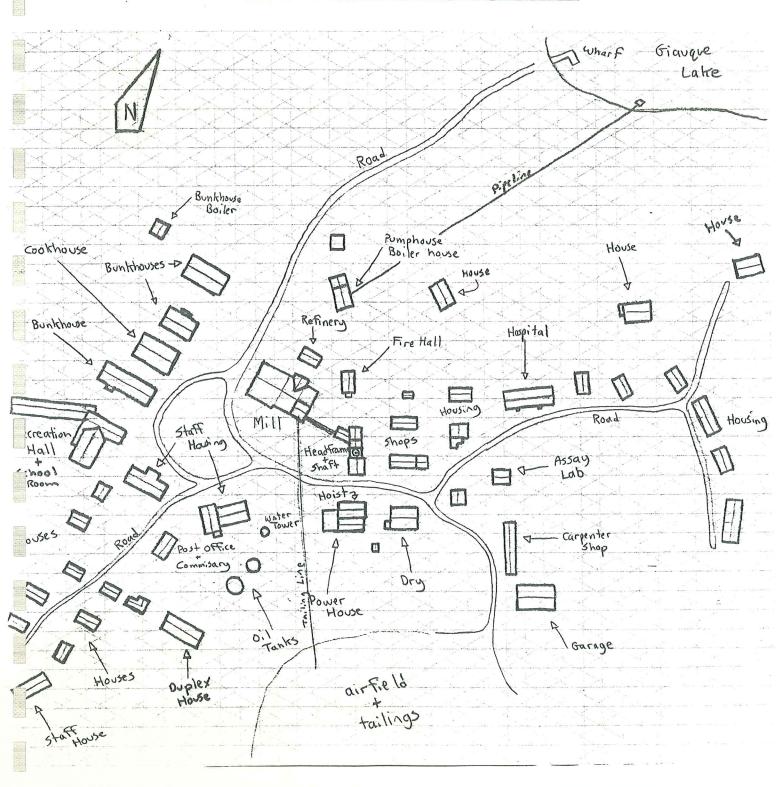
The Outcome: Further ore reserves on the Discovery property have been reportedly delineated within the last ten years, and GMD Resources along with New Discovery Mines were continueing exploration as of 1995 (NWT Exploration Overview, DIAND reports). As of 1999 there are however evidently no plans to reopen the mine. The past development of Discovery contributed to the growth of Yellowknife into the 1950's and 1960's, and continued to portray the north as a mining territory. Discovery has been called one of the biggest gold finds in Canadian history, with some areas on the property yielding as much as 10 ounces of gold per ton (Price, 1967). Currently. an environmental remediation of the large tailings pond at Discovery Mine is underway. A work crew is re-forming the old airstrip, and covering up the tailings for re-vegetation. No action has been taken to removing any of the old buildings of the mine.



The Discovery Headframe in August 1999 (Ryan Silke photo)

The Site Today: Some have stated Discovery as one of the largest remaining abandoned minesites in Canada. Based on an onsite investigation on August 31 of 1999 by Ryan Silke, most of the original buildings remain at the mine. Most are abandoned and some in a condemned state, but some of the houses are still used by visitors to the mine. A work crew of a half-dozen men or so were on-site, doing environmental work on the tailings pond. These men use some of the buildings for storage space.

# Discovery Mine property map, 1950's



## Freda Mine (Abandoned)

| Company<br>Name(s)                                  | Designation   | Production<br>Years | Location                                | Coordinates                             |
|---|---------------|---------------------|---|---|
| Northern<br>Tantalum and<br>Rare Metals Ltd<br>1946 | Past Producer | 1946                | 4 km north of<br>Thompson-Lundmark Mine | LAT 62* 38' 20"<br>LONG 113* 28'<br>45" |

Site Access: Accessible only by overland hiking from Thompson-Lundmark Mine.

**Geology**: The claim is underlain by nodular quartz-biotite schist which is derived from greywacke of the Yellowknife Group. The Freda dyke is exposed for 297 feet and varies in mineral content and texture. While the southeastern end contains albite, quartz, microcline, muscovite and tourmaline, the Western section of the dyke contains mostly pegamtite. (NMI)

**History and Development**: The Freda No. 1 claim was staked in September of 1944 by E. Sutherland covering a pegmatite dyke found the summer before. Stripping and blasting continued until 1945, at which time Northern Tantalum and Rare Metals was consolidated. In 1946 they erected a small mill. (Lord, 1951)

Mine Production: Under the direction of L.F. Gauvreau, the mill processed 120 tons of pegmatite material which was extracted from an open cut on the dyke. Products of this contained tin, beryllium, lithium and columbium. (Lord, 1951))

**The Outcome**: This small operation only lasted a few months, never clouding the Thompson-Lundmark operation located south of Freda. In 1968, the site was re-examined by J. S. Turner. He at this time did a little sampling and mapping. (NMI)

**The Site Today**: If any buildings were present on site they may have been destroyed by the forest fires of 1998, which destroyed the nearby Thompson-Lundmark mine.

# Gold Lake Mine (Abandoned)

| Company<br>Name(s)                         | Designation      | Production<br>Years | Also Known As             | Location  | Coordinates                             |
|--|------------------|---------------------|---------------------------|---|---|
| Giant<br>Yellowknife<br>Mines Ltd.<br>1986 | Past<br>Operator | 1986-1987           | GKP,<br>(Lynx-Supercrest) | Northern<br>property of<br>Giant Mine<br>Supercrest<br>area at Gold<br>Lake | LAT 63* 04'<br>00" LONG<br>113* 10' 00" |

Site Access: The site can be reached by traveling the Vee Lake road to Gold Lake.

Geology: The GKP zone is a small shear zone containing gold-bearing veins similiar to those at Giant Mine property. The GKP zone is a faulted extension of the Supercrest ore-body, offset by the Akaitcho fault. (NMI)

**History and Development**: The FOX claims (1-13) were recorded in January 1936 by M. Saingrie. They were then optioned to Ventures Ltd. who did surface exploration including trenching and diamond drilling during 1936 and 1937. Lynx Yellowknife Gold Mines Ltd. held the claims from 1945 to 1947 and conducted exploration work. No orebodies was found at this time (Lord, 1951). The FOX claims were aquired by Giant Yellowknife Mines sometime later.

The AES group were recorded in February 1936 and aquired by Frobisher Explorations Ltd., who later formed Akaitcho Yellowknife Gold Mines Ltd. in 1945. Four ore bodies were located in 1947 and a shaft was sunk in 1948-1950 before development stopped (Lord, 1951). Giant Yellowknife Mines Ltd. gained control of Akaitcho in 1964 and formed Supercrest Mines Ltd.. Development and production of the Supercrest area began in 1969 as the area was mined by drifts constructed from Giant Mine (NMI).

Giant Mine began development of a portal at Gold Lake to access the GKP zone, part of the LYNX-Supercrest property. Three-levels were developed, the 2nd; finished in 1986; and the 3rd in 1987. Ore was trucked to the Giant Mine Mill. Mining of this area was completed by 1987. Supercrest Mines mined the GKP zone ore via drifts from Giant Mine into 1988. (NMI)—

**Mine Production**: No production numbers have been located for the Gold Lake Mine. For statistics on the GKP zone located near the Supercrest Mine see the Supercrest entry.

The Outcome: This small extension of Giant Mine helped to aid the mine in production.

The Site Today: The portal was filled in and the site was cleaned up after operations ceased.

# Goodrock Mine (Abandoned)

| Company<br>Name(s)                  | Designation   | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates |
|-------------------------------------|---------------|---------------------|---------------------|---|-------------|
| Goodrock<br>Gold Mines<br>Ltd. 1942 | Past Producer | 1942-1943           |                     | 88 km north-east of<br>Yellowknife,<br>Gordon Lake, north<br>of Camlaren Mine |             |

Site Access: Gordon Lake is accessible by winter ice road or by float plane.

**Geology**: The property is underlain by greywacke and slate of the Archean Yellowknife Group. A series of quartz lenses with scheelite outcrop over widths of up to 10 to 12 feet (NMI).

History and Development: The claims in the area were staked sometime before 1937, and the Galloway Gordon Lake Mining Syndicate was formed in June of 1937 to acquire these five claims. In 1938, the property was enlarged to 30 claims and exploration work during 1938 and 1939 included the sinking of a 35-foot shaft and 2,000 feet of diamond drilling along with two trenches across the No. 1 vein. The original discoveries were that of high grade gold veins but the strategic importance of tungsten by 1942 meant that this site had a more important role. Goodrock Gold Mines Ltd. purchased a 60% interest in the claims in 1942 and evaluated these showings for scheelite. A mill was installed by Goodrock in November. Argonaut Yellowknife Mines Ltd. acquired the property from Goodrock Gold Mines and Galloway Mines Ltd. in 1944, and did exploration work from 1944 to 1946. (NMI) No further developments or exploration on the property have been reported.

Mine Production: A 10 tons/day mill was installed in November of 1942, and ran intermittently to at least March of 1943 under the direction of C. Watt. An unknown amount of tungsten concentrate was recovered. (NMI)

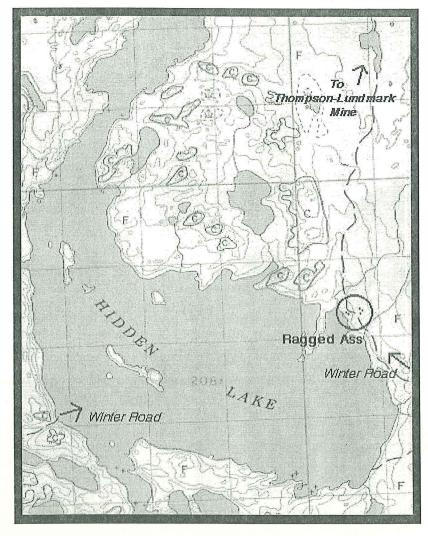
**The Outcome**: This mine site served the country well during World War II, with the production of tungsten. Further exploration on the property after 1946 have not been reported.

**The Site Today**: The site on the east shore of Gordon Lake was destroyed by the forest fires of 1998. It was reported that this mine was in a good state, with an old cabin campsite.

**Notes**: CS Lord (1951) does not acknowledge the usage of a mill on the property in 1942 and 1943 in his 1951 report on the property.

# Hidden Lake Mine (Abandoned)

| Company<br>Name(s)  | Designation      | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|---|------------------|---------------------|---------------------|---|---|
| Ragged Ass<br>Syndicate 1940,<br>Wist and<br>Associates 1959,<br>Hidden Lake<br>Gold Mines Ltd.<br>1968 | Past<br>Producer | 1968-1969           |                     | 45 km east of<br>Yellowknife, east<br>shore of Hidden<br>Lake | LAT 62* 35'<br>00" LONG<br>113* 29' 00" |



Map of Hidden Lake and the Hidden Lake Mine site, along with the winter road up to the Thompson-Lundmark Mine. (NTS 85 I/12)

Site Access: Winter trails extend from the Ingraham Trail into Hidden Lake. Float plane, or a

canoe trip from Prelude Lake is required during the summer.

Geology: The property is underlain by thin-bedded greywackes and slates of the Archean Yellowknife Group, and is bordered by the Hidden Lake granite on the west. The narrow north-striking vein system dips about 25 degrees to the east. The vein is interupted by a sharp fold in the area of the shaft and has been the locus for extensive quartz mineralization. The resulting quartz boudins within the mine contain a fair amount of visible gold. The vein system is conformable with the bedding of the hosting greywackes and shales. The vein zone is from 15-20 feet in thickness. Free gold occurs in the individual bands near the altered contact with the country rock. (NMI)

History and Development: In December 1938, A. McClure and J. Herrimen staked the HM group of claims on the east end of Hidden Lake. They were aquired by the Ragged Ass Syndicate, run by E. McQueen, C. Watt and T. Williams around 1940 (Price, 1967). They tested a vein by driving a long 40 degree decline, along with 2 pits (Schiller, 1965). The Ragged Ass Syndicate operated the site for under a year, with a custom mill located on the property and operated by Shorty Holloway. The grade of the material mined was reported to have been very high (Price, 1967). Apparently, excessive water was encountered at the depth of the decline where further gold bearing quartz was located, and the site abandoned (Barager, 1962). This group of claims on Hidden Lake was known as the LITTLE GIANT (3-12) group of claims in 1953. These claims were in the possession of C. McAvoy until 1959, when they lapsed and were restaked by J. Herriman in June of 1959. Work done up to 1964 by Wist and Associates Ltd. included diamond drill programs, and the sinking of an 8x8 foot 80 degree inclined shaft to 69 feet. Underground development up to 1964 consisted of 45 feet of drift work done on one level of the shaft, at an unknown depth. At ten feet of this easterly trending drift, a crosscut had been driven 10 feet to the north. During 1965, there were plans to begin milling operations, and facilities were already under construction (Schiller, 1965). Work reportedly stopped on the property in 1969 (NMI).

