

~ Contents ~

<i>Pamphlets</i>	
<i>Introduction</i> =====	3
<i>List of Mines</i> =====	18
<i>Mining Regulations 1900</i> =====	27
<i>Descriptions of Mining Locations</i> =====	28
<i>Newspaper Articles</i> =====	242
<i>Interviews ~</i>	
<i>Herb Bergman</i> =====	265
<i>Max Cameron</i> =====	277
<i>Carl Holm</i> =====	289
<i>Les Ingo</i> =====	305
<i>Barbara Machin</i> =====	314
<i>John Peterson</i> =====	317
<i>J. B. Simpson</i> =====	320
<i>Carl Walsten</i> =====	322
<i>Albert & Olive Zeemel</i> =====	335
<i>The Mines Today</i> =====	342
<i>Glossary</i> =====	352
<i>List of Illustrations</i> =====	359
<i>Index</i> =====	360
<i>Sources</i> =====	377
<i>Acknowledgements</i> =====	378
<i>Map of Mining Locations</i>	

Klondike at Home

Jes' want to say a word or two to
these here friends of mine
Who must go to the Klondike with
the rushin' bustlin' line.
Of fellers with ideas that because gold's
in the ground
They kin git it without workin' jes'
cause other peoples found
That it's there?

Yes, they're willin' to be froze to
death: they're anxious fer to try
An' walk a thousand miles in snow
Though other people die?
They only want a chance to suffer
night and day
Till they git to where the gold is for
don't other people say
That it's there?

They're crazy to go hungry, to get
soakin', wringlin', wet
To feed on dogs an' horses an' most
Anything they get.
They're willin' to be drowned, to be
starved an' frozen too,
Fer other people's got gold, we've
read it, me an' you.
That it's there.

If half these guys would stay at home
 an' hustle here awhile
The same's they'd have to hustle
 the Klondike, every mile:
If they'd get up in the mornin', never
 mindin' 'bout the cold.
An' go out an' tend to business, they
 would find a plenty gold,
 Fer it's here.

Yes, there's Klondikes in this city here
 Where they were born an' raised,
An' Dawson City nuggets that has
 never yet been phased:
There's Chilkoots on the corner, an'
 There's Skagways on the streets,
An' you'll find there's lots of people
 minin' gold dust that you meets,
 Fer it's here.

So Jes' never mind the sufferin' an' the
 Starvin' an' the snow,
But jes' get out an' hustle here as hard
 as you can go:
"Tend strictly to yer business, an' keep
 both eyes open wide,
An' you'll find a plenty gold dust
 without riskin' yer hide.
 Fer it's here."

Rat Portage Miner April 15, 1898

Introduction

Gold-- a word which thrilled the heart and brought a twinkle to the eye of many a prospector and fortune-seeker. Gold in the Lake of the Woods-- a phrase which captured the interest and capital of miners and investors alike, during this area's great, if brief, moment of glory as one of the country's richest gold fields.

The Lake of the Woods first came into prominence as a gold field back in the 1880's. The period from about 1885 to 1899 was the first and the biggest gold rush in the Lake of the Woods mining history. The prospects and potential of the region as a profitable gold mining "Eldorado" were almost limitless; a mining expert visiting Rat Portage in 1894 referred to the district as the "most promising gold region in America." Following that, in 1900, the New York Engineering and Mining Journal enumerated the many advantages of the Lake of the Woods for profitable mining activity:

"1. As has been stated, the ore is practically all **free**-milling, and from actual testing the gold has averaged about \$15 to the ton, while the cost of working and treating has only averaged about \$4 or less per ton.

"2. Abundance of water for power and other purposes. The whole region is a network of lakes, rivers, and streams, which afford not only excellent means of communication for boats and canoes etc., in the summer, but also in the winter, when frozen over, for sleighs etc.

and it is by this latter method that supplies are taken into the camps to a great extent. Exceptional advantages are also afforded the prospector, as almost every part of the region can be reached by canoe. Power sources are almost unlimited. At Keewatin, three miles from Rat Portage where the waters of the Lake of the Woods fall into the Winnipeg River, the Keewatin Power Company is installing what will be, when completed, one of the greatest power plants in the world. By the erection of an immense dam at this point they have converted the Lake of the Woods into a reservoir 3,000 square miles in extent.

"3. Abundance of timber for both building and fuel purposes. As fuel, it can be laid down at the mines at a cost not exceeding \$1.50 per cord, while for building purposes it is also relatively cheap."

Muir Kelwynn, in an article written in 1936, added to this list with a bit more romanticism:

"The sensational discoveries made in the Lake of the Woods district in the early nineties brought in turn an influx of prospectors and miners lured not only by the reported finds but also by the comparative ease of access to this latest land of their dreams. By sleeping car to Rat Portage, a convenient base for supplies of every kind, thence by canoe to explore the thousands of islands and easily reached mainland for the yellow metal. No mules or pack horses to feed, no shouldering heavy pack sacks over mountain ranges, just the swish of the paddle as the canoe nosed in and out amongst the myriad islands and unexpected channels for ever opening up new vistas of easily prospected ground."

Unfortunately, despite these numerous advantages, the

fates seemed to be against all mining operations from the start. The story of gold mining on the Lake of the Woods was one of rather erratic cycles of activity and inactivity, and considering the number of gold discoveries made, the lake's gold mining history was, on the whole, disappointing.

The chief reason for the failure of so many mining properties was, basically, mismanagement. The first developments were made by men with little or no experience in mining. Many of the mine managers were "practical miners" who knew very little about opening up a mine properly. J.E. Thompson, a geologist for the Department of Mines described the faulty operations of these managers:

"There was a general practice of sinking a shaft on the vein without any attempt to first open it up by surface trenching and sampling. These shafts were too small or too low in gold content to merit the time and money expended upon them and the prospect was doomed from the start. A mill was generally installed on the property during the early stages of shaft sinking or drifting, certainly long before there was any justifiable reason for believing that it would be necessary. As a result heavy financial loss was often the case and the treasury was exhausted before the vein had been given a fair test."

Another factor which retarded the development of the gold fields was the matter of disputed territory, where the area was claimed by both the Ontario and the Manitoba governments. Absolute titles from the Crown could not be obtained until the dispute had been cleared up by the Privy Council who ruled that the auriferous zone of the Lake of the Woods was part of Ontario.

Nevertheless, the effect of gold fever lured hundreds of people into the district. Rat Portage had an increase

in population from a few hundred to three thousand citizens during the decade following 1885. It was reported that there was such a demand for surveyors to locate mining claims that they slept in tents in the bush to evade prospectors who were continually besieging them and wasting their time.

The first discovery of gold was reportedly made in 1872. A Mr. William Murdock had the incident of this first discovery recorded in the "Rat Portage Miner":

"Mr. Murdock was in the service of the Dominion government employed in making a preliminary survey for the Canadian Pacific Railway line and locating the objective points on which the line has since been constructed. During a trip in the vicinity of the North West Angle one of his rodmen, a Mr. Mingy, handed to Mr. Murdock some specimens of gold bearing quartz which had been picked up by one of the axmen. Very little attention was paid to the discovery at the time but it was not forgotten and during the C.P.R. construction many fresh discoveries of gold bearing rocks were made."

A slightly conflicting report by Mr. James Weidman, secretary-treasurer of the Rainy River Gold Mining Co., stated in an 1899 edition of the "Rat Portage Miner" that the first discovery of gold in the Lake of the Woods was made by Frank Moore in 1873:

"He was with Mr. Moberly's survey party who in that year ran trial lines westward from Port Arthur to find the best location for the C.P.R. He washed gold out of the red sand on a bay on which the first

picket line came out. This is now known as the Yellow Girl. Mr. Moore also found gold on what is now known as the Sultana island in 1879, but did not locate it. In the same year Messrs. McFadden, Sherlock, Wm. Lockwood and Andy Lowry found gold on Hay Island, with which Mr. George Heenan became prominently associated. Messrs. Jacob Henesy and Charles A. Moore located the now famous Sultana in 1881. Mr. Jacob Henesy, or "Uncle Jake", discovered and staked the claim known as the Regina mine in 1880, and the Sultana in 1881.

Unfortunately, capital was very scarce and expenses heavier so that the baby mines of the early eighties, the Winnipeg Consolidated, Hay Island, Ophir, and the Argyle, were temporarily abandoned, the shafts being rarely more than 100 feet deep and the machinery, primitive. Often the extent of the work done on a claim amounted to just a hole in the ground and fortunes were lost as well as gained. Ruined shaft houses and deserted mills were the result of the incompetence of inexperienced mining men, who lacked knowledge on the types of veins and made wrong conclusions about their structures, as was mentioned previously. But they were not entirely to blame. Mining and milling were also extremely inefficient. Cyanidation was only beginning to be used, and the losses of values in the tailings were high. Therefore, sulphide ore-bodies were ignored in favour of "freemilling" ores which could be treated more easily by a process called amalgamation.

Unfavorable and often condemning reports on the region by geological experts also did much to retard the region's development.

Despite this, prospectors were hunting and digging in earnest now. Led by John F. Caldwell, who started prospecting on the Sultana property in 1890, mining went ahead at a rapid pace, with claims dotting the shores and islands of the Lake of the Woods. Caldwell's enterprise and perseverance against all odds was the means of drawing attention to this district as a gold field.

By 1884 quite a few mining companies had been organized and money invested into operations. Many purchasers were from the United States, England, Australia, and Africa.

The Manitoba Consolidated Gold and Silver Mining Co. was organized to work on claim X37 on Clearwater Bay. The Argyll Gold Mining Co. operated nearby on claim X21 also on Clearwater Bay. The Winnipeg Consolidated worked in the vicinity of Hay Island, as did the Keewatin. Also in operation on the Lake of the Woods at this time were the Canadian Gold Mining Co., the Heenan Mining Co., the Lake of the Woods Gold Mining Co., and the Pine Portage Gold Mining Company.

A gold and silver reduction plant was built at Rat Portage in 1893 as interest in the mining possibilities of the area increased. Twenty locations had been firmly established by then as working mines, notably in the Big-Stone Bay and Shoal Lake- Clearwater Bay areas. The Sultana was unquestionably the major mine on the lake, as well as in the Western Gold Fields, having a total gold production of almost \$1,000,000, with the Mikado and Regina mines close behind.

It is interesting to note that the underground workers in the nickel mines of Sudbury were only paid a wage equal

to less than two-thirds of the wage paid to the miners in the Lake of the Woods gold mines. The average wage here was about \$2.10 per day, while the surface laborer received \$1.75.

The considerable development taking place around this time was evidenced by the fact that nine out of the ten mines which contributed to the provincial gold yield of \$189,294 in 1897 were from the districts tributary to the Lake of the Woods. The principal mines were Hay Island, Stella, Regina, Sultana, Burley, Triumph, Mikado, and Yum Yum mines.

Around this time there was some rivalry between the gold fields within the United States and Canada. In the "Rat Portage Miner and Rainy Lake Journal" appeared numerous articles extolling the Lake of the Woods district and discrediting such rich areas as the famous Klondike and British Columbia gold fields, in order to draw interest to this area and away from others. These were also intended to retain miners, investors, and prospectors that were already here. The following is one such article from 1897:

"The late owner of the Monarch Mine, Mr. E. LaRose, of Norman, is a practical mining man of wide experience all over the west. In addition to being a prospector he has also handled hammer and drill on 1,300 foot levels. In conversation with the "Miner" man the other day he made the unqualified statement that the gold fields of Western Ontario were the richest in Canada or United States, and that in all his varied experience he has never saw such rich surface showings as were found here. He was all through the Cripple Creek boom, and says that much lauded region does not begin to compare with the Lake of the Woods

district, and that, instead of getting good showings on the surface as is the case here which grow richer as depth is attained, out there the barren rock is all the surface showing, and in order to get pay ore one must sink 500 feet or more. Then, in addition to our rich surface ores, we have unlimited water and fuel, numerous water powers, cheap and reliable labor, nearness to business centers, and all easily accessible by boat or rail, all of which gave superior inducement for investment of capital in the gold fields of Ontario. Mr. LaRose is of the opinion that when these facts and conditions are generally known that there will be a rush into these Ontario gold fields that will eclipse all previous gold mining excitement, not excepting the Klondike Furore."

In 1898, the provincial gold yield increased to \$265,000, of that the major portion came from the Sultana, Mikado and Regina mines on the Lake of the Woods, while in 1899 when the production peaked at \$424,500, and again these were the three chief producers. Other mines operating in the area at this time were the Bullion, Monarch, Yum Yum, Cameron Island, Nonsuch, Sirdar, Norah, Winnipeg Consolidated, Triggs, Keewatin, Hay Island, Pine Portage, Burley, Black Sturgeon, Treasure, Triumph, Bad, Caribou, and Gold Hill, plus others.

When the Sultana closed down in 1902, due to the faulting of its large ore body, and the Mikado closed down in 1903, the provincial gold yield dropped drastically proving its dependence on the three Lake of the Woods mines. Thus the period of gold production was of rather short duration, for in 1900 a number of mines closed down, being worked only intermittently until 1912 when practically all the gold mines in Western Ontario had closed down. In 1908,

a last attempt to revive mining in the area was made through the organization of a group called the Prospectors' and Mine Owners' Association headed by H.A.C. Machin. Yet, no matter how hard Kenora tried to hold its prospectors and mining interests, the attraction of fresh gold fields, especially in the newly discovered Porcupine area, lured them away and the Lake of the Woods area was abandoned as a mining region for a long time. The impression left in the minds of the general public was that the Lake of the Woods gold field had been tried and "found wanting".

Approximately thirty-five years later, the Lake of the Woods area again came into the gold mining limelight. The year 1935, as mining reporter Harold H. Hilliard observed, was a time when conversations everywhere inevitably turned to "gold".

Harry Hotchkin of the Herald Tribune wrote in 1933:

"The 1933 gold rush is like none other in history. It may lack the traditional boom-time ignorance and waste of the past but in scope, in intensity, in capital expenditure, in engineering and geological skill, the boom is astounding for these and any other times."

The first evidence of a revival in mining in the area was in 1932 when Colonel J. Gordon, of Sudbury, staked numerous water claims from the island of C.W. Gordon, past Bare Point to Queen Bee and Quarry Island locations, almost two and a half miles of water lots staked together. The Pine Portage mine also came under option. It was these incidents which renewed hope that important mining developments would be taking place in the near future, which they did.

The chief incentive for the come-back was the revaluation of the price of gold. The price of gold was now around \$33, and with this new valuation, old mines abandoned as worthless now could be revived. Also newer and more economical methods of mining were introduced and the ores that previously could not be treated profitably were now exploited. Old properties, worked at the turn of the century, were re-examined and many new ore-bodies and rich showings of gold were found in the immediate vicinity of the old workings. In fact, the majority of mines developed during this second gold boom (1933-1943) were on old mining locations. To those who had sunk money and labour into these old mines and lost, the resuscitation of these properties was thrilling to say the least.

Unlike, the earlier periods of mining history, experienced operators managed the mining properties. Prospector's classes were even formed to teach the prospectors and miners fundamental geology and new mining methods.

As a result, many new properties were opened up and new companies formed. The discovery of gold on the old Three Ladies Mine owned by the Kenricia Gold Mines Ltd. led to considerable staking and prospecting activity in the Clearwater Bay. area. It was there that most of the new mining work was undertaken, a half dozen or more claims opening up for development in that area.

Three mines came into special prominence during these years. These were the Wendigo, the Cedar Island property owned by the Kenora Prospectors and Miners, and the Duport on Cameron Island, which all produced gold steadily. Other more minor properties carried on surface and underground work, many with encouraging results.

One mine manager during this time explained to the laymen of Kenora, through the medium of the "Kenora Miner and News", the mining methods used at this time:

"The first stage was prospecting, with the modern prospector in the main, one familiar with the geological formation of rocks. Through schools and through assistance given by provincial geologists, the prospector was given advanced information as to the areas most favorable, and to the disposition of ores. The prospector's find was followed by the examination of the field man, and later the company's geologist or engineer, and if favorable, trenching and pitting followed. Then came diamond drilling to prove the ore body or eliminate its prospects.

"Shaft-sinking meant going into heavy money and all underground development required considerable expenditure. Planning was necessary before shaft sinking, and in most cases it was advisable to buy a new plant, for second hand equipment was seldom advisable.

"The lay-out was then made, and the shaft sunk forty or fifty feet by hand steel or portable compressor. Then timbering followed. Then came the excavations for the plant, plant compressor, diesel power, headframe, etc.

"With the shaft down to the required depth and the level stations all cut out, development started by cross-cutting and the drifting on the known vein or ore bodies, and in the decision made on the values and quantities available, depended the building of a mill or not."

In all, 180,000 ounces of gold were produced in the Kenora-Fort Frances area. Of that, 75% came from thirteen mines of the Shoal Lake-Lake of the Woods area.

These mines in decreasing order of reported production were: Wendigo, Mikado, Sultana, Regina, Cameron Island, Cornucopia, Kenricia, Ophir, Gold Hill, Olympia, Golden Horn, Champion and Crown Point.

Over a billion years ago the area was very mountainous some peaks reaching a height of 10,000 feet. Several cycles of volcanic activity tapped down to the depths of the earth where molten gold lay and brought it to the surface, depositing numerous ore bodies across the area. The Lake of the Woods seemed to be a favorable area but the volcanoes deposited only small pockets of gold.

Presently, mining activity is being undertaken in the Sturgeon Lake area where three new ore bodies have been found. Gold has been found south of Sioux Lookout, and Red Lake has a large group of gold mines operating. In the Lake of the Woods area, some exploratory work and diamond drilling has been done in the past few years at the Duport, especially, but no real mining activity has been going on.

It was known in a general way almost from the time when the Lake of the Woods region was first discovered that it contained mineral deposits, but not until 1850 was one definitely reported. In that year it was found near Gunflint Lake. A little later it was reported in the region now known as the Vermilion Range.

In 1884 Eugene Coste reported on the Gold Mines of the Lake of the Woods. These were for the most part on Big Stone Bay, some 10 miles southeast of Rat Portage (Kenora) and on Clear Water Bay, about 20 miles to the southwest. It appears from this report that in 1884 a number of gold-mining companies had been organized and a good deal of money invested in machinery, but the mining operations were apparently in the hands of very inexperienced men.

At some mines, stamp mills had been erected, with expensive machinery, before a shaft had been sunk or any knowledge obtained as to the extent or richness of the ore. At another place, a 50 foot shaft had been sunk with no vein to be worked.

For some years very little progress was made in goldmining development in the Lake of the Woods region, beyond testing operations and prospecting. A gold and silver reduction plant was constructed at Rat Portage.

By 1883, there were some 20 locations in the vicinity of Rat Portage, including the Sultana, a mine which later became one of the chief producers. In that year, further discoveries were made, notably in the Shoal Lake area, where the Mikado and other mines were attracting attention.

The gold yield for Ontario in 1891 was \$2,000.00 and increased to \$115,000.00 in 1896. By far the greater proportion of this increase was due to the yield from mines on the Lake of the Woods watershed.

The Sultana had come to be recognized as the chief mine of the western gold fields. After years of hard work had overcome preliminary difficulties, a good financial return was at last derived from a large body of rich quartz in places 40 feet wide, and it was estimated that enough ore was in sight to last several years.

The production of gold in 1897 amounted to \$189,294.00. Ten mines contributed to this production, all of which mines, with the exception of one in Eastern Ontario, were in the districts tributary to the Lake of the Woods.

The principal mines being operated in 1897 were: In the Lake of the Woods District - Hay Island, Stella, Regina, Sultana, Burley, and Triumph mines; in the Shoal Lake District - Mikado and Yum Yum mines; in the lower Seine District - Foley, Olive and Golden Star mines; in the upper Seine District - Sawbill, Hammond, and Golden Reef Mines.

In 1898, the provincial gold yield rose to \$265,000.00 and the major portion of it came from the Sultana, Regina and Mikado mines. The highest production of gold, up to the present time at least, within the area under discussion, was reached in 1899 when, for the Province, it amounted to \$421,951.00. This was derived chiefly from four mines, the Sultana, Regina, Mikado, and the Golden Star.

There was a considerable falling off in the gold output for 1900, the amount for the Province was \$297,495.00, but the chief source of supply was still the Lake of the Woods country. The immediate cause of this diminution was the stoppage of several producing mines, especially the Golden Star and Olive. The reduction works at Rat Portage stood idle for most of the year 1900, although at Keewatin, where a reduction plant had been erected, a considerable quantity of ore was treated.

In 1902 the Sultana was closed, its large ore body had faulted, in 1903 the Mikado also closed down. For a number of years, these two mines had been substantial producers, and had shared the leadership in the Western mining field. The Mikado was in operation from 1896 to 1903 and during this period is credited with having produced over \$500,000.00 in gold.

During the next seven years ending with 1911, the gold production in Ontario fluctuated between \$99,885.00 in 1905 and \$32,445.00 in 1909, the average yield for the seven years being \$62,062.00. During this period the Sultana and Mikado had both resumed operations but were again closed, and for a part of this time the Principal producer was the Laurentian Mine situated in the upper Manitou Lake district.

Contributed by Mr. Carl Holm

CANADIAN ELDORADO.

Opinion of Some of the Eminent Engineers, Geologists, Scientists and Experts Who Have Visited the

NEW GOLD FIELDS OF CENTRAL CANADA.

COLLECTED BY JOHN F. HOWARD.

FROM THE MINER, NOV. 21ST, 1900.

As an introduction we may observe that a great deal of interest has been created during the past summer in the gold fields of the Lake of the Woods through articles appearing in many of the leading financial and other journals of this country and in Europe written by Mr. Howard.

The prospects in the rich districts of the Lake of the Woods and the Manitou have never been so bright and the permanency of the gold mining industry so well established as at the present time. This has not been accomplished by blowing of trumpets nor by the discovery of myriads of bonanzas that have been reported from week to week, each one greater in value than the other, with veins, wider, larger, and richer than the one recorded the week before. It has been brought about by the persistent and businesslike procedure of those who conduct mining as a commercial enterprise (not as a gamble or speculation) requiring the fulfillment of certain conditions as requisite to success. These pioneers have opened up properties upon which the general scientific and commercial conditions for a profitable enterprise exist.

They succeeded by the permanent continuance of scientific work aided by a small expenditure of money and have placed their mines in such a position that they are now yielding results, and the permanency of the properties is now well established.

There is one unusual and commendable feature in the conduct of mining operations in this remarkable district; that the companies doing business few are offering their stock for sale on the open market. The shares of the Mikado, Sulfura, Anglo-Canadian and others for instance are held at a premium in London and few outside people have the privilege of owning any of their stock.

Prof. A. P. Coleman, geologist and mineralogist of the Ontario Bureau of Mines, in his report to the government, says "looking at our gold-bearing region, one is struck with the wide extent over which gold has been found. The variety of the deposits which occur, the ease with which they may be reached, the free-milling character of the ore, all points in its favor when compared with most gold fields. No part of the region is more than 40 miles from a railroad and most of the mines are within a few miles of the railway, all parts being readily reached by boat. The region is not an inaccessible desert, nor covered with malarial swamps. Not cut off from civilization by precipitous mountains. Supplies of all kinds are cheap and easily obtained. Efficient labor can be obtained on easy terms and life and property are as safe as anywhere on the globe.

Charles Kreissman, M. E., University of Freiberg, Germany, reports "rarely have auriferous veins or deposits been discovered so favorably situated for economical exploration equal to those in the Lake of the Woods and Manitou districts. As a result of recent developments their permanency and depth, size of reefs and grades of ore seems to have been established beyond any reasonable doubt, in fact the ore in the lower workings seems to be wider than that at the outcroppings."

Alan Sullivan, C. E., M. E., says, "wherever you go in any part of this wonderful district there are outcropping reefs, varying from one to four hundred feet, fifty per cent of these reefs carry gold in appreciable quantities. This high percentage is no exaggeration, and I venture to say is unparalleled in any other part of the globe. What is the cause of this wonderful wealth? There has been a great deal of volcanic disturbance throughout the district to which fact I attribute its auriferous

quality. All along and near the edge of the contact bounding the eruptive points, gold is found, sometimes in reefs of outcropping quartz, sometimes in dykes or bands of schistose rock through which the solutions carrying gold have percolated with extraordinary uniformity. In an ore body of this nature a very small amount of development work is necessary, as a result of wearing down by glacial action the present surface of the country is below the original surface. This means in other words that nature has done this amount of prospecting for us, and at five hundred feet below the present surface I have seen reefs which amply justify my assertion that they do most certainly continue to an indefinite depth."

A. H. Prescott, mining engineer and practical mining expert, tells of his investigations in the Lake of the Woods gold district. He says "I have visited the mines in Alaska, Montana, and California that are paying large dividends on ore that averages less than two dollars and they will continue doing so for years to come, but I could not truly compare them with Ontario properties. I investigated rock samples from twelve going concerns and over twenty prospects and it is one of the finest collections I have ever seen. Among them were some forty samples taken from a trench ninety feet across a reef over four hundred feet wide and which can be traced for over a mile. These samples gave an average of over four dollars to the ton in gold. I tested samples taken from the bottom of a pit twenty-five feet deep on the same reef which assayed seven dollars per ton. If that pit were to go down one hundred feet, and I see no reason why it should not go one thousand, it would certainly average ore of four dollars.

Dwight E. Woodridge, the American geologist, recently said, "there is no country in the world so thoroughly impregnated with gold veins as is the Western Ontario district. The peculiar feature of the district is that all the gold veins have been explored by glacial action. The glaciers have scraped the country completely and left the veins where they can easily be traced by the prospector. The ore is free-milling and of high grade."

T. R. Deacon, C. E., O.L.S., Canadian director for the Mikado mine, says "that gold is here widely distributed in paying quantities and in many localities in exceedingly rich deposits, no man who has travelled over the district and made even a superficial examination, will for a moment doubt. I confidently believe that it is a conservative statement to make that this region will prove to be one of the greatest gold producing areas on the planet."

"This vast area is for the most part covered with virgin forests of Jack-pine, Spruce, Tamarac, Poplar, Birch, and Cedar, so that abundance of timber is at all times available for mining operations and whenever it becomes necessary to use steam power in the operation of the development of any mine the question of fuel is not a formidable one, as fuel can be obtained here probably in greater abundance and at less cost than in any other gold mining region in the world. These great forests are also well stocked with Cariboo, Moose, Partridge and Duck and in every stream and lake are fish in abundance."

A great number of mining experts representing eastern and foreign capitalists have been in the Lake of the Woods district for the first time this year, attracted by reports of development. Their reports were all favorable, promising greatly increased confidence for the future.

Archibald Blue, Director of the Bureau of Mines for the Dominion

government in a recent report says, "the opportunities for the profitable investment of capital in the Lake of the Woods and Manitou districts are numerous and the vivifying touch of enterprise and capital alone is wanted to call many other industries into being. There is an abundance of raw material, cheap labor, large water facilities available for power, facilities for distribution by land and water, and safety for life and property. The free-milling ores of northern and northwestern Ontario offer better rewards to the miners and capitalists than any ores in the world, and their extent and continuity admit of no doubt."

Nature has done much for mining in the Lake of the Woods. The veins are in a great many instances clearly defined and traceable for long distances, so that when mining operations are begun the first shot will turn up ore that may be put through a mill.

The climatic conditions are excellent. The lake affords the best possible facilities for transportation to be found in America. If it were not for the endless chain of lakes it would be hard indeed to get about from place to place, as the country, though not mountainous, is very hilly. These endless chains of lakes passing from the height of land to the larger bodies of water, produce many waterfalls that can be used in creating power either to be used directly or by generating electricity.

Thomas W. Gibson, Secretary to the Ontario Government Bureau of Mines, says, "the rocky uplands of northern and northwestern Ontario will yet be reckoned among the most valuable parts of the province by reason of the vast number of waterfalls situated there. The main watershed dividing the system of the Great Lakes from that of the Hudson's Bay runs in a north-westerly direction from the eastern boundary of the province of Ontario north to the head of Lake St. Joseph on the northern boundary, a distance of about five hundred miles. It consists of a table land or plateau rather than a sharply defined ridge and is estimated as having an average width of about seventy miles or an area of about thirty five thousand square miles. Thus with the slopes on both sides affording an extensive catchment surface for the streams running to the north and south. Its elevation will average fifteen hundred feet above the level of the sea or nine hundred feet above lakes Superior and Huron. The consequence is that the rivers and streams which flow from it into the Great Lakes, though mostly of considerable volume, are not of great length and their descent is therefore unusually rapid and abrupt and marked in many places by cascades and falls. The character of the country in Western Ontario is such as to provide unlimited water power."

The advantages of the country have formerly almost been a drawback, for it seems that only places that are difficult of access and require a heavy expense to recover their value meet favor in the eyes of mining men. It is established beyond question by the results already obtained that the Lake of the Woods and Manitou gold fields are payable and the gold output will rapidly increase.

Canadian Gold Ores at Paris

A number of persons and companies operating in the Lake of the Woods district have received acknowledgment of their exhibits from Paris. Central Canadian ores received the Grand Prix Diplôme. Below is a copy of the letter sent to some of the mining companies, which reads as follows:

Paris, 1st Sept., 1900.

Dear Sir:

I have much pleasure, by order of the Canadian Commission, to advise you that the International Jury at the Paris Universal Exhibition has awarded the Dominion of Canada for a collective exhibit of minerals, of which your exhibit of gold ore formed an important part, a Grand Prix Diplôme, and you will be entitled to receive a copy of the award. I beg to remain,

Yours truly,

(Signed)

AUG. DUPUIS,
Secretary.

List of Mines

	YRS. IN PRODUCTION
<i>Abraham Claims</i>	1934-1935
<i>Allie Island</i>	1909-1911
<i>Amazon</i>	1897
<i>Argyle</i>	1900
<i>Arnold</i>	1900
<i>Aronck</i>	1934-1935
<i>Bad (Champion, Franklin)</i>	1887-1900, 1925-1927, 1935-1937
<i>Barr Gold</i>	1900
<i>Bath Island</i>	1896-1898
<i>Ben Harrison</i>	1894
<i>Birbeck</i>	1898
<i>Black Fox</i>	1900
<i>Black Hawk</i>	1900-1902
<i>Black Jack (Bull Dog)</i>	1893-1900, 1907
<i>Black Sturgeon</i>	1898-1900
<i>Block B</i>	1898

	YRS. IN PRODUCTION -
<i>Boulder</i>	1898-1900
<i>Brae-Breest</i>	1936
<i>Britannia</i>	1899
<i>Bullion</i>	1899-1901
<i>Bullion No. 2</i>	1900-1901
<i>Bully Boy</i>	1898-1900, 1901-1907, 1943
<i>Bunker Hill</i>	1937
<i>Burley</i>	1897-1899, 1903-1904
<i>Butcher Boy</i>	1897
<i>Cameron Island</i> (<i>Duport, Damascus</i>)	1898-1900, 1903-1906, 1911-1912, 1916-1921, 1932-1937, 1940
<i>Canada Gold Mining Co.</i>	1883
<i>Caribou</i>	1898-1899
<i>Chien d'Or</i>	1899
<i>Climax</i>	1898-1899
<i>Combination</i>	1888-1898
<i>Combined</i>	1894-1899, 1900-1906
<i>Contact</i>	1896
<i>Coppermine</i>	1896
<i>Cornucopia</i> (<i>Cedar Island, Kenora Prospectors and Miners</i>)	1896, 1898-1899, 1932-1933, 1934-1937
<i>Crown Point</i>	1900-1901

	YRS. IN PRODUCTION
Deadbroke	1892
Dicky Mac	1933, 1937
Eastricia	1937
Echla	date unknown
Echo Bay	date unknown
El Diver	1893
Elphinstone	1895
Elsie	1898
Emerald Isle	1897
Enen Lode	date unknown
Eschweiler	1894 - 1900, 1935.
Eureka	1894
Flint Lake	1903-1904
F.M. 72	1902
Gardner	1897
George Heenan	1883-1885
Gold Coin	date unknown
Gold Creek (Bigstone Bay Gold Mines) . . .	1886, 1934-1936
Gold Hill (Northern Crown) . . .	1886, 1893, 1895-1896, 1898
Gold Mountain	1890-1895

	YRS. IN PRODUCTION
Gold Reef (Mikado Reef)	1901 - 1903
Gold Sun	1900
Golden Gate (Johnson-Nilson) . . .	1896-1898, 1935-1935
Golden Horn (Rush Bay) . . .	1901-1904, 1906-1907, 1935-1936
Gordon Property	1901
Gordon-James	1898
Great Granite	1898
Great Northwest	1903-1904
Grey Eagle	1898-1901
Gull Island (Ambrose, Hill Lake Gold) . . .	1898, 1934, 1936-1937
Hay Island	1898-1900
Hilly Lake (White Claim)	1901, 1940
Homestake	1894-1900
Imperial (Emperor)	1899 - 1901
Indian Joe	1903-1904
Jenny Leigh	1897
K 170	1919-1921
Kathleen	1897
Keenora	1902
Keewatin	1880

	YRS. IN PRODUCTION
<i>Keewatin Reduction Works</i>	1897-1902
<i>Kenbrae</i>	1937
<i>Kenopo</i>	1940
<i>Kenosha</i>	1936-1937
<i>King</i>	1896
<i>King Solomon</i>	1911
<i>Kobold</i>	1900
<i>Lady of the Lake</i>	1908, 1897
<i>Leona</i>	1900
<i>Little Bobs</i>	1900
<i>Maiden</i>	1896
<i>Mammoth</i>	1901
<i>Mandarin</i>	1896
<i>Manitoba Consolidated</i>	1882, 1896
<i>Mascotte</i>	1898-1899
<i>Master Jack</i>	circa 1890
<i>Mather & Beveridge Soapstone Cms.</i>	1915
<i>McA 52</i>	1902
<i>Medecine Ledge</i>	1898
<i>Michigan & Ohio Company</i>	1901

	YRS. IN PRODUCTION
<i>Middle Island</i>	date unknown
<i>Mikado</i>	1894, 1896-1903, 1907, 1910-1912, 1933-1934
<i>Mina Grande</i>	1904
<i>Minerva</i>	1885, 1901, 1903
<i>Mines Contract</i>	1904
<i>Monarch</i>	1898
<i>Monte Cristo</i>	1896
<i>Muriel</i>	1896
<i>Nanki Poo</i>	1896
<i>Neda</i>	1935-1936, 1943
<i>Nickel</i>	1894
<i>Nonsuch</i>	1896
<i>Norah</i>	1900
<i>Norma H.</i>	1897-1898
<i>Northstar</i>	1897
<i>Norway</i>	1897
<i>Oliver-Severn</i>	1936-1943
<i>Olympia</i>	1901, 1903-1906, 1911, 1912, 1915, 1936
<i>Ontario Ltd.</i>	1898
<i>Ophir</i>	circa 1880, 1893, 1894, 1900, 1902-1903, 1910-1912

	YRS. IN PRODUCTION
<i>O'Sullivan Claims (Split Lake)</i>	1937
<i>Pine Portage</i>	1883-1884, 1932
<i>Poo-Bah</i>	1897
<i>Princess</i>	1898
<i>Quarry Island</i>	1899
<i>Queen</i>	1897
<i>Queen Bee</i>	1899
<i>Queen of Sheba</i>	1894
<i>Rajah</i>	1894
<i>Rat Portage Reduction Works</i>	1890, 1896, 1902-1906
<i>Regina (Black Eagle, Horseshoe, Kentland)</i>	1895-1899, 1901, 1904-1907, 1932-1934, 1935-1937, 1941-1943
<i>Royal</i>	1898
<i>S 70</i>	unknown
<i>S 120</i>	unknown
<i>Sabaskong Mining Co.</i>	1899
<i>Sawa-Shunia</i>	unknown
<i>Scotty Island</i>	1899-1900
<i>Scramble (Canadian Homestake)</i>	1894, 1898, 1901, 1911-1914
<i>Sentinel</i>	1898
<i>Sirdar</i>	1898-1901

	YRS. IN PRODUCTION
<i>Sirdar Point</i>	1898
<i>Sovereign</i>	1897
<i>Standard</i> (Kenecho)	1897, 1937
<i>Stella</i> (Blue Star)	1898-1901, 1934-1935
<i>Sullivan</i> (Wright Claims)	1898, 1943
<i>Sultan</i>	1897
<i>Sultana</i>	1892-1902, 1903, 1904-1906, 1934
<i>Sultana Jr.</i>	1894
<i>Sweden</i>	1896
<i>Thompson</i>	date unknown
<i>Thor Gold Mining</i>	1937
<i>Three Friends</i> (Kenjoe, Kenjoseph)	1890, 1896 - 1897, 1934-1937
<i>Three Ladies</i> (Kenricia)	1889-1890, 1935-1937, 1939-1940
<i>Toronto & Western Co.</i>	1899
<i>Treasure</i>	1892, 1898, 1900, 1940
<i>Triggs</i>	1898-1901
<i>Triumph</i>	1896-1898
<i>Trojan</i>	1898-1901
<i>Tycoon</i>	1898-1901, 1934
<i>Victoria</i>	date unknown

	YRS. IN PRODUCTION
<i>Wendigo</i>	1900, 1902, 1903, 1933-1942
<i>Westricia (Waite Option)</i>	1936-1937
<i>White Czar</i>	1900
<i>Wilkinson Claims</i>	1898
<i>Winnipeg Consolidated</i>	1883-1884
<i>Witch Bay</i>	1903, 1933-1934
<i>Woodchuck</i>	1894
<i>Yellow Girl</i>	1885, 1901
<i>Yum-Yum</i>	1897-1900

Mining Regulations 1900

The mining laws are quite liberal. Any person may explore crown lands for minerals, and mining lands may be purchased outright or leased at the rate fixed by the Miners Act. Mining lands are sold as mining locations, the minimum of one of the latter being 40 acres for an individual, or 640 acres for a company, and not more than one location can be obtained within the radius of 15 miles in any **one** year.