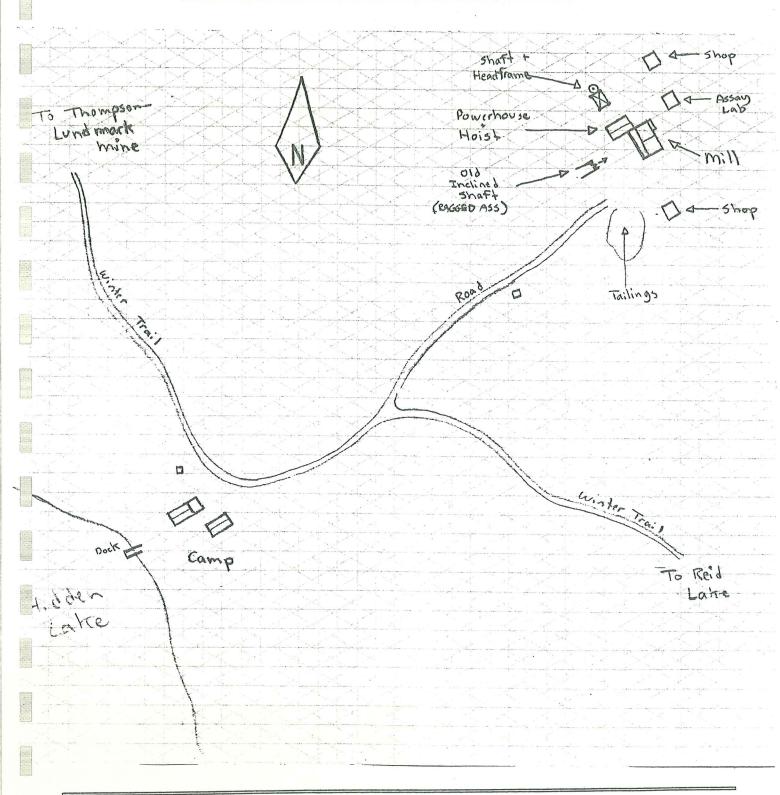
**Mine Production**: There was reported milling operations at Hidden Lake by The Ragged Ass Syndicate during the 1940's, but no records have been found (Price, 1967). In 1968, several hundred tons of stockpiled ore was processed in a mill, but no other milling records have been found. (NMI)

**The Outcome**: Exploration in the area continued after the Hidden Lake Mine was abandoned, and currently there are three other main deposits in the area: the Shorty, K1 and F1 deposits.

**The Site Today**: The Hidden Lake Mine site was destroyed in the forest fires of 1998. Before this, the mine was in a reasonable shape, as reported by Thurber Environmental in 1992.

Notes: According to 1946 claims maps of the Hidden Lake property (NWT Assessment Report 082251), the claims were known as the HM group. According to 1953 claim sheets of Hidden Lake, the property was located on the LITTLE GIANT claims. The numbers of this group totalled 3-12, with the two first claims titled MCQUEEN 7 and 8 (NWT Assessment Report 015030). Ed McQueen was part of the Ragged Ass Syndicate according to Price (1967), but during 1940 it is assumed that the property was called the HM claims, as maps show. The relationship between the 1953 MCQUEEN group and Ed McQUEEN of the 1940's is not known. It can be assumed that the HM group was restaked sometime after 1946 as the LITTLE GIANT claims, and claims numbers 1 and 2 were re-staked before 1953 as the MCQUEEN claims 7 and 8, maybe by McQueen himself while attempting to restake his original property. The proposed MCQUEEN claims 1-6 are not included on this map. It is not known what the claims were called in 1959 when re-staked by Herriman.

#### Hidden Lake Mine property map, 1960's



## June Mine (Abandoned)

| Company<br>Name(s)                    | Designation   | Production<br>Years | Location  | Coordinates                          |
|---------------------------------------|---------------|---------------------|---|--------------------------------------|
| Strike Lake<br>Resources Ltd.<br>1977 | Past Producer | 1977-1978           | 77 km east of<br>Yellowknife, near<br>Beaulieu Mine | LAT 62* 25' 07"<br>LONG 112* 51' 08" |

Site Access: Float plane is required during the summer to reach the site.

**Geology**: The claims are underlain by southeast-trending metasediments of the Archean Yellowknife Supergroup. The property hosts two parallel vein systems of gold-bearing quartz. Diamond drilling indicates that the veins and stockworks are up to 6 meters in width, but have generally low grade.

History and Development: The JUNE group of seven claims was staked in July of 1939 for the Consolidated Mining and Smelting Company of Canada. From 1939 to 1941, exploration was conducted on site with diamond drilling and geological mapping (Lord, 1951). In 1956, Canadian Exploration Ltd. conducted a surface exploration program, but later let it's lease lapse. In 1973, D. Nickerson restaked the ground as the JOON group. Diamond drilling of 53.19 meters yielded poor gold grades. Two mineralized veins were located with tonnages of under 2000 tons of ore. Strike Lake Resources Ltd. bought the JOON claims in 1977 and began a small operation to extract and mill ore on site. During 1977 and 1978, several hundred tons of vein material were extracted (NMI).

Mine Production: Over 100 ounces of native gold and minor amounts of silver were recovered in 1977 and 1978, at first from the Beaulieu Mine concentrator, and later from a small mill set up on site (NMI). It has also been reported that in 1980, 20 tons of mine tailings were sent to Vancouver BC for treatment by Robinson Investments (NORMIN.DB).

The Outcome: The June site was a small operation with limited gold recovered.

The Site Today: Unknown.

### Mitchell Lake Mine (Abandoned)

| Company<br>Name(s)                              | Designation   | Production<br>Years | Also Known<br>As              | Location  | Coordinates |
|---|---------------|---------------------|-------------------------------|---|-------------|
| Beneventum<br>Mining<br>Corporation<br>Ltd 1952 | Past Prospect | N/A                 | RIBB,<br>CHICK,<br>Beneventum | 57 km northeast<br>of Yellowknife,<br>Mitchell Lake |             |

**Site Access**: The site is reached from the winter route up to Gordon Lake, by heading west at Dome Lake. Summer access by Float plane is not reccommended when planning to land on Mitchell Lake, which is a shallow body of water. A lake just north of Mitchell should be considered when attempting to land a float plane.

**Geology**: The property is underlain by the Archean Yellowknife Supergroup. Quartz veins on property are housed in small shear zones (NMI).

**History and Development**: In 1948, gold was discovered on the shores of Mitchell Lake and 4 years later the CHICK group of 13 claims was staked. Beneventum Mining Corporation Ltd. set up camp and prepared to extract a bulk sample of ore. Around 1952, a 15 ton bulk sample was mined, grading 3 ounces/ton (NMI). A small shaft was apparently developed as well.

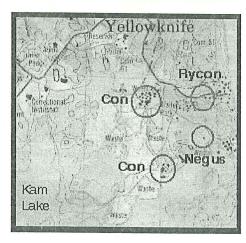
Mine Production: No mill was installed on site.

**The Outcome**: Half of the CHICK claims were restaked in 1972 by A. Mandeville and are now known as the RIBB claims. In 1976 Duke Mining Ltd. optioned the claims and did 2000ft of diamond drilling on the property.

The Site Today: Vista Engineering reports a cabin as the only structure on site in 1996.

# Negus Mine (Abandoned)

| Company<br>Name(s)       | Designation   | Production<br>Years     | Location   | Coordinates                             |
|--------------------------|---------------|-------------------------|--|---|
| Negus Mines<br>Ltd. 1938 | Past Producer | 1939-1944,<br>1945-1952 | West shore of<br>Yellowknife Bay (Negus<br>Point), adjacent to Con<br>Mine | LAT 62* 26' 10"<br>LONG 114* 21'<br>00" |



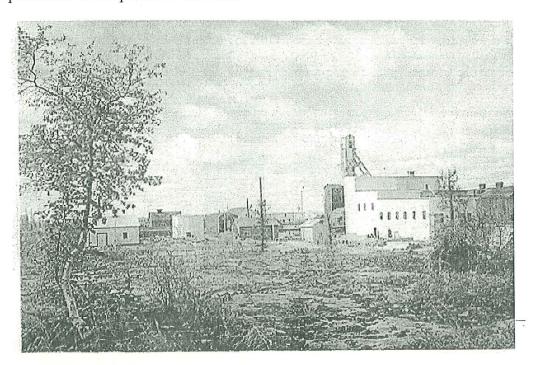
Map of Con mine, with Negus mine in the bottom right corner extending to the shore taken from 1986 topographical maps. (NTS 85 J/8)

**Site Access**: The Negus site is adjacent Con property and is easily accessible by road from Yellowknife.

Geology: Negus Mine is situated on the Rycon-Negus shear system, a zone where early production came from. The Negus Fault offsets the southern end of the system by about 1000 feet. The ore bodies were developed along the shear zones as well defined quartz veins. These veins are up to 400 feet in length with an average width of 2.5 feet. One scheelite bearing oreshoot was encountered on the 425 foot level in the Shear system. The Campbell Shear Zone, which Negus began to mine from in 1948, is a faulted extension of Giant orebodies to the north. This zone is much larger than the Rycon-Negus Shear system and steeply dips west from Yellowknife Bay, occuring at a greater depth of the property than the Negus-Rycon shear zones (NMI).

History and Development: In 1935, Tom Payne descended on the west shore of Yellowknife Bay and staked the PRW claims for Burwash Yellowknife Mine Ltd.. This caused Ollie Hagen and George Goodwin to as well stake claims nearby in January 1936, that came to be known as the NEGUS group (McMeekan, 1967). They were soon after acquired by C. McCrea, who set up a diamond drilling program on the property during 1937. The results disclosed a number of narrow high-grade veins, and through financing by J. Errington, McCrea began plans for immediate shaft sinking (Hoffman, 1947). Negus Mines Ltd. was formed in January of 1938, and in March, an inclined exploration shaft (No. 1) was sunk on the No.1 vein to the 100 foot level. In September, the main vertical shaft (No. 2) was sunk (to 100 feet in early 1939) and

mining equipment and a 50 ton/day mill was brought onto the site. By 1939, the shaft was explored to a depth of 300 feet, and by 1943 the shaft was 950 feet deep (Lord, 1941). Negus was in threat of closure in June 1939 as tonnage had decreased and there were problems supplying the mill with ore. A new vein was discovered fortunately, and operations speeded ahead (Hoffman, 1947). The mill stopped operations in October of 1944, this time due to wartime conditions, however development work continued on a reduced scale underground with the shaft deepened to the 1,250-foot level. Negus mine became the only producing mine in the NWT when milling began again on July 1945. Geological work done by N. Campbell in 1944 theorized a large shear zone along the West Bay Fault, which Negus Mine intersected in 1946. From December of 1946 to August of 1947 the Negus shaft was again deepened, to 1,940 feet and first production in the Campbell Shear Zone began by Negus. By December of 1947, ore above the 1,250-foot level had already been mined, and by 1948 full attention was focused on the Campbell Shear system (Lord, 1951). In order to access further depths of the Campbell Shear Zone, a winze was developed from the 1,775-foot level and reached as far as the 2,025-foot level by mid 1950 (News of the North, August 11, 1950). Mining operations ceased in September 1952 (LeBourdais, 1957), preparatory to shutting the camp down for the winter. The mine did not reopen for production, probably due to unprofitable ore reserves after several years of premature development for the mine.



Negus Mine around 1949. (NWT Archives - N-1979-052-2010)

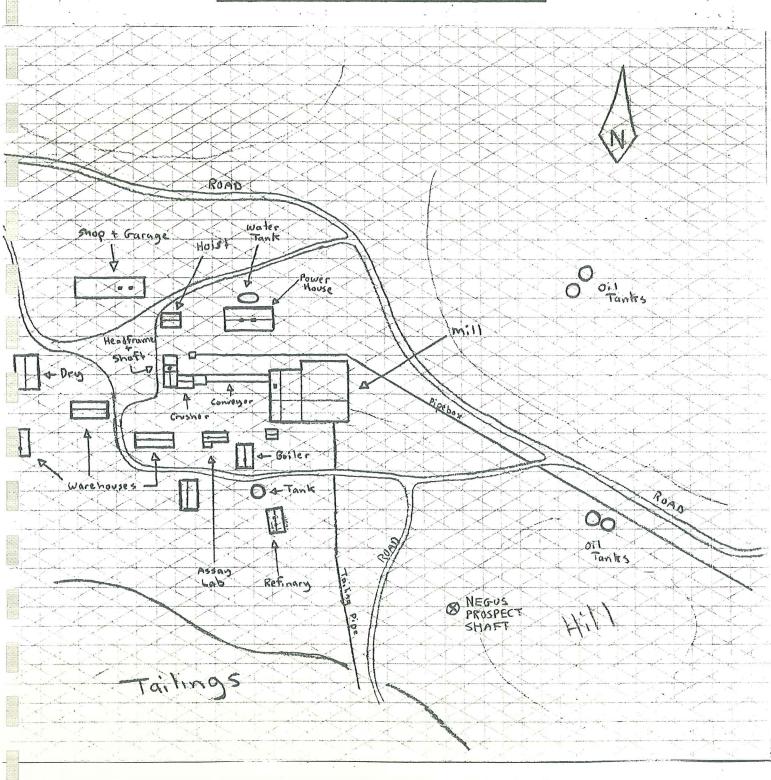
Mine Production: Negus went into production in February 1939. Production stopped briefly in October 1944 due to World War II but resumed in July 1945 while the war was still on, and all other mines shut down. By 1947, the mill was increased in capacity size from 70 to 170 tons/day, along with the installation of flotation cells to facilitate the treatment of refractory ore from the Campbell Shear zone (Lord, 1951). This required the construction of a low-temperature roasting plant to treat the gold bearing concentrates, and was completed by early 1952. The mill had been increased to support tonnage of just under 250 tons/day by this time as well. The last gold brick was poured in October of 1952 (News of the North, October 3, 1952). Production numbers are in the below table.

| regus IVII | ne Production Lev   | VIO            |                             |
|------------|---------------------|----------------|-----------------------------|
| Years      | Tons Milled         | Gold Recovery  | Silver Recovery (1939-1948) |
| 1939-195   | 52 490,908 tons/ore | 255,807 ounces | 42,598 ounces               |

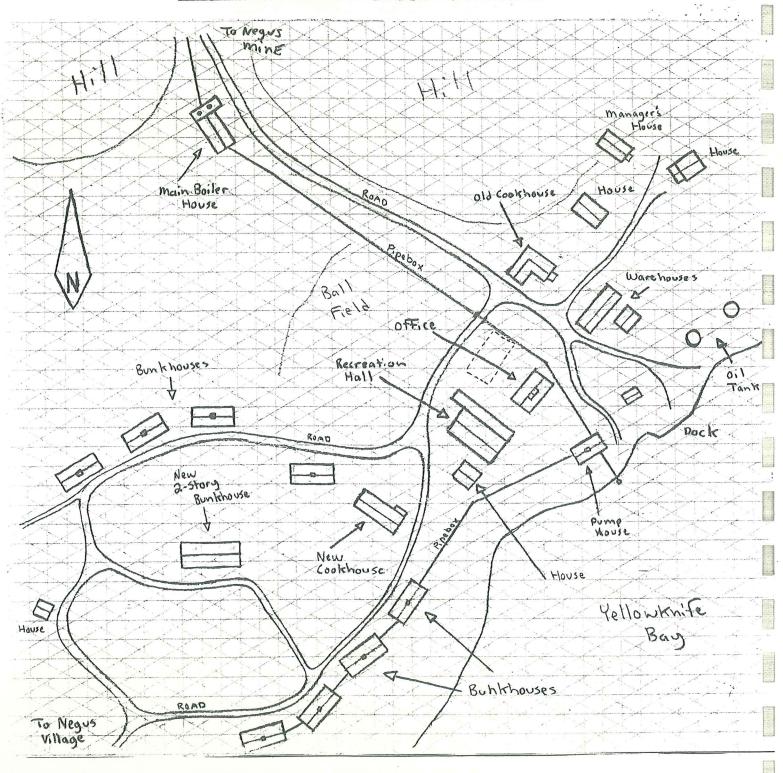
**The Outcome**: Years of large-scale development without adequate ore reserves during the early 1950's led to Negus Mines Ltd. going bankrupt and forcing the shutdown of the mine. When the property was sold to Cominco Ltd. in 1953, the shaft was connected to Con Mine workings and utilized for ventilation intake. Minor amounts of mining was done on the property for sampling, etc. The mill was removed sometime after 1955, and the headframe was destroyed by a fire in 1958 (DeCoursey, 1989). Other buildings were later removed in the late 1960's or 1970's.

The Site Today: The mine site has had most of it's old buildings removed with the exception of a few small cabin-type structures found near the old shaft. The shaft itself is now used for Con mine ventilation purposes, and is therefore housed in a small building. Two residences occupy the mine site, along with a large garage/warehouse. Building foundations for the powerhouse have been located. Mine junk is scattered throughout the area from when buildings were torn down. Con mine seems to use the area as a junk yard more than anything else. The old Negus Camp on Yellowknife Bay has been leased to Imperial Oil and Gas, therefore most old buildings have been torn down long ago. One building remains however, the old cookhouse, built in 1938. It is un-vandalized and in pretty good shape. No other old buildings remain, except the Rec Hall, which has been re-sided. Negus Village still the site of five residences. (The area was visited numerous times during the summer of 1999 by Ryan Silke)

## Negus Mine property map, 1949



### Negus Mine Camp property map, 1950



## Nicholas Lake Mine (Abandoned)

| Company<br>Name(s)                      | Designation   | Production<br>Years | Also<br>Known<br>As | Location                           |   |
|---|---------------|---------------------|---------------------|------------------------------------|---|
| Athabasca Gold<br>Resources Ltd<br>1989 | Past Prospect | N/A                 | NIC claims          | 88 km north-east<br>of Yellowknife | LAT 63* 14'<br>58" LONG<br>113* 46' 10" |

**Site Access**: The main winter route towards Discovery Mine extends towards Nicholas Lake. Float plane can be used during the summer months.

**Geology**: This gold deposit is located near the northern end of the Yellowknife supracustral belt with the Archean Slave province. It comprises of a series of vertical quartz-sulphide veins and has been traced over a strike length of 200 metres and to a depth of 300 metres (NORMIN.DB).

History and Development: The area was originally occupied by claims held by the Consolidated Mining and Smelting Company in 1941; the BENCH claims. Work done in 1941 consisted of 14 trenches, and in 1947 consisted of 10 X-ray diamond drill holes. In 1952 the claims were allowed to lapse and the area was re-staked as the DOT (1-6) group of claims by A. Mandeville. The area was re-staked again in 1960 as the BAG group, and then in the 1970's as the GAB group by R. Olexin. A total of seven trenches were excavated during these years. The current showing at Nicholas Lake was staked in 1986 as the NIC (1-2) claims by D. Webb, and optioned to Chevron Minerals Ltd. in April 1987 (Mineral Industry Report 1986-1987, NWT)

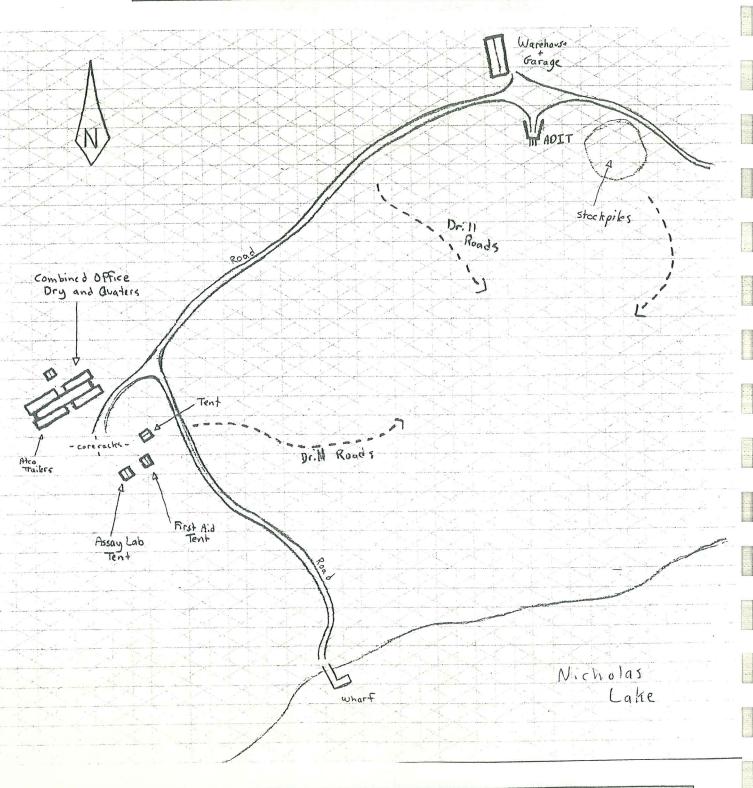
By 1989, Athabasca Gold Resources Ltd. had purchased 60% interest in the Nicholas Lake property and with Chevron Minerals, exploration work was continued, including trenching, surface mapping and diamond drilling totalling 4072 metres. This drilling indicated reserves of 557,000 tons grading 12.16 grams/ton to the 1000-foot level. In 1990, Athabasca Resources planned a \$3,000,000 underground bulk sampling test to be undertaken during the 1991 season. Studies by consultants suggested that a 400 ton/day mining operation would be profitable based on the ore reserves.

Athabasca Resources purchased Chevron Mineral's interest in the Nicholas Lake property in November of 1991. Funding for a small exploration program, brought forth by Royal Oak Resources, totalled \$800,000. This was to be used to test mineralized zones of the Main Zone, and for exploration of the East Zone. Underground exploration was decided on, and in 1994, a 615 meter decline was driven to the 80-meter level followed by 206 meters of drifting into the Main and East Zones. A decision was made to produce 1130 kg per year starting operations in 1995. The plan did not materialize, after the purchase of the property by Royal Oak Resources for \$3.5 million in 1995 (NWT Exploration Overview, DIAND Report, 1988-1995). The operation has been inactive since 1995. An investigation by the author on August 31 of 1999 of the mining camp confirmed that the property has not been occupied for a few years.

Mine Production: Although milling operations were planned for 1995, the plan did not go into effect.

**The Outlook**: The property is currently held under recievership, as Royal Oak Resources went bankrupt in early 1999. The future of this gold prospect operation is in doubt.

### Nicholas Lake Mine property map, 1990's



# Nose Mine (Abandoned)

| Company<br>Name(s)               | Designation   | Production<br>Years | Also<br>Known<br>As | Location   | Coordinates                             |
|----------------------------------|---------------|---------------------|---------------------|--|---|
| Shield<br>Resources<br>Ltd. 1967 | Past Prospect | N/A                 | Clan Lake           | 53 km north of<br>Yellowknife, 2 km<br>east of Clan Lake | LAT 62* 54' 50"<br>LONG 114* 14'<br>00" |

**Site Access**: Float planes can land on Clan Lake and if open, the winter road to Discovery Mine runs across the lake.

**Geology**: The property is underlain by steeply dipping meta-sediments the Archean Yellowknife group. Free gold occurs in three principal mineralized zones within conformative quartz veins. There is little association between the gold and the pyrite and galena found in the veins. One zone was assayed at 1.98 ounces/ton of gold over a width of four feet (NMI).

**History and Development**: The NOSE group of 40 claims were staked by the Earl-Jack Syndicate in 1964. Exploration work was conducted by Gunnex Ltd. through diamond drilling totalling 3,290 feet. In 1966, Shield Resources Ltd. bought the claims and extracted a 1,141 ton bulk sample in 1967. The sample was shipped to Discovery Mine for milling (NMI).

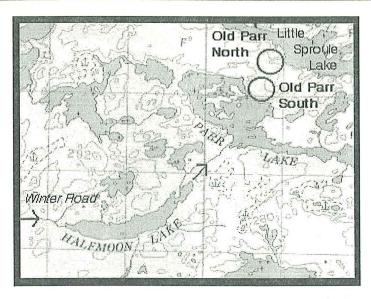
**Mine Production**: The results of the bulk sampling operation in 1967 was 515 ounces of gold and 115 ounces of silver, recovered from the Discovery Mine Mill.

**The Outcome**: The NOSE claims yielded only a small amount of gold, and was never brought into full production. Precambriam Shield Resources (alias Shield Resources Ltd.) and Numac Oil and Gas Ltd. conducted exploration on the area in 1973, and 12 other gold veins were discovered. Diamond drilling during 1974 yielded visible gold in 9 holes. In 1983, Pacific Copper Mines Ltd. optioned the property (NMI).

**The Site Today**: Apparently, the forest fires of 1998 in the Clan Lake region were caused by lightening striking an explosives shed from the abandoned Nose operation. This would indicate that the mine was destroyed by the fires.

# **Old Parr Mine (Abandoned)**

| Company/Owner's<br>Name(s)   | Designation      | Production<br>Years | Also<br>Known<br>As               | Location     | Coordinates                             |
|--|------------------|---------------------|-----------------------------------|--------------|---|
| Mr. Louis Garskie<br>1947-1960's, Liten<br>Mining Company Ltd.<br>1963 | Past<br>Producer | 1963-1965           | Liten,<br>Garskie<br>Gold<br>Mine | between Parr | LAT 62* 44'<br>00" LONG<br>113* 31' 00" |



Parr lake area with the Old Parr Mine circled. Little Sproule lake is a name mentioned by Thurber Environmental along with Vista Engineering in their reports on this site. (NTS 85 I/12)

**Site Access**: An old trail extends from the north of Prelude Lake into Bliss Lake and onward to Halfmoon Lake. It is assumed that this was a winter road that led to the Old Parr mine at one point. This route may also have been a projected route to the Gordon Lake area at one point. A float plane to Parr lake or Little Sproule lake is required during the summer.

**Geology**: The Old Parr property is underlain by a homoclinal succession of metamorphosed greywackes and shales of the Yellowknife Supergroup. There are three pegmatite dykes in the area as well as quartz veins. The quartz veins are found in an area 600 metres long and 300 metres wide between Parr Lake and Sproule Lake, however the main vein is not very deep. The shape of the vein would accommodate open pit mining (NMI).

**History and Development**: The Parr Lake area was staked by Martin Bode and Louis Garskie in May of 1947. The claims came to be known as the OLD PARR and PAR VALUE claims. During 1947 and 1948, the property became famous in Yellowknife through the efforts of the two men who hand mined gold on the claims. During this time, at least 195 ounces of almost pure gold were displayed throughout the town in beer bottles which were high-graded and

panned by Garskie and Bode. Five pits were excavated on the site: the Old Parr, Million Dollar, Real High Grade, Galena and Jewelery Shop pits. In 1949, poor grades in the pits forced Garskie to halt his prospecting (NMI). In order for further development, Garskie Gold Mines Ltd. was formed and L.F. Gauvreau was appointed as president. Diamond drilling programs were conducted in 1950 but the option on the property was dropped after discouraging results due to inaccurate exploration on the part of the company. The claims later reverted back to Garskie (News of the North, August 10, 1951).

Louis Garskie was determined to continue his own operations at the site, and bought out his partner, Martin Bode's, interest in the claims. A shaft was started in 1951 in the Million Dollar pit, and by 1957 was 40 feet deep (News of the North, May 10, 1957). All operations that Garskie preformed were done by hand as no compressor equipment was brought onsite. An estimated 400 ounces of gold were recovered from this site overall by Garskie in ten years. In 1960, Vanguard Exploration Company Ltd. did an extensive evaluation of the site and it was concluded that more pits and trenches could be blasted to yield more ore. In 1963, Garskie, still working on the site decided to go into buisiness with an Edmonton based gold company; Liten Mining Company Ltd. At the newly named "Liten" Mine a small mill was installed (NMI). Work was done on the Galena and Million Dollar pits (Schiller, 1965). In 1972, Garskie reportedly returned to the area to continue work, but not long after the area was abandoned (NMI).