Prices range from \$2 to \$3.50 per acre the highest price being paid for lands in surveyed territory within 6 miles of a railroad. The rental charge is at the rate of \$1 per acre for the first year, and from 15¢ to 30¢ per acre for subsequent years. The leasehold may be converted into freehold any time at the option of the tenant, and when that is done the first year's rent is included as part of the purchase money.

After seven years a royalty of not more than two percent is payable to the Crown, based on the value of the ore extracted, less the cost of extraction and treatment for the market.

From New York Engineering and Mining Journal

Descriptions
of
Mining Locations

Abraham Claims

The mining claims of Michael Abraham which adjoined the Horseshoe (Regina) property were developed in 1934 and revealed a vein three feet wide with parallel quartz stringers. The main showing was located near the claim line of K3655 about 400 feet west of number one post.

The vein located along the sheared zone was eight feet wide and was well exposed at the bottom of a 25 foot pit. The vein struck E.20 degrees and dipped 70 degrees N.E.

The vein was traced 50 feet to the east of the test pit, at which point it disappeared under drift and swamp. It was exposed for a distance of about 40 feet west of the pit.

Allie Island

In June 1911, four claims on Allie Island were staked by F.W. Moore and two shafts sunk 27 feet deep. Later that year a new shaft was sunk 40 feet deep which showed promising copper deposits. The mine was located just west of French Narrows, about 14 miles from Kenora. The property was owned jointly by Dr. Scoville and Frank Moore.

In August of 1911 the shaft was down to 75 feet. At the 40 foot level a drift was run 20 feet. Samples from this level averaged 27 pounds of copper per ton.

Aronek

The Aronek syndicate held 7 claims on the Indian reservation north of Bald Indian Bay. Surface trenching and test-pitting was done in 1934 and revealed a number of veins. Two camps were built and a crew of 10 men were engaged in stripping and trenching. In veins number one and four the ore was shown to carry abundant free gold. All veins were heavily mineralized showing a variety of sulphides and considerable amounts of native copper. Claims were located seven miles from Kenora, and within two miles of Fort Frances highway.

In August 1935 the mine was sold to Muton Long Lac Gold Mines. In 1936 J.C. Finnan was in charge of operations, sinking a shaft, 7 by 11 feet on the number one vein to 125 feet, where a crosscut of 80 feet cut the number two and number three veins on that level.

Muton Long Lac Gold Mines sold its property to Jane Gold Mines in 1937. Jane Gold Mines planned to proceed with the installation of mining plant and deepened the 30 foot shaft to 140 feet. At the 12 foot level, lateral work was to be done.

*Bad**

The property was situated in Haycock township, 9 miles east of Kenora.

Staked in 1887 by A. Swanson and his party, the property was immediately taken over by H.H. Holmes, who named ~~it~~ the Bad Mine. Exploration work was done and in 1892 two cars of ore were shipped to the Rat Portage Reduction Works with poor results, owing to insufficient equipment.

In 1896 the company was bonded to W.A. Dove, under whose direction a shaft was sunk about 70 feet after a mining plant was installed. However, Mr. Dove's idea was to gouge out ore at as little cost as possible, with no mine development, to make quick money at a minimum of expense. The owners, realizing this, forced Dove to give up his option after he had shipped 350 tons of ore to the Reduction Works.

A Winnipeg syndicate optioned the property in 1898, but the only mine development this company did was to put a tunnel for 100 feet from the bottom of the hill

** Also known as Champion, & Franklin*

from which the shaft was sunk to connect with the shaft at about a 70 foot depth. Mr. Holmes forced this company to also give up their option because they too wanted to make money at very little outlay. In 1899 it was bonded to Hugh Armstrong, James Hildreth and William Peters of Rat Portage.

A year later the Bullion Company of Rat Portage optioned the mine with the object of conducting mine development. The shaft was put down to 150 feet where the first level was established.

Encouraged by the showings at the Bad Mine in 1900 the Bullion Company purchased the property and put in a boiler and hoist, with camp and mining buildings being built. Sinking of the inclined shaft was resumed to 245 feet where a second level was cut. Drifts were pushed 55 feet east and 115 feet west of the first level, and 100 feet west on the second.

Ore averaging \$22 was taken out of these workings and shipped to the Keewatin Reduction Works, but because of

the inefficiency of the plant, only about \$15 were recovered from a ton, so shipments were suspended.

A subsidiary of the Bullion Company was organized in 1900 called the Champion Company which was formed to finance the development of a mining plant. However because of circumstances not explained in the records, it was decided to resume shipments of ore to the Keewatin Reduction Works. A road from the mine to Margach station on the C.P.R., less than one mile north, was built and ore was shipped to Keewatin. The treatment of the ore was still unsatisfactory and as a result the company ran into financial difficulties and could not finance its own mill. The mine closed down. The Champion mine remained dormant until 1925, when Ontario Champion Mines Ltd. was formed to develop the property. Mr. Charles Brent, who had been in charge in 1898, became the manager, and under his direction a two stamp Tremaine mill was installed. The machinery proved inefficient so the mine was again closed down.

Vickers Mines Ltd. became interested in the company and financed the re-opening of the mine in 1931. It was dewatered and examined by Percy Hopkins who advised further development after seeing the underground and surface workings. Funds, however, became low and the Champion again lapsed into inactivity. In 1933 the property was acquired by Rideout-Swaze Gold Syndicate.

In 1934 the Franklin Mining Co. Ltd. was organized to develop the Champion. Besides the original claims of the mine, nineteen others were acquired. The mine was reopened in May under the direction of R.B. Adair, engineer.

Mr. S.E. Wolf succeeded Mr. Adair as resident engineer in July. A crew of 18 men worked on the property. Old equipment was overhauled and the shaft timbers were replaced. Twelve veins were opened up running \$22 to \$28 per ton.

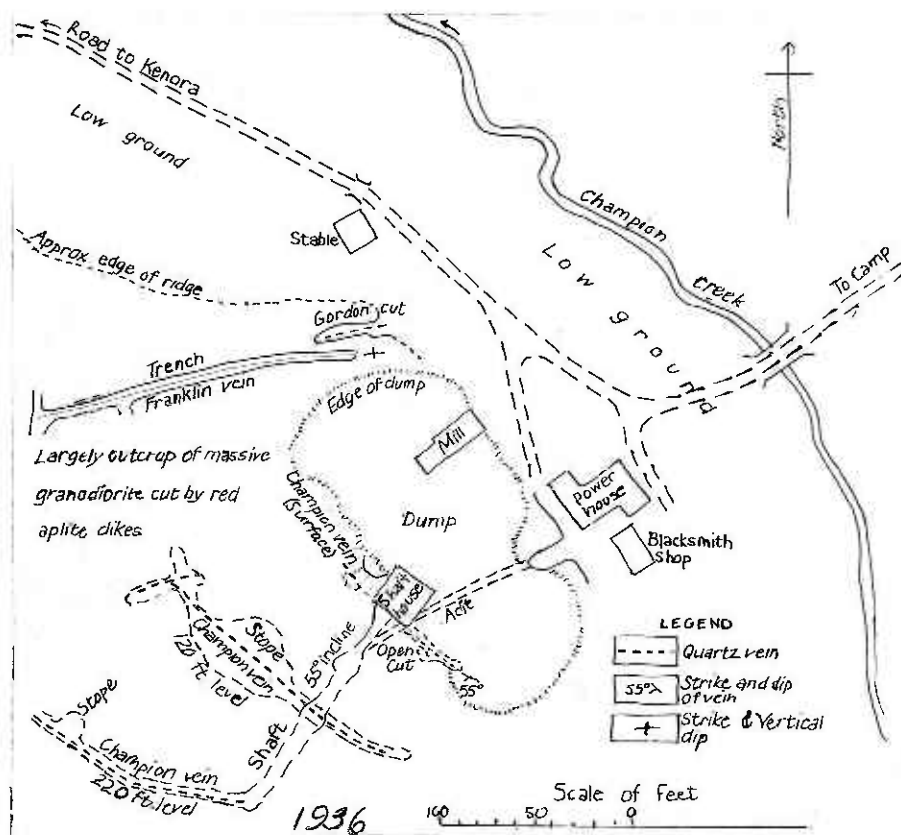
The Franklin mine was equipped with electrical power for lighting purposes generated by steam. The machinery

installed in 1896 was still in good condition.

Accommodation in the camp was available for at least 20 men.

Underground work resumed in February 1936 and continued to April. It was suspended until August and then resumed again until November.

12 men accomplished 300 feet of drifting under H.L. McClelland.



Sketch map of the main showings on the surface and underground workings Franklin mine.

Bath Island

The property was owned by the Bath Island Mining Co. Ltd. 19 veins were uncovered.

On the main vein a shaft was sunk in 1896.

In 1898 a new shaft (6 and a half by 10 and a half) was sunk west of the old one which reached a depth of 84 feet by the end of the year. 9 miners worked in the day and night shifts. Buildings on the property consisted of a cooking-camp, blacksmith shop, powder house, assay office, and shaft house. The gold ore valued \$19 to \$20 per ton. Operations were closed until 1899 when work resumed under the management of Mr. J.F. Mievill of the Regina mine. Work was carried on by 12 men, 8 of whom were miners. It was intended to build a 20 stamp mill on the property.

Birbeck

This mine was situated on a point of land between Echo Bay and Ptarmigan Bay on the west shore of the Lake of the Woods. The property comprised of 120 acres. Five veins were uncovered, however, most of the test-pitting was done. This work was done in 1898.

The ore on the surface showed a value of \$3 to the ton. At the depth of 8 feet it milled \$5.60, while at 12 feet it was valued at \$7.50 per ton. It was intended by Mr. Birbeck and associates to sink a shaft 50 feet deep to determine further developments. No further reports on this mine were available.

Black Hawk

The Black Hawk was located close to the Grey Eagle mine about six miles from Rat Portage and four miles from the Sultana mine. The property consisted of 257 acres. The superintendent was W.E. Watson. Col. Morgan was the president of the Black Hawk Mining Company and the managing-director of the mine. Actual development did not start until 1902.

Black Jack *

In 1899 a Crown patent was issued to W.J. Franks. The Black Jack Mining Co. purchased the property in 1892. A shaft (11' by 7') was sunk on the southern part of the property to 63 feet. In the winter of 1892-1893 a mill building was erected. Also erected between 1893-1895 was the shaft house, engine and boiler house (hoisting engine and electric plant), boarding house, and dining camp. In 1895 the shaft was reported to be 80 feet deep but full of water.

In 1898 work was discontinued on the mine but in 1900 the Black Jack was acquired by the Consolidated Gold Mining Company. The manager was D.C.T. Atkinson, the foreman was William James. Although the mine was in poor condition and the machinery old, a total work force of fifteen including 2-8 miners continued working on the shaft sinking it to a depth of 110 feet making two levels, the first at 60 feet, the second at 100 feet.

In 1906 the mill building was burned down but the mine was reopened in 1907 to proceed with further development. Taking over was Mr. Bannell and S. Sawyer of Montreal.

** Also known as Bulldog*

Black Sturgeon

Andrew Benson was the owner and manager of the Black Sturgeon mine in 1896. The discovery was made by Benson in 1896. Two shafts were sunk. One, 42 feet deep, had a new shaft house erected on it. The other, 7 by 9 feet was sunk 36 feet deep. Six miners were employed for prospecting. The buildings on the property consisted of two shaft houses, boarding camp, blacksmith shop, dwelling house and a dressing room.

In 1900, the mine changed hands. The new owners were F.W. Gilchrist, P. Culligan. The shaft was 6 and a half by 11 feet and 175 feet deep. The drifting on the bottom was 34 feet. Working on the development of the mine were 16 men of which 10 were miners. George Thurber was manager.

Block B

The mine was located on Shoal Lake and was managed by T.R. Deacon. There were three veins being diamond drilled and test-pitted. In the Rat Portage Miner 1898 Mr. Deacon related that a Welsh miner in the employ of the company was delighted at what he regarded as a good omen;"In the main shaft in Block B, which is now down to 120 feet, a swallow built her nest last spring in the timbering 15 feet below the surface. Notwithstanding the fact that blasting is being done two times a day in the bottom of the shaft and in the levels and the men and buckets are passing up and down regular, she hatched and reared her young brood till they were able to fly."

Boulder

The Boulder mine on Camp Bay was owned by Ontario Boulder Mining Co. Ltd. E.F. LeClaire was president and the mine was managed by J.R. Clifford; "an old and experienced California miner." In the spring of 1898, good camps had been built, supplies got in to the mine and the shaft sunk to a depth of 60 feet in six weeks. The Rat Portage Miner July 29, 1898 noted that the rapid work done on the mine was due to the experienced miners brought in from the west to work. There was a force of 25 men including 9 miners. By 1899 they had sunk number one shaft to 90 feet and number two shaft (1000 feet east of number one on the same vein) to 70 feet.

In 1900, shaft and hoist houses were erected at the main shaft but the mine closed down in the fall of that year. At that time the main shaft was 300 feet deep and four levels had been established. It was stated in the Department of Mines Report 1901 that "On the whole, the results of the development work were not promising."

Brae-Breest

The Brae-Breest Gold Mining Ltd. owned a group of claims north of the east end of White Partridge Bay. These claims were staked by Jack Nutt in 1936. The mine was situated about six miles southwest of Kenora.

The first drill holes were put down to a depth of 500 feet, with practically all the drilling going on under the water. 12 men were employed with diamond drilling going on 24 hours a day. The property consisted of a group of 12 claims, and an additional 380 acres of patented ground acquired by purchase.

It was the widest gold bearing zone ever discovered in Lake of the Woods. H. M. Hheimster was manager. 10-15 men were employed in putting down test pits and trenches. Permanent buildings were erected: a bunkhouse for 30 men, a cook-house and a office-building, all log structures. The diamond drilling program consisted of 5,000 feet minimum. Good values were reported over the widths of 15-60 feet. Associated in the discovery were Tom Barry, H. Silverman, S. Silverman and Jack Nutt.

Bullion

This mine was situated three miles northeast of Rat Portage in Jaffray Township. It was owned by the Gold Bullion Mining Company Ltd., the superintendent being A. E. Higgins. Most of the work in 1900 consisted of test-pitting.

In 1901 contracts were let to J. H. Wilson & Co. to sink a shaft 300 feet deep. In the June 14, 1901 issue of the Rat Portage Miner it was reported that there was a delay in reopening the mine because of the destruction of a portion of the camp by forest fire.

*Bullion No. 2 **

This mine was sold on August 15, 1899 to parties who then formed the Bullion No. 2 Mining Company, Ltd. The property adjoined the Mikado and Sirdar on Shoal Lake. A total force of 20 including 4 miners were employed to sink two shafts. No. 1 shaft was 5x7 feet and 75 feet deep with a dip of 70 degrees. No. 2 shaft was also 5x7 feet, 70 feet deep, dip 70 degrees.

The buildings consisted of boarding and sleeping camps, storehouse, office, powder house, engine and boiler house, blacksmith shop, and stables. Mr. Charles Brent succeeded Mr. Small as manager.

The mine closed down in June 1901 and was reopened October 1, 1901. By that time the No. 1 shaft had been sunk to a depth of 115 feet with 300 feet of drifting and crosscutting. No. 2 shaft was in the same condition. A new shaft was sunk to 30 feet.

Because of the Boer War and the collapse of mining securities which had made it impossible to float the Bullion No. 2 Co. it never commenced independent development from the Gold Bullion Mining Company.

** Also known as Montreal mine.*

Bully Boy

The Bully Boy mine was situated on the Fort Frances-Kenora Hwy. about a half mile northeast of Camp Bay, Lake of the Woods. The owners were Messrs. Walsh, Stirling, and Sullivan.

In 1898 work was suspended on the mine until Nov. 1899 when the shaft was sunk to 115 feet. The work force at that time was 9 including 6 miners under the management of Mr. Ross. The work continued to June, 1900 but the mine was then closed down and seized due to non-payment of wages. The shaft had been sunk to 170 feet.

In 1904 the mine was taken over by the Arizona Camp Bay Gold Mining Company. The hoist, compressors, boilers, and mining equipment formerly used by the Boulder Mining Co. were installed at the Bully Boy. Two shafts were sunk on the property, 56 feet and 165 feet deep. During 1905 George Thurber was the manager and J. A. Albrecht was foreman. New camps were erected for accommodation of thirty men. The ten-stamp mill

was located two miles from the mine whose daily output was 18 tons of ore. In 1906 Mr. F. Fall took over the management. The shaft was sunk 60 feet deeper with drifting at the 200-foot level. A compressor plant was installed also. By the end of 1906 the shaft was 216 feet with two drifts of 100 feet each north and south. the gold value of the ore was \$12 to \$2000 per ton.

In July 1907 the Bully Boy Mining Co. took over the property of the Arizona Camp Bay Company. The name of the company conflicted with the name of another company operating in the same district and frequently "created annoyance" through the wrong shipment of goods. It was thus decided to organize under another name and purchase the property. The name chosen for the company was that by which the mine was originally known. A new mill was installed along with the ten-stamp mill installed in 1906.

Bunker Hill Extension

The claims were located on an island close to Hay Island about eight miles south of Kenora. The crew was involved with surface explorations and prospecting in 1937.

Burley's Shaft

The mine was owned by the Burley Gold Mining Co. of Ottawa. The property was acquired after much hard fighting in the courts between them and John F. Caldwell, the owner of the Sultana.

Work started in the summer of 1897 under J. Burley Smith and continued into the following winter. Work was suspended in early February pending a court decision regarding the title of the property. This being in favour of the company, work resumed under the management of R.H. Flaherty. As the company owned nothing but water rights their shaft had to be sunk in the water. A diver was employed to locate a place where sufficient clay covered the bedrock (to insure a water-tight seal) in which to sink the shaft. It was decided then to build a crib on Queen Bee Island about a mile away from the proposed site of the shaft. The dimensions of the crib were 60 feet square on the outside, 40 feet on the inside, leaving a box space about 10 feet wide around it, and 24 feet high.

It was then ribbed and braced and sheeted with 8-inch square timbers. Valves were provided inside the crib to

let in water as the structure could not contain sufficient rock to sink it without this addition. The crib took about two months to build.

In November 1897 it was towed by steam tug to the proposed site of the shaft (directly opposite the open cut of the Sultana mine) and a few days later it was frozen in position by the ice. Shortly after, the crib was filled with 2,000 tons of broken rock and sunk to the bottom of the lake. To make doubly sure, an inner cofferdam was constructed inside the hollow square of the crib. The water was then pumped out with a powerful centrifugal pump, and the clay inside the inner cofferdam was excavated down to bedrock. A watertight shaft casing formed of eight inch square timbers was carried up to the deck platform. Behind the casing and underneath its foot, sealing of the rock was made by caulking with oakum and filling it with hydraulic cement; the rest of this space was then filled in with concrete up above the surface of the bedrock. The space between the shaft casing and cofferdam and inside the walls

of the crib was filled in with clay and rock. On the platform on top a machinery building and pit headframe was erected.

The shaft reached 180 feet with the first level 105 feet and the second level being at 175 feet. In April 1899 P.W. Webster succeeded R.H. Flaherty as manager. The mine closed down in June and the shaft filled with water. Later, J. Burley Smith pumped it out and examined the mine and again allowed the shaft to fill.

The mine was idle until the summer of 1903. The property was now owned by the Coronation Gold Mining Co. Ltd. (nephews of Burley Smith) of Rat Portage with J. Burley Smith as manager. The shaft was sunk to 202 feet. Water coming into the shaft was causing a lot of problems and despite the pumping efforts of eight men the water could not be lowered below the first level. The inflow was apparently caused by the leakage around the bottom of the crib and the washing-out of fissures from the lake bottom.

In 1904 negotiations between the Burley and the Sultana were underway to discuss the granting of a site on the Sultana property for the Burley power plant instead of necessitating its installation on the crib platform.

No report of further development was made and the mine became idle shortly thereafter.

See page 209 b for location of Burley shaft

*Cameron Island**

The mine was situated on Shoal Lake, 35 miles from Rat Portage and was about 4 miles from Mikado mine. It was owned by J.J. Foster of Toronto, vice-president and general manager of the Cameron Island Mining and Development Co. W.M. Caldwell was manager. It was discovered by R. McInkstor and W.J. Cameron of Rat Portage. The work started on July 29, 1897 with a force of 6 miners. Buildings included a blacksmith shop, powder house, and boarding house. Four parallel veins were discovered. The number one vein was 75 feet with a crosscut of 12 feet. The ore assays ranged from \$9.00 to \$50.00, but milled \$23.00. The 17 assays taken in June from 50 to 145 pound lots were made and the average value was \$14.11 free milling gold to the ton. In addition to this big vein, there were 8 others, which would keep a 40 stamp mill busy. The shaft was 116 feet deep. Drifts 22 and 27 feet ran on the 60 foot level.

By July, 1898, the main shaft was down 120 feet,

** Also known as Damascus, & Duport*

with drifts at 60 feet and 120 levels. The vein showed four feet at the surface and gradually widened at the 120 foot level showing 20 feet of quartz. Mr. Wm. James became the mine foreman and Mr. H.B. Hunt was manager. The total force of 20, included 15 miners. The work ceased October 1, 1898 until the spring of 1899. The main vein had a 120 foot shaft.

After one year of idleness, operations resumed(1900). The manager was George Thurber. A new frame of the buildings were erected: engine and boiler house, foreman's dwelling and office, manager's dwelling and general office, assay office and carpenter shop.

The rocks were amphibolite, altered trap, intruded by felsite. The main quartz vein was four feet wide carrying much pyrrhotite, pyrite and chalcopyrite. A mill run in a 5 stamp mill yielded \$200 in gold, the ore averaged about \$10 per ton. The shaft was down 132 feet with 500 feet of lateral work on 63 and 127 foot levels. The mill was replaced by two Forsythe pulverizers, a rotary roasting

kiln and two amalgamation plates.

The mine again closed down March 25, 1901. The shaft was down to 132 feet at this time, with 375 feet of drifting and crosscutting.

Dr. Joseph Fowler of Buffalo expected to open up the mine in 1903. He purchased 10--stamp mill from Eagle Lake Milling Company. T.F. Morrison was in charge of the property. The Damascus Mining Company purchased the mine in 1909 with the ore maintaining steady values of \$7.00 per ton.

The Cameron Is land Syndicate, who purchased the mine in 1910, during the winter of 1910-11 made an examination of the mine. The mine was put into operation in 1912 as soon as navigation opened up, with Mr. Pfau to continue as manager. Cameron Is land Syndicate Ltd. started work again on June 1st 1915. A brick obtained from a trial run of 5 tons gave, when refined, \$47.81 in gold and over 6 ounces of silver. Donald M. Cameron was in charge of the property. The equipment at the mine consisted of a 80 h.p. boiler, one 25 h.p. boiler, a feed water pump one

mine pump, one 50h.p. colorless engine , one 15 h.p. hoisting engine, a blake crusher, two 5 stamp mills and two Frue vanners.

In 1932, J.G. Cross, representing Duluth interests, dewatered the mine. Venturers Ltd. optioned a controlling interest in the Duport Mining Co. Ltd. who owned Cameron Island. In 1934 they diamond drilled through the ice of Shoal Lake. Duport Mining Co. was composed of Port Arthur and Duluth men, hence the name "Duport". Huge boulders weighing 30 or more tons were found on the shore of Cameron Island in which highly spectacular gold was present. A very high grade gold-bearing vein called "Float" at the waters edge on the southern tip of the island was diamond drilled under the lake during the winter 1933-34. The inclined shaft used by the former operators was sunk 132 feet, and 236 feet of drilling was done from this level along the vein to the south. It was planned to continue this drift for approximately 500 feet to intersect the ore bodies found by drilling

1

under the lake. Buildings constructed during the year included a shaft house, powder house, office and cook house. Employed were 20 men and a group of 9 underground men.

In the summer of 1935 an inclined shaft was developed with lateral exploration carried out at the 125 foot horizon. In the old workings a shoot of ore was opened up and prompted the resumption of operations. By now, the 500 feet of drifting was completed.

South some 20 feet from the Float vein the cross-cut intersected the Mariposite vein where channeled samples showed a value of \$33 across the width of 11 feet.

In the old workings 10,000 tons grading \$15 were estimated. In the Mariposite vein 25,000 tons were valued at \$22 per ton, and in the Float vein some 1,500 tons graded \$160 per ton.

Before the ice went out of the lake, 100 tons were shipped via the Greater Winnipeg Water District railway

to Winnipeg thence Canadian National to Hudson Bay Mining and Smelting Co. at Flin Flon. It averaged 4.7 ounces to a ton.

During the summer of 1935, development was concentrated on sinking a winze on the Mariposite vein. Duport Mining Company participated in the erection of a small mill on the nearby property of Kenora Prospectors and Miners at Cedar Island.

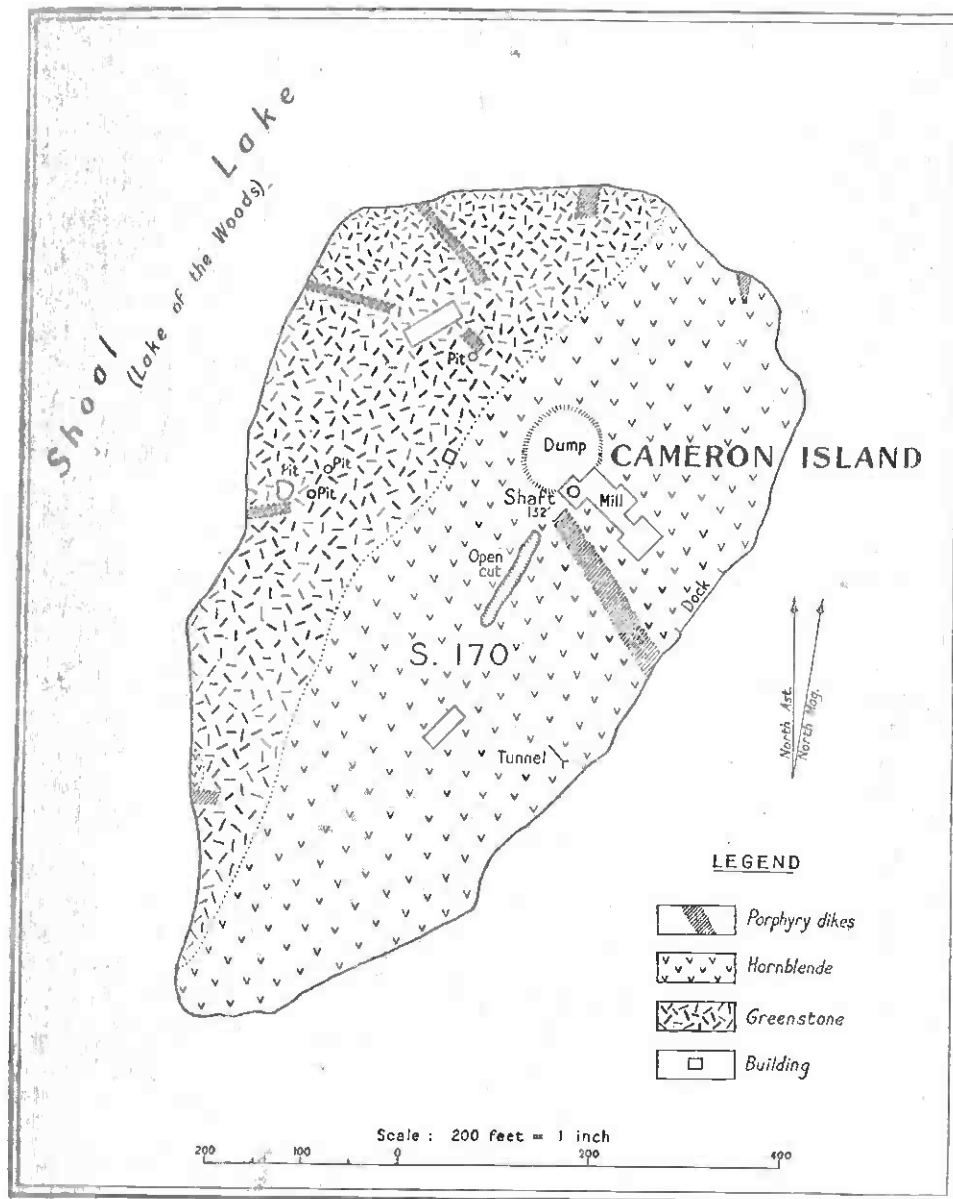
In 1936 underground explorations continued until November 24 and were suspended until after Christmas. There was 600 feet of drifting, 400 feet of crosscutting and a winze, 125 feet deep, was sunk from the third to fourth levels. The 2-compartment, 75 degree winze was sunk from the second level to 120 feet. The third level consisted of 376 feet of crosscutting. A 45 foot stope was cut and it was from this stope that most of the shipped ore came which yielded .2212.88 ounces of gold. A program of diamond drilling was just completed from the fourth level. 22 men were employed, 12 underground J.G. Cross was in charge and C. Nelson was mine captain.

The underground operations continued during the first nine months of 1936. The winze was deepened to 125 feet. The shipment of ore amounted to 698 tons to American Smelting and Refining Co. at Tacoma, Washington and to Hudson Bay Mining and Smelting Co. at Flin Flon, Manitoba.

Work was discontinued in September pending reorganization of the company. 24 men were employed, 16 underground.

Plans to reopen in February included drilling to be done on surface with a view to an enlarged underground program. The old workings were to be temporarily abandoned while a complete new shaft was blasted producing twice as much ore. The new shaft, it was felt, would increase efficiency and reducing operation costs.

In 1940 diamond drilling was done with favorable results. Development work was also undertaken.



CAMERON ISLAND GOLD MINE. 1925

Caribou

This mine was very primitive compared to the other mines in the area. A tiny stamp mill was worked by hand crank. The stamps consisted of wooden rods shod with an iron plate and weighted with stone. No other information is available on this mine.

Climax

The vein on this property was discovered by Fred Wagner, who became the manager. The owner of the property was the Climax Gold Mining Co. headed by W.R. Muloch of Winnipeg. The main vein was 8 to 10 feet wide which had shown very rich samples.