Mine Production: From 1963 to 1965, Liten Gold Mines processed 180 tons of ore in the mill installed at site (NMI). In 1963, 150 ounces were produced (Schiller, 1964). About 2.6 kg of gold was recovered in 1964 (NORMIN.DB), and during 1965, 83 ounces of gold and 12 ounces of silver were produced (Schiller, 1965). Other gold from this mine was hand-picked by Garskie during the 1940's, 50's, and 60's, and also at later dates. This production amounted to over 400 ounces of un-refined gold (NMI).

**The Outcome**: This site was a fairly successful small mining operation due north of the Thompson-Lundmark Mine. It has become famous among Yellowknife historians for it's early operation by Loius Garskie, and his continuous efforts to make a living at his own mine.

The Site Today: Thurber Environmental did a report on the "Liten" mine in 1993, and it seems the site has been relatively untouched since the 1960's. One cabin was located, and other mining equipment.

# **Outpost Island Mine (Abandoned)**

| Company<br>Name(s)  |                  | Production<br>Years     | Also<br>Known<br>As | Location        | Coordinates                             |
|---|------------------|-------------------------|---------------------|-----------------|---|
| N.A. Timmins<br>Corporation<br>1935, Slave Lake<br>Gold Mines Ltd.<br>1940, Tungsten<br>Corporation of<br>Canada 1951 | Past<br>Producer | 1941-1942,<br>1951-1952 | Philmore,<br>FOX    | of Yellowknife, | LAT 61* 44'<br>00" LONG<br>113* 28' 00" |

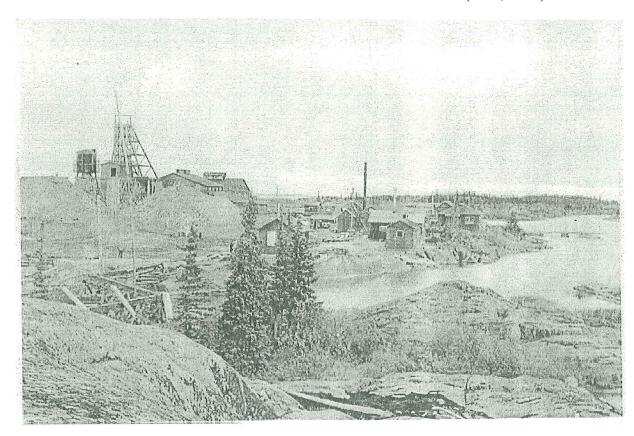


Map of Outpost Islands (NTS 85 H/11)

**Site Access**: This site is normally reached by float plane. Boats can also be used, however the long journey to reach the Outpost Islands generally prohibits travel by water.

**Geology**: The Outpost Islands are underlain by metamorphosed sedimentary rocks of the Wilson Island-Point Lake group of early Precambrian Age. Sheared and silicified zones with disseminated metallic minerals occur along the Outpost Islands in eight major zones. They are exposed on surface for 1,550 feet trending northeast, and average ten feet in width. A few bodies of quartz and mica occur in the shear zones. Quartz bodies contain gold and scheelite occurrences. Underground developments have been conducted on the West Zone, which

outcrops 30 feet south of the No. 1 shaft. Most mined material has come from the No. 1 ore shoot in the West Zone. Another ore shoot is located at the No. 2 shaft (Lord, 1951).



Outpost Island Mine in the 1950's. (NWT Archives - N-1979-052-2017)

**History and Development**: Spectacularly high grade gold was discovered on the Outpost Islands as early as 1920, however they were not staked until over ten years later. The FOX group of 18 claims was staked in July of 1935 by W.D. Brandy and M.J. Shunsby, and sold to H.D. Tudor of the Athabaska Syndicate. Under financing by the N.A. Timmons Corporation, the property was developed from November of 1935 to March of 1938. During this time, a 450-foot shaft was sunk and five levels opened. Drifts and crosscuts totalled about 1,700 feet (Lord, 1941). When in 1938 Slave Lake Gold Mines Ltd. acquired interest to revive development, exploration programs yielded the presence of tungsten and tin on the property in reasonably economic proportions (The Prospector, August 3, 1938). Further development began at Outpost Island in September of 1940 and a mill was installed by 1941 by Slave Lake Gold Mines. Developments at this time included many pits, and the sinking of the No. 2 shaft to a depth of 70 feet by July 1942 (The Yellowknife Blade, July 17, 1942). The main No. 1 shaft had also been extended to 525 feet, with levels on the 50, 125, 200, 325, 425, and 525-foot levels. These drifts and crosscuts total over 3,500 feet. A raise from the 200-foot level of the No. 1 shaft extended towards the surface near No. 2 shaft, to aid in ore transportation to the mill from No. 2 shaft (Lord, 1951). Management problems proved fatal to the operation at Outpost Island during the summer of 1941, and led to numerous complications in running the mine. A forced shutdown was issued by the operators in the fall of 1942 (Price, 1967). Mostly gold was produced during this period as the mill was poor at recovering tungsten. Several companies took interest in the property during the 1940's as a sole producer of tungsten.

In 1945, Philmore Yellowknife Gold Mines Ltd. acquired the assets of International Tungsten

(formally Slave Lake Gold Mines) and started plans for re-development (Lord, 1951). Small scale tune-up, restoration of plant and surface exploration was carried out from 1946 to 1948 by Philmore, in preparation for restarting production at the mine (News of the North, December 13, 1946). The property seemed to have been abandoned by Philmore before 1950. Marwood Mining Corporation Ltd. was formed in 1950 to acquire the property and bring in into production, and after an exploration program sold it to Tungsten Corporation of Canada Ltd. Regular operations began in October of 1951. Dewatering of the shaft to the 200-foot level took place during 1951 for underground mining, and the 50 ton/day mill was upgraded (Little, 1959). Operations were temporarily stopped by September of 1952. Apparently, a fire on Outpost Island destroyed all buildings and combustible materials at the mine in 1955.

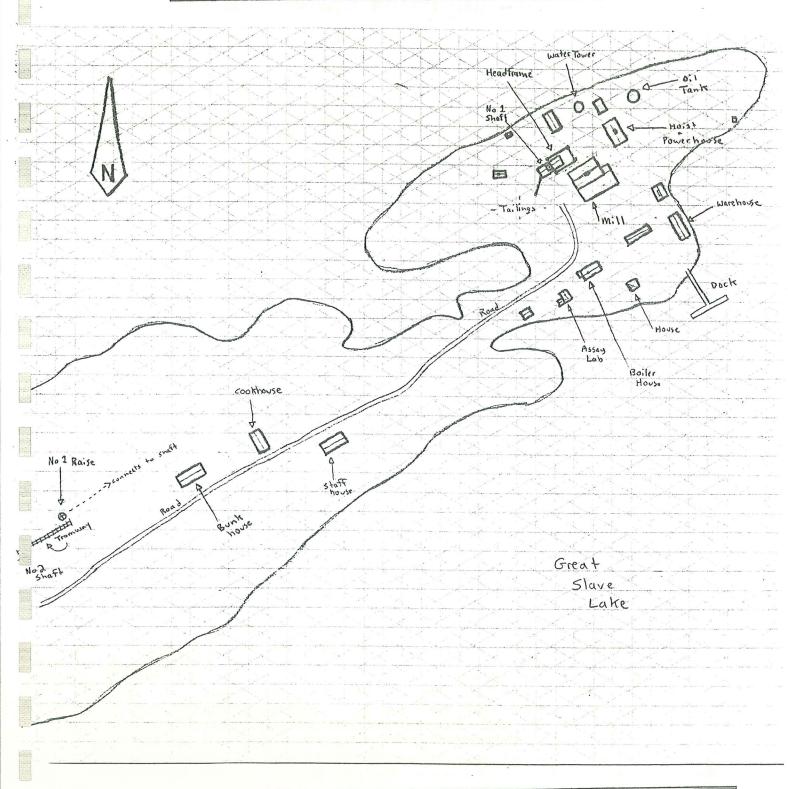
| Years     | Tons<br>Milled      | Gold (bullion)    | Silver            | Copper (in concentrates) | Tungsten (WO3 in concentrates) |
|-----------|---------------------|-------------------|-------------------|--------------------------|--------------------------------|
| 1941-1942 | 20,324<br>tons/ore  | 8,809<br>ounces   | 75 ounces         | 112,863 pounds           | 27,700 pounds                  |
| 1951-1952 | unknown<br>tons/ore | unknown<br>ounces | unknown<br>ounces | unknown                  | unknown                        |

Mine Production: Slave Lake Gold Mines held the property in 1940 and mineral production from a 50 ton/day mill began in February of 1941. By May of 1942, the strategic value of tungsten became high enough from the war effort that the mine focused on the extraction of this valuable concentrate, but the success was hampered by conditions beyond the operator's control. The mill stopped operations on August 9, 1942 (Lord, 1951). In October of 1951 the Tungsten Corporation of Canada Ltd. resumed production on the site. Initial mill feed was an estimated 10,000 tons of tailings from past operations. By 1952, underground ore supplemented mill feed (Little, 1959). It was reported that the mill had failed to live up to it's expectations on the value produced and milling ceased (News of the North, Sept 19, 1952). Production numbers from these years is not known. All production numbers are from Lord (1951)

**The Outcome**: Most tungsten prospects proved to be highly successful during the min 1940's in Yellowknife, but operating problems and lack of interest caused the closure of the Outpost Island Mine more than once. There has been little further work done on the property in the last 50 years.

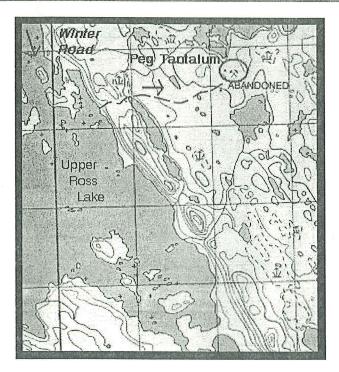
The Site Today: Based on a report by Thurber Environmental in 1992, no buildings are still standing as all were destroyed in a fire in 1955. Remains of some of the buildings have been located, but mainly surface work is the only recognizable evidence of mining. Debris, junk and heavy equipment is scattered all around the site.

### Outpost Island Mine property map, 1950's



# Peg Tantalum Mine (Abandoned)

| Company<br>Name(s)                    | Designation   | Production<br>Years | Also<br>Known<br>As | Location   | Coordinates                             |
|---------------------------------------|---------------|---------------------|---------------------|--|---|
| Peg<br>Tantalum<br>Mines Ltd.<br>1946 | Past Producer | 1946-1947           | Toke                | 71 km east of<br>Yellowknife, 2 km<br>east of Upper Ross<br>Lake | LAT 62* 43' 40"<br>LONG 113* 06'<br>50" |



Map of Upper Ross Lake region and the Peg Tantalum Mine, taken in 1978. (NTS 85 I/11)

**Site Access**: The site can be reached from the Lupin Mine's winter road which passes through Ross Lakes, or by float plane.

Geology: The area is underlain by granodiorite which is intruded by numerous pegmatite dykes. The dykes are genetically related to the granite and form irregular bodies that range up to more than 40 feet in width and trend southwest. Rare earth minerals identified include beryl, tantalum-columbite, tourmaline, spodumene, amblygonite, lithophilite and lazulite. Several hundred of these dykes have been found in the area lying 1 to 2 miles from the granite border. Tantalite-columabite is erratically distributed within the pegmatite. Beryl is abundant in the pegmatites of the area, and spodumene is present in a seperate zone of pegmatites. Tin is also known to be an associated mineral (NMI). Deposists mined on the property were confined to the No. 1 and No. 3 dykes, which were recommended primarily as sources of tantalite-columbite by the GSC (Joliffe, 1944). There has been little work known to be done on the other pegmatites on this and the adjoining properties (NMI).

History and Development: During the 1940's, the Pensive Lake and Ross River districts were staked heavily. In 1943, prospectors went into this area and staked rare earth deposits with showings of tantalum. At this time, these deposits were very valuable, as tantalum was used as a by-product in the production of steel, which was used heavily during World War II. G.R. Saunders was one of the prospectors, and staked the PEG claims at Upper Ross Lake. In 1944 these claims were bought by Peg Tantalum Mines Ltd. and during 1945-1946 a mill and camp were set up. Mining developments were confined to the No. 1 and No. 3 pegmatite dykes, which were explored by numerous sized pits. The No. 1 pit measured 15 feet long x 6 ft wide x 1.5 ft deep in dimensions. The No. 3 pit was substantially larger, and measured 50 ft long x 25 ft wide and 9.5 ft deep on a slope. Mill equipment reached the site by September 1946. Mined rock was to be transported to the mill via a inclined trestle from the pits, however the track was reported not used and all rock hauled to the mill by truck. Although milling operations stopped in 1947, developments continued (Lord, 1951). It was reported that several tons of ore concentrate were bagged and shipped from the property in 1949 and possible at later dates into the 1950's (NMI), however no other data is available.

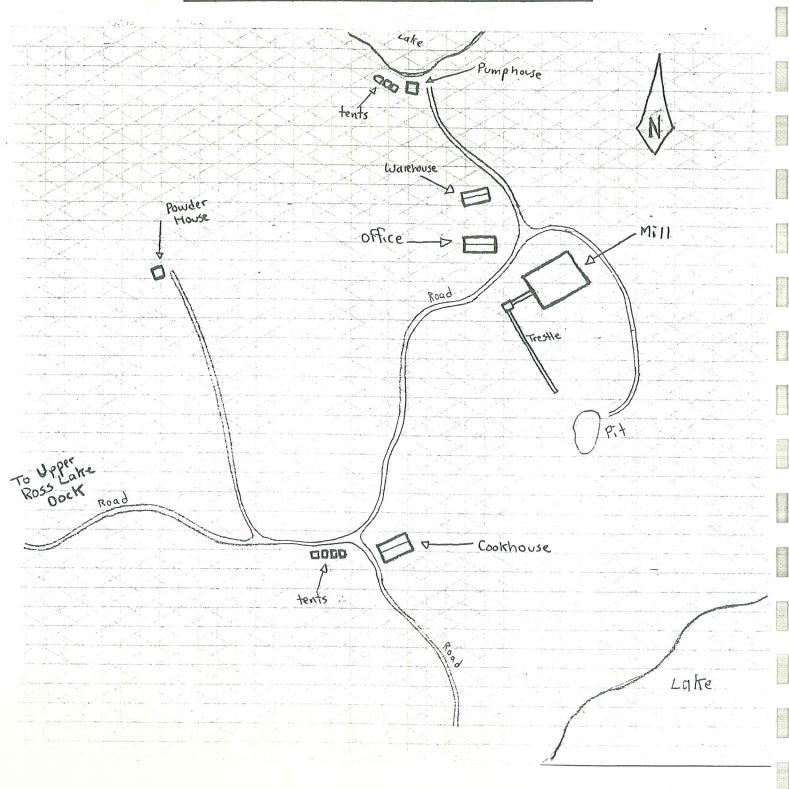
| Production Dates   | Tons Milled | Concentrate Recover |
|--------------------|-------------|---------------------|
| Oct 1946-Nov 1946  | 200 tons    | 180 lbs             |
| Apr 1947-Sept 1947 | I           | 3,750 lbs           |

**Mine Production**: The mine began milling in October of 1946 with a short break during the winter due to mechanical and metallurgical problems, then ran from April until September of 1947 mainly as a sampling plant (Lord, 1951). Production numbers are stated above.

The Outcome: The Peg Tantalum site was brought into production to supply tantalum and other rare-earth minerals for strategic purposes. In 1947, a refinery opened in Edmonton that would produce tantalum metal by processing concentrates shipped from operations in the north. The Peg Tantalum Mine took part in this project for a short time until the project folded. Considerable work has been done on the Peg property in recent years. Barrington Explorations acquired the 14-claims in 1966, and passed them on to International Bibis Tin Mines Ltd. and CIBA Ltd. who staked 34 more claims in the area. They then hired Precambriam Mining Services to evaluate the claims during 1967. Bulk sampling of dykes grade 0.01 % T2O5. The PEG claims were restaked as the MC (26 claims) and MD (24 claims) groups by Trans-Canada Resources Ltd. in 1968 (NMI).

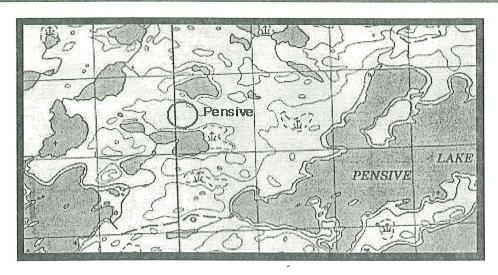
**The Site Today**: The forest fires of 1998 claimed the Upper Ross Lake region, and it is assumed that the mine site was destroyed. Based on a report by Thurber Environmental in 1993, the mine was in a fair state, although many of the structures were threatening to collapse.

## Peg Tantalum Mine property map, 1947



### Pensive Mine (Abandoned)

| Company<br>Name(s)                            | Designation   | Production<br>Years | Location   | Coordinates                             |
|---|---------------|---------------------|--|---|
| Pensive<br>Yellowknife Gold<br>Mines Ltd 1939 | Past Producer | 1939-1941           | 68 kilometers<br>north-east of<br>Yellowknife, east of<br>Upper Pensive Lake | LAT 62* 44' 10"<br>LONG 113* 20'<br>00" |



Map of Upper Pensive Lake area (NTS 85 I/11)

**Site Access**: This site can be reached by float plane or from winter roads that extend up to Gordon Lake. Canoe trips during the summer up the Cameron River can also access this site.

**Geology**: The property is underlain by folded and faulted argillite, slate and greywacke of the Yellowknife Group. The principle vein of gold-bearing quartz is exposed for 500 feet before plunging into muskeg on both ends. This vein has an average width of two feet. (NMI)

History: The W, TIX, Q, VIC, CO, RARE, and NESS claim group of 70 claims were staked before October of 1938 by the Harry A. Ingraham Trust Company. From October to December 1938, seven men were employed on exploration work on the property, mainly confined to the VIC group, through 450 feet of trenching. From August to December 1939, four men were employed with work on the RARE claims. A large pit, 27 feet long, 3 feet wide and 13 feet deep was blasted on a high grade vein on the RARE 15 claim. Ore mined from this pit was transported by canoe to the shore of Pensive Lake, where a small amalgamation 5 tons/day mill had been set up (Lord, 1939). Pensive Yellowknife Mines Ltd. was formed later in 1940 to continue work on the RARE claims. In the pit a shaft was sunk, cabins were erected, and a headframe set up over the shaft by 1941. Power was supplied by a tractor connected to an air compressor. By the time the site closed down, the shaft had been deepened to 50 feet. (Lord, 1951)

**Mine Production**: Between 1939-1941, over 200 ounces of gold were retrieved from over 1,000 tons of handpicked ore, amounting to market value of about \$7,000 (Lord, 1951)

The Outcome: The Pensive site was a small mining operation. In 1944, Pensive Yellowknife Mines Ltd. was incorporated (a different company) and conducted surface work on the claims. In 1983, Newcan Minerals Ltd. evaluated the property, and recommended that no further work be done in the area based on low gold assays. Claims in the area today are the JS and DJ groups. (NMI)

The Site Today: Thurber Environmental reports from 1992 show the site is comprised of a primitive log cabin which is in the stages of collapsing, and a deep trench. Although literature reports a headframe and the use of a mill, no headframe remains are on site and no evidence of a mill is present, which would include a tailings deposit. As well, no shaft was found, although it was assumed that a shaft may possibly be at the bottom of the flooded pit. Thurber reported aerial reconnaissance of Pensive Lake, but it appears nothing of interest was noted. However, according to literature, the mill was set up on the shore of Pensive Lake, a quarter mile southwest of the mine.

#### **ROD Mine (Abandoned)**

| Owner<br>Name(s)           | Designation   | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|----------------------------|---------------|---------------------|---------------------|---|---|
| David<br>Nickerson<br>1975 | Past Prospect | N/A                 | Rodstrom            | Southwest end of<br>"Baker" Lake, 6<br>km northwest of<br>Yellowknife | LAT 62* 29' 50"<br>LONG 114* 26'<br>00" |

**Site Access**: Snowmobile trails that extend towards Baker Lake from Long Lake are within walking distance of the site.

**Geology**: The property is located in the Defeat Plutonic Suite which is intruded by numerous pegmatite dykes and quartz veins located in shear zones that range 10-12 feet in width. (NMI)

**History and Development**: The R 1-10 claims were staked in 1962 and 1963. Rodstrom Yellowknife Mines Ltd. formed to develop the claims and undertook geological mapping and diamond drilling on site in February of 1963. It is understood that they dropped their option after no ore body was found. D. Nickerson re-staked the R group of claims as the ROD claims in 1975. He handpicked two tons of material grading about 3.92 ounces of gold/ton, and other amounts by 1979. (NMI)

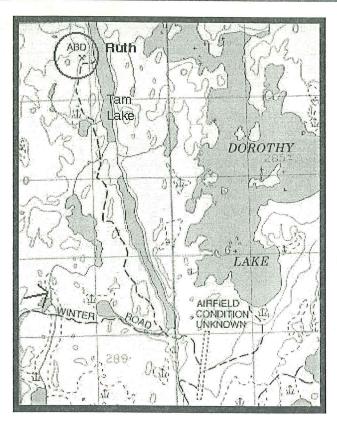
Mine Production: By 1979, 10.9 tons had been handpicked and shipped to the Con Mine for processing by Nickerson, which amounted to about 126 ounces of gold. (NMI)

The Outcome: This small one-man prospect never amounted to a larger mining operation.

The Site Today: Workings, which include a few small trenches, are still visible near Baker Lake.

# Ruth Mine (Abandoned)

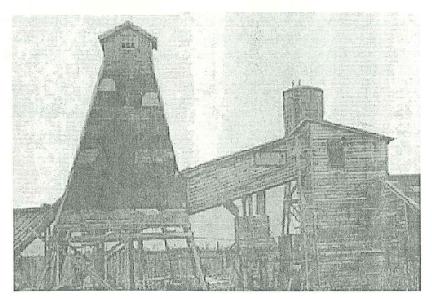
| Company Name(s)  | Designation   | Production<br>Years | Location   | Coordinates                             |
|--|---------------|---------------------|--|---|
| Consolidated Mining<br>and Smelting<br>Company 1941, Ruth<br>Gold Mines Ltd 1959 | Past Producer | 1942, 1959          | 91 km east of<br>Yellowknife, 7 km<br>west of Francois<br>Lake | LAT 62* 27' 45"<br>LONG 112* 34'<br>15" |



Map of Ruth mine area, with the center of activities circled, derived from 1978 topographical image. An airstrip was cleared 5 kilometers south from the mine. The lake adjacent to the mine was referred to as Tam Lake by Thurber Environmental when they did a study on the site in 1992. (NTS 85 I/7)

**Site Access**: The Ruth mine site is reached by an extended winter road from Beaulieu mine, or from a route up the François River from Great Slave Lake into Buckham, and then François Lake. A float plane is required during the summer to land on the narrow and deep Tam Lake.

**Geology**: The RUTH claims are underlain by quartzite, greywacke and slate of the Yellowknife Supergroup, cut by minor dykes and by irregular veins of glassy quartz. The vein appears to be controlled by shears or slaty sediments. Five of these veins have been investigated (NMI).



Ruth Mine headframe and mill during the 1990's (DIAND)

History and Development: The Ruth claims (1-14) were staked in 1940 during exploration of the Beaulieu and Francois River Districts by J. Michelson on behalf of the Consolidated Mining and Smelting Company. In 1941, 12 men were employed on site with shaft sinking and camp construction. A 25-ton mill was shipped in that winter. The mine operated during the summer of 1942, and closed due to shortage of labour caused by World War II. At this time the shaft was 230 feet deep, with drifts on the 100 and 200-foot levels (Lord, 1951). Several drifts extended for 150 feet on the 100-foot level, and stopes were opened. The 200-foot level was established as a station, but no drifting took place. The mine was left idle for about 20 years until interest was gained on the property by Ruth Gold Mines Ltd. around 1958 (Edgar, 1958). Rehabilitation of the shaft and several buildings was underway by 1959, and the 100 and 200-foot levels were reopened. Stockpiled ore amounted to 500 tons. An airstrip was cleared south of the mine in order for freight planes to land (NMI).

| Years | Tons Milled    | Gold Recovery | Silver Recovery |
|-------|----------------|---------------|-----------------|
| 1942  | 186.8 tons/ore | 152.45 ounces | 23.14 ounces    |
| 1959  | 500 tons/ore   | 398 ounces    | 70 ounces       |

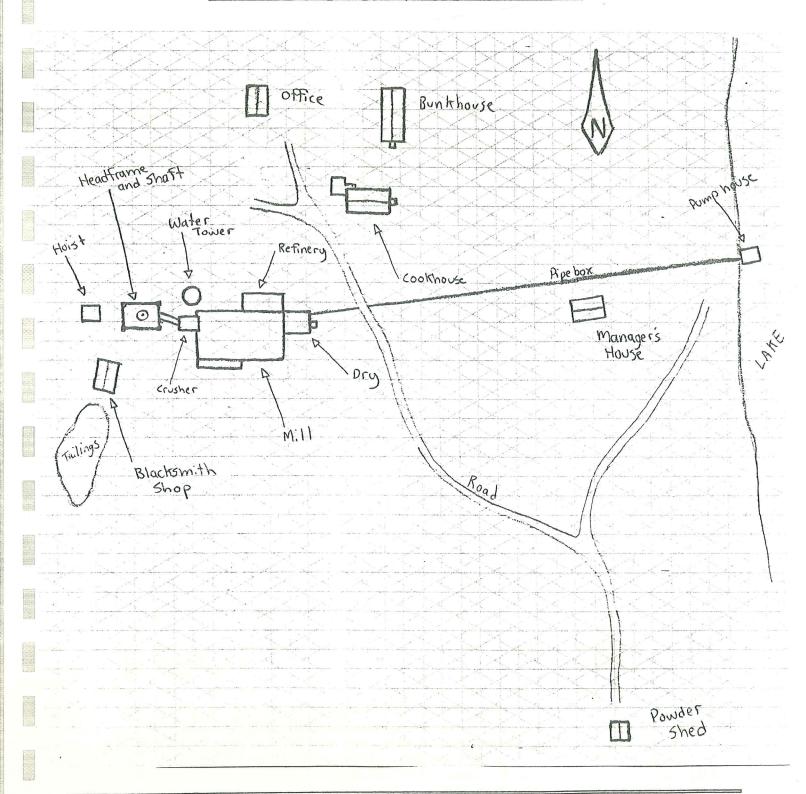
Mine Production: A mill was installed in 1942 and production began in August, however, the mill only operated for 12 days and was shut down due to WWII. During operation 186.8 tons of ore was processed. In the late 1950's, more work was done on the site and production resumed in 1959 by Ruth Gold Mines Ltd. Again the mill closed down after a month or two of operating (NMI).