The mine was located 10 miles from Kenora (Rat Portage) east of Heenan's point. The property consisted of 256 acres. With a force of three miners the work was carried on for about a year but ceased in Oct. 1899 when the shaft was 31 feet deep.

Combination

In 1888 the Combination vein was sunk by Frank Moore to a depth of 56 feet.

In 1898 it was bought by the Dominion Gold Mining Co. The mine was located at the southwest angle of Islet lake. In 1898 the mine was being tested. 4 miners were employed in the sinking of two test pits about 50 feet apart. A shaft, 6 by 8 feet, was sunk to 115 feet. Charles Smith was the manager of the mine.

Combined

This mine was located two miles east of the south end of Camp Bay.

The mine was started in 1894. A force of 4 miners under the management of Mr. A. Patterson carried on work from 1897-1899.

The operations were then discontinued but resumed in the summer of 1900. The mill was situated on Camp Bay. A small trestle railroad was built through the swamps in order to convey the ore from the mine to the mill two miles away. The railroad was named the "Camp Bay and Crow Lake Railroad."

In 1900 Mr. Patterson took over the job of superintendent and W.H. Crooker became the manager. W.H. Rudd was the assayer and amalgamator. 7 miners worked on the mine in 1900.

Work discontinued again in the summer of 1901.

In 1903 work resumed under the new manager, Sidney Pinchin. New machinery was installed. The property was then taken over by Camp Bay Mining Co. Ltd., of Buffalo,

New York, and Niagara Falls, Ontario. In 1904 a new power house was installed. The mill was idle until the mining development blocked out sufficient ore to insure steady production.

The manager of the mine, Sidney Pinchin, was drowned near the mine May 1905, after being the manager for three years.

Coppermine

This mine was located on Andrew Bay. It was first opened up Messrs- Whiting and Kendal. A tunnel was driven for 70 feet into decayed schist just above water level. Because of high water in 1896 the tunnel was flooded.

There was no vein but the wide band of rust decomposed schist was charged with siderite often changed to brown iron ore, some quartz and a little malachite, asurite and native copper, the latter in crystals, the largest of which were less than a quarter of an inch in diameter but exquisitely perfect and always twinned octahedra. The decayed material was said to run 1 and a half to 2 percent copper.

Cornucopia^{*}

The Cornucopia, west of Mikado, was discovered by Mr. Sam Whiting in 1896 and survey work was carried out at this time. The Cornucopia consisted of island, D212, D217, D216, D229. There was a stripping of a number of veins. The shaft sunk to 110 feet was on the vein that was 2 and a half to 3 feet wide. Price per ton ranged from \$60 to \$70.

The mine was shut down all summer because of trouble between owners. A. M. Hay was manager. The mine was purchased by Cedar Island Gold Mining Company. The shaft ^{was} sunk to 75 feet by former owners Kendall and Whiting. The buildings consisted of a boarding camp, blacksmith shop, engine house, shaft house, warehouse, barn, and dry dock.

In 1899 the only work done was diamond drilling. In all, four holes were bored on different veins on the island and mainland.

In 1902, Mr. A.M. Hay turned over the Reduction Works and a big group of mining claims, including Cedar Island,

** Also known as Cedar Island, & Kenora Miners and Prospectors.*

to the Keenora Mining Co.

The Bureau of Mines Report 1921 commented, "The shaft was sunk on a vein carrying much pyrrhotite." The gold recovered was valued at \$1560.

In 1932 Lindsley let a contract to sink a shaft 150'. A carload of ore was shipped to Coppercliff and \$3718 of gold was extracted from the 32 tons of ore. A small two-compartment inclined shaft was sunk to a depth of 165 feet with 385 feet of drifting and 163 feet of cross-cutting . Shipment of 44 tons of high-grade ore was made to the Ontario refinery at Coppercliff. Eight men were employed under F.L. Smith from February until Oct., 1932 when work was suspended. During the summer, underground work was carried on at Cedar Island in Bag Bay. Three gold-bearing veins were found. The most important vein was at the extreme northern end of the island. An inclined shaft was sunk 150 feet on the vein. Drifting northeast ward under the lake on the 144 foot level, a section of ore 180 feet in length, averaged 1,476 ounces

of gold per ton across 46 inches. An old shaft towards the central part of the island was deepened vertically to the depth of 300 feet and a crosscut ran from this level to intersect the above mentioned vein.

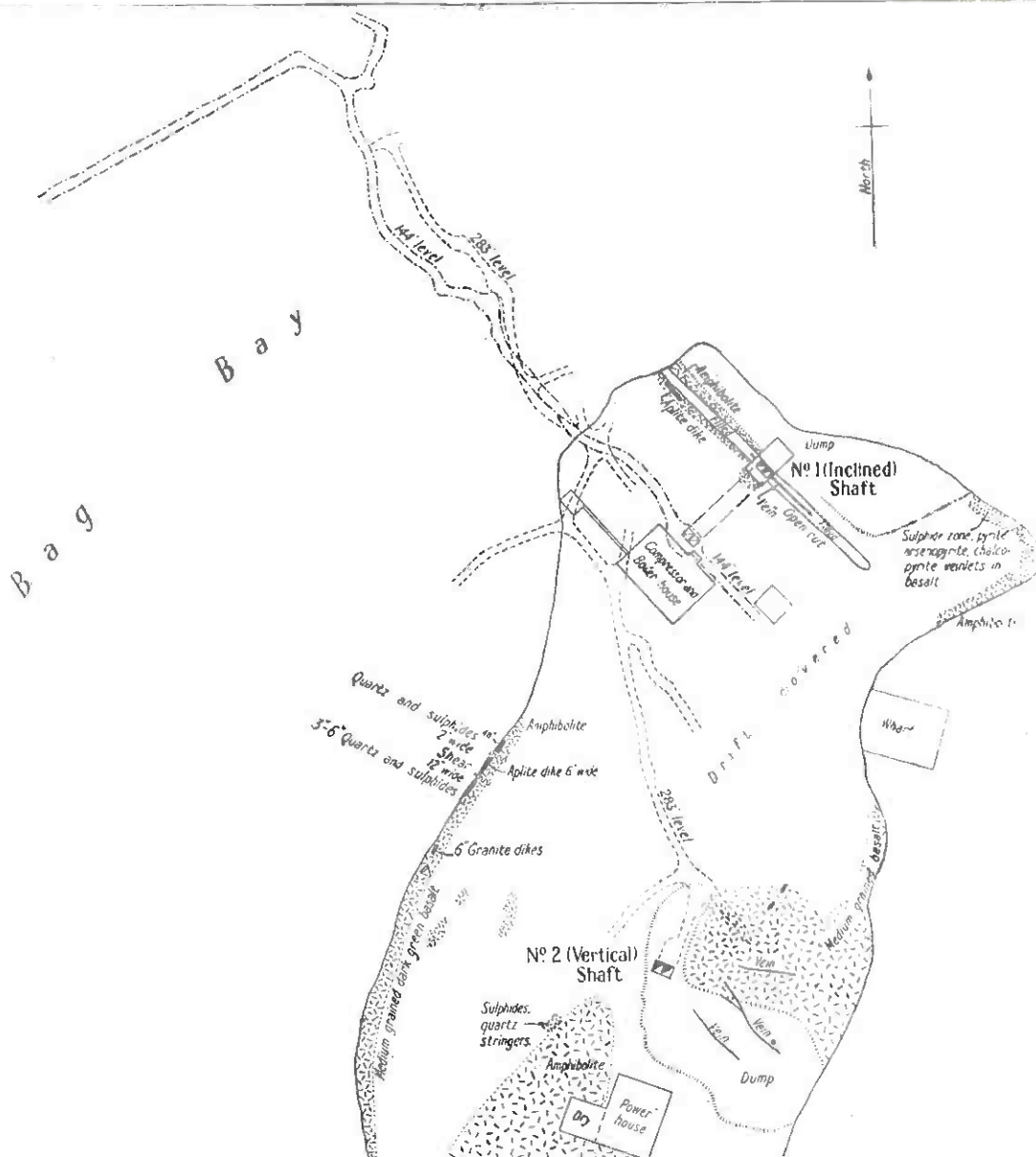
In May 1934 work resumed on the mine which had been idle since October 1932. The operations transferred farther inland to the Cornucopia shaft (81 feet). In 1934 the shaft was timbered, a headframe and a plant were erected and sinking was carried to a depth of 393 feet. Plans were made for a co-operative mill for the joint use of Kenora Prospectors and Miners Ltd. and the Duport Mining Co. The first level at 150 feet produced a shoot 180 feet in length, four wide with an indicated average value of nearly \$30 ore with gold calculated at \$20. At 280 feet a faulted zone was encountered but 100 feet of ore was found on the same vein that ran \$11. The shaft continued downwards to 300 feet and drifting on this level brought in another ore shoot which had not been found in the upper horizons. The shoot was 200

feet in length of an ore body, three feet wide and ran at \$35.

The fourth level opened up to a depth of close to 500 feet. A new hoist was installed and compressor capacity was increased. 45 men were employed, 11 underground. George H. Inace was in charge.

Work continued through 1935 at the Cedar Island mine. The Cornucopia shaft was sunk an additional 208 feet to a depth of 601 feet with levels at 393 feet and 500 feet. There was 712 feet of drifting and 257 feet of crosscutting on the 500 foot level. In June, construction of a 30 ton amalgamation float mill was started and was finished in October. Hilding Johnson was superintendent.

In 1936 work continued at the mine. Cornucopia shaft was sunk 45 feet more to the depth of 646 feet at the 600 foot level. There was a total of 1271 feet of drifting and crosscutting, and 3420 feet of underground diamond drilling. The value of bullion produced was \$65 and \$659.67. October operations were suspended. 38 men were employed, 11 underground, 9 mill workers.



Crown Point

This mine was located on a point east of the narrows between Bag Bay and Clytie Bay. It was owned by the Crown Point Mining Co. Ltd.

In 1900 the main shaft, 8 by 16, was sunk to a depth of 100 feet. Another shaft, the winze or air shaft, was sunk east of the main shaft, 3 and a half by 10, to a depth of 47 feet. During this time an engine house, and five stamp mill were being erected. The other buildings consisted of a mill building, hoist house, blacksmith shop, powder house, boarding camps and a private residence. The total work force was 36 including 20 mines under the direction of the mine captain, W. Sharp. The manager of the Crown Point mine was R. H. Ahn. Late in 1900 the mine was closed pending its transfer to an English Syndicate.

In the summer of 1901 the main shaft house was burned down. The work was therefore suspended. The main shaft at this time was 125 feet deep, the contract shaft 60 feet, and the air shaft 65 feet deep.

The mine was closed until August 1903 when the property

was sold to the Black Cat Mining Co., Cincinnati, Ohio. This company intended to resume development of the mine and install new machinery but no further reports are available.

Deadbroke

This mine was situated on Deadbroke Island, northwest of Cliff Island. In 1892 the vein was stripped and an open cut had been made 20 feet in length and 12 feet in width and a few feet in depth. From this cut 75 tons of ore were removed which showed assays of \$7 to \$133 per ton. 25 tons of the ore were taken to the Reduction Works to obtain a mill run. A small tunnel and several dikes were also made.

Dicky Mac

In 1933 the Dicky Mac Syndicate did some work on its property in White Partridge Bay near the Brae Breest mine. The property consisted of one claim. A compressor was bought in and the shaft was sunk to 50 feet. Acrosscut was driven at the 40 foot level, but no drifting was done because the pump could not handle the large amount of water in the shaft. The mine shut down because of this.

In 1937 diamond drilling was done on the property. The principles of the syndicate were W.J. Dickson and Finley McCallum.

Eastricia

This property consisted of 14 claims adjoining Kenbrae on the south and Brae Breest on the north in Clearwater Bay.

El Diver

Two and a half miles north of Rossland station on the C.P.R. line was the location of the El Diver mine. The name was a refinement of "hell-diver", a type of bird seen on the property. The owners were Mr. J.H. Webster and E.W. Gaylord.

On the number two vein a shaft house was built and the shaft (7 by 9 feet) was sunk 102 feet which was allowed to fill with water.

A mill was installed in 1893 but was destroyed by fire in May of that year. The fire was thought to have been caused by arson.

In April of 1940 the El Diver was examined extensively and new possibilities were reported. Roy Picard was in charge of the operations.

Elphinstone

This mine was situated on Shoal Lake Narrows and originally belonged to the Dominion Gold Mining and Reduction Company around 1895.

Elsie

The location of this mine is unknown. The strike is 55 degrees to 60 degrees at the shaft. 9 men were employed under L. Adams. The manager was Mr. R. Ahn. Work was done at this mine during 1897-98.

Eschweiler

Little is known about the early days of this mine. It was located south of the Scramble mine and owned by Goldhouse and Company in 1896.

In Dec., 1935 the property was optioned to a Winnipeg and Montreal syndicate. A new road was built to the mine and a new collar was constructed on the shaft. Considerable exploration work was done.

Flint Lake

The Flint Lake mine was worked by the Flint Gold Mining Company. The property included mining locations McA 285, 286, S 430 and 431 and a water location S 433 on Cedar (Cedartree) River. Development was largely confined to McA 285. A shaft was sunk 27 feet, the cross-section being 6x11 feet.

A Krupp ball mill was erected in 1902. Also on the property were the dining and sleeping camps, a blacksmith shop, an assay office, and a powder house.

The superintendent in 1903 was W.B. Drummond. Fifteen men were employed, some at mining and the rest on mill construction.

The No. 2 and No. 1 shafts were closed and development was confined to surface work.

FM 72

A platinum find on the Lake of the Woods was situated on an island, FM 72, about 11 miles from town. The island contains about three acres.

The ore was assayed at the laboratory of Toronto University, and at Newark, N.J., and gave platinum values from 3dwt to 1 ounce 15 dwt per ton, ore taken from the latter high value being from ore taken from the water. The report stated that the ore contained platinum and iridium in good commercial quantities. The gold values ran from a trace on the surface to \$7.23 in a five foot pit.

Gold Creek *

The property was discovered about 1896 by J.S. Whiting. Shortly after that he optioned it to a company which proceeded to develop it, sinking a shaft and making several shipments of ore, which gave favourable returns. They were unable, however, to secure adequate funds for the proper development of the claims and then the general slump in mining occurred in the district and the property was returned to Mr. Whiting.

In July 1934 Mr. Whiting again sold the property and it was examined by Captain H.E. Silver on behalf of Grant Mahood and Company.

The mine was taken over by the Bigstone Bay Gold Mines and development of the Gold Creek vein was done by means of surface stripping and diamond drilling.

In December 1935 the property was taken over by the Gold Creek Mine Ltd. and more diamond drilling was done. An assay value gave \$7 - \$16.10 per ton. The old shaft was dewatered and sunk to provide two working production levels. There were also plans to install a 50 to 60 ton capacity mill.

** Also known as Bigstone Bay Gold Mines.*

Gold Hill*

This property, situated at a distance of about 18 miles from town, on the Lake of the Woods comprised 1200 acres. In 1895 test shafts were excavated the deepest being 70 feet. A 10stamp mill was built to give the owners an idea of the value of the mine and also to give data on which to base further development. A map of the Gold Hill property was made by Robert Ahn showing the position of the veins and the amount of work done in 1895.

The buildings consisted of a mill, an office, dining camp, four sleeping camps, dry room, forge and stable.

Work was suspended in 1896 but the mill was kept in use extracting gold from quartz from the Golden Gate mine. The mill crushed 6-8 tons per day of 11 hours.

In 1898 Mr. A. Kingsmill was in charge of the mine. Under him were 5 men employed for prospecting only. The mill was used for testing.

** Also known as Northern Crown*

Gold Mountain

The mine was situated on the Western Peninsula, 20 miles southeast of Rat Portage. It lay between two small lakes one of which was Lily Lake. 400 feet from this lake a shaft was started reaching a depth of 30 feet. The patent on this property was acquired in 1890 by E.V. Wright of Ottawa. Later James Foley entered into a partnership with Mr. Wright. The manager of the mine was M.P. Wright. The ore averaged \$12.72 per ton.

Gold Reef

The Gold Reef was discovered by Harry Shields of the Mikado mine. The location (P484 - P489) had a total area of 128 acres including the underwater rights of a series of reefs, "honeycombed" with auriferous quartz. The assay showed a value of \$60 per ton.

In 1902 the property was sold to Mr. Burns and Mr. Gibbs of Michigan Gold Reefs Company Ltd. of Traverse City, Michigan. They sunk the shaft (7' by 9'), in eleven months, to a depth of 185 feet with 250 feet of drifting and cross-cutting. The ore assayed at \$8 per ton. Several camps were erected in 1903, but in the summer all work was discontinued.

Gold Sun

This mine was located northwest of Crow Lake on locations JC 81, 97 and Fm 145. 6 miners were employed to carry on the operations during 1900.

Golden Gate *

The mine was located south of Blindfold Lake and east of Bigstone Bay. It was opened up by R. Ahn and originally belonged to the Dominion Gold Mining and Reduction Co. J. Sutherland was in charge of the mine.

In 1898 the mine changed hands and became the property of W.A. Laycock. 4 miners and two surface men were hired to sink a shaft to 60 feet.

One hundred tons of ore were treated at Gold Hill Mill, producing \$1500 of \$15 a ton. The values represented gold at \$20.57.

In the fall the work was discontinued on this shaft. After fire destroyed the Gold Hill mill, the work at the Golden Gate was discontinued because of lack of finances, as the ore treated was the main source of revenue.

The property was restaked by Hilding Johnson and Algot Nilson in 1934. The work on these claims consisted of trenching and test-pitting near the old workings. About 300 feet southeast of the old shaft, a flat-lying quartz vein was opened up for about 100 feet along the

** Also known as Johnson-Nilson Claims, & Alding*

strike.

In March 1937 the Alding Kenora Mining Syndicate took over the property. The purpose of the syndicate organization was to secure sufficient funds for diamond drilling and additional surface work.

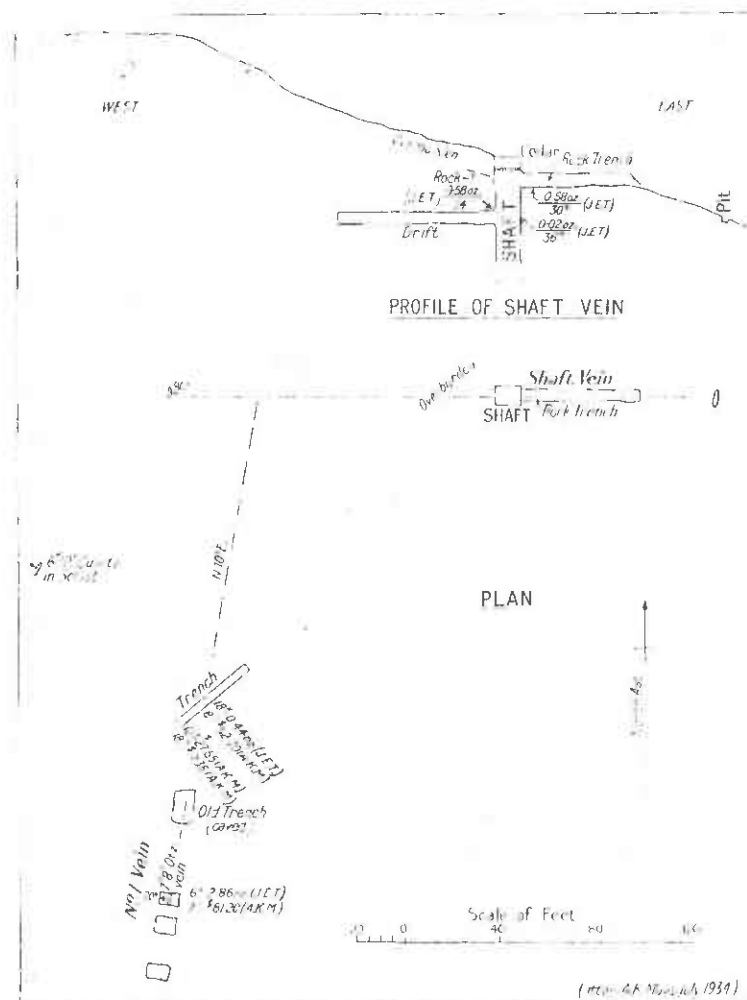


Fig. 7—Sketch map of the Johnson-Nilson claims showing the location of the trenches and shaft. In the A.K.M. assays, gold is taken at \$35 per ounce.

Golden Horn

The mine was located on the south side of Rush Bay, 24 miles west of Rat Portage.

The first records available show that the property was sold to the Rush Bay Golden Horn Mining Co. composed largely of Montreal and St. John capitalists. Development work under the supervision of H. Rideout started in the spring of 1901. The shaft was sunk 75 feet and a large amount of surface work was done that year.

In June 1901, a contract was let to Mr. E. Hammill to sink a new shaft 100 feet on number one vein on a line with the 75 foot shaft which had been sunk on number two vein. A test pit was also sunk on the number three vein. Mr. Williams was the mining engineer. The values of ore obtained from the shaft were \$8 to \$44.50 per ton.

By December 1902 the number one shaft was sunk to 184 feet (7 by 10 feet cross section) with the first level at the 100 foot level and the second level at 166 feet. 120 feet of drifting was also done. The east drift

** Also known as Rush Bay*

carried gold averaging \$51 per ton. 20 employers, 10 which were miners did the development work. New buildings erected included two dwelling houses, a store house stable and blacksmith shop. A small steamboat and a barge were purchased by the company.

In March 1903 Harding Rideout resigned his position as manager because of a disagreement as to the policy of the board of directors. Mr. B.T. Thorne took Rideout's place as manager.

In 1904 there was a force of 14 men to sink the shaft to 255 feet. A new power house was also erected. In October there was a 2-stamp mill erected on the property. Work was discontinued after this.

Two years later a new Huntington mill was installed, the first of its kind in the district. Active development of the mine started after the shaft was dewatered. Number two shaft was sunk to 113 feet.

The mine was not worked again until 1935 when it was optioned by the Consolidated Mining and Smelting Company of Canada. The workings were dewatered and sampling

work was carried on from ^May to the end of July when
the option was dropped. 7 men were employed under
C.E. Waite.

Gordon

This property adjoined the Champion mine and was situated about six miles from Rat Portage. James Gordon started operations on the mine in March, 1901. No other information is available on this property.

Gordon-James

The Gordon-James property was situated in the vicinity between the well-known Stella and Triggs mines. The owners were people of the Chemical Gold Mining Co., of Montreal, so called because the company was largely composed of druggists and chemists. The representatives of the company in Rat Portage were Messrs. S. Lachance and L.R. Baridon.

Operations were carried on at the mine during 1898.

Great Granite Co.

The mine was situated south of Echo Bay on the Lake of the Woods. Prospecting work was in progress in July 1898. The president of the Great Granite Company was General James E. Curtis. The general manager of the mine was Thomas W. Gleason.

Great Northwest

The Great Northwest Company was under the direction of Mr. Fryling. The newly opened claim (1903) developed rapidly and the ore obtained was highly mineralized carrying good values. Erection of the boarding houses and sleeping camps occurred at this time.

The mine consisted of numerous locations situated on the north side of Clytie Bay, three-quarters of a mile northeast of the Indian Joe mine. The manager was J. Williams, and with a force of 6 men a shaft was sunk in the spring of 1903. The mining was done by hand and the men lived under canvas.

Grey Eagle

The mine was located 4 miles east of Rat Portage. It was owned and operated by the International Gold Mining and Development Company. John Kennedy was the manager of the mine. Employed under him were 7 men including 4 miners sinking a 6 by 12 foot shaft to 32 feet. Work was done in 1898.

In 1901 development work was resumed by the Cleveland directors, under the management of Mr. Watson. The claims were partially developed and thoroughly tested by surface explorations.

Gull Island

The Ambrose shaft was situated on the southern extremity of Gull Island 125 feet above the lake. Five miners sunk the shaft, 6 and a half by 10 and a half feet, 40 feet during 1898.

A horse and whim were used for hoisting. On the property was a long boarding house and tents for accommodating the miners.

No information about the mine is available until 1934 when a Montreal Syndicate, Lake Hill Gold Mines Ltd. purchased the mine from W.J. Richards. Three buildings were erected for the accommodation of the crew of the 7 men engaged on the property in stripping and other operations.

In 1937, 2,000 feet of diamond drilling was done as well as 4,000 feet of stripping and cross-trenching. 6 veins were located and four shallow drill holes were put down.

**Also known as Ambrose, & Lake Hill*

Hay Island

The mine was owned and worked by the Hay Island Gold Mining Company. Two shafts were sunk. One, near the shore, was completely submerged during high water. The hoisting was done by horse and whim and 10 miners were employed to carry on development work.

In 1899 the shaft was sunk to 100 feet but as the results were not satisfactory, work was discontinued and the mine was closed.

During the summer of 1900, operations resumed for about 3 months. Five miners were hired to do 215 feet of drifting and crosscutting.

Hilly Lake *

G. Swanson, a prospector, and a crew of miners opened up the vein near the Champion and Eschweiler mines some seven and a half miles and eight miles to the east of Rat Portage along the C.P.R. line.

Two shifts of miners were employed under the supervision of M.M. Hunter from Milwaukee.

In 1940 W. Gwyn and Associates obtained a short-term lease on the property and carried on operations from October to December. About 10 tons of ore from the vein were shipped to the Kenopo mill at Kenora for treatment. Work was done under the direction of H.M. Whimster.

** Also known as Waite Claims, & W.I. Gwyn & Assoc.*

Homestake

Mr. Birbeck had the contract for sinking 100 feet on the big vein. In June 1900 a lot of prospecting had been done and a number of test pits were dug. By July the shaft was 60 feet deep.

Assays were \$8.86, \$12.40 and \$9 to the ton besides a couple of dollars in silver.

In Dakota, a rich famous mine called the Homestake, served as a namesake for the Ontario Homestake.

*Imperial**

The mine was situated about a mile southeast of the Mikado mine. A road, half a mile long, ran from the mine to a landing at the end of Hell Diver Bay.

A total force of ten; eight miners, worked under A.A. Hare, the manager. A shaft, 5 by 8 feet, was sunk to a depth of 70 feet. Hoisting was done by horse power. The building consisted of boarding camps, office, stables, shaft house, blacksmith shop, and storehouse.

The mine closed down in July 1901. The shaft had reached a depth of 110 feet, with drifting at the first level 12 feet east and 25 feet west, and at the second, or 100 foot level, five feet east.

Although considerable surface prospecting was done on the property the results did not prove to be satisfactory.

** Also known as Emperor*

Indian Joe

This property was located on the north shore of Shoal Lake near the entrance to Clytie Bay. The Great Northwest Company developed it and hired 10 employees, 6 of whom were miners, to sink a shaft (10 by 13 feet) to a depth of 60 feet.

From the spring to September 1903 there was an idle period but work continued steadily after this under the management of J. Williams. During the summer of 1904 16 miners were at work sinking the main shaft to 65 feet.

Jenny Leigh

The Jenny Leigh (Lee) mine was situated at the end of Andrew Bay. The only reports available state that the two shafts were full of water. Log camps had been built on the property in 1897.

K₁₇₀

This property was originally owned and prospected by Joseph Gauthier in 1909 and two years later was sold to a syndicate of Buffalo capitalists. It was situated between Ptarmigan and Echo Bay. The vein was reported to be very large and assays and pannings gave good values. The syndicate engaged Mr. Gauthier to prospect several adjoining claims that were taken up after the richness of the property was realized.

Keenora

This claim was held by Frank Moore and Dr. S.S. Scovil and was located on Andrew Bay. One large vein averaged 6-10 feet wide and was rich in free gold. Three other veins were discovered which also showed free gold. The claim was worked in 1902.

Keewatin

The Keewatin was one of the oldest mines on the lake. It was located at the north end of Hay Island. The reason it was abandoned so early could have been that the shaft was sunk at the top of a hill when a shaft or drift at the foot of a steep slope would have developed the ore body much better.

On the property was a shaft house and a blacksmith shop.

Keewatin Reduction Works

The Keewatin Reduction Works were owned by the Ottawa Gold Milling and Mining Company Limited. The works were built just east of the Lake of the Woods Flour Mill in 1897-98.

It was a 20 stamp mill under the management of Mr. F. T. Snyder.

Barges were built to transport ore from mines located on the Lake of the Woods to the mill. The works were also located next to the C.P.R. tracks so that any ore from the mines near the line could be transported to the works.

The assay and chemist department was under the management of Henry A. Guess.

A description of the works was written in The Ottawa Gold Milling and Mining Co.'s "The Extraction of Gold From Quartz" 1898:

"The ore brought in by the barges of the Company from the different points on Lake of the Woods, on arriving at the Company's dock, is lifted direct from the barges into a skip holding about a ton, and hoisted to the top

of the tower, and conveyed along a cableway into the sampler, where it is dumped into a 60 ton ore bin. From this bin the ore drops into a crusher with a capacity of ten tons an hour, is there crushed, and is hoisted up the elevator and is allowed to slide down the screen. The rock that is too large to go through the screen goes to a set of rolls, where it is reduced to the necessary size, goes up the elevator, and it is again sent over the screen. After going through the screen, the ore drops into an automatic machine sampler. From the sampler the ore drops directly into a weighing bin, where it is weighed. In this connection it is worthy of particular note by the owner of the ore that all estimates of weight will be based on the dry weight of the ore, which will be determined from the actual percentage of moisture in the ore as ascertained from the samples. After being weighed the ore goes into one of the storage bins. The sampler contains ten 200 ton bins, and

thus has an available storage capacity of 200 tons of ore..."

Between 1900 and 1901 the mill worked continuously treated 1,00 tons of ore from the Wendigo, 554 from the Champion (Bad), and ore from the Sakoose mine (in the Manitou district) which was purchased by the Ottawa Gold Milling and Mining Company.

Rat Portage Miner December 9, 1897.

Reduction Works of the Ottawa Milling and Gold Mining Company.

That the Lake of the Woods district is rich in gold, is a fact now beyond a doubt and that capitalists have faith enough in it to invest their money is positive proof that they know what they are about. Especially is this so when the Ottawa Milling and Gold Mining Co. are building at Keewatin, a reduction works which when completed, will be the most complete in the world. No pains are being spared to secure the very latest and up-to-date mining machinery the greater portion of which, by the way, is made from original designs and drawings and especially adapted for the class of ores found in this district.

Although the framework of the 20 stamp mill was only started some three weeks ago, it will soon be completed and ready for work. A turbine wheel of 1200 horse power will be used to operate the mill which will be increased from time to time as circumstances may require.

The sampler is a large one, capable of storing 2,000 tons of ore and is so arranged that a complete test of any quantity of ore can be made in a given time, thus determining the value in the same way a grain merchant would grade grain. The object of this is to find out the exact value of any given quantity of ore so as to save the cost of a mill run in case it should not be worth it. In connection to this it

might be stated that the weight of the water, usually 10% , is deducted, so that the customer only pays for the actual weight of the ore milled. When it is stated that over thirty tons of bolts alone are used in the construction of the works, it will give "Miner" readers and (sic) idea of what work has been done. The manager, Mr. F.T. Snyder, under whose supervision the work has been done, certainly deserves great credit for what has been accomplished and in his hands the company can rely on getting the best work obtainable.

A curious and not at all uncommon circumstance, in connection with the excavation, was the striking of gold quartz which assay from \$5 to \$8 per ton on the surface. The company will therefore have a gold mine to begin work on right at the stamp mill and if it should turn out that they have a mine the company will have got more than they bargained for.

On account for the low cost of operating the new works, manager Snyder stated that they would be in a position to mill ore at a much less cost than any mill on the lake after paying all charges.

Kenbrae Gold Syndicate

This syndicate was organized to acquire two groups of claims, one near the Kenricia on the southeast and a group of four claims at Rock Lake, immediately west of the Brae Breest mine.

Camps were constructed for the accommodation of 20 men. Drilling was done through the ice as showings extended into the lake.

Exploration was undertaken by the Mining Research Corporation in 1937.

*Kenopo**

This company was incorporated in December 1938. The president was J.A. Poirier. The company operated a custom mill in Norman and held 15 claims near High Lake about 30 miles west of Kenora on which only surface work was done.

** Kenopo Mining & Milling Co Ltd.*

Kenosha

The Kenosha Gold Syndicate was organized to develop two groups of claims near the Kenricia Gold Mines. The group northwest of the Kenricia consisted of 2 mines while the northeast group, approximately 160 acres, consisted of four claims.

The Mining Research Corporation acted as consulting and resident managers of the syndicate's holdings. Work was confined to surface prospecting and exploration in 1937. 5-10 men were hired on the east property under Jack Harrison.

King

The King was located near Pine Portage mine on Pine Portage Bay. A small shaft was sunk on a hill side in 1896.

King Solomon

This copper mine was owned by Captain Kendall of Rat Portage and was six miles east of the Scovil-Moore mine.* It was a rich copper property which was still unprospected in 1911 but with large chunks of pure copper having been picked up on it.

** Allie Island Copper mine.*

Lady of the Lake

The mine was originally worked in 1897 but little information can be found about it during that period.

In 1908 colonel Crowley and Son of New York investigated the worth of the property. Assays were shown to run about \$100 to the ton. Crowley intended to strip a large boss of dark coloured quartz which had given good returns. The company also intended to install a mill if sufficient ore was in sight.

The property was situated on an island in Shoal Lake east of the Cameron Island mine.

Leona

The Standard Gold Mining Company owned and operated the Leona. It was situated on mining locations D538, McA58, D540 and J0134, 25 miles from Rat Portage. The general manger was Frank Hodge. Work was done on the property during 1900.

Little Bobs

Little Bobs consisted of two locations. One location was a group of islands at the east end of Ptarmigan bay about 14 miles from Rat Portage; the other adjoined the Wendigo mine on Witch bay. The mine on Ptarmigan bay produced ore valued at \$50.60 per ton. C.E. Brent was the engineer in charge of prospect and development work. A shaft was sunk 12 feet. The bullion produced was worth \$20 an ounce. Operations were carried on during 1900.

Mammoth

These claims, located on the north shore of Black Sturgeon lake were owned by Mr. Sunblad and Mr. Lindell. Under the direction of Neil Campbell, the number one shaft was sunk 43 feet and stripping and crosscutting was done on four other parallel quartz veins. The average width of the main vein was 60 feet that yielded \$2 to \$10 per ton. Operations were carried on during 1901.

Mascotte

The La Mascotte mine was located about a quarter of a mile northeast of the Fort Frances-Kenora highway and about three-quarters of a mile west of Young's Bay, Kakagi Lake.

The mine was owned by Colcleugh Gold Mining Co. of Rat Portage. Twelve men under C.P. Kelpin, manager, sank the shaft on number one vein at 35 feet. The camp consisted of powder house, blacksmith shop, storehouse, cook camp, sleeping camp and manager's dwelling.

Two diamond drill holes were made in 1899 which were bored towards the shaft so as to cut the vein perpendicularly to its strike as follows: number one bore, dip 45 degrees depth 240 feet; number two, dip 60 degrees, depth 260 feet.

The president of the Colcleugh Gold Mining Company of Rat Portage, was Mr. J.W. Colcleugh, the secretary was Mr. J.M. Savage, the treasurer was George Drewry.

Master Jack

The Master Jack mine was located on Blindfold Lake. The shaft was 110 feet deep, and drifts were 100 feet. Three log houses, a shaft house and stables were built on the property during 1897.

Mather & Beveridge

Shipments of soapstone were made in 1915 from a deposit on an unpatented mining claim owned by Mather and Beveridge, and situated on Pipestone Portage, Lake of the Woods. The material was shipped to the Dryden Timber and Power Company, in Dryden, Ontario, for the lining of the soda-smelting furnaces. It was used in blocks 18 inches by 12 inches by 8 inches.

Medecine Ledge

The Medicine Lodge mine was situated at the mouth of Blindfold Lake. 7 men worked at the mine sinking a shaft 6 feet wide and 38 feet deep at an incline of 45 degrees. The mine was worked during 1898.

McA 52

Active development was started on this claim in 1902 by Robert H. Ahn because of the richness of the Golden Horn mine which adjoined McA 52 on the western side.

Michigan & Ohio Company

Their claim was located on Lobstick Bay, in the vicinity of the Black Eagle. Mr. Martin Florida was the owner. Mr. Proudlock was awarded a contract for 250 feet of sinking and 100 feet of drifting during 1901.

Middle Island

Little is known about the mine, except that the shaft was sunk at the north end of the island. The lots were Middle Island and K157 Prospect.

Mikado

The Mikado was situated south of Bag bay on Shoal Lake and was one of the four principal gold mines of the Lake of the Woods.

It was discovered in 1893 by an Indian and the find was brought to the attention of Charles Bunn of the Hudson's Bay Company in Rat Portage. Mr. Bunn and Dr. S.S. Scovil took up the location but in 1895 sold it to Colonel Engledue for \$25,000. The Mikado Gold Mining Company was then formed.

Under the manager, T. Breidenbach, 27 men worked to open up the vein.

By 1898 the main shaft (6 by 12 feet) was sunk to 250 feet. On number two vein an inclined shaft (5 by 8 feet) was sunk to a depth of 200 feet. A 20 stamp mill building was erected. Also on the property was an assay office, general office, manager's dwelling, cooking camp, two sleeping camps, dwelling house, hoisting engine house, two shaft houses, boiler house, mill building, powder house, ice house, stable and

and blacksmith shop. The company also invested in a steamship called the "Mikado". The name of the mine was derived following a performance in Rat Portage of the "Mikado" by touring musicians.

The total force was 75 men, 46 of whom were miners.

In September 1898 a cyanide plant was installed for treatment of ore.

The number two shaft was especially noted for its richness- one discovery showing ore was 5% pure gold worth over \$25,000 to the ton.

In 1899 Theo. Breindenbach was transferred. Penguilly and N.C. McMillan were appointed joint managers. The number two shaft closed down during 1900 and was allowed to fill with water. A force of 70 including 25 miners worked on the mine shaft. A new sorting plant was added as well as a boarding house for 60 men and a dining room for 100 men. F. Penguilly resigned on May 31, 1900.

In 1901 the superintendent was N.C. McMillan, the

manager was T.R. Deacon. Number two shaft was reopened Dec.1, 1900, and a hoist engine, head gear and bucket were installed. Number one shaft was abandoned temporarily.

A new boiler room, an extension to the cyanide house, and several employee's dwellings were erected that year. The total force was 80 of which 33 were miners.

An inclined shaft was made with a dip of 26 and a half degrees and reached a depth of 805 feet on incline and 395 feet vertical.

Life out at the Mikado was not all work, however. In Jan.4, 1901 edition of the Rat Portage Miner was an article on the Christmas ball at the Mikado mine which was considered "one of the most enjoyable entertainments that has ever been given in the district."

In Aug. 1901 the shaft was down to 1200 feet and it was reported that there were practically inexhaustible supplies of ore.

Accidents were part of a miner's life. In 1901 a trammer named John McGuire was seriously hurt when

he fell 50 feet in the winze breaking an arm and fracturing a leg. This is only one of the many accidents that occurred in the mines. Carelessness was often a cause of many of the incidents.

The Mikado produced gold bricks so regularly that it earned the name of "Old Faithful". It was reported in the October 24, 1902 issue of the Rat Portage Miner that the Mikado's pay ore body was so phenomenally rich that the "machine men in the drifts are standing on a floor of gold".

In 1902 the inclined shaft reached a depth of between 13,000 and 14,000 feet. The sinking crew created a speed record by going down 60 feet in a wide shaft in one month. Exploring diamond drilling was done on one of the water locations through ice.

Later work was confined to development with only 20 men employed. The mill was closed down in November 1902.

In 1903 the company decided to indefinitely suspend operations because of poor vein values. The company

was in debt for 5,000 pounds.

In 1907 Mr. Robert Ahn secured an option for the property and an examination was made.

The mine was reopened early in 1910. It was now being worked by the Kenora Mines Ltd. with Captain H.A.C. Machin as president and Mr. R.B. Nickerson, superintendent and manager.

The plant was remodelled as well as the shaft house. Electrical power was generated by a dynamo.

The number one shaft had been sunk to 540 feet and the nine (9) levels opened up. The number two shaft was 250 feet, and three levels were opened up upon which 850 feet of drifting was done. Work on this shaft was discontinued. An 80 foot shaft had been sunk on the number three vein (1500 feet south of the main shaft) and two diamond drill bores were put down.

Work was chiefly carried on in the second, fourth and seventh levels of the main shaft.

In the latter part of 1912 no work was done on the mine and it was allowed to flood.

In 1922 it was pumped out and some underground development took place but there was no recovery of gold because of the costliness of its removal due to the poor design of the early workings.

In 1928 Kenora Prospectors and Miners Ltd. took over the property and in 1933 they started sinking in an old 87 foot inclined winze on the fourth level. It was sunk an additional 211 feet. 20 mine men were employed, 15 of which worked underground, who completed 1651 feet of drifting and 264 feet of crosscutting. R.O. Brehaut was in charge of operations. A total of 2760 feet of diamond drilling was accomplished from the underground.

212 feet of drifting was done at the tenth level (560 feet deep) from Jan. 1 to July 20, 1934.

Over \$500,000 worth of gold was extracted from this mine.

Rat Portage Miner Decmber 16, 1898.

\$25,000 in Gold - Strike at the Mikado Gold Mine Richer Than at First Supposed

This country is a source of constant excitement and surprise to a mining man who first learns of it riches, but to the average resident here, no matter how rich the find or strike, he takes it simply as a matter of course if it is his individual property, and is alike indifferent if it belongs to his neighbour, simply because our woods are full of these good things and repletion produces satiety.

The first report of the wonderful strike last week in the big Mikado mine produced a temporary buzz of local excitement, but things soon reached their normal condition. The fact is, however, that the strike is one of the richest ore chutes ever known, and is not yet fully determined. The mine management is as dumb as an oyster as to the find, but the "Miner" possesses occult information which is reliable that bears out its statements.

The marvelous find is located in the stope between the 150 and 200 foot levels. The stope is forty feet high. The vein at that point narrowed down to two and a half feet. In the head of this stope the wonderful ore is located, which is so rich that the management is heading it up in barrels, and do not intend to put it through the mill, the intention being to send it direct to mint or smelter. The entire stope is filled with this ore. Samples of it have been brought to town and conservative and reliable mining men estimated that the ore was 5% pure gold. But if we place it at 3% it means \$25,000

solid gold to the ton.

Many of our readers not versed in gold ore will not understand these figures, but if the chute should be of any great extent in width and depth the Mikado could supply the world alone.

It is known as we said before, that this rich ore chute is two and a half feet wide and forty feet high. Assuming that it is a foot thick and extends no farther in any direction and we will have 100 cubic feet of this rich in sight. The average ore requires 13 to 14 cubic feet to make a ton. This ore being so much richer and heavier it is safe to say that only ten cubic feet will be required to make a ton. If the ore is worth \$25,000 a ton as estimated by men competent to express an opinion, it will be seen that there is now in sight in that ore chute a quarter of a million dollars, and there is no telling how much more considering that the first mill test of surface ore from that rich mine went over \$90 in free-milling gold to the ton! The outlook is simply amazing.

It shows that the gold belt near the Mikado is one of the richest in the world, but it is all in the hands of a few men. One company alone owning 5,000 acres on which not a stroke of work is done as yet, and which is made valuable by the work on the Mikado, the Tycoon, and the Toronto & Western, a fact demonstrating that the Ontario authorities have been too lax as to their mining laws and that there is need of a change!

But how will the outside world receive the news? Beyond a doubt with incredulity. It is too big to be believed, and it is too near civilization to come to verify. A case in point is where a young Englishman said emphatically that while he had seen the ore he would not dare to repeat it at home for fear of ridicule.

Manitoba Free Press Mining Supplement 1899

Mysterious Mikado-A Bonanza Property

"More has been written about the Mikado owned by the Mikado Gold Mining Co. Ltd., than about any other property whatsoever in Western Ontario. And it must be confessed that most that has appeared does definitely more credit to the imagination of the writers than their knowledge of what is going on at the Mikado. It has been extremely difficult to find out the truth during the occupancy by Mr. Theo. Briedenbach of the management, but now that he has transferred his talents to the Sifdar, and Mr. F. Cardell Penguilly, heretofore but the cyanide expert of the mine, has taken charge, a change in respect is promised. It must not be gathered from the foregoing that Mr. Briedenbach was in any way to blame for the profound mystery in which all operations of the mine were shrouded, he was probably acting under instructions from headquarters, and had no option in the matter. However, it is understood the stockholders have resolved on a more open course of conduct in the future, and have instructed Mr. Penguilly to answer all reasonable inquiries fully and frankly.

This will be to the very great advantage of the district. The Mikado is a wonderful property, and the whole mining world is deeply interested in the result of the development that is taking place in it.

Early last December a report of the marvellous strike in the stope between the 150 and 200 foot level, set Rat

Portage wild with excitement. Hand specimens were soon being exhibited in the town, that had undoubtedly been stolen by the men in the stopes, before management was made aware of the find. These were so heavy with free gold that it was calculated such ore would run \$25,000 or more a ton. Of course such predictions were not warranted, because no one seemed to know whether there was even as much as one hundred pounds of it in sight. Mysterious stories of men with loaded Winchesters, guarding ore so rich that it would be sent in barrels to the United States mint, and such delightful flights of the imagination were bandied about the little mining town, but through it all the management of the Mikado mine kept a silence as deep as that of the Sphinx itself...

The history of the Mikado is as follows: Colonel Engledue came to Rat Portage in the autumn of 1896. He had been mining in the African Rand, and bore the reputation of being a successful man. He explored a good deal of the country near the Lake of the Woods and found the Mikado location a promising one. He therefore, immediately took a \$25,000 option on it and proceed to install machinery for the development work. Several hundred tons of quartz shipped to the Rat Portage Reduction Works yielded as well that he said to have obtained sufficient bullion from it to buy a 20 stamp mill, and repay the \$25,000 advanced for the purchase of the mine. Be that as it may, the ore was undoubtedly very rich and warranted further sinking. The stock is all owned in England...

The mine is on a peninsula jutting into Shoal Bay, an arm of the Lake of the Woods. There are three veins and shafts on the property. All assay well, some of the rock (leaving out the consideration the rich ore already mentioned), running \$200 a ton.

Rat Portage Miner January 4, 1901.

Xmas Day at the Mikado Mine

One of the most enjoyable entertainments that has ever been given in the district took the form of a ball and was held at the Mikado mine on Xmas night. All the arrangements were made by the men and superintended by Mr. Clelland, the store manager.

The large dining hall in the new boarding house was tastefully and elaborately decorated, showing that good taste and skillful arrangements are not confined to town limits. The ladies displayed exceeding taste in the arrangement of the lights and evergreens, and their dresses well harmonized with the soft and lovely tints, so that the ballroom, with its occupants, looked a picture of youth and beauty. About fifty couples took part in the dance, and reflects great credit upon those who had charge among whom should be mentioned Messrs.

Clelland, H. Lonsdale, Mannion, Coleman, Affleck, James and Shields. One of the features of the evening was a Scotch Reel given by Messrs. Macmillan, Milne, Robertson and Matheson, which was highly applauded.

The invitations were issued to the residents of the neighbouring properties and the presence of the ladies and gentlemen contributed largely to the success of the affair.

Messrs. Cameron deserves the thanks of all for the excellent supper which he so generously provided.

AT THE MIKADO GOLD MINE

1901

A trammer named John McGuire was seriously hurt on 12 July while working in this mine. He had been sent by the mine foreman to the 120-foot level to lay track, and it appears that his supply of spikes ran out and instead of going to the surface for more he descended to the 180-foot level to borrow some from John Bryson who was also laying track there. Before returning he started without any authority to help Bryson with his work, the latter holding the gauge and McGuire striking, and as McGuire was in the act of driving in a spike about 18 inches from the mouth of the winze leading to the next level below, his foot slipped and he fell down some 50 feet in the winze, breaking his arm and sustaining a compound fracture of the leg.

According to the investigation made into the circumstances by Inspector Bow the accident was due largely to carelessness on the injured man's part, though had there been a guard rail across that side of the mouth of the winze (as there was on the other side) in accordance with the Mines Act, it would not have happened. McGuire was put immediately in the mine doctor's care and next day removed to the Rat Portage hospital, whence a week later it was reported that he was doing well, but that it would probably be two or three months before he fully recovered.

THE MIKADO GOLD MINE.

1902

Here we found our old friends, Manager McMillan and Captain Mackenzie, who gave us the hearty welcome which is always ready at the Mikado. The attendance was unusually good considering the pay roll,—only about 50. There were 31 enrolled, and the average attendance was 17. The attendance at the illustrated lectures was large, averaging 47. This camp is an example of what can be done by a manager who takes care of his men, providing them with homes for their families, a school for their children, and encouraging them to practise the virtues of sobriety and industry. It is said that every Mikado miner has a healthy bank account. It is a pretty sight to see, in this out of the way place, forty miles from the nearest settlement, quite in the wilderness, twenty or thirty children going to school up the little street which is lined with neat, prosperous looking cottages. The teacher, Mr. John C. Little, gave us the run of his rooms and library,—welcome privileges. The house of the manager was always open to us, as was that of the bookkeeper, Mr. Alex. Milne. Indeed we were everywhere made to feel at home among our good friends at the Mikado.

Mr. John Davies, resident geologist of the Department of Mines, has kindly contributed the following information which will be of interest to our readers Thank you, Mr. Davies.

MIKADO MINE

The recent staking rush in the Confederation-Uchi Lakes area has been of interest to most residents of the area. Though many in Kenora will benefit directly or indirectly from the ensuing work, the activity is not close enough to home to generate a real aura of excitement.

There are some readers however, who will remember when our town was once in the limelight of mining activity. It was not until the 1911 Procupine rush that the area took a back seat in the mining arena; previously a number of local mines were the leading gold producers of their time.

One such mine was the Mikado Mine situated on the southeast side of Bag Bay of Shoal Lake. It was discovered by an Indian, and in 1893 the discovery was brought to the attention of Mr. C. Bunn of the Hudson's Bay Company in Rat Portage. Mr. Bunn, together with Dr. S. Scovill, took up the location and sold it to Colonel W. Engledue, the representative of an English Company. The property and the nearby Yum Yum and Nankipoo properties derived their names following the performance in Rat Portage of the "Mikado" by touring musicians.

Little work was done on the property until 1895 when the discovery vein was opened up and camp construction begun. The labor force in 1896 expanded to 27 men under Mr. T. Breidenbach. Ore from an open trench

was sent to the Rat Portage Reduction Works, and yielded 3.26 ounces of gold per ton for a total of \$14,535. value.

A shaft was sunk during the winter. Crosscutting at a depth of 60 feet encountered more gold and a mill containing 20 stamps was constructed the following spring. A second shaft was sunk at an incline down the narrow but, highgrade #2 vein. By mid-summer of 1897 about 75 men were employed, fifteen of whom cut cordwood for the mines' boilers.

The mine continued in production until the autumn of 1902. At that time the vertical shaft had reached a depth of 325 feet and the inclined shaft a length of over 1,300 feet. Ground waters then were allowed to flood the workings.

During 1910, Mr. H. A. C. Machin, M.P.P. for the district, managed to generate further interest in the mine. It was partially pumped out and the veins were assayed. A company called Kenora Mines Ltd. was formed to take over the property and the mill was remodelled. Additional underground work was carried out in 1911 and 1912 with the recovery of some gold.

Once more the mine was allowed to flood. In 1922 it was pumped out again, and underground development took place. There was at this time, however, no recovery of gold, for although ore was found to remain in the mine its removal would have been difficult and costly due to poor design of the early workings.

Kenora Prospectors and Miners Ltd. incorporated in 1928, took

over the property and retain it today. A little gold was recovered in 1931, presumably in a mill cleanup. During the entire life of the mine it has produced officially \$412,070 in gold. Unofficially, the figure is likely to closely double that. While such production is modest by today's standards it should be remembered that most of the Mikado's production was in the years 1896 to 1902, and that Ontario's total gold production during the same period was about only 4 times the Mikado figure.

The above is a brief summary of reports recorded by the Ontario Bureau of Mines. It would be of great interest to have readers add to this with stories of personal experiences. The Miner and News is to be commended for writing such information. Also, the Resident Geologists' office of the Ontario Department of Mines in Kenora would be very pleased to receive any verbal information or records of the old mines of the area.



Workings of
Mikado mine.

Legend

-  *Altered Trap*
-  *Felsite*
-  *Stoping*

West Side - Foot Wall

East Side - Hanging Wall

Mikado Mine

around 1934

Scale in feet

0 100 200 300 400 500

Mina Grande

This mine was owned by Frank Moore and a Mr. Seager. The exact location of the mine is unknown but it was situated in the Whitefish Bay area. A home-made mill was used which resulted in half the gold being lost in the processing. However, the vein was said to have been rich.

Minerva

The Minerva mine was located eight miles west of the Sultana mine. It encompassed fifty acres of land, and water rights of forty acres. The gold claim embraced the entire island. The mine was similar to that of the Sultana because it was tranversed by a strong series of auriferous veins and reefs.

In October 23, 1903, The Minerva Mining Company was formed for the purpose of developing a mine on Minerva Island. It was sold (August 21, 1903) to American capitalists from Wisconsin. No further information is available.

Mines Contract

During 1903 exploration development was done on five of the Mines Contract Land Investigation Company properties, on Clytie and Rush bays. Mr. J.W. Cheeseworth was manager.

Monarch

The Bullion Mining Company of Rat Portage owned lots S105, S106, and S107 on Hell Diver Bay. There were seven men prospecting, and two pits 20 feet deep were dug between 1897 and 1898.

Monte Cristo

The Monte Cristo mine was located one mile north-east of the mouth of Clytie Bay on Shoal Lake on location D158. Very little work was done on the development of the mine.

Neda

McVittie Graham Mines supplied funds for the reopening of the Neda Gold Mines property in 1936. A shaft of forty feet in depth was originally sunk. The main vein was traced for seven hundred feet on the surface. The property consisted of eight claims about forty-five miles from Kenora, adjoining the Horseshoe mines. The Kenora-Fort Frances highway passed right through the Neda group. The Empire Syndicate which financed the Horseshoe Mines purchased the necessary machinery to put the property back into production. In 1935 excellent showings were reported.

The property was situated half a mile south of the Kenland mine. A road about half a mile in length led to workings from the Kenora-Fort Frances highway.

Nonsuch

The mine was owned by Oliver Daunais and was situated on Skunk Island in Echo Bay.

Six to eight men were employed sinking a shaft to 70 feet. Eighteen feet of drifting was done at the 26-foot level. Sixty feet from the surface a cross cut was made showing the width of the vein to be 45 feet. Five hundred to six hundred tons of ore were mined. The assays varied from \$6 to \$60 per ton.

Two men were kept at the mine bailing out water in the shaft and making improvements.

Norah

The mine was located on claim J.E.S.38 between Fox and Nola Lakes. In 1900, the property consisted of claims J.E.S.38, 41, 42, and the west half of 39, and J.C. 79 and 80. An old road leads to the workings from a small bay on the south side of the central part of Fox Lake.

It was owned by Gold Leaf Mining Company Ltd. Robert Laird was manager and Ed Hammill was mine captain. The total force was seventeen men, ten of whom were miners. Thirty ounces of gold per ton were extracted. Buildings included cooking and sleeping camps, blacksmith shop, engine house, powder house and stable. The shaft reached a depth of 120 feet.

Norma H.

The Norma H. was sold by W.H. Hopkins and others to the Buffalo Mining and Development Co. The property is an island of 115 acres situated on the steamboat channel twenty miles from Rat Portage (present day Kenora). The prinipal vein was seven feet wide. The quartz showed free gold, and ten assays averaged \$11.50 free-milling gold to the ton.

Oliver-Severn

In the autumn of 1935 a group of six claims were staked and three optioned by the Oliver-Severn Gold Mines Limited, on the south side of Kendal Inlet, immediately east of the Kenricia mine. Work was done on two properties in 1937. The Split Lake claims and the Oliver-Severn claims, which were about six miles east of Kenora, included 240 acres. The shaft was one hundred feet in depth. The buildings consisted of a cookery, bunk houses, office, and manager's quarters. There were seven men employed; three of them were miners. H.L. Donaldson was in charge.

Split Lake Gold Mines resumed operations on the Oliver-Severn claims on Bigstone Bay, in 1938. The workings were unwatered, a new headframe was erected, and a mining plant was installed. Drifting, shaft-sinking and lateral work was done.

Operations were suspended in May of that year and the mine remained idle. In total there were 17 claims on the east end of Long Point Island (Whitefish Bay).

Olympia

The property was located on the northwest arm of Hell Diver Bay in Shoal Lake.

In November of 1901, preliminary development was done under Captain Epell. The vein of the Mikado was traced into the Olympia which was 40 feet wide. Assays averaged \$5.30 per ton. It included lots M11 and S129.

The geological formation was similar to that of the Mikado. The Olympia or M11 mine was sold to an American syndicate. The superintendent was James Gordon. Seven veins were found and partially stripped. The number One vein had a shaft of 90 feet sunk on it. Value per ton was \$19.50. The number Two vein was a test pit sunk 32 feet with a value of \$50 per ton. The third vein or the "Shore" vein had a 35-foot shaft and gave values of \$18 per ton. The fourth vein or the "Daunais" vein had little work done on it. The "Mikado" or fifth vein intersected number one vein. This was

the Mikado vein proper.

By 1902, the mine had a shaft reaching a depth of 95 feet. Mr. J.S. Griffiths was manager. A contract was awarded for the sinking of the existing shaft 100 feet more, in February of 1903. At 150 feet a level was started. Machinery (hoist engine and trailer) was removed from the Gold Hill mine to the Olympia.

The Olympia had a quartz-calcite vein from 3-6 feet in width in Keewatin diabase. The gold, valued at \$2,101, was produced in 1912.

The following article appeared in the "Kenora Miner and News" around this time describing some of the unique experiences of running a gold mine.

That fish could cause serious loss in the production of a stamp mill at a gold mine has, we venture to say, never come within the knowledge of the mining men of this district.

A couple weeks ago Mr. Vernon noticed that the results in the batteries were not what they should have been. He examined the ore, and the assays were above average... He began a thorough investigation and found particles of fish. He then investigated the large tank that supplies water for the boilers and the plates, and found millions of minnows, dead and alive, some as large as a finger. When the tank was drained off over six basketful of fish were taken out. The fish had been drawn up by the suction pump from the intake, which probably has cost the Olympia a couple thousand dollars in loss of bullion.

In the summer of 1915 some ore was milled. There were five shafts-- 110, 75, 70, 32, and 25 feet deep. Also on the property were three tunnels. The president and treasurer was Franklin Floete. The secretary and manager was George Vernon and the foreman was Emil Hubner. 7 men were employed.

Nothing was evidently done on the mine until 1936 when I.A. Machin and I.F. Machin, of Kenora, commenced work on the old Olympia. The property included D.202, D.199, S.105, M.11. Underground work was carried on until September 1936 with the shaft deepened to 125 feet from 65 feet. Buildings included the mill, power-house, boiler room, black-smith shop, storehouse, cook-house, stable and icehouse. 9 men were employed with Hilding Johnson in charge.

See pg. 139a for illustration

Ontario Limited

The property of Ontario Limited was situated on the southern extremity of the long arm running south from Bag Bay. W. Engledue was the manager.

Gold was first found by Israel Gagne in 1896. Clinton Markell bought the property and sold it to the Ontario Limited Gold Mining Company in 1897.

Work commenced in the summer of that year. Twelve veins were found and camp buildings were erected. There were seven miners employed for underground work.

Ophir

The Ophir opened up for development in combination with the adjacent claims of Quarry Island, the Burley, and Queen Bee. The Sultana and Ophir's best veins were common to both, as the Ophir lay at the bottom half of Sultana Island. Ores from both mines carried a considerable percentage of gold and silver.

There were nine or ten veins on the Ophir property. The Number One vein gave an average of \$39.75 per ton. Test pitting was done in 1901.

The mine was closed down for a short while but reopened in 1903 at the end of the year, under the direction of C.L. Lawyer and Company. Mr. J.P. McNolty was superintendent. Ten men were employed of which two were miners. The shaft reached a depth of 97 feet before the mine closed for a period of eight years over litigation of ownership.

During the winter of 1910-11 a shaft was sunk from 80 to 130 feet. A drift was started at about forty feet in depth and a second one at 100 feet in depth. Mr. Richards was the manager. In 1911, R.B. Nickerson

was appointed manager. It was reported that the ore was shot with free gold at a depth of 100 feet, with values being phenomenal in a rich pay streak of about 3 feet, running thousands of dollars to the ton.

The Ophir vein was entirely unaltered granite porphyry. The vein was a lobe consisting of a few lenses and bands of quartz separated by micaceous and chloritic material and granite porphyry.

In 1912 a new company called the Ophir Consolidated Mines was incorporated to develop the Ophir and a couple of other properties in the vicinity.

On the romantic side of the mine, this news article in the Miner dated August 1, 1902 was found:

"The Ophir mine adjoins the Sultana. There is a small shaft sunk on the property from which thousands of dollars' worth of gold was taken in the old days. The history of this hole in the ground reads like a romance and it is the delight of the old timers here who had "twentieths" in the mine to tell the tales of great lumps of gold as large

as men's fists, taken out of the hole. An English syndicate came over here ever so many years ago to examine the Ophir, and during the testing work, gold in fabulous quantities was dug up. An ironbound whiskey cask was filled with nuggets, and under a strong guard was loaded on a steamboat bound for Rat Portage, where the cask was to be expressed to London, England. The treasure cask disappeared-where is not definitely known. Some of the guards said it had been delivered in Rat Portage, while others said it disappeared between the Ophir mine and the steamboat wharf at Rat Portage. The cask was never found however, and there are men in town today who believe the treasure is buried away on an island between here and the Sultana mine. Mr. George Heenan who was one of the men who owned a "twentieth" firmly believes that the treasure cask is still on the lake.

When the cask of treasure was taken out, the bottom of the shaft was glittering with gold under the miners' candles and the "twentieth" men set to work to effectually hide

golden treasure from the cupidity of the stranger, and this they did by filling up the shaft with broken rocks and dirt, and it remained in that state until today."

See page 209b for location of Ophir mine

*O'Sullivan Claims**

Oliver Severn Gold Mines Ltd., did surface trenching on a group of claims owned by J.J. O'Sullivan, during the summer of 1936. The claims adjoined the Trans-Canada highway about five miles southeast of Kenora, surrounding Hilly Lake and included the western portion of Indian Reserve No. 38B. 20 quartz veins were uncovered which struck N.25 degrees E. to N.50 degrees E. The more promising veins were opened up and channeled sampled at five-foot intervals by C.W. Taylor.

The best vein was number two which gave values of 0.53 ounces of gold across an average width of 24 inches, over a length of 83 feet. The number one vein gave an average 1.40 ounces of gold across an average width of 7", over a length of 38 feet. None of the other veins were commercially important.

After a small amount of diamond drilling was done on the number two vein, the option was dropped in December, 1936.

Early in 1937, Split Lake Gold Mines Ltd., acquired

** Also known as Split Lake Gold Mines*

all rights to the claims. The property was first examined by J.F. Wright, consulting geologist, who reported that the number two vein averaged \$24 in gold (at \$35 an ounce) across 3 feet for a length of 80 feet.

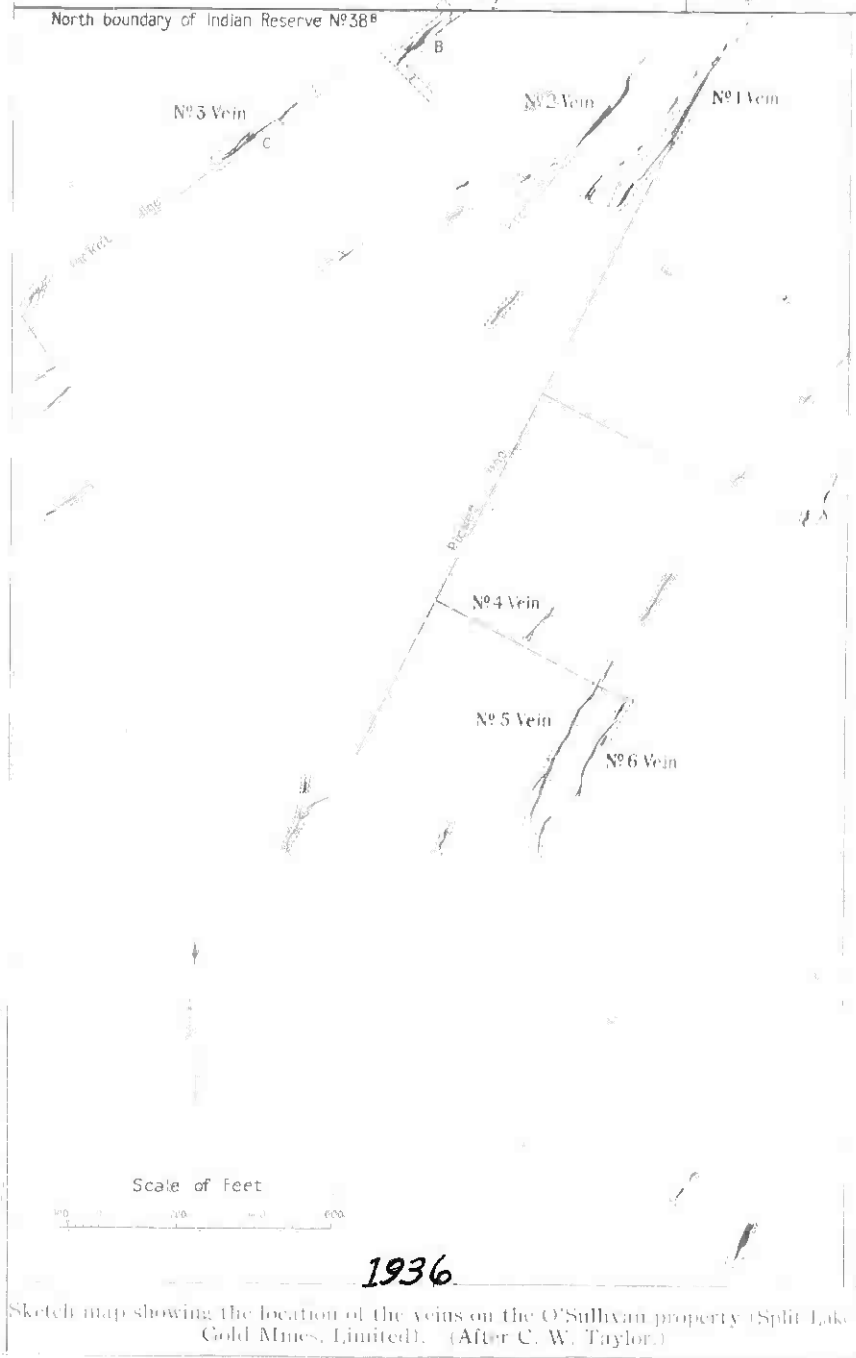
There were plans to diamond drill and sink a shaft. Camps were constructed and a crew of 4 men were employed under H.L. Donaldson, manager.

J A F F R A Y

Lot 18

Lot 432 P

North boundary of Indian Reserve No 38^B



Pine Portage

Pine Portage Bay is a long, narrow bay on the north side of Big Stone Bay. The mine was three-quarters of a mile back in the woods, northeast of the head of the bay, and four or five miles south of Rossland station east of Rat Portage.

Mr. Dobie, manager, shut down the mine because of the failure of water supply for milling purposes. The following was found in the "Report of the Gold Mines of Lake of the Woods" in 1894 by Eugene Coste: "AT the time of my visit in August there were but four men at the mine carrying on the sinking of the shaft, a blacksmith and a cook, the crushing-house had been idle for nearly a month for want of water, and several men (5 or 6) had been dismissed. The great blunder had been made of erecting the stamp mill on the side of a small creek, full of water in the spring, but absolutely dry in the summer. Clearly the proper place for the mill was on the shore of the Lake of the Woods; a self-inclined plane would have given easy connection between the mine and the head of Pine Portage

Bay. Besides, the fitting up of the crushing-house was entirely premature; the mine should have been first developed, and the crushing mill erected only when the preliminary work was done and the mine was in regular working condition."