**The Outcome**: In 1973, Ice Station Resources Ltd. conducted an extensive diamond drilling program consisting of 3,930 feet of drilling in 17 holes. Reserve tonnage was calculated to be 20,000 tons. During the 1980's, Roxwell Gold Mines Ltd. did surface exploration and sampling on the property and estimated that there to be 5,000 ounces of ore in reserve on the property. In 1986, Hidden Lake Gold Mines Ltd. leased these claims and de-watered the shaft in order to collect some underground samples (NMI).

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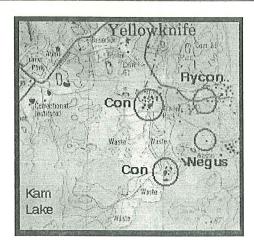
**The Site Today**: Based on a report in 1992 by Thurber Environmental, and recent pictures courtesy of Mike Piro, the Ruth Mine is still standing and in good shape. There has been no effort done so far to clean up the site. As of 1999, Ruth Mine may be one of the last abandoned mine-sites that is still in such good shape.

#### Ruth Mine property map, 1941-1942



# Rycon Mine (Abandoned)

| Company<br>Name(s)       |               | Production<br>Years | Location             | Coordinates                          |
|--------------------------|---------------|---------------------|----------------------|--------------------------------------|
| Rycon Mines<br>Ltd. 1938 | Past Operator | 1938-1958           | Adjacent Con<br>mine | LAT 62* 26' 18" LONG<br>114* 21' 15" |



The site of the Rycon shaft is circled on this topographical map. (NTS 85 J/8)

Site Access: The Rycon site can be accessed from Yellowknife to the Con Mine Townsite.

**Geology**: The Rycon deposit is a small ore body which lies in the Rycon-Negus Shear System between the Con shear system and the Campbell Shear Zone. The system is composed of ore shoots which plunge 45 degrees southernly. Four shear zones have been reported in the Rycon-Negus shear system; the R51, R52, R53 and R54 zones. The zones average about two feet in width. This shear system extends south and is part of the Negus property (NMI).

**History and Development**: In 1935, prospector Murdoch Mosher staked claims on the west side of the Yellowknife Bay that became known as the MM and MH groups of claims. In 1936, Mosher got some people to evaluate the property and they recommended that he let the claims lapse. This action has confused historians, since obviously this was actually a find of great value. In August 1936, the claims expired and Tom Payne and G. Latham re-staked the group as the P and G claims and sold them to Ryan Gold Mines Ltd. In September of 1937, Consolidated Mining and Smelting Company made an agreement with Ryan Mines that they would mill the ore from the site. Rycon Mines Ltd. was formed by the two companies to develop the mine (Price, 1967). A 3-compartment shaft was sunk in the R-51 shear zone, and was 250 feet deep by September 1939. Early operations hoisted ore to the surface through the Rycon shaft. It was then was trucked to the Con Mill. By 1948, the shaft was decommissioned for this usage, as the ground was explored on the 125, 250, 375, 500, 650, 800 and 950-foot levels of the Con Mine, with drifts totalling over 3,000 feet. Ore was transported along drifts to the Con shaft and hoisted from there to the mill. The Rycon shaft was mainly used for ventilation at this time, as it was connected to the 950-foot level of Con Mine by several inclined raises (Lord, 1951). Although Rycon operations ceased in around 1958, sections of the property continued to be mined from Con mine into the 1960's (NMI).

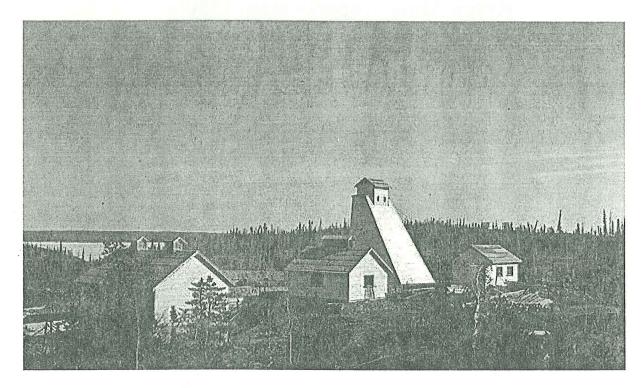


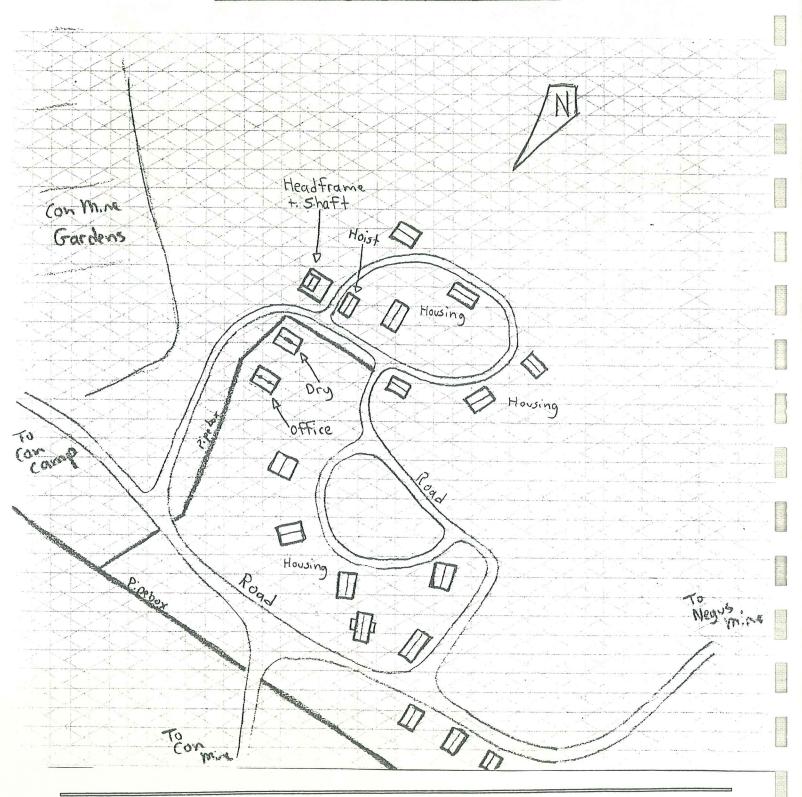
Photo of the Rycon Headframe and other mine buildings during the 1940's. (NWT Archives - N-1989-019-0050)

Mine Production: In the 20 years of operation (1938-1958), 816,480 tons were treated at the Con mill. Reports dealing with gold recovery have not be found (NMI).

**The Outcome**: The Rycon portion of the Rycon-Negus Shear systems was mostly depleted by around 1958, and the property had ceased as part of the Con Mine's corporate structure by the 1970's. The shaft continued to be utilized for ventilation until the re-development of the Negus vent shaft in the 1970's.

The Site Today: The Rycon shaft has been covered over and filled in, but is still noticeable from across the new trailer park at Con Camp overlooking the old gardens. The Rycon camp has only one house remaining on it, plus the old trailer park along the old Negus road. Many foundations remain from older houses. Debris from the headframe when removed is present.

# Rycon Mine property map, 1950's



# **Sunset Lake Mine (Abandoned)**

| Company<br>Name(s)                       | Designation   | Production<br>Years | Location  | Coordinates                             |
|--|---------------|---------------------|---|---|
| Sunset<br>Yellowknife<br>Mines Ltd. 1945 | Past Prospect | N/A                 | 112 km east of<br>Yellowknife, east shore<br>Sunset Lake, Beaulieu<br>River | LAT 62* 51' 15"<br>LONG 112* 19'<br>50" |

**Site Access**: Sunset Lake is only accessible during the summer months via Float Plane. Some old winter tractor routes have run to Sunset lake in the past but are no longer usable. The cut-line from the proposed extension of the Ingraham Trail runs within 5 kilometres of Sunset Lake.

Geology: Sunset Lake lies on the Beaulieu River Archean Greenstone Belt. Most developments of the original mine were conducted on the Alice Shear zone, which was considered the most promising structure on the property. The shear zone ranges from 1 foot to around 20 feet in width, and is exposed on the surface for over 900 feet. Gold is well mineralized in a section 2 to 3 feet wide for 500 feet along the zone. (NMI)

History and Development: Fred Thompson, the man that discovered the famous Thompson-Lundmark Mine, staked the ALICE group of claims in this area in 1938 for the Thompson Prospecting Syndicate. In 1945, Sunset Yellowknife Mines Ltd. was formed to develop the property, and conducted exploration on the site. Over 3,000 feet of diamond drilling was conducted to delineate an ore shoot. A camp was soon set up on the east shore of Sunset Lake. Development on the mine was stopped in February of 1946 due to a delay in shipments of equipment and supplies, but work resumed in August with a 2-compartment shaft sunk to a depth of 28 feet on the gold-bearing oreshoot. Development was again stopped in November during the winter, but by March of 1947 a mining plant had been tractored in. The shaft was deepened to 145 feet and drifts were opened on the 125-foot level. The ore shoots did not turn out to be profitable, and operations stopped in September of 1947. (Lord, 1951)

Mine Production: No mill was installed on site.

The Outcome: Sunset Lake Mine was a short lived gold mine far from Yellowknife. This was another factor to it's closure. With an unfavourable ore-shoot, the costs involved in the project out-weighed the interest in the property. No further work was done in the area until the 1980's when the Sunrise Lake deposit, just north of Sunset Lake, was staked. As of the mid 1990's, the Sunrise deposit was under heavy exploration by the Hemisphere Development Corporation and Aber Resources Ltd. (NORMIN.DB)

**The Site Today**: Vista Engineering did an assessment of the mine in 1996, and during the following months conducted a cleanup with all buildings and equipment removed. Three structures were located at the camp shore, and a couple mine buildings near the shaft. The headframe had already collapsed.

#### **Storm Mine (Abandoned)**

| Company<br>Name(s)                  | Designation   | Production<br>Years | Also Known<br>As    | Location                             | Coordinates                             |
|-------------------------------------|---------------|---------------------|---------------------|--------------------------------------|---|
| Tungsten<br>Developers<br>Ltd. 1942 | Past Producer | 1942                | Consolation<br>Lake | East shore of<br>Consolation<br>Lake | LAT 62* 30'<br>15" LONG 112*<br>56' 15" |

Site Access: The site can be accessed by float plane on Consolation Lake.

**Geology**: The property contains the main 60 foot long quartz vein and minor scheelite showings. A few smaller veins were reported in the 1970's (NMI).

**History and Development**: The area was staked in the spring of 1940 by J. Irwin and H. Lang as the STORM 1-6 claims and in 1941 was controlled by Storm Yellowknife Syndicate. In 1942 they were acquired by Tungsten Developers Ltd. who erected a small mill on site. One or two pits were opened up along the principle quartz vein (Vein 25 on STORM No. 5 claim). Work stopped by September 1942 after interest was lost on the property. (Lord, 1951)

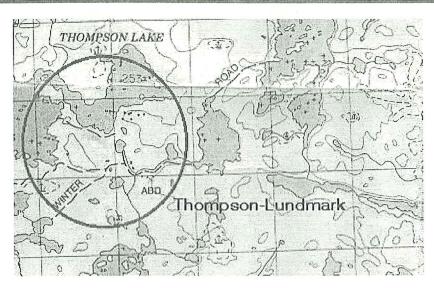
Mine Production: During 1942, 11 tons of ore was processed on site. Concentrate recovery amounted to 1,917 lbs, which contained about 35% WO3 as scheelite. (Lord, 1951)

The Outcome: This small operation was fueled by the war-time tungsten interests, but the potential on property was lacking. In 1968, the APR (1-8) claims were staked over the old Storm property, along with the BEA claims in 1971. A little exploration was done at this time by KLS Prospecting Syndicate. In 1972, the area was re-staked by J. Irwin as the STORM 1-4 group, and put under control of Delphi Resources Ltd.. The STORM 5-13 claims were then staked in 1974 by R. Lees. The best assay attained on the property at this time was 1.08 ounces/ton of gold and scheelite from a vein 30 feet long, and 0.7 feet wide. In 1975, the ground was evaluated by Bacon and Crowhurst Ltd. for Starbird Mines Ltd. They blasted a series of trenches which exposed a long quartz vien with assays of 0.83 ounces/ton over 25 inches. (NMI)

The Site Today: The state of the site is not known by the author. A few cabins have been built at Consolation Lake.

# Thompson-Lundmark Mine (Abandoned)

| Company Name(s)                          | Designation      | Production<br>Years     | Also<br>Known<br>As                  | Location  | Coordinates                             |
|--|------------------|-------------------------|--------------------------------------|---|---|
| Thompson-Lundmark<br>Gold Mines Ltd 1939 | Past<br>Producer | 1941-1943,<br>1947-1949 | Treasure,<br>Waco,<br>Kim,<br>Fraser | 48 km east of<br>Yellowknife,<br>Thompson<br>Lake | LAT 62* 36'<br>45" LONG<br>113* 28' 15" |



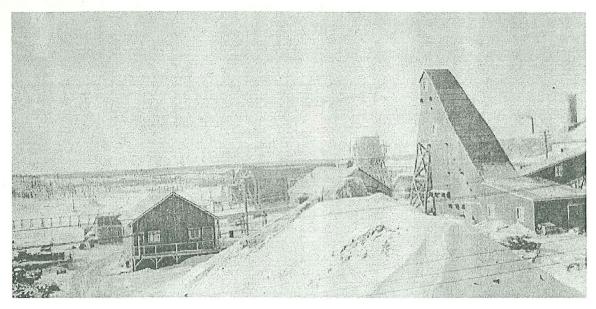
Map of Thompson Lake East basin region and the T-L Mine taken in 1978. (NTS 85 I/11)

**Site Access:** The site can be accessed during the summer by float plane or canoe via Hidden Lake. A winter road can also still be used.