The ore that was milled was taken from a 100 foot shaft in 1884. The vein was a fissure over seven feet in width; it was auriferous and was impregnated with iron and iron and copper pyrites, blende, galena, mispeckel and a little covellite. The lead was a fissure cutting a hard massive schistose hornblende rock at a distance of 150 feet from a granite mass to which it dipped. The mill contained 10 stamps and two Frue vanners.

The mine failed because of mismanagement. Andrew C. Lawson commented, "The reason assigned for the suspension of work is largely the difficulty encountered on the part of the proprietors in securing a thoroughly competent and experienced mining engineer to take charge of operations of the mine, and their reluctance in the light of experience

to center upon any further serious outlay till such a manager can be procured."

In 1900, C.S. Scott of Hamilton bought Pine Portage Mine for \$20,000.

Princess

The Princess Mine was located north of the El Diver mine. It was owned by Princess Gold Mining Co. of Ont. Ltd. The manager was J. Collins. The shaft was 4 by 8 feet and reached a depth of 69 feet. Three houses, cooking and sleeping camps, and an office were built. The price per ton ranged from \$6 to \$12.60. There were six men employed in 1898.

Queen Bee

The Queen Bee mine was located on Queen Bee Island west of Sultana Island. The shaft was sunk in 1899 to 30 feet on one of the two parallel veins similar to Sultana vein (chimney of ore).

Rajah

The Rajah mine was located 5 miles northeast of Rat Portage and included 131 acres. The Rajah Gold Mining Co. acquired it from McGree, Brerton and Henesy, who were joint discovers in 1892. The shaft was 7 by 9 feet and sunk to a depth of 60 feet on the north side. The value per ton was \$15 in gold and silver. On the south side the shaft was sunk to 63 feet. 9 men were employed and the manager was M.T. Hunter.

Rat Portage Reduction Wrks.

The works were located on the present day site of McLeod Park and were originally owned by the Lake of the Woods Gold and Silver Reduction Co. organized in December 1889. Work was started in January 1890 by Mr. Powers and Linn. At first it was intended to erect the mill on a site near the Ross, Brown and Hall sawmill in the southern part of town (Recreation Centre).

By a subsequent arrangement, however, the site was changed to the north side of Rat Portage Bay on the east side of the outlet to the Winnipeg River.

The mill was completed in the fall of 1891. It was capable of treating 191 and a half tons of ore per day.

The manager resigned in November after a disagreement with the president, and was succeeded by Charles Brent in January 1892. In June the mill was remodelled and restarted. The works were closed down in August because of the failure of some of the machinery. It was then sold under the foreclosure of mortgage in January 1893 to an American syndicate for \$15,000.

Renovations were made in 1895 under the direction of O.F. Purnall. The reduction works were then bought by the Dominion Gold Mining and Reduction Company.

The aim of the company according to the Report of the Bureau of Mines 1895 was: "To protect, search for, get, win, work, and raise gold, silver, coal, iron, ironstone and other ores, metals, and minerals, and substances what soever, whether by open or underground workings and to carry on the buisness of miners, millers, smelters, and workers of any processes in the production, reduction and making merchantable of ores, minerals and manufacturers and workers any minerals, metals, articles, and things used in or in connection with mining, smelting and other processes aforesaid, or any of them."

Messrs, Hay and Robert Ahn supervised the renovations of the works.

The reduction works were made little use of in 1900-1901 and were not a financial success.

In 1902 the works were turned over by A.M. Hay, manger,

to the Keenora Mining Co.

In April 1906, fire destroyed the works. The works which consisted of a 20 stamp mill, chlorination plant, stables, docks, tramways, and a complete outfit for the reduction of ores to bullion, were all destroyed with the exception of the trestle tramway to the C.P.R. and the docks. The value of the property destroyed was estimated at \$40,000.

The mill had been idle for some years because of a lack of ores to treat.

Kenora Miner and News April 27, 1906.

Twenty twisted steel stamps sticking up from amongst a pile of bent metal, fallen brick and burnt woodwork is about all that is left of the fine reduction works that stood just above the towns power house on the Winnipeg river yesterday morning.

Mill, stable, offices, tramways and part of the docks have been completely swept out of existence. The fire was not a long one but it was a scorcher while it lasted and it is only due to the good Providence that is called luck and to hard work on the part of the town fire brigade that there was not further loss. As it was, both Mr. Hay's pretty residence and boathouse to the east of the mill and Mr. Chas. Smith's house further down the road near the big steel bridge, were for a long time in great danger and but for the efforts of a small bucket brigade and the timely arrival of water after 22 minutes work by the fire engine, both residences would have been licked up by flames.

When the alarm was rung in at 2:10 p.m., a smoke cloud, thick and significant looking, was drifting westward before a strong southeasterly breeze from the roof of the metal clad mill, and it was not long before the smoke grew in intensity and one could see at the end of ten minutes that the mill was a goner, for the flames spread with lightning rapidity and the whole premises from end to end were belching forth thick clouds of smoke with the thin red flames spitting out here and there through the gloom.

In 15 minute's time it was seen that both Hay's house and Smith's would be imperiled and willing hands went

to work clearing out the household contents of each and removing them to places of safety.

The fire engine in the meantime had taken up a position on the foot of the bridge- and with her suction pump thrown over the rail was vainly endeavoring to pull the water up twenty feet and then drive it through two lines of hose 150 yards to where the firemen were cursing softly at the empty nozzles. Things looked bad for a while, the heat grew in intensity and smoke began to curl up from the shingles on Hay's cottage while on Smith's house embers were falling fast, all around up to the C.P.R. track and past away in the bush, little smoke clouds began to show up and enlargen. Finally after a long tortuous twenty odd minutes and just in time too, the water began to leap from the lines and here it was, the firemen showed up well. Three of them with a wooden door got on Hay's roof and stayed there despite the heat, which was intense, and kept the roof wet and cool, until the whole mill collapsed, it fell inwards, luckily and after that the cottage was alright. Smith's house was only in danger from flying embers and sparks and the boys kept good watch on it throughout. Only two lines of hose were in use, one throwing a poor stream owing to a break in one of the lengths. At three o'clock, the mill was blazing fiercely from end to end and soon after began falling in piecemeal. Great sheets of metal, red hot, here and there could be seen curling up as a portion of woodwork broke away and fell.

It was a spectacular fire but a costly one and the Dominion Gold Mining and Reduction Works Company were not the only losers. Jack Stone, the boatbuilder, had some

twenty-odd boats and canoes stored away in the stable portion and was only able to get six boats in all out before the flames drove the rescuing party back on the lake with their small tow of six. The balance of boats, most of which, were the property of Winnipeg visitors, were completely destroyed.

The Reduction Works which consisted of a 20 stamp mill, chlorination plant, stables, docks, tramways and a complete outfit for reducing of ore to bullion were all destroyed with the exception of the trestle tramway to the C.P.R. and the docks of which the latter, though burned in places are practically intact. The value of the property destroyed is estimated as high as \$50,000, but would probably be in the neighborhood of \$40,000.

The mill has been idle for some years and has never been a financial success, owing to the lack of ores to treat. It was thoroughly equipped for such work and has put through runs from different mines but only piecemeal. Col. A.M. Hay, the manager, is down at Cobalt just now, and Mr. Elfick was in charge.

The fire started round on the west side of the mill under the tramway and was apparently started by burning grass. Just before noon, Mr. Elfick had been burning the grass adjoining the mill and before going to luncheon had taken care to pour water on all parts of the grass that had been burnt. At any rate, the household were aroused during lunch by the news that the tramway was on fire. Water was taken to the spot but despite all efforts, the fire edged in under the boards and fanned by a draft jumped into the mill. A few minutes later the side of the structure was in flames and no fire system in Canada could have

saved it, the great hollow of the mill pulling the flames up with lightning rapidity.

There was no insurance on the building or contents, the insurance having been dropped a year or two ago, so it well be a total loss.

The works were first erected by Messrs. Powers and Linn two American mining men, who obtained a bonus of \$10,000 from the town. They sold them to the mining company in which some local parties were interested and they later sold out to the Dominion Gold Mining and Reduction Works Company.

*Regina**

The mine was situated east of the Grand Presqu'ile and Whitefish Bay, about thirty miles due south of Hawk Lake station on C.P.R. and twenty miles east of the meridian of Rat Portage, approximately forty-five miles by water route. There used to be a winter road, partly over land and partly on ice, about thirty-eight miles.

The Regina Mining Company was reorganized in 1894 out of the Rajah Gold Mining Company of London, England, which had done exploratory work on location 317P in 1893. Mr. Parcoe, mining expert, was sent out in 1893 to examine the Rajah property. His report on this property was unfavourable. A Mr. Motley, of the same company, condemned this property in 1894, at which time locations 566P, 567P, of thirty-five and forty-two acres were taken up by Paul Proulx, Jacob Henesy and John McLean. These properties were purchased in the fall of 1894, for the price reported to have been between ten thousand and fourteen thousand. Mining got underway in 1895. Construction work was under the charge of

**Also known as Black Eagle, Horseshoe, Kenland, & Goldwood.*

Otto F. Purnall. The mill was completed September 5, 1895, with W.E. Motley, M.E. as resident engineer and William Caldwell, mine captain.

The shaft was sunk 50 feet. The average width of vein being 2 feet 6 inches- no mention is made of ore values- dip 75 degrees to the west; size of shaft was 6 by 10 feet. 300 tons of ore were on the dump for the start of operations- ore was mined in June and July. Mining operations shut down in August to allow for completion of the mill.

The mill was operated by a boiler and an engine of 40 h.p.; a grizzly, and a number 7 Blake ore crusher; also 2 Gates Batteries of 5 stamps each. Stamps were of 900 pounds weight dropping 8 inches at a speed of 80 times per minute to crush the ore, which was delivered by two automatic Tullock feeders; front and back plates 45 mesh screens and outside plates of four and a half by 10 feet, to take up the free gold; two perfection concentrators with amalgamated bottoms,

manufactured by the Colorado Iron Works, 4 slim cloths each two and a half by 6 feet; air compressors were number two of Canadian Rand Drill Company's manufacture and an air receiver of 3 by 6 feet to supply power for drills. A dynamo of 100 light capacity was driven by an engine of 10 h.p. and a water tank of 2,200 gallons, and had the capacity on third floor to supply batteries. Water plugs on each of the three floors of the mill was used for connection with a hose for fire protection.

A shaft house was provided with steam hoist and a wire cable. An iron tramway was laid down from the mouth of the shaft and from the adit, with a turntable, to the ore and rock dumps outside and to the grizzly in the mill. A proper system of signaling with printed instructions directed the hoist.

Construction work on the mill commenced July 1st and the first run of the stamps was made on September 5, 1895.

Thirty-five men were employed at the works of whom 8 were miners working in two shifts per day of 10 hours each, 4 engineers, 4 mill men, 3 surface men, 2 blacksmiths,

2 cooks, 1 foreman and 1 clerk. General Wilkinson was the president of the Regina.

A small steamer, "Squaw", freighted supplies from Rat Portage. The main shaft was 233 feet from the collar; second level, 110 feet from the collar of the shaft; third level, 185 feet from the collar of the shaft. The vein averaged 6 feet at the third level. A cyanide plant was added to the surface works. A McArthur-Forrest process for treatment of concentrates with a capacity of ten tons per month and a similar plant for tailings of a capacity of 600 tons per month was in operation in 1896.

July 11, 1896 Report: In company with Lieutenant General Wilkinson, managing director, and R. Huntley, Chief Engineer, the trip was made in General Wilkinson's steam yacht "Squaw" built in Ottawa 1891. The yacht was 60 feet with a 13 foot beam. It could carry 16 tons of cargo and steam at 10 to 12 miles per hour. The steam yacht was able to leave Kenora and return from the mine in one day. The cost was \$4,000. Its first trip on Lake

of the Woods was Saturday July 11, 1896. They apparently ran into quite a storm on this trip and all came to the conclusion that the "Squaw" was seaworthy. General Wilkinson also conducted religious services every Lords Day in the dining room of the mine.

An additional boiler 80 h.p. was added. Since Sept. 5, 1895, mill ran a total of 2,897 hours, treated 2,787 tons of ore with a return of 943 ounces of gold with a heavy loss in tailings. Personnel at the mine at this time was 1 office clerk, 28 miners, 2 muckers, 1 timber man, 2 landers, 3 engineers, 8 mill men, 22 general work, 5 carpenters, 2 blacksmiths, 1 mason, 1 charcoal burner, 1 in store, 2 cooks, 2 cookees and three boat men, making a total of 84.

The quartz carried pyrite and other sulphides, including molybdenite, some calcite and a dark substance of uncertain nature that fouled the plates badly. Some gold occurred in the ore. It was stated that 80 percent of the gold was free, but in very fine condition, but was hard to save on the plates.

In 1896, 50 electrical lights were installed. The shaft house and mill were built together down a steep rocky slope close to the water. The boarding house, office,^{and} other buildings were a little to the west.

The shaft on number three vein reached 160 feet. There was an air shaft of 30 feet, 500 feet of drifting and 130 feet of winzes. The ten stamp mill treated about 25 tons per day. J. Luchman was mining engineer and manager. J.M. James was mining captain.

By 1898 the shaft reached a depth of 434 feet, the mine had over 2,000 feet of drifting, the longest drift being 400 feet. On the seventh level drifts were being run down on each side of the shaft.

Henry A. Pringle was manager until October 1898 when John F. Meiville took over. John M. Jones was mine captain and W. H. Rudd, cyanider. The total force was 52, including 24 miners. There were 4 shafts. The main shaft was 6 by 10 feet and was 374 feet in depth, air shaft was 34 feet deep, west vein was 72 feet, and camp

shaft was eighteen feet.

Since 1895, a total of 84,991.44 dollars was taken out of the mine. 77 acres of land and 123 acres of water rights were included in the claim.

The mine was closed during October 1899. The option expired in the spring of 1901. The shaft reached the depth of 475 feet. The total force was 50 men; 16 to 18 miners.

The Regina Gold Mine Limited in 1902 sold out to the Black Eagle Mining Company Ltd. due to insufficient capital. The mine was then called the Black Eagle. The main shaft reached a depth of 535 feet. The erection of new works occurred. Additions included a new mining school house and a private dwelling. The class was held in a hall used for religious services and social gatherings. The total enrollment was 48, and the average attendance was 22. One illustrated lecture was given, at which the attendance was 50. Employees numbered 71; 42 miners. J.M. Jones was foreman. Tom Trethway became general

manager after F. Peterson left.

In 1905 the Black Eagle shut down temporarily for the overhauling of the machinery; approximately six weeks. Eighteen men were employed with steady work throughout the winter. The Black Eagle was sold to an English syndicate for \$100,000 in 1907. The shaft was then sunk to a depth of 545 feet, and nine levels were opened up at intervals of 60 feet. A vein of principally quartz and gold was also found on this property. There was a 40 stamp mill. Cyanide was used in recovering the gold.

The total production between 1902 and 1905 was \$500,000, In 1908 the mine was briefly reopened by Lieutenant Wilkinson. The mine was involved in litigation from 1908 to 1923 and remained dormant. The mine was dewatered and examined in 1924, 1929, and 1931. There was a two-compartment shaft of 560 feet with nine levels and 3,560 feet of drifting. Between June and December 1932 it was again dewatered in anticipation of more active

development, which did not materialize. Repairs were made to the surface plant. An air compressor was installed to replace the obsolete equipment. Five men were employed under George Miller.

Horseshoe Mines Limited, in 1933, sunk a winze from the bottom level at 550 feet down. Twenty-five people were under the direction of George Miller. W.A. Lamport was president of the company.

Operations of the Horseshoe mine were carried on from July 1933 until February 1934. During July and August the mine was dewatered and a small amount of work was done following which operations were again suspended due to a financial group of Toronto men withdrawing after advancing \$40,000 for development, feeling that it would take considerable further money to attain their objective. The Horseshoe resumed operations in 1935. Financing was from a syndicate formed from New York. The principal vein was opened up to 565 feet and almost 4,000 feet of lateral work was done on the nine levels.

Work was carried on from September to December and was then suspended. Repairs were made to the buildings and shaft. A geological survey was also taken. There was a crew of 9 men under W. R. Williams who succeeded Frank Williams. By September 1936, 55 men were engaged to work. The workings had a depth of 700 feet. There was a 40 stamp mill, with a small ball mill and classifier. Because of the shaft being re-timbered, ore was drawn from stopes left from earlier operations.

The Kenland Gold Mines Ltd. was incorporated Feb. 1929. It had six claims, which amounted to 308 acres. Operations resumed in July 1936 and continued until June 1, 1937. A new mining plant was installed and new buildings were erected. Exploration work was done on 8th, 9th, and 10th levels. The new buildings erected included a shaft- house, headframe, 2 bunkhouses, cookery and office. The shaft on number one vein was 547 feet. There was 4,327 feet of drifting done. 20 men were employed; 10 underground. J. M. Thompson was manager. A new cyanide mill was

installed and a new deisel engine was purchased. Feb.2, 1937 there was a complete reorganization of the company, new financing, a new board of directors and a new mine program.

Goldwood Gold Mines, incorporated in Feb. 1938, acquired property from Kenland Gold Mines. The shaft had ten levels, two compartments and was 547 feet deep. In Dec. 1940, J.D. Shannon obtained a three year lease on the property. At the end of 1941 the mine was allowed to fillwith water. The mill operated from Feb.20, 1942 to May 31, 1942 treating 500 tons of old tailings pumped from the lake. J.D. Shannon was in charge and nineteen men were employed.

In one report General Wilkinson summed up the advantages found at the Regina, most of which could have been claimed equally as well by many other mines in the district. He wrote in 1899:

"The climate is the most invigorating and healthy in the world. The water is ofcourse unlimited in quantity, and is sweet and soft, leaving no crust in the boilers. It is 15 feet deep close to the mill wharf, allowing the largest lake steamers to come along side. Fuel is very cheap, close to the mill and inexhaustable in quantity. Mine timber of all sorts is also excellent, close at hand and very cheap, being only of cordwood value. Communication with the Canadian Pacific Railway is rapid, easy and ⁱⁿexpensive. Labor is good, chiefly from the Sudbury (nickel-mining) district, and not very expensive. Food is abundant, excellent and very cheap; the largest flour mill in Canada is on the banks of this lake at Keewatin. Powder good and cheap. Steel, iron, lime, cyanide, zinc, tools and mining supplies of all sorts are to be had at reasonable rates delivered at the wharf at Rat Portage, four and a half hours from the mine."

Regina 1896 Visit by A. Slaughter, Inspector of Mines

On Saturday July 11th, in company with Lieutenant General Wilkinson, the managing director, Mr. R. Huntley, the chief engineer, and others, I left Rat Portage to visit the Regina mine. In the afternoon we boarded the small steam yacht Squaw, which the General had recently purchased and completely refitted for the company's service. She was built at Ottawa in 1891, is 60 feet long and 13 feet beam over all. She can carry 16 tons of cargo and steam at from 10 to 12 miles an hour, is fitted with a pilot house in front of the engine, and has a large hatchway in the bow, giving easy access to the forward hold. Aft the engine is a commodious cabin, above which a spar deck will be constructed. With this boat a double journey to Rat Portage and back to the mine can easily be completed in one day, the distance being 45 miles by water. The cost of the craft was about \$4,000. This was her first trip made in the Lake of the Woods, and after we had enjoyed a beautiful run of two or three hours a blinding tornado of wind, rain and hail of over an hour's duration swept down upon us, causing the Squaw to rock and roll by times as though drunken; but she bravely outrode the fearful raging storm, showing no symptoms of weakness nor signs of foundering. The verdict of the passengers, of whom there were several besides the crew, was decidedly given that she is seaworthy. With the clearing up of the sky the remainder of the run was made rapidly, arriving at the dock of the mine late in the evening. The shrill whistle of the little steamer had given the signal of our coming, and several small boats, filled with the workmen, had pulled out in the bay to give to the General a hearty welcome on his return, after an absence of several days. The storm with unabated fury had swept up the lake and over the point of mainland jutting out into Regina bay on which the mine is situated, levelling many of the trees which had been left standing, unroofing some of the dwellings, breaking loose the dock and causing general confusion for a time in the camp, but no serious accidents occurred.

Regina Mine.

The Company's steam yacht Squaw.

I was provided with comfortable lodgings in the residence of Mr. Robert Huntley, chief engineer, to whose genial wife and daughter I am especially indebted for the enjoyment in their home of the quiet Sabbath rest. It may be stated in honor of General Wilkinson that besides his repute for kindness and integrity he conducts a religious service every Lord's day in the dining-room for the benefit of the workmen, to which all are welcome.

Monday and part of Tuesday were occupied in examining the mine, the mill and outside work, and on Tuesday afternoon, in company with the general manager, Captain Jones and two or three builders who had completed their work, we returned to Rat Portage.

Work has steadily advanced at the mine since the visit of the Director last year, whose elaborate description of the property is given in the fifth Report of the Bureau of Mines, p. 180.

The official staff is composed of managing director, General Wilkinson, milling superintendent and assayer, John Teichman, John Jones, captain of the mine, and Mr. Robert Huntley, chief engineer.

Bureau of Mines Report 1896 - Visit to Regina by A.P. Coleman

The buildings of the mine present a very civilized and attractive appearance to voyagers like ourselves coming suddenly upon them from an uninhabited wilderness. The large mill building has been whitewashed, making it very trim as seen from the water, while the fifty electric lights, two of them street lights, gleaming out from the hill side and reflected in the lake, suggest to the wanderer something quite metropolitan. The shaft house and mill are built together down a steep rocky slope close to the water; the boarding house, office and other buildings are a little to the west.

Buildings of Regina mine.

The company. The mine is owned by the Regina (Canada) Gold Mine Company of London, England; Lieut.-General Wilkinson (chairman) acting as managing director. In August Mr. J. Leechman was mining engineer and Mr. J. M. Jones mining captain. Fifty men were employed at that time, including the staff.

A trim little steamer with the uneuphonious name of the "Squaw" brings supplies, etc., from Rat Portage, making the voyage to and fro in a day. My thanks are due to Lieut.-General Wilkinson and Mr. Leechman for their courtesy when we visited the mine.

Mr. Leechman, manager of the mine, has kindly sent me a memo. as to the advance made since August, and this may be included here.

Northward through Reed Narrows to Rat Portage.

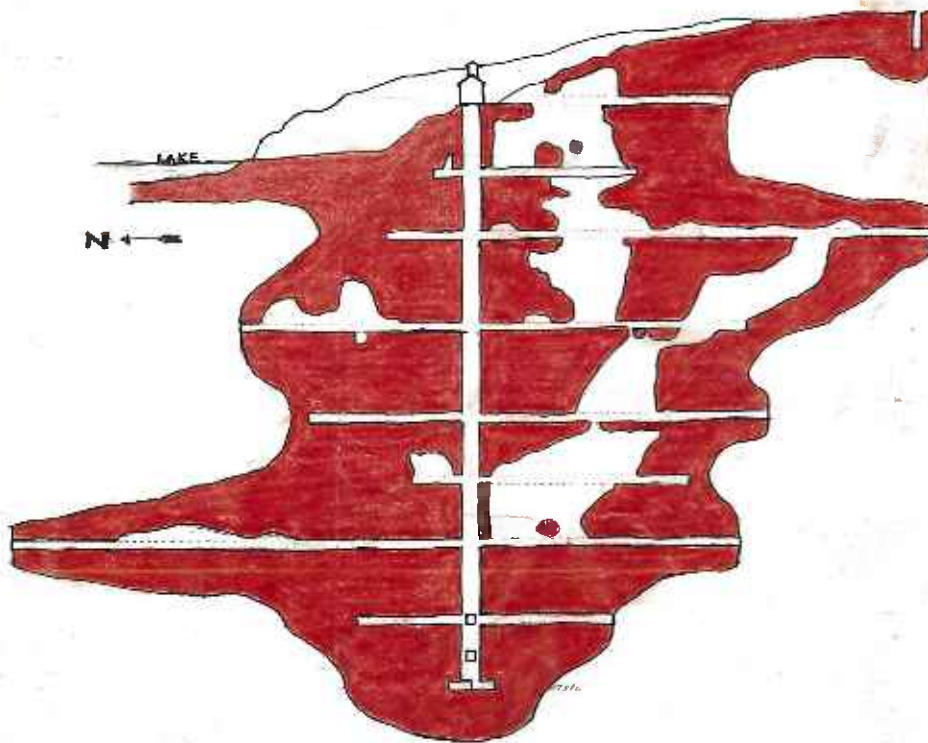
As our supplies were running low we decided to go without delay to Rat Portage to refit. Owing to strong west winds, and a sea too heavy for safety in canoes, we did not go out into Whitefish bay by the Sioux Narrows, but took the northern route, passing the small Hudson's Bay Company's post. There is a small extent of gardening done by Indians on islands and the mainland near by. Indian corn was in tassel and looked well on August 6. Sand cliffs from twenty to forty feet high and banks of stratified silt or silty clay show themselves near the entrance to Reed narrows. The narrows are

scarcely navigable for canoes in low water, the route passing toward the east side of a wide marshy tract. Long bay is a club shaped body of water, the head directed eastwards. It is narrow and straight, affording fairly sheltered water for more than 12 miles, when it opens between low narrow points into Yellow Girl bay, which is wider and partly filled with islands. On one of the islands we found an Indian dancing place, where there were the frameworks of two or three hemispherical conjuring lodges, made of interlaced rods. Inside there were rows of painted wooden pins, two or three feet long, some thick and others thin, like small organ pipes, also bundles of small party colored rods lying on the ground. Slender strips with the upper end bent down supported a piece of tobacco or a feather. Outside of the lodges on each of the four sides there were crossed arches of twigs like the center hoop of a croquet ground. The uses of these appliances neither of our men could explain.

Indian dancing ground and conjuring lodges.

Without further delay we paddled northwesterly, taking shelter where possible behind islands to French narrows, and then northerly to the Devil's gap and Rat Portage, a distance in all of about twenty four miles. There is so wide a sweep of sea at many points on the Lake of the Woods that canoeing in "Peterboro's" should be cautiously done. Rat Portage was reached just in advance of a threatening thunder storm on the evening of August 7.

REGINA MINE 1896



Vertical section of underground workings, Regina mine, Lake of the Woods area, scale 160 feet to the inch. (Ont. Bur. Mines, Vol. IX, p. 45.)

THE BLACK EAGLE MINE.

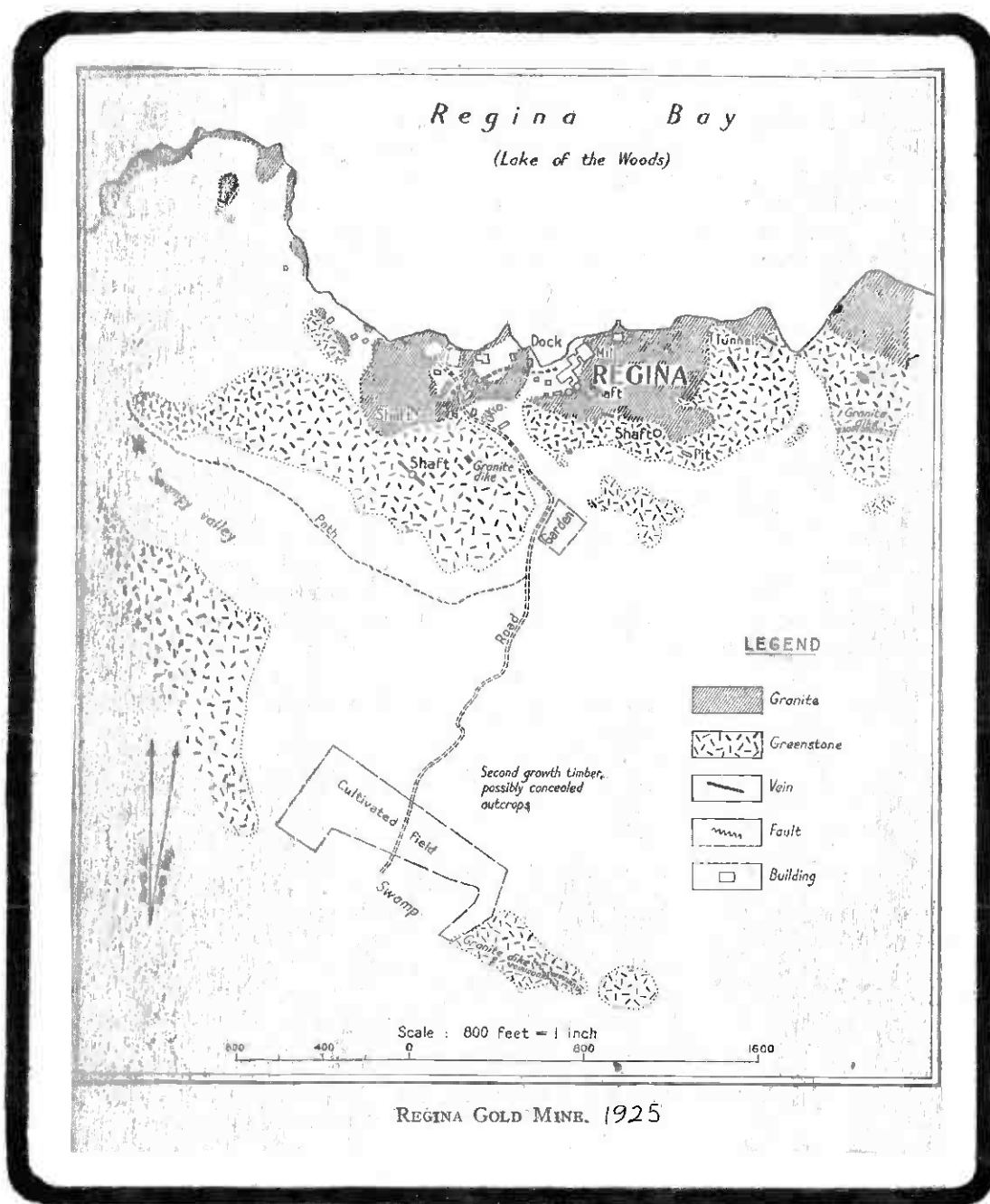
1902

This is the gold mine formerly called the Regina, situated on Whitefish bay. We were met by Mr. Norman McMillan, who welcomed us to his home, where Mrs. McMillan made us comfortable during our short stay. The class was held in the hall used for religious services and social gatherings. A separate building has been put up for the school. The total enrolment was 48, and the average attendance 22. One illustrated lecture was given, the attendance at which was about fifty. Accompanied by Manager McMillan and Capt. Trethewey, we made a lengthy visit underground. There was every evidence of the difficult task undertaken by the present management. The mine had been gutted and left in an almost impossible condition, particularly noticeable being the absence of timber. Several interesting short excursions were made. Just across the bay is the farm of Fred. Caron, guide, hunter, farmer, raconteur. We found Fred's Indian father-in-law weeding the potato patch, and took a snapshot in spite of his protest. Caron entertained us for an hour with stories of his experiences in the woods and on the lake.

On Sunday the whole camp, men, women and children, went on board the company's steamer and started for Whitefish rapids. An organ had been put on board, and the men sang hymns in a way which gave unmistakeable evidence of their being used to this manner of spending the Sabbath. At the Rapids, a beautiful spot, we saw a strange sight, the steamer *Josie*, with scows, etc., a complete mining outfit, being portaged to Whitefish lake to be taken to Flint Lake mine, a prospect being opened up under the management of Mr. Th. Breidenbach. The mine is about eight miles from the Rapids. Above the Rapids are the scows and other property of the Rat Portage Lumber Company. In the afternoon a religious service was conducted by Mr. McMillan, and the spirit of it was excellent. It is to be regretted that he and Capt. Trethewey have not a brighter prospect in the mine.

A pleasant incident, among the many, was a miners' dance held in the school house. At midnight the night shift came up the hill with the candles glimmering in their helmets, very picturesque and quite unpremeditated.

Mr. and Mrs. McMillan made us so much at home and in every way so comfortable at the Black Eagle, that our short visit was terminated with sincere regret. We thank them for their hospitality, and the officials of the mine for many courtesies and much assistance.



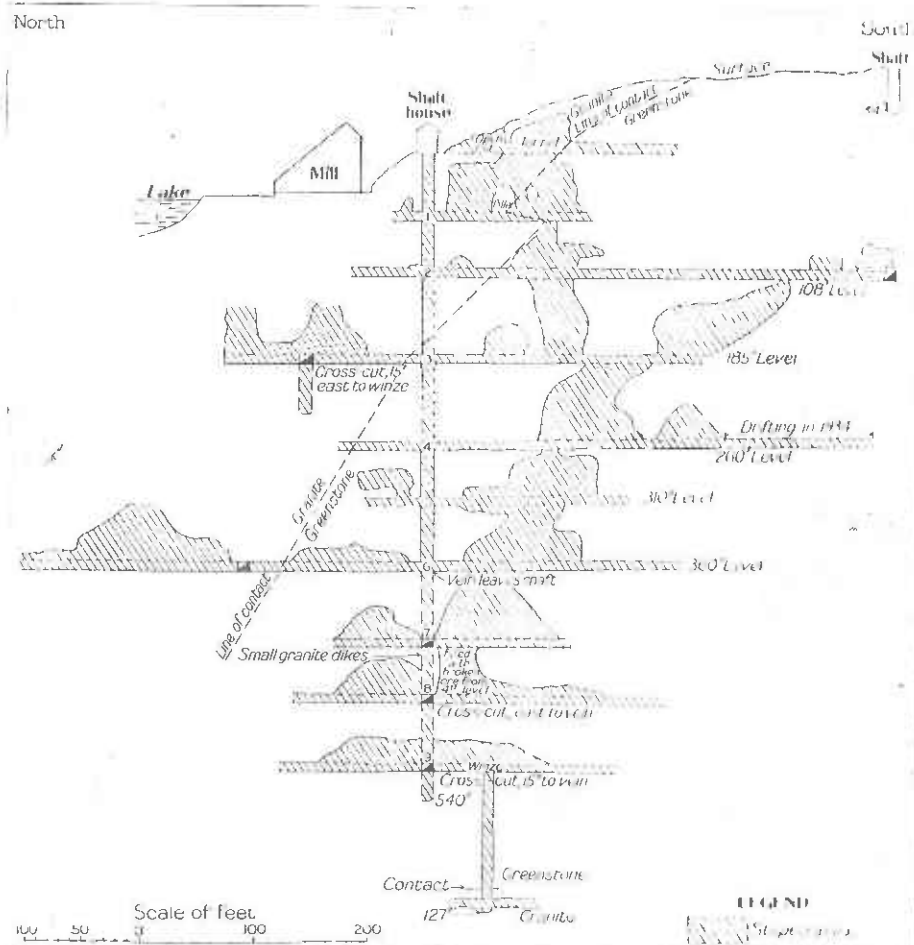


Fig. 2—Vertical section on No. 3 vein, Horseshoe mine, showing underground workings.