**Geology**: The property is underlain by nodular, quartz-mica schists of the Yellowknife Group. These are cut by white to grey gold bearing quartz veins, related to a large mass of granite located 3 miles to the southwest, and by pegmatite bodies, such as the site of the FREDA claims just north of Thompson Lake. Three veins have been developed; the "Kim", "Fraser" and "Treasure" bodies. Other veins include the "Arsenic", "Croesus", "B", "Island", "Trail" and "Lahti" have not been developed. The Kim and Fraser veins contain the highest grades.

History and Development: In 1936, exploration of the NWT area was being passed on to big companies down south, as the Consolidated Mining and Smelting Company recently hit pay dirt at its Con property. G.B. Explorers, run by Glyn Burge, created the Thompson Prospecting Syndicate to pursue exploration of the NWT and Fred Thompson was appointed manager. In 1938, Fred and his brother Bob began prospecting operations in the Yellowknife Area with discoveries at Sunset Lake. Flying in and out of the locations, Fred made aerial reconnaissance of the Hidden Lake area noting several interesting formations. Accompanied by Roy Lundmark, Thompson set down on a nameless lake and eventually found some high grade veins. They later went on to report of gold nuggets scattered on the ground. The KIM, WACO and other claims were staked by Thompson and Lundmark, along with assistance from Murdoch Mosher, Glyn

Burge and Bob Thompson. Approximately 97 claims were staked in a weeks time (Hoffman, 1947). One of the veins was a 20 foot by 60 foot outcrop with high grade ore showings on the surface. The high grade showings of the vein expanded into the waters of the lake. A large island on the lake showed signs of more gold on a outcrop measuring 10 feet by 30 feet. The discovery at Thompson Lake has been described as possibly the best ever surface find of gold in Canadian history. When the news of this find hit Yellowknife, hundreds of people fled into the bush on their way to Thompson Lake to search the area and stake claims for themselves. In all, about 700 claims were staked in that area within a ten mile radius of Thompson Lake (Price, 1967). Examples of mines in the area that were staked during this time include the Old Parr mine and the Peg Tantalum Mine.



Photograph of the Thompson-Lundmark Mine site in 1941-1942. (NWT Archives photo - N-1990-012-0048)

Thompson-Lundmark Gold Mines was formed in August of 1938 and exploration was under way on the Treasure and Kim veins. In February 1939 an inclined shaft was started on the Kim vein and by August this development stopped and shaft sinking commenced on the Fraser vein, which was discovered by Hugh Fraser in 1940. The onset of war was taking it's toll in the Yellowknife area by this time, and the operation at Thompson Lake saw low financing for major developments. Although further funds were aquired for the development of the Fraser shaft, the company was forced to consider shutting the operation down due to the lack of more funding. The Consolidated Mining and Smelting Company of Canada agreed to take over the enterprise, and to bring the mine into the production stage in 1940, and development of a 125 ton/day mill was underway by summer of that year. Further funding would be provided by CM&S along with Ventures Ltd. (Hoffman, 1947). Current development work included 21 trenches on the Fraser vein, and a 3-compartment shaft to over 834 feet in depth, serviced by drifts on the 150, 300, 450, 600, and 750-foot levels. Surface work on the Kim vein included 51 trenches, many diamond drill holes and a 2-compartment shaft connecting the underground workings on the 150, 300, 450, and 600-foot levels. A 2,000 foot drift and raise connected the 600 foot level of the Kim shaft to the 750 level of the Fraser shaft. Operations were halted in 1943 during World War II due to lack of labour and other problems. The amount of profit from this period of operation (\$786,000) allowed Thompson-Lundmark Gold Mines to repay the funding advanced by Ventures and CM&S;. When the war ended in 1945, another gold boom hit the Yellowknife area due to the findings on the Giant Yellowknife Mines property.

Rehabilitation of the T-L property at Thompson Lake was underway by August of 1946 with exploration on the Trail, Island and Kim veins. The Treasure shaft, originally developed as an exploration working in 1938, was deepened to 143 feet with a drift at the 100-foot level. Minor amounts of ore were hoisted up and transported to the mill. Underground work commenced in March of 1947 as the workings were de-watered and several plant buildings upgraded. Ore was being mined from the Fraser workings with the Kim vein being the main source of ore. Most ore above the 750-foot level had been mined before 1943. Ore was transported from the Kim shaft along the haulage way of the 750-foot level drift to the Fraser shaft, to be hoisted to the surface. Operations stopped in October of 1949 after extensive exploration programs, following the exhaustion of profitable reserves. The property was abandoned by 1950. (Lord, 1951)

| Year | Tons Milled     | Gold Recovery | Silver Recovery | Gross Value |
|------|-----------------|---------------|-----------------|-------------|
| 1941 | 11,915 tons/ore | 8,231 ounces  | 1,598 ounces    | \$317,501   |
| 1942 | 37,755 tons/ore | 22,587 ounces | 4,373 ounces    | \$871,294   |
| 1943 | 23,545 tons/ore | 16,814 ounces | 3,287 ounces    | \$648,609   |
| 1947 | 11,309 tons/ore | 3,062 ounces  | 652 ounces      | \$107,639   |
| 1948 | 37,757 tons/ore | 14,653 ounces | 2,904 ounces    | \$515,024   |
| 1949 | 11,688 tons/ore | 4,992 ounces  | 968 ounces      | \$176,616   |

Mine Production: The mill began operations in August, and the first gold brick was poured at T-L on September 20th of 1941 (The Yellowknife Blade, Sept 23, 1941). The mill treated ore from the Fraser vein from this date to September 1943, stopping during World War II. Total value of this gold amounted to \$1,765,000 (Hoffman, 1947, p 316), however most was absorbed into pre-production expenditures. After the war, production resumed in September of 1947. At first, the mill treated ore from the Fraser vein, but latter mainly from the Kim shaft area. Milling ceased for good in May 1949. A total of over 65,000 ounces of gold was recovered with a gross value of over \$2.4 million. (Lord, 1951)

**Town Life**: The Thompson-Lundmark site caught the attention of many people, much like the Discovery site 10 years later. A community was developed at this site, and recreational halls were constructed, along with a curling rink. At least 20 cabins were built, along with bunkhouses for the miners. Modern features on site included electricity, brought in from the Consolidated Mining and Smelting's Bluefish Hydro-Electrical plant east of the mine.

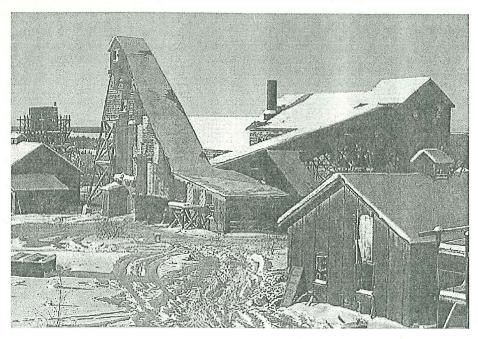
The Outcome: In spite of it's rich promise to the mining community, the Thompson-Lundmark Gold Mine failed to reach the stage of being one of the long-lived mineral producers in the north. However, it's reputation to the North made up for it's short life in the industry. The mine produced \$2,460,067 worth of gold overall (Lord, 1951, p.282). In 1982, Ardic Exploration and Development INC mapped, sampled and surveyed near the Thompson Lake property. They estimated values of 0.12-1.94 ounces/ton grade of ore just north of the mine (NMI).

Thompson-Lundmark ended up being one of the largest sites for a mine in those years. Over 55 buildings were constructed for the mine. In 1992, Thurber Environmental did a study on Thompson-Lundmark and reported the mine was in almost mint condition.

**The Site Today**: Unfortunately, the forest fires of 1998 claimed the abandoned site of the Thompson-Lundmark Mine. The fires swept through the Pensive and Gordon Lake areas destroying many other historic sites. Along with the Thompson-Lundmark site, also consumed

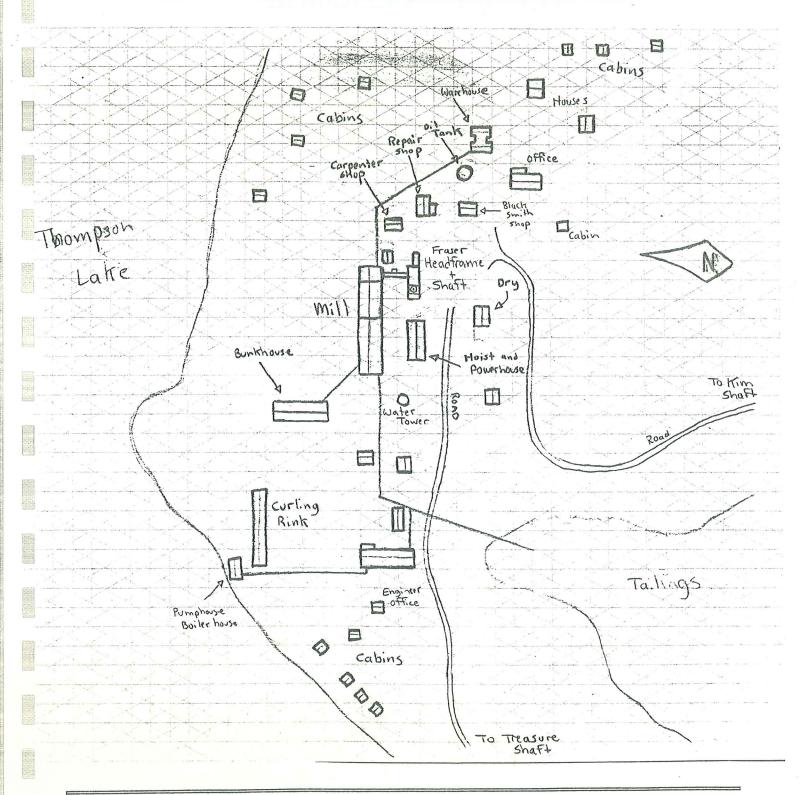
were the Hidden Lake Mine, Peg Tantalum at Upper Ross Lake, the Goodrock Mine and the West-Bay site, both at Gordon Lake.

**Editor's Note**: The destruction of the Thompson-Lundmark Mine has been quite tragic on the history of the Yellowknife Area. It was planned that one day it could be converted into a tourist attraction or a mining museum, because the T-L was one of the few historic mine sites still in such good condition.



Photograph of the Thompson-Lundmark Mine site during the 1980's. (courtesy Up-Here Magazine)

#### Thompson-Lundmark Mine property map, 1948



# Tin Mine (Abandoned)

| Company<br>Name(s)                               | Designation   | Production<br>Years | Location  | Coordinates                             |
|--|---------------|---------------------|---|---|
| Consolidated Five<br>Star Resources<br>Ltd. 1986 | Past Prospect | N/A                 | 24 km north-east of<br>Yellowknife, 4 km north<br>of Ptarmigan Mine,<br>Cassidy Point | LAT 62* 32' 35"<br>LONG 114* 10'<br>55" |

**Site Access**: The Tin property is located at Cassidy Point on Prosporous Lake, easily accessible from the Ingraham Trail.

**Geology**: The country rock is nodular quartz-mica schists of the Burwash Formation, Archean Yellowknife Group. Two faults, the Vega and Ptarmigan, border the Tin claims. Three ore bodies have been noted. The largest is the # 3 zone, which averages about three feet in width and has been traced for over 185 feet (NMI).

History and Development: The STAR group of claims were staked in 1929 by the Atlas Exploration Company Ltd. These claims lapsed soon after, and the TIN group of claims was re-staked in the area by T. Cassidy in 1940. Rock trenching and pit blasted took place on the Tin #3 claim during this time. In 1954, Tarbell Mines Ltd. was formed and conducted diamond drilling on the Tin claims. The best intersection had gold values of 0.76 ounces/ton. Tarbell Mines dropped the option to these claims soon after. In 1965, H. Wist and Associates deepened the trench to 16 feet, and better gold values were found at the greater depth. These samples assayed up to 3.76 ounces/ton of gold. In 1980, ownership of the claims were given to Consolidated Five Star Resources. More diamond drilling took place on the property and a proven reserve of 1,544 tons grading 0.45 ounces/ton was reported. During 1985-1987, a decline was driven into the or body and about 1200 tons of ore was extracted (NMI).

**Mine Production**: In 1950, 30 tons of ore was shipped to Giant Mine, with gold recovery at an estimated 93%. In 1986/1987 1226 tons of ore that was extracted from the TIN claims were shipped to Con Mine for refining. Gold recovery is not known, but the average grade of the rock was 0.371 ounces/ton (NMI).

**The Outcome**: Minor amount of mining took place on the Tin property returning a small amount of gold.

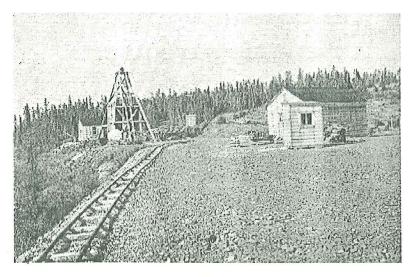
**The Site Today**: A large decline was driven under Prosperous Lake from the northern tip of Cassidy Point. This portal is still there today, flooded and fenced off.

# Viking Mine (Abandoned)

| Company<br>Name(s)                               | Designation   | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates |
|--|---------------|---------------------|---------------------|---|-------------|
| Viking<br>Yellowknife<br>Gold Mines<br>Ltd. 1947 | Past Prospect | N/A                 | New<br>Athona       | 74 km north of<br>Yellowknife, 12 km<br>south of Discovery<br>Mine, inland west<br>of Morris Lake | 19" LONG    |

**Site Access**: Winter routes to Discovery Mine pass accross Morris Lake. Float plane to Morris lake, and a half hour hike will also reach the mine.