Royal

This mine was situated south of the Huronian boundary and east of the Scramble mine. Only two pits were made to a depth of 23 feet in 1898.

*Sabaskong**

The mine commenced active operations on April 22, 1899. The property was composed of locations 1 to 18 inclusive, comprising 2,409 acres. It was located about six miles south of Rat Portage, and was divided from the Sultana Island by an arm of Bald Indian Bay, a strip of water a few hundred feet in width. The property was part of the Indian Reserve 38B.

Buildings were erected on location 17, where testpitting and crosscutting was done. Assays showed a value of \$8 to \$15 in gold. A crosscut was made with the intention of sinking a shaft on the vein. Assays showed an average value of \$27.60.

The miners' wages averaged \$2.15 per day; laborers \$1.50 to \$1.75; mechanics \$2.00 to \$2.50 and \$3.00 per day, out of which they paid their own board.

** Sabaskong Mining Company*

Scotty Island

The mine was located on Scotty Island and was 44 acres. The property was originally owned by Frank Gardiner and George Derry of Rat Portage but was sold in July 1899 to the Ottawa Gold Mining and Milling Co. Ltd.

A vertical shaft (4 by 6 feet) was sunk 65 feet deep. A shaft house and engine house were built.

The total force at the mine was 11 of which 8 were miners.

*Scramble**

The Scramble was located on lots 13 and 14, township of Jaffray. The Scramble was said to be located by a divining rod. In the "Manitoba Free Press Mining Supplement 1899" the writer gave a rather ironical and sceptical view of this legend:

"According to camp-fire tradition Mr. Henry Norman, who appears to be Norwegian with an English name visited the home of his ancestors in far-away Scandinavia. He had with him sundry legal-tender bills, the result of a sale of mining lands near the Lake of the Woods. This was satisfactory to the old folks; but when he explained the laborious process by which the prospectors of West Ontario District find the hidden treasure, a white-bearded sage could control himself no longer, and asked why in thunder they had not used a divining rod. Norman had to confess that divining rods were practically unknown in the western hemisphere, but acknowledged that he should be very willing to take a consignment over when he returned to America, as he felt sure they would be useful and that

** Also known as Canadian Homestake.*

the boys would appreciate them.

It was, however, a bad year for the divining rod apparently, and only one second-hand instrument was in the market. This was secured for the merely nominal sum of \$100, and brought away when the traveller left Norway.

After this, prospecting was robbed of much its terrors for Messrs. Norman and Benson. They simply strolled about, taking no more exercise than was good for their digestion, and yet very shortly located both the Scramble and Black Sturgeon mines. It was supposed the only reason they have not shown up many other gold desposits—is that they fear—glutting a sensitive market..."

The gold was discovered in 1894 by Henry Norman and Andrew Benson. The option was then given to S.V. Halstead of Chatham. Halstead disposed of a large portion of his interests to L.W. Partridge of Detroit.

In 1898 a shaft was dropped to 60 feet with a crosscut of 65 feet made at the 50-foot level. Later that year

two shafts were sunk on the main vein: the main shaft (8 by 10 feet) was 85 feet deep, the number two was sunk 52 feet and then discontinued. 5 miners worked on the sinking of the shaft.

On the property was a sleeping camp, dining camp, two dwellings, a store, dressing room, stable, driving shed, ice-house and blacksmith shop. Mr. Halstead was the manager.

In 1900 the mine was purchased by an English company. It was managed by William M. Strong. Work ceased at the mine for about 13 years, and then the Keenora Mining Co. bought the mine in 1902.

In the latter part of 1911 work resumed under Charles Brent, president and general manager of the Canadian Homestake Mining Company. The mine was operated by electric power from Kenora. Three new veins were uncovered and new machinery was installed (transformer motors). The company continued development work until September 15th, 1914 when all operations were stopped. At that time

the shaft was driven 225 feet deep and timbered to 200 feet. On the 55-foot level a cross-cut was driven a distance of 60 feet. On the 75-foot level a cross-cut was driven 27 feet and a sump cut. On the the 200-foot level a drift was driven 100 feet and a sump cut. Joseph Hicks was in charge of the work.

Sentinel

The mine was owned by the Sentinel Consolidated Gold Mining Company and was situated on the south shore of Labyrinth Bay. The property consisted of W.A. 7,8,9.

The manager of the mine was N.B. Eagen. Two shafts were sunk on WA 7, one 40 feet deep and the other 106 feet. Mr. Hamilton Proudlock was the foreman.

A mill test of 60 tons of ore was made at the Rat Portage Reduction Works. It assayed .11 oz. of gold or \$14 per ton.

Sirdar

The Sirdar was owned by the Toronto and Western Mines Development Co., a subsidiary of which was the Sirdar Mining Co. The manager of the mine was T. Breidenbach. O.R. Smith was superintendent.

The mine was located directly south of the Bullion mine on the shore of Bag Bay.

On the property were 8 to 10 veins, the main one being a continuation of the rich number two vein of the Mikado mine.

The main shaft was sunk to a depth of 200 feet. The company acquired a small steamer "Josie" and built a dock on Bay in 1900.

In 1901 the total work force was 16 of whom 8 were miners, including the Sirdar and Sirdar Point locations.

A duplex hoist was later installed. The mine was abandoned shortly after. It was reported by the Bureau of Mines 1911 that there was evidence that the shaft had been sunk without competent advice.

Sirdar Point

The Sirdar Point mine was owned by the Sirdar Mining Company and was located on Bag Bay, Shoal Lake.

In 1901 the shafts measured as follows: No.1, 107 feet deep with a crosscut 20 feet east at a depth of 100 feet and a drift 4 feet at the same level, full of water; No.2 shaft had a depth of 69 feet (5x9) with a dip of 70 degrees west and was also full of water. Work was going on in shaft No. 3 on the supposed Mikado vein. It had reached a depth of twenty feet (4x8) and was continued.

Diamond drilling had been done on the location for 2575 feet. Nine bore holes were made on the Belt and Mikado veins.

Standard *

In 1897 a shaft was sunk on the No. 3 vein to about 60 feet.

Surface exploration went on during 1935-36 and the old workings were re-opened in 1937.

The mine was renamed Kenecho with Charles Young as managing director. A crew of eight men dewatered the shaft with buckets and then retimbered it to the bottom.

Diamond drilling was done under Henry Norrington for a contract of 2,000 feet which was extended for further exploration.

** Also known as Kenecho*

*Stella**

The Stella mine was located north of the Wendigo on Witch Bay. It was originally owned by the Ontario Prospectors Mining and Development Company. Managing the mine was Neil Campbell. The main shaft near the shore was sunk 51 feet to July 1, 1898. Employed were ten men who were developing two veins. After sinking the shaft that deep (the first contract being completed), the contract was then let for another 51 feet. This contract was not completed however. No.1 shaft reached 60 feet before it was discontinued. No. 2 shaft was sunk to 65 feet and also discontinued. The shaft on No.3 vein was sunk to 127 feet in 1900. The assays ranged \$4 to \$14 per ton. Work was then discontinued.

Work resumed in January, 1901 when a syndicate from St. Paul, Minn. secured a working option. They bought new machinery and the shaft was to be sunk to the 200-foot level and from there exploratory drifting was to proceed, but this never materialized.

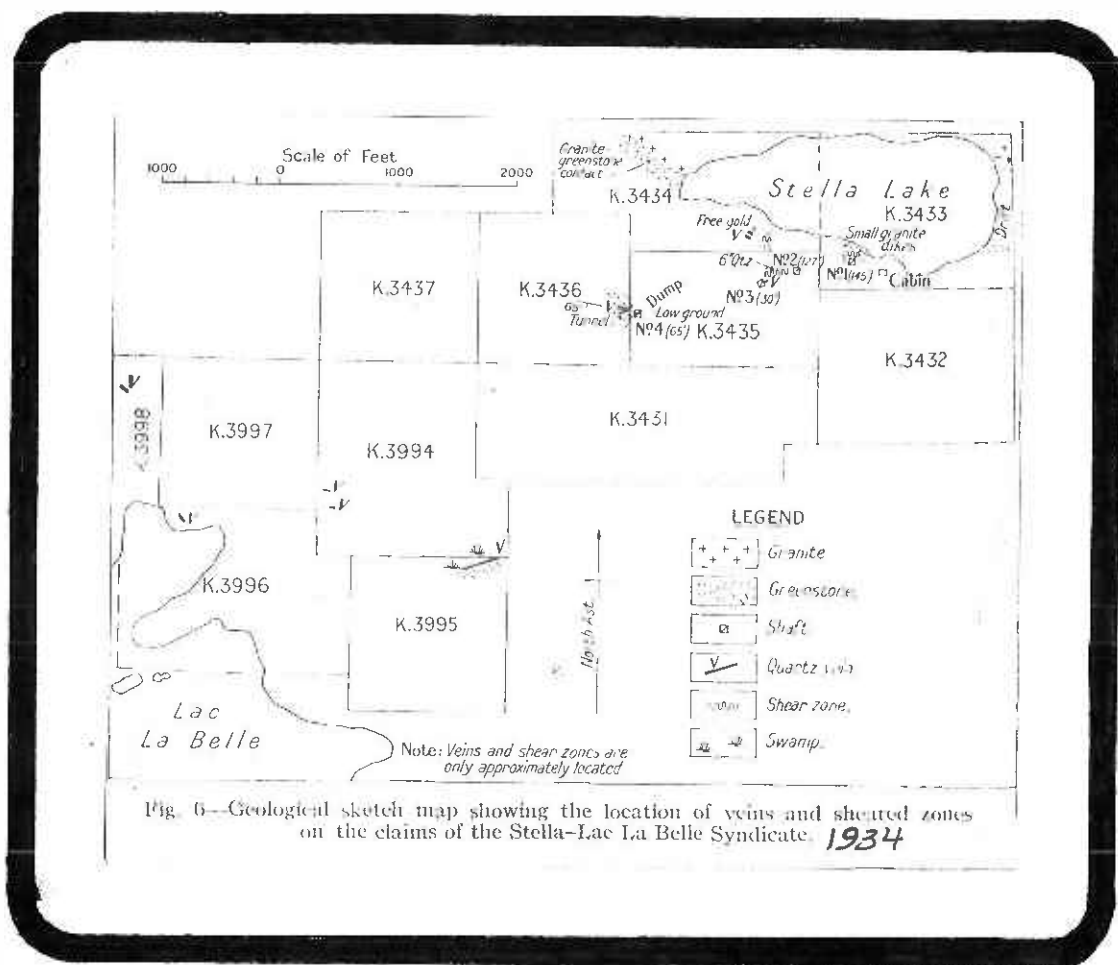
** Also known as Blue Star*

No work was done on the Stella mine until 1934 when the Blue Star Gold Mines Ltd. was formed to take over the property. The work commenced under the supervision of the Wendigo Gold Mines' manager, C.L. Spencer.

Five veins were located and one of the shafts was sunk to 160 feet with some lateral work done.

In 1935 the property was taken over by the Lac La Belle Mines Syndicate but the name Blue Star was retained for the mine.

The mine was shut down in the winter of 1936 due to a lack of funds.



Sullivan *

This mine, located on Young's Bay, Kakagi Lake, was owned by M.P. Wright, C. Stirling and T. Walsh and was discovered by M.P. Wright in August 1896.

Operations started on July 3, 1898. An 8 by 10 foot shaft was sunk half a mile north of Camp Bay.

The general manager was A.B. Whitehead under whom were six miners all working in the shaft. The main shaft was sunk 62 feet in 1898.

Built on the property was a sleeping camp, dining camp, powder house, stable, shaft house, and blacksmith shop.

** Also known as Wright Claims*

Sultana

The Sultana was one of the most famous mines on the Lake of the Woods. It was situated approximately six or seven miles south-east of Rat Portage on Sultana Island on Bald Indian Bay.

A patent was issued by the Indian Department in November 1888 to H. Bulmer, Jr., J.H. Henesy, C.A. Moore, and Dr. S.S. Scovil. There was some dispute as to the ownership of the property because Sultana Island was connected to the mainland (Indian Reserve 38-B) when the water was low. In court action the Indian claim to ownership was disallowed, the site being declared an island and not part of the mainland reserve.

A dispute also arose between the provincial and federal governments who both claimed jurisdiction over issuing patents for the mining claims. The provincial government Patents were upheld by the Privy Council.

The first owners were a group of 15 known as the Ontario Mining Co. but they were never incorporated.

This company then transferred the property to G.F. Galt and J. Galt of Winnipeg and Bulmer and Hart of Montreal. They commissioned a mining engineer of New York to examine 27 acres of property.

The property was then sold because of the adverse report of the engineer. John F. Caldwell of Winnipeg purchased the property in 1890 despite the report.

Operations commenced in the summer of 1892. Three small veins were discovered. A shaft (12 by 7 feet) was sunk to 30 feet on the number two vein. Ore from this shaft was valued at \$3 per ton. A shaft was also sunk on number three vein 100 feet deep.

A stamp mill was built in December, 1892. The total cost was about \$30,000. 12 miners, 1 blacksmith, 5 mill men, and 2 cooks were employed, their wages being \$3.00 per day with board.

The mine temporarily closed down in 1894 due to the excessive water seepage into the shaft. New machinery was installed including a steam hoist, steam pump, air

compressor, and new drills. A new shaft house was also built to enable the handling of larger quantities of ore.

The main shaft (7 by 18 feet) was 200 feet by 1895. The first level was at 66 feet, the second at 126 feet and the third at 190 feet. The number employed at the mill and mine was 40, including 25 miners, 4 trammers, 3 blacksmiths, 2 engineers, 2 firemen. Work was carried on by day and night shifts of ten hours each.

In August of 1896 the shaft reached a depth of 280 feet with a 90 foot drift. A chlorination plant was put into operation to treat the tailings. An average of 50 men were employed at the mine. Over all, 1000 feet of drifting was done.

New buildings were erected among which were a boarding house and a sleeping camp.

In 1898 the entire milling and hoisting plant was renovated. The main shaft was sunk to 352 feet. Other developments on the property consisted of the construction

of a new shaft house and two tram ways, one to the mill and the other to the rock dump. A sawmill was also constructed by Mr. Kendal of Rat Portage.

Later 1898 the old stamp mill was replaced by one with 30 stamps which had a capacity of treating 80 tons of ore per 24 hours.

In 1899 the agent for the mine was M.T. Hunter, the chlorinator, C.G. Rothwell; mine captain, Albert Johnson and mill superintendent, James Gale. The total work force was 75 (including 39 working underground) in the summer, and 65 in the winter.

The shaft was sunk to 400 feet. The buildings on the property consisted of private dwellings, sleeping camps, boarding houses, stables, blacksmith shop, assay and general office, dressing room for the miners, ice house store house and powder house. A small dynamo supplied the electrical power to the mill and other buildings.

A small steamer was also purchased by the company. The machinery installed at the mine was as follows:

a sizing screen, a Gates crusher, 6 5-stamp batteries, 6 challenge ore feeders, 6 mercury traps, 6 Frue vanners, and a clean-up pan. The stamps weighing 850 pounds each, dropped 8 inches 92 times a minute in the standard order, namely 1, 5, 2, 4, 3. Power was supplied by two 100 h.p. and one 75 h.p. boilers and a 110 h.p. Corliss engine.

The mine was sold in 1900 to the Sultana Mine of Canada Ltd. which was incorporated in 1899.

Operations were confined to the main shaft which was dropped to 461 feet.

New buildings erected on the property included a machine shop, manager's dwelling, mill superintendent's dwelling, sleeping camp, and three private dwellings for employers.

The mine captain was Albert Johnson. The mill superintendent was Alex Cotter. 85 men were employed including 30 miners.

During 1901 two accidents occurred at the mine involving

four men, three of whom were killed and one injured. Both accidents were the result of dynamite explosions.

The Report of the Bureau of Mines 1901 lists the total depths of the shafts: Main shaft, 545 feet; Galena shaft, 164 feet; Crown Reef shaft, 143 feet; Number three shaft, on Pasha vein (full of water) 76 feet.

By 1902 the scale of operations had decreased somewhat. Only 31 men were employed, 16 of whom were miners. The main shaft was sunk to a depth of 754 feet connecting at 726 feet with the winze from the second level of the Crown Reef vein.

Two wood barges with a capacity of 40 cords were built.

The mine was then shut down because of the lack of funds. The company thought the vein had faulted and after much searching in vain they discontinued operations.

In October 1903 Mr. J.F. Caldwell discovered the "lost" vein and then reorganized the Sultana Gold Mine Ltd. which was mainly controlled by Rat Portage people.

J. Johnson was the mine captain and J.F. Caldwell was

managing director. 15 men were hired to unwater the workings.

The mill only ran part time in 1905. Water was allowed to fill the mine from the 8th to the 4th level, because development was confined to the 2nd and 4th levels. 30 men were employed. Despite the discovery of the "lost vein" the mine was closed down in the summer of 1906.

During the time the mine was in operation it was estimated that one million dollars worth of gold was extracted, the largest yield from any gold mine in North-western Ontario in the early days.

Although the mine was closed, a caretaker, Mr. Richards, was kept out at the property.

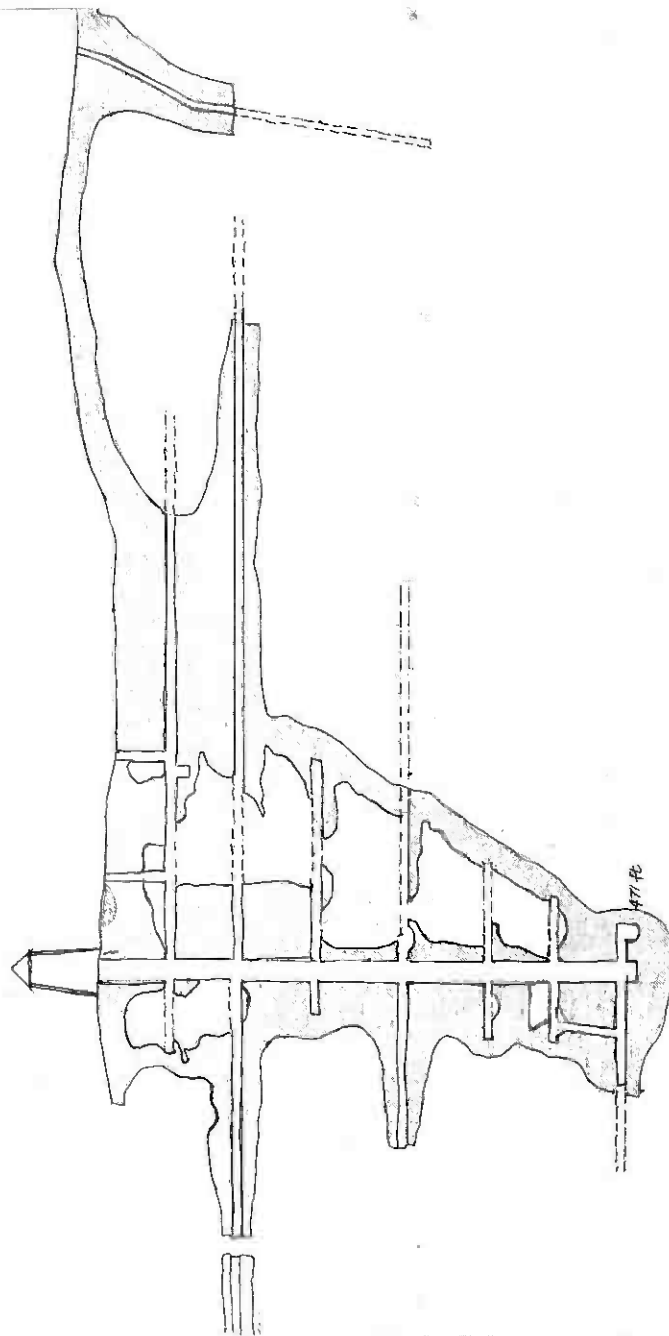
In 1934, however, interest in the mine was regained. A company called the Ventures Ltd. secured a large interest and undertook examination of the property. It was felt that due to the modern methods of recovery, gold could be extracted from the dump and the tailings of the old workings.

In the summer of 1934 Selected Canadian Golds Ltd., incorporated in March 1932, obtained an option on the property.

Twenty men were engaged in an overhauling of the shaft house, replacing timbers, testing the old boilers and dewatering the shaft. Houses were also put in shape for the accommodation of the men. Over 1800 feet of diamond drilling was done.

C.W. McDonald was manager of the mine.

SULTANA MINE 1921



Underground workings of the Sultana, Lake of the Woods area, scale 170 feet to the inch. The shaft is now 600 feet deep and a drift on the third level has reached the Crown Reef vein, 750 feet from the main shaft. where some ore was stopped.
(Ont. Bur. Mines, vol. IX, p. 39.)

1925

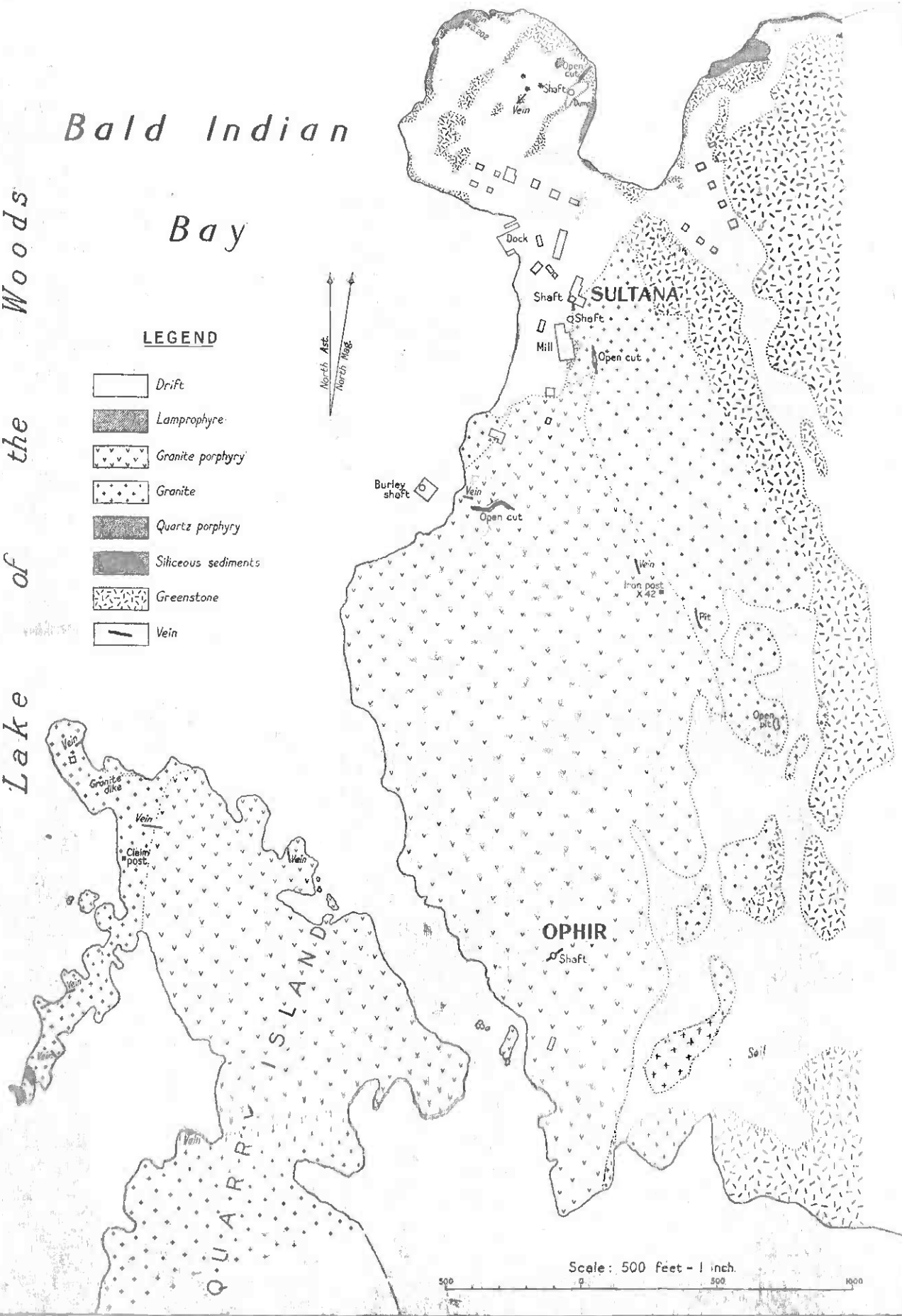
Bald Indian

Bay

Woods
the
of
Lake

LEGEND

-  Drift
-  Lamprophyre
-  Granite porphyry
-  Granite
-  Quartz porphyry
-  Siliceous sediments
-  Greenstone
-  Vein



Scale: 500 feet - 1 inch.

(First of a series)

The Sultana Mine

The Sultana gold mine was shut down around 1912 after a dispute between Burley interests and the Sultana owners.

Carl Holm, who has recorded several stories of the early history on the Lake of the Woods says that the Burley Mine was located on a water claim and operated from a crib located about 75 to 100 feet from shore on a gold-bearing vein called the Crown Reef vein. The dividing borderline likely was the shoreline. The dispute was that one or the other was using the ore from bordering properties. There is an open cut that runs east about 100 to 150 feet, then curves to the south.

The ore from this was dumped through an opening in the floor, about 75 feet from shore and chuted down to the fourth level and trammed 1,000 feet to the shaft and hoisted to the surface.

All the ore from the open cut was stooped out also and there are some good sized caverns there. A caretaker had looked after the mine until the fall of 1934, off and on.

In 1934, recalls Mr. Holm, a young engineer by the name of McDonald from Falconbridge, and working for the Venturers Ltd. came up to Kenora and arrangements were made to hire a stationary engineer and other members of a crew needed to pump out the Sultana Mine.

A boat was rented from Percy Williams for transportation to and from the mine. The first thing on the agenda was to have the boilers inspected and tested.

A man by the name of Kelly came up from the east to do this. A gasoline powered water pump was borrowed from the Lands and Forests to wash out the boilers and the workmen also used this pump to test the boilers to 100 lbs. cold water pressure.

Mr. Holm who was working at the mine, said they were allowed 70 lbs. steam pressure per square inch and the inspector provided them with two seals to attach to the safety valves, but as the method of setting the safety valves was to slide a weight on a horizontal bar, there was no way of fastening the seals and that enabled them to eke out an additional 20 lbs. per sq. in. hoping that the boilers wouldn't blow.

There was some minor repairs to the fire brick linings and some replacement of pipes also. An ore skip that held about 325 gallons was converted into what was termed a torpedo bucket. Joe Hughes came out from Stone Boatworks with an acetylene torch and cut a rectangular opening in the bottom of the ore skip, about 18 x 30 and a valve was built out of two inch lumber, working on hinges and a chunk of casting bolted on top.

When the skip was lowered into the water the valve was forced open, the skip filled and when hoisted the valve closed.

There was an elevated tramway between the shaft house and the stamp mill, upon which the ore had been transported to the crusher by an ore car pulled by a small winch located by the crusher. The ore car was still there, but the cable had been disconnected and the winch removed. The skip was secured to a timber by a cable.

The timbers and posts in the tramway were rotten so the stringers were sawed off at the shaft house and the stamp mill. The whole thing was then pulled down. Some of the material was usable and the lumber salvaged from the partially tumbled

down houses in "Swede Town". This was used to construct a box to house the steamline from the boiler house to the hoist in the shaft house. This box was later filled with sawdust after the steam line had been constructed and covered with boards. The steam line was made of four inch pipe, cut and threaded in a hand-operated die which was found on the property.

The die was operated by a ratchet and Mr. Holm recalls that he personally cut and constructed the steam line under the supervision of the maste. mechanic. A kind of swing-joint was arranged where the pipe was connected to a horizontal pipe emerging through the boiler house wall so that when the steam line expanded the elbow that was attached to the horizontal pipe would turn slightly.

When everything was in order the workmen started bailing. A skip dump had been moved down from where the ore skip was dumped to about 12 feet from the floor of the shaft house and what was called a laundry was constructed where the skip dumped the water and a flume to carry the water outside.

The water level dropped fairly fast until they were past the second level because the stoops and tunnels were not very extensive at this depth. One evening, says Mr. Holm, a distress call came from the hoistman on the night shift. It was found that the cable on the hoist drum had worked apart and the cable would jam down and the cable itself was threatened.

A discussion was held about how to overcome the trouble. There were two alternatives. One was to block the skip on top of the shaft opening and pull the

cable out on the ground and rig up some way of keeping a brake on the cable.

The other was to lower the skip down the shaft and hope that it would not get snagged somewhere. There was some argument and finally the boss said, "Okay, drop her down, but if we lose one skip you are fired, every damn one of you."

The hoistman lowered the skip some distance and finally it stopped. He said "I believe we have a chair here." There was some cable to come off before we could get at the trouble spot so more cable was dropped hoping that it wouldn't get snagged somewhere. At last it was in a position where re-winding was possible. Two men with hammers guided the cable on the drum as it revolved. Some of the men hung on by the shaft until the weight of the skip took hold. This cable was replaced later on with a $\frac{3}{4}$ inch cable and no further trouble was experienced.

The chair mentioned was a heavy piece of iron about 2 x 6 and about six feet long and attached at the bottom by a heavy pin, through the iron, working in two eyebolts, fastened to the rock wall under the floor and supported at the top by two heavy chains fastened by eye bolts in the rock about three feet on each side of the centre. This chair is controlled by a cable attached to the top of the chair and runs under the floor through a pulley and lever attached to a cable so that the skip tender could lower the chair into position and when the skip was lowered slowly it would come to rest on this chair and the bail on the skip would drop against the rails allowing an ore car to be dumped into the skip. All control cables had rusted away so there was difficulty at every level.

The chair had to be held clear until the water had dropped enough to tie the chair back.

Mr. Holm was operating the boat amongst other chores, and when entering a store in Kenora one afternoon, Oscar Cronlund, who knew something about the mine wondered what progress was being made and was told that the men were getting close to the third level. He said that caution would have to be taken because there was a dam across the drift and if it broke the Lake of the Woods would come tumbling in. During the earlier operation, a miner driving a tunnel at the third level was blasted by a stream of water from a hole he was in the process of drilling.

The bailing continued and when the tunnel was dry enough the engineer went in to have a look and there was no sign of any dam or bulkhead there. Evidently it had been a pocket that had been struck and it finally petered out and the dam was removed. A dynamite box was found at the scene. The dynamite had all dissolved over the years.

Thor*

The nine Thor claims were staked in the summer of 1936 by M.J. Thorarinson, who did the testpitting on the property.

In March 1937 operations resumed on the claims located a few miles west of the Wendigo mine in Andrew Bay. A vein was discovered that ran under the lake. Assay values were reported to be high. In June 1937 the prospect shaft (23 feet) was extended.

Claim 5135, where most of the work was concentrated, was owned by Charles Graham and Arthur Gauthier. Thor Syndicate optioned it and owned the other eight claims outright.

** Thor Gold Mining Syndicate*

*Three Friends**

The mine was located 5 miles from Three Ladies Mine, on which a rich desposit of ore was discovered. The shaft reached a depth of 45 feet during 1890.

The Clearwater Bay Syndicate in 1936 bought 15 claims (K.4, 246-K.4, 260) located on the south side of Clearwater Bay. This included some old workings which were known as the Three Friends mine when originally worked.

Two well-defined ore bodies, 50 and 60 feet wide were uncovered and traced for sveral hundred feet. The assays ranged from \$3.30 to \$26.80. Test pits were sunk across the two discovered vein structures. Joseph Fredute was president and J. McDonald was manager. 8 veins were opened by stripping and blasting. The main vein (number four) had values from 70¢ to \$18.20.

In 1937 the Kenjo(e) Gold Mines Ltd. was organized to carry out exploration work on a group of 23 claims located 2 and a half miles west of Kenricia, 12 miles west of Kenora. The property included 15 claims formerly owned by Clearwater Bay Mining Syndicate and 8 newly-staked

** Also known as Kenjoe, Kenjoseph, & Clearwater Bay Mines.*

ones. A crew of two men and A.G. Brown, prospector, did some sampling of the showings so far opened up.

In March 1937 the name was changed to Kenjoseph Gold Mines Ltd. to avoid confusion with other mining companies having similar names to Kenjoe. In April trenching was carried out under F. Zeemal, the mine foreman.

*Three Ladies**

The Three Ladies was a 50 to 60 acre location on the main land bordering Clearwater Bay. Two veins were opened up and traced for 600 feet; in 1896. A smaller one was stated to be from 20" to 3 feet in width on which two shafts were sunk 48 and 57 feet respectively. The other vein was 150 feet distant from the former. A shaft was sunk 30 feet showing the width of the vein to be 6 feet. The property was bought for \$7500 by Oliver Daunais, owner of the Non Such Mine. Daunais made a considerable stake in the early 1890's in the vicinity of Port Arthur and Fort William, which earned him the name of "Silver King." Later he disposed of the property to Phil L'Heureux and it was then optioned to C.W. Greenland, a prominent mining engineer, who interested Joseph Errington in the proposition.

In the summer of 1935 an important gold discovery was made on the property. The main workings on claim P.211, which is a peninsula located at the northeast

**Also known as Kenricia*

corner of Clearwater Bay, about a mile south of the Trans-Canada Highway. The company, at that time, owned a group of 12 unsurveyed claims adjoining P. 211. During the summer of 1935 the mine was optioned by Joseph Errington and C.W. Greenland. Kenricia Gold Mines Ltd., was formed to finance underground development, which commenced in 1936. By September 1936, the shaft was down to 500 feet, with other levels at 200 and 350 feet. The headframe was of B.C. fir construction. The bunkhouse measured 84 by 30 feet and contained 30 double bedrooms on its two floors, with washrooms etc., on each floor. It was steam heated and had electric lights. Buildings erected included a power house and a hoist room, blacksmith shop, dry-house, pump-house, warehouse, office, cookery, and powder magazine. 65 men were employed, 6 underground, 40 on construction under David A. Duff. claims consisted of K.5, 613; 6, 376; 5, 537; 5, 536; 5, 484; 5, 476; 5, 481; 211 P.

Operations continued until Dec. 8, 1937 when the plant

shut down temporarily to build a 100 ton cyanide mill on the property. The shaft reached a depth of 383 feet with two levels. 46 men were employed.

The mine was idle during 1938; but workings were kept dry. Power was obtained in November and the mill foundations were completed. In 1939 power was taken from the line constructed by the Winnipeg Electric Railway Company from Seven Sisters to the Kenora Paper Mill. Work with the electric power was started on the shaft allowing it to sink to new levels. 49 men were employed.

*Toronto & Western**

The mine was located in Shoal Lake adjoining the Mikado on the east and a quarter of a mile from Bag Bay. It consisted of lot D410. The manager was Mr. John T. Moore, and the foreman was Mr. H.F. Downing. A force of 12 men including 8 miners were employed. The shaft reached a depth of 120 feet, another shaft, 200 feet away, struck a depth of 57 feet.

** Toronto & Western Company*

Treasure

The Treasure was located about seven or eight miles east of Rat Portage and two miles southwest of Rossland Station. It was owned by Messrs. Webster and Angell in 1893. By 1898 the mine was worked. The shafts on the two main veins were down 60 and 50 feet respectively. The mine was under the direct management of Mr. A.B. Upton, who also owned it. Originally the force at work was small, the aim being to test the property before getting it in shape for more extensive development. The shaft development reached a depth of 100 feet. A mill run of 33 tons of ore yielded 29 oz. of gold, valued at that time, \$525.25 or about \$18.25 an ounce. The mill run was made at the Keewatin Reduction Works. The ore used to be taken from an open cut on a 16" vein of quartz located in solid granite. By removing the quartz, it was felt, granite became mixed with the ore reducing the output of gold per ton. The granite on each side of the vein yielded free milling gold to

the extent of \$3 per ton.

The Treasure Mine was located on lots 400, 409P, making up 80 acres. In 1900 it was still owned by A.B. Upton. George Tennant was the foreman . There were 4 miners employed and the boarding camps were included.

The shaft was 100 feet deep but full of water. In 1940 interest in the Treasure mine was revived briefly. Roy Picard was in charge of the exploration work.

Triggs

This mine was located east of Witch bay, on three locations McA56, 129, 148 on 113 acres. It was owned and operated by the Triggs Gold Mining Company of Ontario Ltd. The president was F.D. Sargeant. The work had been going on since October 1897 under the management of J.H. Triggs, secretary of the company. The shaft was sunk 80 feet. The force consisted of 3 miners and a cook.

By 1899, the property consisted of Mc56, 129, 130, 134, 189, 190-280 acres. The vertical main shaft was 150 feet. The first level was at 108 feet. Cross-cutting and drifting occurred at the 200-foot level. Buildings consisted of a shaft and engine house, blacksmith shop, stables, office, boarding camp, store house and dwelling house. There were 13 men employed of whom 6 were miners.

The Triggs Mine closed down on July 14, 1900 owing to the lack of capital for further development. The ore was treated at the Keewatin Reduction Works. The depth of the main shaft was 225 feet. Number one cross-cut, driven northwest from the shaft, was 58 feet. There was

drifting in the cross-cut at a distance of 51 feet from the shaft. The total length of development work on the property was 826 feet.

Triumph

The Triumph was situated on the Pine Portage Bay. There was a shaft sunk 55 feet in depth in 1896. Large quantities of sulphides were carried by the quartz and some free gold occurred. The quartz at the bottom of the shaft showed a width of 3-4 feet.

The mine remained idle for one year and the original owner, C.S. Morris, sold to E.W. Barnes and A.B. Upton, and in September 1897. They sold it to the Triumph Gold Mining Company. There was a total of 30 veins, and 5 test pits. The shaft reached a depth of 113 feet. A new hoist was set up. There was a new shaft house, ore house, boiler house, mill building, blacksmith shop, dressing room, office, boarding house, and barn. The working force was 10 men oncluding 8 miners. The mine was kept in operation until the latter part of September 1898, when the work was suspended. There was a force of 4 miners with Mr. Joseph Hicks of Rat Portage as manager. The shaft was sunk 226 feet and then discontinued. The property was reached by road, 7 miles form Rat Portage.

Trojan

The Trojan mine was situated east of the Atikiminike Bay (Grassy Bay) on the southeastern side of Whitefish Bay. It was owned by C. Stirling, T. Walsh and M.P. Wright. 7 veins were located in 1897. The shaft on the main vein was sunk 30 feet. The shaft on the number two vein was sunk 67 feet. There were 3 miners, a cook, and a blacksmith. The work ceased for a while after the mine had been sold. In 1899 the operations continued after a two year suspension. The shaft reached a depth of 91 feet. There were new buildings erected; a shaft house, blacksmith shop and hoist house. A duplex hoist with 25 h.p. and a locomotive boiler was also installed. The total force was 10. The mine captain was James Near and the manager was George J. Ross. The number three shaft reopened to a depth of 100 feet with 40 feet of drifting. By June, the number three shaft had reached a depth of 145 feet. D. Morrison was the manager. Two other shafts were sunk. The mine closed down July 12, 1901. All machinery was removed to the steamboat landing. The syndicate who was operating did not get satisfactory results and gave up.

Tycoon

The locations consisted of three islands and one water area surrounding the islands, comprising in all 40 acres.

It was 32 miles from Rat Portage and was situated about three-quarters of a mile north of the Mikado mine on Bag Bay on Shoal Lake.

The Mikado vein crossed the Tycoon Property. The diamond drillers bore the number one hole for the tapping of the Mikado vein, at 120 feet. The bore touched quartz and revealed an ore deposit 11 feet from wall to wall. The average value of the 11 foot vein was 19 dollars in free-milling gold. Bore number two passed through 11 distinct veins. The first seven formed one group, and after going 45 feet of granite it passed through the other four veins. The first seven veins gave an average assay value of \$67.45, free-milling gold to the ton. The second group showed an average of \$68 to the ton. The mine was owned by local men, an organization known as the Tycoon Mining and Developing Company of Ontario, Ltd.

By July, 1900, a working shaft was put down at the 90-

foot level. It was the intention of the company to install and erect a stamp mill with a cyanide or chlorination system. Diamond drilling was started and the sinking of the shaft started. The shaft (5 and a half by 7 and two thirds) was 78 feet deep. P.S. Griffin was manager and J. Downey was foreman. Buildings consisted of a boarding house, shaft house, hoist house and blacksmith shop.

In 1910 the shaft was sunk with a view to intersect the Mikado vein. Later the equipment was removed and the mine was abandoned. Diamond drilling took place in Feb., 1934.

Wendigo

The Wendigo mine was situated on La Belle lake, north of Witch Bay on Lake of the Woods. The property consisted of three locations MH 208-210. In 1900 the property was owned and operated by the Canadian syndicate consisting of Charles Gooderman, Wm. McKenzie, Sir Richard Cartwright, Clarkson Jones, and others.

Mathew T. Hunter was manager of the mine and Isreal Gagne, the original owner of the property, was the mine captain. 24 miners were employed in 1899 to sink a shaft on the main vein.

In 1900 tow shafts were sunk 240 feet apart. The main shaft (7 by 11) was 120 feet deep with the first level being at 50 feet. Number two shaft was 82 feet deep and 7 by 9 feet in size with the first level being at 60 feet. 80 feet of drifting was done to connect the two shafts. 200 tons of ore from development work was shipped to the Rat Portage Reduction Works in barges. It was reported in the Bureau of Mines Report 1901 that the percentage of copper was estimated to be sufficiently high

to pay for the mining and milling of the ore, leaving the gold contents clear profit.

The hoists for both shafts were at the number one vein. A large shaft and crusher house was erected at the main shaft. The other buildings on the property consisted of sleeping camps and office, cooking and dining camps, shaft and engine houses, blacksmith shop, carpenter shop, powder magazine and five private dwellings. A dock was also constructed at the steamboat landing in Witch Bay.

The mine was closed for about year and a half because of litigation and mismanagement. Messrs. Cameron and Heap bought out the mine from the previous owners and settled the dispute in 1902. The pumping out and opening up of the mine took place in March.

In November 1902 the property was taken over by the Chippewa Consolidated Gold Mining Company of Buffalo under the management of Fred Pfau of Rat Portage. Extensive surface prospecting was done simultaneously on the two shafts.

No work was done on the mine between 1903 and 1933. Preliminary work started early in the year and a number of important surface finds were made showing large quantities of free gold. Under C.L. Spencer a new plant, powder house, and bunk house were installed. The old 120-foot shaft was dewatered and shaft-sinking started. 17 feet was accomplished in two months. 19 men were employed, 6 of whom worked underground.

In 1934 an inclined shaft was sunk to a depth of 500 feet. Drifting was done on the 50, 100, 200, 250, 350, and 500-foot levels.

The main shaft was sunk to 200 feet by the end of January 1934. 400 feet of drifting was done east and west of the shaft on the 200-foot horizon. At 130 feet values of \$20 per ton was encountered. 65 men were employed.

In June 1934 Henry Tudor of Boston and Horce Young of Toronto acquired 1,000,000 of the outstanding 1,515,000 shares of the Wendigo Gold Mines Ltd. Mr. Tudor became

president under the new financial arrangement and Mr. Young vice-president and managing director.

By July the depth of the main shaft had reached 350 feet. Average assays from the surface to the 200 foot level ran from .47 to .55 ounces of gold per ton across an average vein width of three feet. Within the limits of the property, on the strike of the vein, there was a distance of 2 miles, a great portion which was covered by swamp and was inaccessible from the surface.

The shaft reached a depth of 518 feet in October. New compressors were installed and a blacksmith shop, office and storehouse were constructed.

The Wendigo, Witch Bay, and Stella mines were operating under the same management with the Wendigo mill treating the ore from the other two properties.

An average of 44 men were employed of whom 12 were underground. They accomplished a total of 1000 feet of underground diamond drilling during 1934.

New levels were opened on the shaft at 200 feet,

350 feet, and 500 feet.

In the summer of 1935 a new amalgamation-cyanidation mill was constructed with a daily capacity of 50 tons. A new crusher house and an addition to the power plant was also made. Also erected was a new headframe for the mine.

Work was held back somewhat by a fire in May 1935 which destroyed C.L. Spencer's home, a large water tower and one hundred cords of wood.

In 1936, 50 men were employed at the mine. Several employees erected their own homes on the property.

During the year the government completed a winter road from the Kenora-Fort Frances highway. The management changed from Mr. Spencer to A.M. Potter, in Oct. 1936.

The mill was changed from an amalgamation-cyanidation mill to a straight amalgamation unit. 71 men were employed, 30 of whom worked underground, and 14 of whom were employed in the mill.

The mine and the mill operated continuously during 1937. A floatation unit was added to the mill during December. The capacity of the mill was 65 tons of ore per day.

76 men were employed, 35 of whom worked underground and 13 in the mill. G.S. Campbell succeeded A.M. Potter as the manager in March.

The Wendigo was the only gold producer in the Lake of the Woods area during 1938 producing ~~at~~ the rate of 90 tons per day.

During the early part of 1939 the shaft was deepened to 833 feet with new levels established at the 575, 650, 725 and 800 feet.

The shaft was then extended to ~~the~~ 1100 foot level with a new level at 950 feet. The mill was handling 97 tons daily of about \$11 grade ore. In November stoping operations began on the 725 foot, 800 foot, 875 foot, and 950 foot levels.

An indication of the growth of the Wendigo Mine townsite was the building of a curling rink and an out-

door skating on the property in December 1939.

During 1939 an average of 102 men were employed including 53 miners and 15 millers. A total of 42, 406 tons of ore was hoisted that year of which the mill treated 34, 235 tons producing gold to the value of \$398, 267.29.

The shaft was carried down to 1700 feet from the 1100 foot level with four new levels established at 150 foot intervals. The new manager was Ken North. A new internal shaft was located 185 feet north of the incline shaft. The production was running \$40,000 to \$45,000 monthly.

The mine continued operations through 1942 but work was suspended in January 1943 and the plant and equipment was offered for sale. When the mine had been closed J.P. Waugh had been manager. 73 men had mined 37, 701 tons of ore.

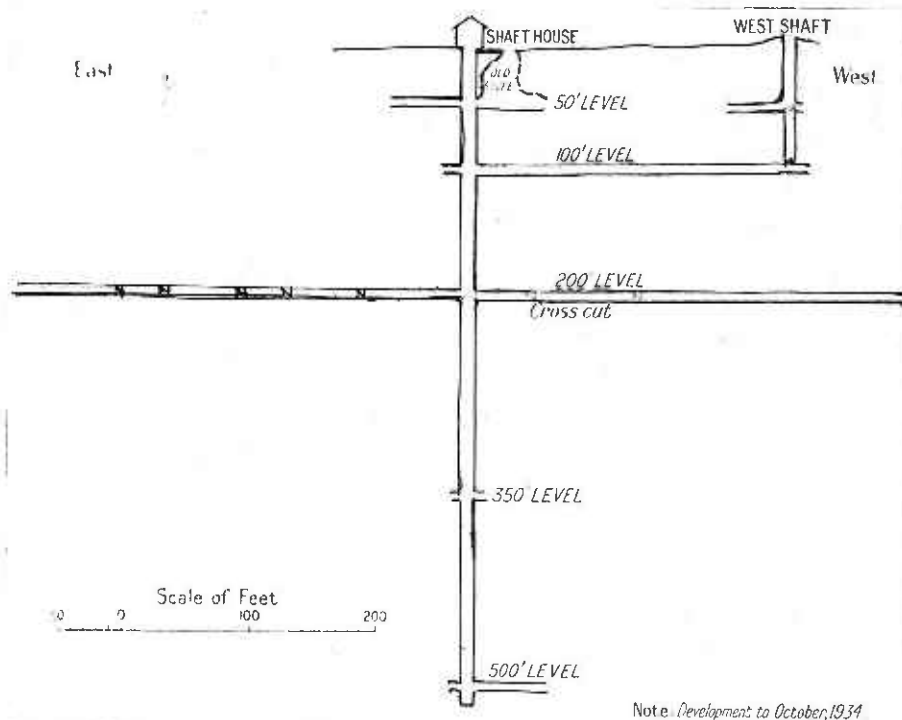


Fig. 1—Longitudinal section in the plane of No. 1 vein, looking south, showing the underground development at the Wendigo mine.

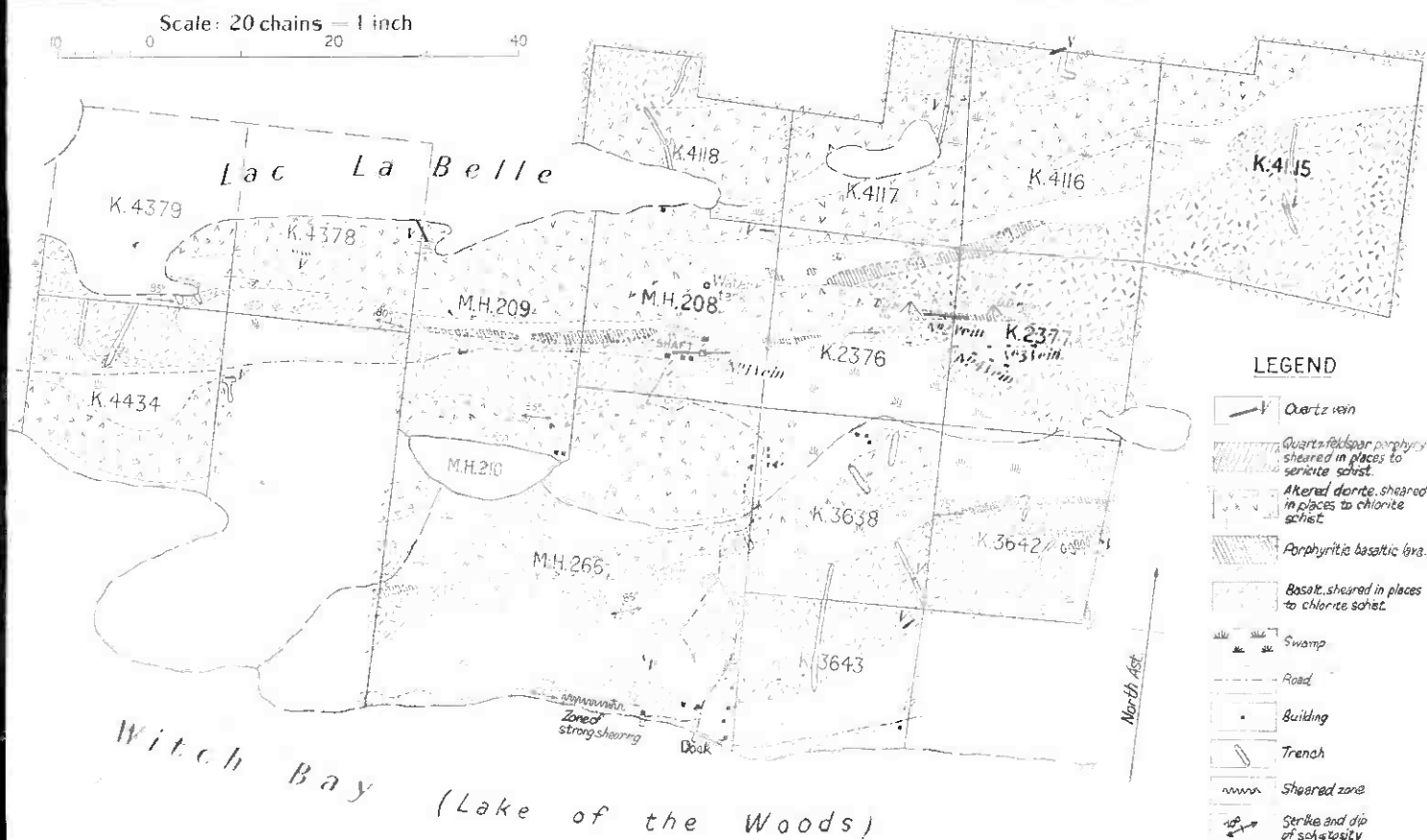


Fig. 3. Geological sketch map of the claims of Wendigo Gold Mines, Limited. 1934

*Westricia**

In 1936 J.H.C. Waite optioned a group of claims immediately west of the Kenricia mine. Surface prospecting revealed a few veins, one of which was found to carry gold values over a length of 400 feet. This lay near the southeastern corner of Inglis Lake on claim K5849. However, since the vein was narrow and gold values were not encouraging the option was dropped.

In Feb. 1937 the Westricia Gold Syndicate took over the claims lying immediately west of the Kenricia which included the Waite claims. A crew of seven men under Paul Schnab and Ed Dwyer did surface trenching and test-pitting. The Westricia group consisted of 25 claims previously owned by N.S. Caswell, Harry Corneillie, Bill Fairburn and Gus Lindbergh of Kenora.

Later in February a new company was organized to replace the Westricia Gold Syndicate. It was called the Westricia Gold Mines Ltd.

** Also known as Waite Claims*

Wilkinson Claims

Little is known about this mine. The claims adjoined the Regina and in the winter of 1898 were being prospected by Messrs. Purchase and Lockwood for the Rand Canadian Syndicate who had a bond on the property. The veins were stripped and exposed for a considerable distance and two shafts were sunk.

Winnipeg Consolidated

The mine was owned by the Winnipeg Consolidated Co.

In 1883 the mine was having financial problems but were temporarily saved by an English Syndicate who bought out the treasury stock of the company for \$90,000.

The manager of the company at that time was Mr. F. Brown. A small inferior 5-stamp mill on the property was used for testing ore only. The crushing house was located on the shore of the lake 500 feet from the pit.

In 1884 the mine closed down because of lack of funds.

Witch Bay

Two groups of claims, one on the east side and the other on the west side of the Wendigo Mines Ltd., were developed by a new company incorporated by the Witch Bay Gold Mines Limited. One group consisted of 16 claims 640 acres. The latter was known as Group B and witnessed considerable development in 1903 when two shafts were put down to a depth of 100 feet and 60 feet.

The claims were taken up by J.H. Cameron in 1932. The vein struck N 85 degrees E, and dipped 45 degrees S. Tow gold values were obtained on the surface. Work was started in August and suspended in December 1934. During that period an old 30 foot shaft on the east group was cleaned out and sunk an additional 15 feet. Some surface trenching was done under F.M. Passow who was in charge of operations. A mining plant was also installed.

The work in 1934 was concentrated on the eastern group. The main showing was located near a small lake claim K4544. Work was discontinued at the property in the winter of 1934-35.

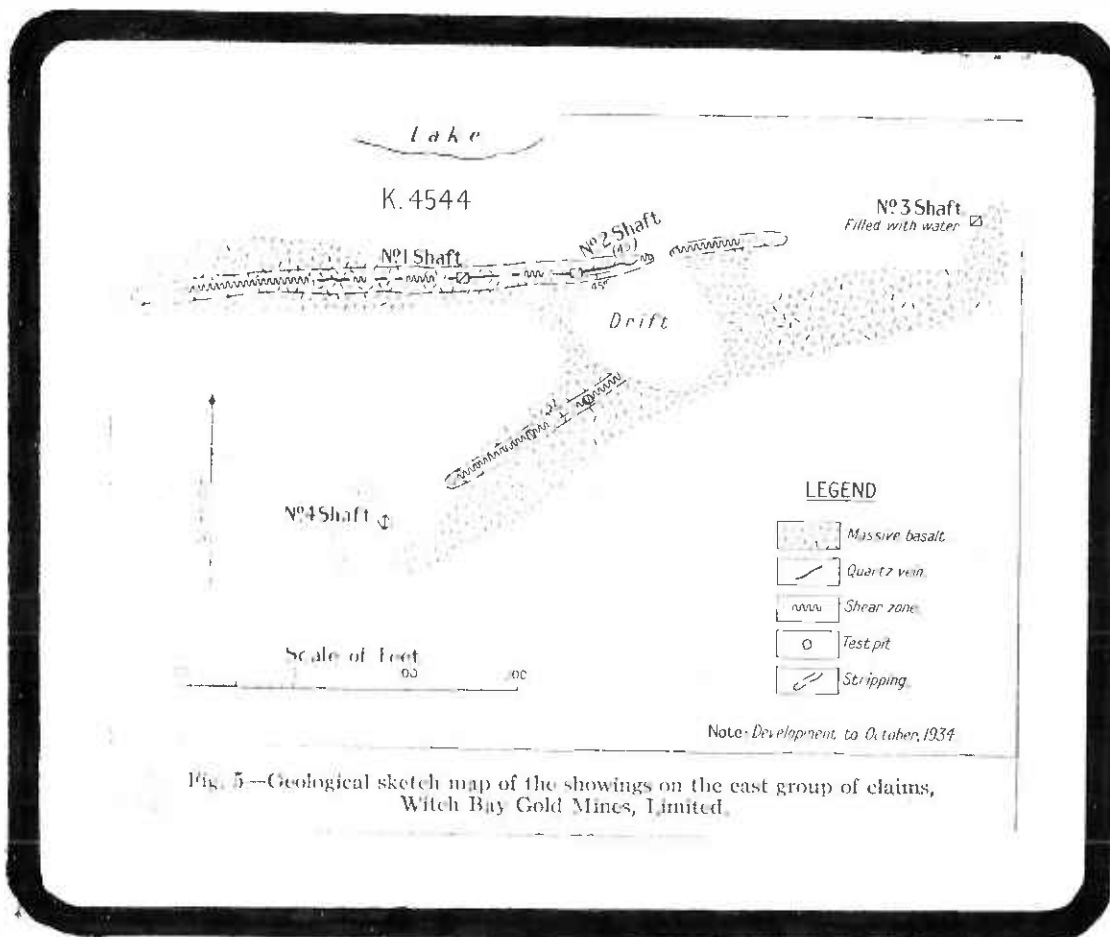


Fig. 5—Geological sketch map of the showings on the east group of claims,
Witch Bay Gold Mines, Limited.

Yellow Girl

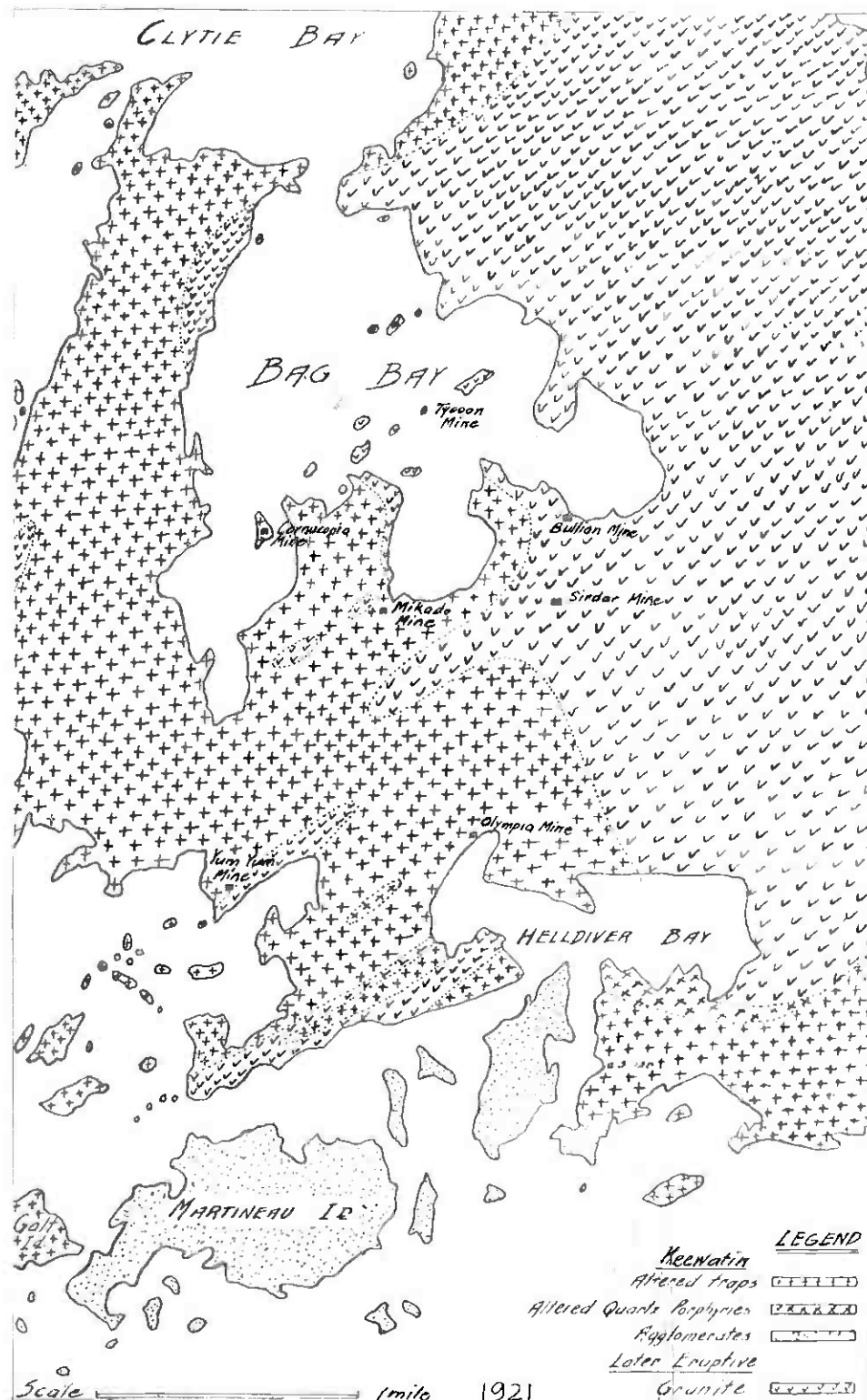
The claim was 5230, and was located by Edmond Scager, a government surveyor in 1885. It contained 111 acres of well mineralized but sparsely timbered lands. It was traversed by at least three parallel quartz lodes. The number one pit was from 6 to 7 and a half feet wide. It included a group of islands 5231, 232, 233. Yellow Girl Point was the first place at which gold was discovered on the Lake of the Woods. It is not known how much work was done on the property.

Yum-Yum

The Yum Yum was owned by the Yum Yum Gold Mining Co. Ltd. J. Burley Smith was manager. Gold was first discovered by an Indian named Indian Joe. He sold the property to Dr. Edmison of Rat Portage, in 1897, who sold it to Yum Yum Co. Ltd. There were 7 veins. Vein number three had the shaft dimensions of 6 by 12 feet. The ore was conveyed in barges to the Keewatin Reduction Works. There were 14 miners, 4 of whom were diamond drillers. Buildings included powder magazine, ice-house, blacksmith shop, sleeping camp, dining camp, cook house, stores, assay office, office and manager's dwelling. The management was transferred to R.H. Flaherty in 1898. The number three shaft was sunk to 86 feet, by January 1898.

In 1898 two miners were employed during the summer doing exploratory work on the Indian Joe vein. H.A. Guess was in charge. Wm. Gordon was foreman. The force increased to five.

The mine was about a mile and a half west from Olympia and in 1910 the shaft was sunk from 150 feet to 200 feet.



Map of West Shoal lake, Lake of the Woods area, by A. L. Parsons (Ont. Bur. Mines Vol. XX, Pt. 1, p. 79).

Rat Portage Miner and Rainy Lake Journal, January 27, 1898.

Klondike

You talk about the Klondike and all its glittering gold,
But why, not talk ONTARIO, the story's not half been told;
We've got the gold in placer and also in the rock,
But Klondike, Klondike, Klondike is all that you can talk.

It's easy to reach this country where the yellow stuff we
yield,
While in the Klondike region, Death pervades the field,
You say you'd live the journey, you think you'd stand the
shock.
O, Klondike, Klondike, Klondike is all that you can talk.

'Tis the distant, far-off country lends enchantment to the
eye
You would not have the eye, so much enthused were the Klondike
near by,
You'd listen to the stories and repeat them with a mock,
But Klondike, Klondike, Klondike is all that you can talk.

There is the famous Hammond Reef, we know the report is true,
The Golden Star and Olive Mine by the resort of Archie Blue.
Go and see the Foley still while grinding up the rock,
But Klondike, Klondike, Klondike is all that you can talk.

There's the Lucky Coon and Ferguson, and Weigand cross the
way,
And Rice's Mine at Sturgeon Falls, and famous Alice A.
When the truth is known to the outside world to this region
they will flock.
And Klondike, Klondike, Klondike you never will hear them
talk.

The Manitou has several mines, the best you ever saw;
For instance there is the Beehive Mine and the Little Neepawa.
And there's the famous property that was sold by Teddy Lock,
So Klondike, Klondike, Klondike let us never talk.

And there's the famous Gold Hill Mine, and Sultana, best of
all,
The Regina and Montana that to investors call.
So come and see our country, mark its merits down with chalk,
And Klondike, Klondike, Klondike you ne'er again will talk.

Now come all of you old Klondike crowd and quit Alaska cold,
And invest your cash at Rainy Lake and increase it twenty-
fold;
And when you've millions in the bank and it is safely locked,
Say Klondike, Klondike, Klondike, of you I never talked.

Prospector in the Rainy Lake
Herald

Newspaper Articles

The News- Lake of the Woods Journal, March 23, 1894.

Will Not Hurt This District.

It has been rumored around, that the new discovery in gold at Rainy Lake would hurt this part of the district this season owing to the way it has been boomed, that the attention of the mining men would be attracted in that direction. Now it is a well known fact that the Lake of the Woods district has been known for years for its rich gold fields, although little or no work was done owing to the dispute between the Ontario and Federal Governments as to who was really the owner of the mineral and land, this, we all know, was the cause of driving away men of money, and the development of the district practically stopped for a time. When the dispute was finally settled, we find, that work was resumed last season, and now a number of valuable properties are in fairly good shape for working as soon as the spring opens and we feel certain that this district will attract more attention this season than any other year in the history of the country. No doubt many of the mining men have read the number of misleading reports in the St. Paul and other newspapers about the richness of the American gold fields, in some reports it was stated that some of the mines at Rainy Lake City have been worked and paying big dividends. Now any person acquainted with the mining districts of Rainy Lake knows that so far there is no claim on the American side, sufficiently developed to be called a mine; in the Lake of the Woods, we have mines developed and which have proved paying properties.

Men who are looking after mining lands are not likely to pass a district like ours and invest in Rainy Lake properties, when there is nothing but reports of its richness. However, should the American side of Rainy Lake prove to be good mining country, Rat Portage will be the headquarters, at least until (sic) the country is opened up by railroad, as this is the only way that easy access can be had to that district.

The News November 8, 1895.

Sad Accident, Ed Brereton Killed and William McCarthy
Seriously Injured.