**Geology**: The showings of gold and sulphides lie within a quartz veined diorite sill, within the sedimentary rocks of the Archean Yellowknife Group. The sill extends for 2500 feet and is 50 to 300 feet in width. No definite ore bodies have been located, and gold showings have been found scattered throughout in quartz veins (NMI).



Viking Mine, September 1950. (GSC Memoir 266 photo)

**History and Development**: During the staking of Discovery Mine in 1945, Fred Thompson also staked the ARLENE, BBB, and OLA groups of claims. In 1946, New Athona Mines Ltd. bought and developed the property, and staked the additional DEI and KAM claims. Surface work included diamond drilling and trenching. A 10 x 7 foot 2-compartment prospect shaft was started in April 1947 on the Main Zone. In May of 1947, New Athona Mines was reorganized, and Viking Yellowknife Gold Mines Ltd. was formed to continue underground work onsite. The shaft was extended to 159 feet with a drift on the 150-foot level, with over 400 feet of lateral work done by June 1947. Mining work was concentrated on the Main Zone, on the OLA and BBB claims. Work on the East Zone consisted of many trenches. Ten people were employed at the camp, before it was shut down in September of 1947 for the onset of winter (Lord 1951). Underground exploration in this area continued through to 1974 on a minor scale

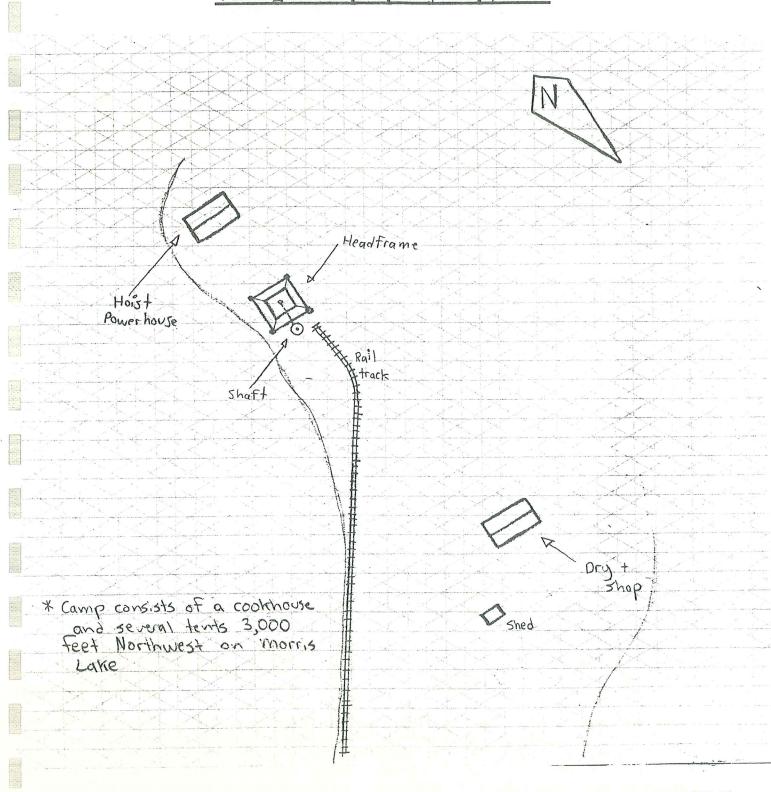
at various times (NMI).

Mine Production: No mill was installed on site.

The Outcome: An initial plan to begin major operations in the 1940's did not materialize, nor did early plans to operate the site by trucking ore to the Discovery Mine. Either gold values did not prove profitable enough, or not enough exploration was done on the property to permit such operations. In 1968, Discovery Gold Mines optioned the property and conducted a survey of the geology. Calculations of 700 tons per vertical foot grading 0.6 ounces/ton were reported. Discovery Mines dropped the option in 1977. In 1980, Viking Yellowknife Gold Mines Ltd. held 11 claims under lease on the property. New Athona Mines held an 81% interest in Vikings shares in 1981 (NMI).

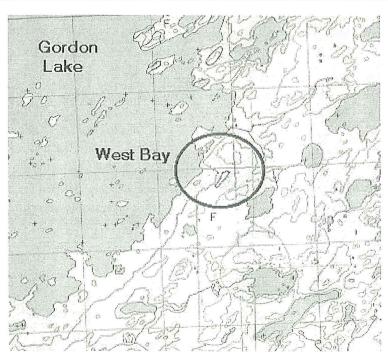
The Site Today: A 1996 report on the site by Vista Engineering opted to leave the mine alone since no hazards were found onsite. A few buildings were present, along with a 32-foot headframe. This information was confirmed by Ryan Silke on August 31 1999, through aerial reconaissance of the mine site

### Viking Mine property map, 1947



# West-Bay Mine (Abandoned)

| Company<br>Name(s)  |                  | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|---|------------------|---------------------|---------------------|---|---|
| Mr. Jake<br>Woolgar 1947,<br>West-Bay<br>Yellowknife<br>Mines Ltd. 1948 | Past<br>Producer | 1948                | Zolota,<br>DAF      | 77 km northeast<br>of Yellowknife,<br>south shore of<br>Gordon Lake | LAT 62* 54'<br>21" LONG<br>113* 13' 58" |



Map of West-Bay Mine site situated on Gordon Lake (NTS 85 I/14)

**Site Access**: The West-Bay site is located on Gordon Lake. It can be accessed by float plane in the summer or from the Gordon Lake winter road in the winter.

**Geology:** The property, on the east side of Gordon Lake is underlain by sediments of the Yellowknife Supergroup. The "Hump" vein (not the same vein as the one mined by Camlaren) strikes northeast and is continuous within the zone. This vein has been mined via a small open pit on the property. The vein contains gold, pyrite, and galena (NMI).

**History and Development**: During the late 1930's and early 1940's, the Gordon Lake area saw heavy staking. The Camlaren area had already been developed and prospectors were looking for other worthwhile areas during the 1940's. In June of 1946, Jake Woolgar and G. Wonmcott arrived at the south shore of the 24 mile long Gordon Lake and staked the DAF (1-14) claims. In October of 1946, Zolota Yellowknife Gold Mines optioned to do work on the claims, but had relinquished the option by April of 1947. Further developments were undertaken by Woolgar in

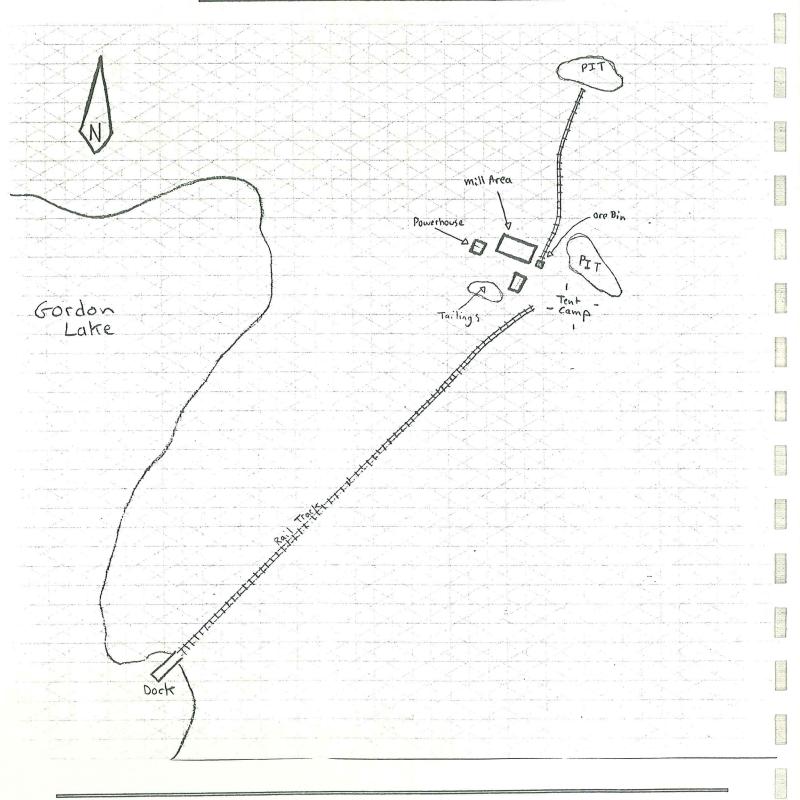
partnership with Jim McAvoy on the discovery vein. In April of 1948, West-Bay Yellowknife Mines Ltd. purchased the site from Jake Woolgar and installed a 5-10 tons capacity mill. There was 15 men working on the site during the summer of 1948, and a large pit was dug along the discovery vein, with dimension of 40 feet in length, 12 feet in width, and a depth of 22 feet (Lord, 1951). No known developments took place after 1948, however, News of the North (April 21, 1950) reported a company plan to sink a 2-compartment shaft to around 400 feet on the DAF claims that year. The outcome of this is not known, as no shafts on the property have been recorded in literature.

Mine Production: In June of 1947, a small mill was erected and milling took place between September 21 and October 12 by Woolgar and McAvoy. At this time, 18 tons of ore were treated, with a recovery of 49.75 ounces of gold. In June of 1948, West-Bay Yellowknife Mines Ltd. comissioned a 5-10 tons/day cyanide mill, and treated 289 tons of ore throughout the summer, with a recovery of 221 ounces gold and 28 ounces of silver (Lord, 1951). The first gold brick was poured on June 22nd of 1948 (News of the North, June 25, 1948).

**The Outcome**: The DAF claims lapsed and were restaked in 1977 as the WQ group by J.F. Doucette. In 1982 Blackridge Gold Mines worked on the claims, along with Cruiser Minerals in later years. Considerable trenching and diamond drilling was completed at that time(NMI). In 1989, the property was owned by Cameron Mining and New Era Developments Ltd., who extracted a 1,000 ton bulk sample from an open pit. This was to be milled on the Burnt Island property in 1991 (NWT Exploration Overview, DIAND Report, 1991).

**The Site Today**: The forest fires of 1998 swept through the east side of Gordon Lake, and it is assumed this site was destroyed.

### West-Bay Mine property map, 1948



# Wilson Island Mine (Abandoned)

| Company<br>Name(s)                           |               | Production<br>Years | Also<br>Known<br>As | Location  | Coordinates                             |
|--|---------------|---------------------|---------------------|---|---|
| Aurous Gold<br>Mining<br>Corporation<br>1921 | Past Prospect | N/A                 | Aurous              | 96 km southeast of<br>Yellowknife, eastern<br>tip of Wilson Island,<br>northwest of<br>Outpost Islands,<br>Great Slave Lake | LAT 61* 47'<br>45" LONG<br>113* 10' 30" |

Site Access: This site is accessed by float plane or boat during summer months. Generally, no traveled winter roads extend Great Slave Lake during the winter towards the area.

**Geology**: The country rock on the claims are part of the Wilson Island Group of the Archean Age. Gold is the main mineral identified located in a few quartz veins. (NMI)

History and Development: These claims were staked during September of 1916 as the BIG MOOSE and BIG BEAR claims by R.H. Wilson and C.P McTavish. By 1921, two shafts had been sunk (one to 43 feet) and many open cuts had been trenched. This work was carried out by the Aurous Gold Mining Corporation (C.S. Lord, 1941). Rotary mill equipment was reported as having been ordered, but as of 1925 was not installed on site, probably due the death of coordinator R.H. Wilson. Machinery at the mine during this time was reported to be several pieces of shaft sinking equipment (hoist, compressor), along with a camp of two cabins (Mines Branch Report, Ottawa, July 1924). The Aurous Gold Mining Company Ltd. moved to Canada around July 1924 and formed the Aurous Gold Mining Company of Canada Ltd.. Gold values were reported as economic, and several tons of ore were shipped south to Trail BC for processing. During 1926, some developments were reported (Department of the Interior Report, 1931), but afterwards the property and company were reported as being dormant.

**Mine Production**: Plans were made to set up a mill on several occasions, however no reports state that mill equipment was ever actually used on site let alone erected. Some literature hints to the usage of a stamp mill on the property. Other records report that several tons of rock had been sent south for precessing.

**The Outcome**: This is one of the first sites in the Great Slave Lake Region to have major work done on it. Unfortunately the mine was eventually deemed unprofitable. In 1934 the claims lapsed and were re-staked as part of the 12 claim VICTORY group (NMI).

The Site Today: Thurber Environmental did a study on this site in 1992, and reported the evidence of two flooded shafts and many open cuts. Literature reports that 2 cabins were built here, but these were not reported by Thurber.

**Notes**: Historical data on this mine is sketchy. Several old newspaper articles mention milling equipment, but government reports (CS Lord 1941-1951) make mention of only surface and underground developments. To further add to the confusion, it is rumoured that the development of this mine on Wilson Island was a mistake made by prospectors in 1920, when they gave bad locations for their gold discoveries. The samples found and sent south were actually from the Outpost Islands, and R.H. Wilson accidently landed on Wilson Island, where nothing of value was to be mined (as told by Walt Humphries). This information however contradicts with dates and events as reported by C.H. Stockwell (1932), Lord, and others.

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  - Alf Silke Geologist, Con Mine Yellowknife
    - Walt Humphries Historian
    - Shorty Brown Historian
    - Bert Varcony Mines Inspection Official

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- The Prospector (various articles dating 1938-1939)
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Other data was collected from various archival collections at the NWT Archives, and the Geological Archives in Yellowknife, plus various personal items donated by individuals.