On Wednesday afternoon Dr. Macdonnell was called to attend at Mr. Wm. McCarthy's mine, situated a short distance from the town, those bringing the information stated that a premature discharge of dynamite had played general havoc in the shaft. The facts as near as could be ascertained are as follows: A hole had been drilled for the purpose of blasting and the deceased, Ed Brereton, had inserted the necessary amount of explosive which he was packing in the usual mannner with sand or earth using, what is called, a tampstick for the purpose. Brereton was standing immediately over the hole with Mr. McCarthy near him when the explosion took place, and was instantly killed, a fragment of rock striking him in the neck directly under the chin while Mr. McCarthy in addition to having his right arm broken in two places was badly shaken up, Mr. F. Proudfoot was standing at the top of the shaft when the explosion occurred which was a fortunate thing for Mr. McCarthy who was covered with debris and pieces of rock which he could not have removed without assistance. Mr. Proudfoot succeeded in extricating him from his perilous position and assisted him into town.

The Colonist, Vol. 10-Number 12, May 1896. Excerpts.

The Views of Mr. R.H. Ahn Manager of the Gold Hill Mine,
and Other Properties.

Mr. Robert H. Ahn came to Rat Portage, first, about two years ago, and has resided there steadily for the last 18 months as an authority on gold mining, he is one of the most widely experienced men in the district. He has gained his experience in the mining camps of many of the most famous gold fields in the world, among other places having been a practical assayer in Sudbury, in California, in Australia, and in New Zealand. For twenty-five years, indeed, he has been associated with mining; and though not entirely occupied in it, he has always given more or less attention to it. It will, therefore, be seen that his opinion is of value, and is probably nearer the actual facts than the conjectures of a hundred amateur prospectors.

He states emphatically that, so far as he can judge, (which on the basis of what we have said above, should be something considerable) there is in this district every feature necessary for a permanent gold field. He says that, though differing somewhat in general topographical features, there are, he has no doubt, a large number of veins. The area of this gold field, so far as known, and established by the Geological department at Ottawa, is over 500 miles in length by 100 miles in breadth, extending from the north shore of Lake Superior to Lake Winnipeg, and from the international boundary to as great a distance north as it has ever been explored.

This immense region is probably all mineral bearing and is practically, so far as its capabilities in that respect are concerned, still terra incognita; though

in a few districts, such as this which we are now describing it has been more or less prospected. Mr. Ahn says that he knows a number of prospects in the district that when assayed from the surface ore that does not show any free gold, nevertheless yields over \$20 to the ton. These veins, in some instances can be traced for a distance of a mile or more. There are also instances where the veins are showing a width of 30 feet with an assay value of \$10 and he can quote instances where even this can be exceeded in large deposits. The only thing wanted in this district, Mr. Ahn declares, is systematic development and he is fully satisfied that a depth of 500 to 1,000 feet, these veins will be found to be continuous and, judging from the work already done, an improvement in value over surface indications.

It appears that the average product throughout the world for the best gold fields is about \$12 a ton, whereas here, the few mills that have so far been put in operation have been giving returns of nearly double that amount. For instance, the Sultana output, he says, averages \$3,500 per week, and as their stamp mill is not capable of treating more than twenty tons a day, this shows a return of over \$28 a ton. This may be taken as a fair average of this gold field, and for an exceptionally rich return, we might instance the Golden Gate mine, which has so far produced \$60 per ton for ore milled.

Mr. Ahn says that he has always avoided anything that would have a tendency to boom the district. Indeed, the writer found that it was the general feeling of the residents of Rat Portage that a boom was a thing to be avoided, if possible. They appear to be quite confident that they have a very good thing, and are anxious to get a hold of as much of it as they can, before values of property go up to big prices. Nevertheless, everyone will welcome the investment of capital upon the work of development, and as this has

already begun to come into the district in considerable quantities, it is pretty certain that, in a very short time, Rat Portage will become a pretty large town, and it is probable that the residents will find it difficult to avoid something in the nature of a boom, though probably a healthy one.

With regards to the Reduction Works of which Mr. Ahn has been the manager, he says on the custom basis; and they will, if requirements demand it, be increased to any capacity necessary. It is, moreover, the intention of the Company to add to the present works a complete system of chlorination so that all ores can be treated to a finish; that is to say, not only will the free gold be taken out, but also the concentrates will afterwards be chemically treated, and by this means the whole assay value of the ore will be obtained. The mill is now capable of treating 45 tons a day. It was run for some time last fall to test its capabilities, and what work was done showed all the gold, and also silver, obtainable by a free-milling process was secured.

Speaking of the immediate prospect for development in the district, Mr. Ahn said that one of the richest and most experienced mining companies in Europe has given him instructions to secure them a number of properties here with the view of commencing operations on a large scale, and the company will put in several million dollars of capital, as soon as the work requires it. Mr. Ahn is manager of the Golden Gate Mining Co.; he says that he has a large number of inquiries from different monetary centres in Europe for properties in this district.

Up to the present there are six English companies here, namely, the Dominion Gold Mining and Reduction Company, the Regina Gold Mining Company, the Mines Contract Company, a company represented by Mr. Ferguson, besides two other companies in the Rainy River district. There is also a French company preparing to start operations, and a wealthy Belgian syndicate

is carrying on negotiations for the purchase of a large block of property. Besides these from the other side of the Atlantic there might be fully half a dozen American companies who have secured properties; and are preparing to operate at different portions of the Belt. As regards the Golden Gate Company, Mr. Ahn says that it is principally a Montreal enterprise.

Finally, Mr. Ahn admits that after an experience of many years in several of the great gold fields of the world he is thoroughly satisfied with this Lake of the Woods district. He has every confidence in it, and intends to remain with it, in the hope that within five years it will have become one of the largest mining camps in the world.

The Colonist, Volume 10-Number 12, May 1896.

A Favorable Report. An interview with Mr. W.G. Motley, M.E., by a reporter of the Winnipeg Free Press.

Mr. Motley visited Rat Portage about eighteen months ago in the interests of an English company, to examine and report upon certain properties owned by them on Lake of the Woods. His report was so favorable that the Regina mine company was formed in London, with Major General Wilkinson as president, and the Regina mine- the first under British auspices- was opened at White Fish Bay, 20 miles from Rat Portage. The reef on the Regina proved so rich on development that a ten-stamp mill was erected last fall and has been almost continuous operation since, producing gold bricks regularly from one that averages an ounce of gold to the ton.

Mr. Motley was in good spirits when approached by the Free Press man, and talked freely of the mining country and its prospects.

"You Winnipeg people," he said, "do not seem to understand what is being done for you in the Rainy Lake district- (I speak of it as the Rainy Lake district, although my interests lie on the Lake of the Woods, Rainy, Manitou, Wabigoon, Shebandowan, Mille Lacs, and other lakes, the Seine River, in fact the whole mineral belt extending from Port Arthur, to the eastern border of Manitoba)-we are building up an industry there that is bound to make your city a second Denver or San Francisco. Why, even the people of Rat Portage do not realize the immense riches with which they are surrounded. Some day, when you all wake

up and see the tangible results of our work you will be astonished beyond description. When I first saw the district, 18 months ago, I was satisfied that it was worth a careful examination, and very soon I became convinced that it was a most valuable and promising gold field. The general features, formation, etc. reminded me of West Australia, where so many rich finds have been made, but with this important difference, the West Australia gold reefs are found in an arid and treeless country, far inland, and remote from any settlement, while here we have the mines right along side the C.P.R. track, on the shores of the navigable lakes and rivers, and with ample timber for buildings and fuel right on the ground.

"I must confess that I was surprised that so little had been done in the way of development, but that was explained to me by the difficulty over the provincial boundary, the impossibility of obtaining a title that had existed and lastly, the unfortunate losses incurred by the amateur miners, who had squandered a lot of money in useless work through sheer ignorance, and thus deterred others from engaging in the business. Somehow when a man makes a failure at mining there is more talk about it than where a score fail at any other business.

"The Sultana was the only mine working when I arrived in the country. Its ten clanging stamps were a welcome sound to me, I must confess, in the midst of the general apathy which seemed to pervade the whole district. I took hold earnestly to see what could be done to improve matters, and although my interests were entirely in the Regina property at that time, I never withheld advice and assistance

to those who applied to me, and I am happy to say that I have been the means of contributing in some degree to the advancement made in the past year and half.

"I think our progress has been highly satisfactory and that you will agree with me when I tell you what has been and what is being done. We have now in the Lake of the Woods, in and near Rat Portage, the following stamps: Sultana, 10; Regina, 10; Gold Hill, 10; Reduction Works, 20. These are practically all that ore in actual use at present, but in addition we have the following in course of erection and contracted for: Oliver Daunais, the Nonsuch mine, 20 stamps; Halstead and Partridge, the Scramble mine, 10 stamps; Goldhouse and Co., the Eshweiler mine, 10 stamps; Haycock, 10 stamps; Empress mine, 10 stamps; Foley mine, 40 stamps; Saw Bill mine, 10 stamps; Lucky Coon, 10 stamps- or in all 200 stamps where only ten were dropping eighteen months ago.

"It must be admitted that this is a wonderful showing for such a short time, and I consider that what has been done is but a small portion of what we may reasonably expect to see accomplished within the next twelve months. Attention is now being directed to the district, and as it presents exceptionally good prospects and facilities, there is no doubt in my mind but ample capital will soon be enlisted to develop the mines on an extensive scale. In this connection I may say that the Mines Contract company, one of the strongest mining corporations in Great Britain, have secured control of some promising locations on Pipe Stone point, which they are about to open as soon as the lake is clear of ice. The work will be under the supervision of Mr. R.H. Ahn, who has also charge of operations on a property adjoining the Gold Hill, which was recently bought by a wealthy English company.

The Colonist, Volume 10- Number 12, May 1896.

Gold Mining in the Lake of the Woods District.

For at least twenty-five years it has been the opinion of many competent judges, that the rocks on the islands and mainland around the Lake of the Woods contain auriferous veins, which the prospector, the miner, and the capitalist will, in time develop into a number of profitable mines. Before the advent of the iron horse, the only attempts at development of these gold bearing veins were made by the mining prospector with his pick, his canoe or boat, and, if he could afford it, his Indian guide. The perseverance of some of these early prospectors, and labor and privations they freely incurred and endured, furnish records of indomitable courage and determination that were unsurpassed by the experience of the first explorers and pioneers of the early part of the eighteenth century. It was not, therefore, until the Canadian Pacific railway construction neared the shores of the lake, in 1880, that any effort beyond that made by the lonely prospector was impossible; and not until regular communication was opened up in 1881, did the usual swarm of gold seekers enter the lake country, and commence the exploration of its shores and islands.

It might reasonably have been supposed, that with railway communication into the heart of the gold-bearing district of the Lake of the Woods, mining would have made rapid strides. Unfortunately, a combination of circumstances, among them the boundary dispute mentioned elsewhere, which made titles to properties uncertain, effectually discouraged the investment of capital upon

any work of development. Since the settlement of this dispute, and the granting of crown patents, some six years ago, innumerable claims have been taken up, and actual work of development has steadily progressed, though until quite recently, in only a tentative way. As in other new districts the obstacle to rapid development has been the want of knowledge of the nature of the ore, and the best way to treat it. In evidence of this, it need be mentioned that until comparatively recently, it was a pretty general opinion that these ores were refractory, whereas it has now been definitely proved that they are all free milling. It was also considered by many, including some trained experts, that the veins would be found to gradually decrease in width at any depth below the surface, whereas all present development has shown that, on the contrary, the tendency is rather that they gradually increase. The experience of Mr. J.F. Caldwell, the father of practical mining in this district, further on, in the description of his mine-The Sultana- at a depth of 300 feet the ore is in a greater body than at any point nearer the surface. Even with perfect assurance of the continuance and depth of the veins there was want of experience as to the best methods of treating the ore. Mistakes have been made in many cases, resulting in disappointment which would have been easily avoided if as much now, thanks to the perseverance and good judgement of Mr. Caldwell, to whom indeed, the whole credit is due for having, once and for all, established the reputation of the district, and shown how to mine and treat the ore to the best effect.

No arguments are now necessary to prove the fact that this is a very promising gold field; there are the solid facts of actual production, which are the very best kind of proof. Two mines at least-The Sultana and the Regina-have now reached a considerable development; both are giving most satisfactory results, exceeding in both cases the most sanguine expectations of the owners; they are situated at a distance of many miles from each other, and had no more promising surface indications than scores of other claims in the district; therefore is it not reasonable to suppose, that what is being obtained from these two mines-the first to be carried to a comparatively extensive stage of development- may be equalled by many other properties, and probably surpassed by some? It would surely be a strange circumstance if the very first mine to be opened in an entirely new district should prove to be the best one existing there. The contrary is very much likely; and the accounts which we give below of what is now being done on the other properties, show conclusively that there is many a Sultana lying beneath the surface there and only waiting the application of a little capital and labor to yield equally good results.

It is now entirely beyond dispute therefore, that the gold is there in quantities and in a form that may be worked most profitably- as profitably, perhaps as in almost any gold field in the world- and when the other natural conditions of the district are taken into account, who can doubt that, in a very short time, here will be one of the great gold producing centres of the world? Let us consider these other advantages for one moment, and compare them with the natural disadvantages as such a district, for instance as Western Australia, where, to merely reach gold fields, is a kind of passage through purgatory. Here,

in the Lake of the Woods, one can ride to the gold mine in a Pullman car, taking his meals luxuriously in a diner, and step, perhaps right from the car into his property, or at worst, reach it by a steamboat trip on one of the most beautiful lakes in the world. At the mine there will certainly be all the fuel and mining timbers necessary, growing in inexhaustable quantities around it; there will be unlimited supply of water, labor will be cheap, plentiful, and efficient; all kinds of food and supplies will be excellent, fresh and cheap, procured from the neighboring province of Manitoba, whose products have already established a reputation all over the world for special excellence, and last, but not least, there will be a climate that is not only particularly healthful but is also pleasant and congenial to the Anglo-Saxon race as that of the mother land.

Rat Portage Miner, April 29, 1898.

Tremendous-Two Lady Miners Make The Biggest Find Here.

The Miner is advised today of the richest find yet made in the gold fields of Ontario. The most singular thing about the matter is that the find was made on a property owned exclusively by two ladies, Mrs. McDonald of Rat Portage and Mrs. Hall, of Winnipeg, who have been personally conducting the property in their own interest and under their own management.

The marvelous find, which will yield pure gold at the rate of thousands of dollars to the ton, was made on a newly discovered vein on the property, which is situated near the old and rich Pine Portage mine and the rich Triumph mine, now developed 225 feet. The surface indications were fine, showing much free gold, but when a depth of four feet was reached a mass of ore of almost solid gold was uncovered of unknown extent and that is surely richer and larger than any other find ever made in the Lake of the Woods, or Western Ontario. It is richer than the richest ore taken out of the old Ophir mine, and old residents will understand what that implies.

Mrs. McDonald came in from the mine last night, walking part of the way, and brought in a piece of ore as big as a ham, of almost solid gold, and has gone back for the rest of the ore that was blown out yesterday. . . . Those who saw the ore say they never saw any so rich anywhere before.

The lucky ladies say the mine has not been for sale, and is not now, and that no man can have the property, as they propose to demonstrate to the world that women can be miners as well as men.

Mrs. McDonald is a Canadian lady who has been here for 12 years and ever has been ay (sic) enthusiastic believer in

the ultimate success of the local gold mining and has never lost faith as to the richness of this country. Mrs. Hall is an American lady, and as both have put in their own money, hired their own miners, purchased the supplies themselves, and have managed the mine to suit themselves, they are surely deserving of great credit and are entitled to a reward.

If Fortune has so generously found them as now seems probable, it is very likely that other ladies may engage in mining in Western Ontario, and if they do "The Miner" hopes all will be successful as these pioneer lady miners appear to be, the only ladies on the American continent that we know of who are actively engaged in gold mining.

Rat Portage Miner May 6, 1898.

Love-A Man With Money to Burn Tries to Get A Wife.

The Ontario Gold Fields are so full of men who have made their thousands that it is a difficult matter to locate the fellow who "struck it rich", and is described in the Midland Free Press as not only possessing plenty of cash, but who also possesses the temper ment capable of falling in love at first sight. In view of the fact that his cash, encumbered by himself, was not accepted, it may be, if he is at all good looking and will let his wants be known through the medium of want columns of THE MINER, that some of the handsome young ladies of Rat Portage will undertake to bear his name and spend his cash. In other words, he should patronize home markets and not go chasing after strange women who do not seem to appreciate the fact that any man who hails from Rat Portage is likely to become one of the great gold mining millionaires of the world. The Free Press has this to say of the young man and his ambitions:

A Midland lady took a trip to Orillia one day last week and on her return witnessed a proposal of marriage in a bus and on the train. In the bus was an attractive young lady and a toil-strong young man. After an admiring look at the young lady, the man said to her:-"I am just back from Rat Portage, with over \$20,000 in my pocket. Will you marry me?" The passengers grinned, and the young lady replied that she didn't care to know how much he was worth, and wouldn't marry him. The man continued his admiring glances, and when she boarded the train he coolly sat down beside the young lady and again urged her to marry him, using his wealth from Rat Portage as a strong inducement. She again refused him and turned her back on him. All the way to Waubaushene, where the young lady resides, the man carried on his campaign, and only left him to continue his journey to Midland without her companionship.

Rat Portage Miner September 23, 1898.

Golden. Streets Gold Paved Like Those of New Jerusalem.

Talk about gold! Why Rat Portage is under laid with the stuff, and there are so many veins being discovered while putting in the water works that the city only needs to work them and the trick of paying taxes by the people of this town would become obsolete. One vein, showing visible gold, about a foot wide, was found this week near McVeigh and Broderick's liquor store. The dirt taken from the sand thrown out of the trenches on Main Street gives an assay of \$3.30 to the ton. At this rate it would pay the city to get one of Morrison's Gold Savers constructed on a large scale, and run the whole of the alluvial deposit through it.

Rat Portage Miner December 16, 1898.

Half a Million is the Production of Three Rat Portage Mines this Year.

The Miner not long ago accidentally learned that the gold output of the three regularly producing mines on Lake of the Woods was \$44,000 during one of the months of the year now closing. We also know the exact production of each mine, but inasmuch as the owners and managers of these mines willfully persist in withholding such information, we do not feel like giving them away.

It is not a little amusing to a newspaperman to see Matt Hunter, the hard-headed close-mouthed Scotch-Canadian of the Sultana, dodge across the street or go by with averted face, taking intense interest in the shop windows, whenever the scribe hoves in sight, as though a pestilence to be avoided. Again along comes that jolly Englishman, Pringle, of the Regina, who will smile and shake hands with you and talk about everything but gold bricks. Then there is that stubby, lusty, German-Yankee, Breidenbach, of the Mikado, who looks wise, and judging from his rotund appearance is full of information, but an inquiry as to what the Mikado is doing brings out of the tombs a doleful sound: "Vell, I don'd tink I have someding for publicashawn."

Under such discouraging circumstances it makes a newspaperman delighted to meet such men as Peter McKellar, of the Toronto and Western, J. C. Foley, of the Foley, R.H. Flaherty of the Burley, Yum Yum and Queen Bee; A.B. Upton, of the Triumph; Capt. Triggs, of the Triggs; T.H.

Brocunier, of the Virginia; L.A. Hall and A.C. Hubbell, of the Golden Star, J.C. Beebe, of the Emperor; Neil Campbell, of the Stella, N.B. Eagen, of the Sentinel; Geo. Hillyer, of the Alice A.; W.H. Preston, of the Olive; James Weidman of the Wimor; Wm. Peters of the Bad mine; and many others, who respect the fact that the world is hungry for the mining news of this country, and that the medium for disseminating it is the columns of THE MINER.

But, notwithstanding the secrecy with which the mines in question are conducted we know the facts, and in order to show our readers what a gold production of \$44,000 per month from these three mines means we will say that the Sultana has 30 stamps, the Regina 30, and the Mikado 20, making 80 stamps in all. Assuming that those stamps each crush 2 tons a day, a fair estimate makes 160 tons per 24 hours. In a month there are 26 working days which multiplied by 160 would be 4,160 tons crushed, and the output being \$44,000, the yield of those three mines would be over \$10 per ton.

It is an easy matter to carry these figures out for the year of those three mines \$528,000 and these figures added to the Foley, Hammond Reef, Independence, Golden Star, and Olive, besides the gold taken out from the numerous prospects which will bring these figures up to a point that will compare favorably with any other district on earth with the same amount of development. The fact is that this district, as yet, is in its swaddling clothes as a gold producing region. Our output last year was \$200,000, so that it has more than trebled this year.

These figures point to the fact that British Columbia, with all its blow and fuss, will soon be outstripped by the slow and conservative mining public of which Rat Portage is the centre.

Rat Portage Miner June 22, 1899.

'Three Men Killed.'

The worst mining disaster that has yet occurred in this district happened at the Black Sturgeon mine on Island Lake east Monday night, ten miles east of here. As a result of the accident, which was very similar to the one at the War Eagle about a month ago, three men are dead and a fourth seriously injured. The names of the dead are: Charles Adams of Novia Scotia

Charles Haas of Sudbury

John Howe of Rat Portage.

The injured man is Charles Anderson, of Rat Portage.

The particulars of the catastrophe, as far as can be learned, are as follows:

At 7 o'clock Monday evening the night shift was going to work and the four men above named had taken their places standing on the edge of a bucket to be lowered away on the hoisting apparatus. Without warning the bucket began a rapid descent of the shaft, which is perpendicular for 70 feet and then slants to the bottom, a distance of 175 feet. When the bucket with the four men reached the incline it was going at a terrific rate, and its human freight was hurled from its place. The three men killed fell to the bottom of the shaft, but Anderson was more fortunate.

It appears that the engineer in charge got control of the hoist, when the bucket was down 120 feet, and Anderson in his descent of the incline grabbed the cable and slid into the bucket, thus saving his life. The bucket was at once hauled to the surface and Anderson was taken out. As soon as possible a party was sent to the bottom of the shaft and there they found Haas dead, and Howe and Adams dying. The last two named, lived two and three hours respectively after being brought to the surface.

The Rat Portage Miner October 15, 1901.

Desposits of Quicksilver

One of our well-known citizens has in his possession a number of specimens of cinnobar, the ore from which the world's supply of mercury is derived. He is much elated over the results of recent tests of the ore; which have given satisfactory percentages of the liquid metal. It seems that this deposit has long been known to the Indians, who have for generations used the powdered ore, which is of brilliant scarlet hue, as a pigment for the decoration of their persons in their various dances. The presence of quicksilver in the ore became known in a curious way. It seems that the Indians were using some of the boulders from the outcrop of the vein in their well-known substitute for the white man's Turkish bath-the sweat-house. Stones heated in the fire furnish the heat for these baths and it happened that some of the stones used contained cinnobar, which being reduced and volatilized by the action of the fire, produced beads of quicksilver upon cooling under the damp grass, which is used to produce the vapor of the bath. These facts have been known for some time to the enterprising gentleman referred to above, but it is only within the past few weeks that he has been able to locate the desposit, which we trust will prove a substantial addition to the resources of our district.

The consumption of quicksilver for amalgamation will rapidly increase as our stamp mills increase in number and it will be happy circumstance if we are able to supply our own "quick" from our own mines.

Kenora Miner and News October 17, 1934.

Northwest Area a Good Producer.

Northwestern Ontario is looming large among world producers as a gold field, and already produces well in excess of 50% more gold than such famed gold fields as the Yukon, says the Fort Williams Times-Journal.

Although not yet in her stride as a producer of the glittering metal, northwest Ontario is fourth in Canada in the annual quantity of gold mined.

Only Eastern Ontario, Quebec, and B.C. exceeded this area in amount of gold mined this year to date.

Nearly 100,000 ounces of fine gold will be taken out of district mines this year, which promises to be more gold than China, Sweden, or Rumania produced. Its gold production will be more than twice that of France, Ecuador, Venezuela, Bolivia, Peru, and Chile.

Interviews

Herb Bergman

August 1976.

Transcribed from a Taped Interview with Mr. Herb Bergman

Interviewer: Were you a prospector?

Herb Bergman: An amateur prospector, a weekend amateur prospector. Whenever I had the time.

Interviewer: What does prospecting entail?

Herb Bergman: Prospecting, as far as I am concerned, entails looking for minerals, that is commercially valuable minerals.

Interviewer: Did you prospect for gold?

Herb Bergman: Not too much for gold; no, mostly base metals.

Interviewer: Did you prospect around here?

Herb Bergman: In the Kenora to Red Lake areas, probably, I would say, the majority of prospecting would be within 200 miles of Kenora, by airplane mostly. I'd fly in and check areas that I thought would be interesting.

Interviewer: Could you spot these areas from air?

Herb Bergman: You could spot some areas from the air. You'd be flying over an area which you could find on a map. You would notice a certain formation going through. I used to fly very low and in circles looking for rust or any strange change. I would land in the lake near and I would walk in and check it out.

Interviewer: Were there any special tools used for prospecting?

Herb Bergman: Tool wise?- pick, hammer, drills, grab hoe,

things of that nature.

Interviewer: What is a grab hoe?

Herb Bergman: It's like a hoe on one edge and an axe on the other edge to dig away roots and mud to get to the rock. Then we also had a dip needle, which is like a magnetic compass on edge. If you go over a magnetic mineral it dips. The degree of dip indicates the strength of the magnetic force. We used that mostly looking for copper, which is magnetic, and of course magnetic iron.

Interviewer: You didn't prospect for gold?

Herb Bergman: Not very much, no. We did a little work on projects that might have been profitable, that someone overlooked, but we never did anything really good on gold, no. I wasn't too interested in gold. Gold just didn't interest me.

Interviewer : Did you stake the claims yourself?

Herb Bergman: Oh, yes.

Interviewer: How do you stake a claim?

Herb Bergman: You stake them, then record them, and take samples, draw up a map of your vein and the structure of the rock, indicating where you took your samples from. You take them to one of the regular mining companies and let them check it out. If they were interested, I would fly them in, show them the property, and if they were interested they would take an option on it.

Option- Well, they would say, "We would like an option

for three months, a year or whatever it may be." They would pay a certain down payment and if they carried out an option, there would be more payments. If they didn't want it, they would drop the option, and say, "Here's your property back." It's a form of selling.

There were times when I sold claims outright as well, but the option was the big thing at the time. Well, you'd say, "We'll give you \$100 claim down, and now if you hold them over three months we'll give you \$200 a claim. If you hold it for a year, we'll give you \$500 a claim and we'll give you so many shares of stock in the company." In some cases the company or the people you were trading with were promoters and had nothing to back them up. In other cases you were dealing with legitimate mining companies, like the one I dealt with, Dome, on the nickel property I found on Isinglass Lake. They spent, I would think, about 50-75 million dollars, but then they gave it up eventually but they put money in the thing and gave it a chance. That's all you can ask.

And then we had a lot of fun. We picked up a scintillator that we used to fly looking for uranium.

Interviewer: It's a plane?

Herb Bergman: Yes. It would fly 200-300 feet off the ground. At first none of us knew anything about it. You would hit a mound of granite, like a granite hill. You'd go across the top of that and your readings would gradually come right up- very high- then drop off. Being very green and not knowing too much, we'd land the plane and walk in and check it out. It was this darn sodium in the granite that would give us this reading because it was so large and so near. It would give you a high reading. Later we learned that flying across the nation, looking for this, if you got this sudden jump up and down reading on your scintillator, that is worth looking at. You can imagine flying with an airplane and if you found a vein of uranium 40 feet wide how long it would

take to cross it.

You know you're stupid and you learn. We had a lot of fun with that.

Interviewer: Was sodium in the rock a big problem?

Herb Bergman: No, well in your granite you have this sodium. Most of this granite has sodium. There is no mineral value in them. Nothing of commercial value.

It sure did send you on some good healthy prospects.

Interviewer: Have you ever been out to any of the old mining shafts?

Herb Bergman: Oh, yes.

Interviewer: Do you think there is any ore left in the mines worth working again?

Herb Bergman: There are some, I think, that could be worked. I don't know right now with the inflation we have that they would be. Back when I was prospecting there were several that I thought had a good chance in making a million that were closed.

One that I think would be commercially economic would be the Conisten property on Straw Lake.

Interviewer: Where is Straw Lake?

Herb Bergman: Straw Lake? It's about 75 miles due south-east of Kenora. If you look on your map you'll see going north from Emo, Clearwater Lake, Pipestone Lake, Yoke Lake, and Straw Lake. The old Conisten ground, I think would normally have a good chance of producing gold.

I don't know of any others around. I just couldn't make that kind of claim for anything else.

I've seen some dandy ones where you could have been fooled.

In the old reports, they say here's a vein 6 feet wide, this fellow found a vein 6 feet wide, and the quartzite carried an ounce of gold to the ton. So you'd go out and check this. There was a 6 foot vein alright but there's probably just 6 inches of quartzite in this vein that carried the values, and the rest didn't. You couldn't mine 6 inches at an ounce.

There is one you could easily check. If you go down to Shoal Lake, there's an island just before you come to Shoal Lake Narrows and there's a red buoy, right in at the shore. If you follow that shore closely you'll see a little shallow shaft about 30 feet up from shore and 6 inches of that runs about 1.31 ounces in gold and the rest ran about \$1.

But this sorta thing you run across really is comical.

Interviewer: They really fooled you in the reports.

Herb Bergman: They didn't intend to. They were telling the truth, but, when you read it, you didn't read it that way.

Interviewer: We noticed in reading some of the old newspapers that they really built up the mining prospects.

Herb Bergman: Yes, there were a lot of untruths too! There were a lot of things built up.

This old report, once you've seen the place, checked it out, and you go back to read it they are absolutely correct.

They didn't tell you there were 6 feet of quartzite carrying one ounce of gold. They said the quartzite in the vein carried... but there were only 6 inches.

Interviewer: Do you find people of your generation have become disenchanted with mining and prospecting?

Herb Bergman: The people, yes, they become, oh this was 15 years ago I would say, disenchanted with prospecting for the simple reason the companies put out their own prospectors. If you found something they would send an Engineer or someone out to check it. They would take all the data on it. You record the claim but you can only hold the claim for one year if you don't do any work on it.

The average person didn't have that kind of money to do the work on it. Work is getting kinda expensive. They would have to draw the full limit from a company fund. They just couldn't stake it. This happened quite a few times.

I don't think you'll see too many individual prospectors, that is, people who are legitimately prospecting for a living. I don't see that anymore. I think the day has gone.

The only way you'd find that is if they are hired by a company, but they wouldn't be doing it on their own; not as individuals. They just can't afford it.

I don't know if that's going to be good or bad, but that's the way it is.

Interviewer: Are there any minerals left in this area?

Herb Bergman: Oh, yes. I think they'll find mines for many years. They'll find them but it's going to be more expensive to find them than it used to be. You're going to have more expensive equipment and instruments in order to do it.

I walked the Northwest Angle, to Red Lake. I followed up the boundary to Ryerson Lake, across up an angle to Red Lake. Of course I didn't do that all at once. I'd fly into one lake and walk two ways checking the magnetics in the rocks. The next time I would go out I'd go into the next bay and walk back and forth. It took me over two years to do it.

It was very interesting. There are a lot of readings a lot of swamp you know. What would we do without swamps?

You have to have a drill, instruments and you have to have a lot of money to do it, but I found there are a lot

of places where there were very good magnetic readings which indicate mineral of some kind.

I am sure that there were some mines of some kind on some of them, but I don't think they were found by individuals like me. They were big companies.

Interviewer: So this area is hard to prospect because of swamps?

Herb Bergman: No, I don't think this area is any harder than any other area. I think any area is tough. I can't see anywhere, any country, with easier prospects.

If you go to the mountains, well, you got to travel up and down. Well, here we have swamps, but we have visible structures to look at.

No, I don't think it is any different from any other place. It's all tough.

Interviewer: What minerals are the most profitable to mine?

Herb Bergman: Well, I don't think there is any difference on whether one mineral or the other being profitable or not. It's a matter of how much it is going to cost to get this mineral out of the ground to the customer in comparison with the value per ton.

Like, you can take an ore that's only worth say, hundreds of dollars per ton, but there's less of it and the rock would cost you more to get it out. Which is the most profitable? The one that is easiest to get! It's like any other commodity.

I think in this area from now on out there are the base metals which are going to be the most profitable. I think they are going to find more base metals, than can be taken out at a profit, than you are going to find gold at higher prices.

Interviewer: What is panning?

Herb Bergman: I was never very good at panning. That's panning for gold. I was never good at that and I used to go out alot with Harry Barbary. He used to come alot with me. He was a real gold man.

If the rock is in a solid state you would take what you considered ore, like quartz or what ever minerals were in it. You pound it down in a steel cup. You pound this down to a fine dust. Then you'd dunk this down in a pan and wash it. You get all the sediment away and finally, handling it properly, you'd find a tail of gold, maybe 5 or 6 specks or more depending on how valuable it was. How much was in that weight of material. That's the way the old prospectors prospected.

Then in a lot of cases, you see, the gold was tied in such a way in the rock that you just couldn't pound it. They burned the rock first. They'd build a fire and burn it and they would crush it and pan it. Sometimes they'd crush it and then burn it, then recrush it and pan it. They'd get the gold out of it then.

Interviewer: What was the purpose of burning it?

Herb Bergman: The way the gold was locked up in other minerals. It wouldn't release unless you burn it. I guess it would burn away any impurities, so the gold was released.

I really don't know to much about that. I really wasn't too interested in gold.

Interviewer: It must have been a long slow process than.

Herb Bergman: Well, no. It didn't take them too long. They would go out and prospect, then they would come back to the tent at night with these mineral samples. They would say, "Well, we'll pan this stuff out," and they'd toss this stuff in the fire- their cooking fire- and it would get burned well

or roasted. They'd take it out and burn it so it didn't take long. Oh no, Harry would pan ordinary rock, pound it down and pan it in possibly 20 minutes. Then we'd talk about it for an hour.

Interviewer: Who were some of the prospectors who worked with you?

Herb Bergman: Stan Stevenson. I took Stan, well I prospected with him, but then I'd fly him out to an area and leave him out. I'd just go out with food and things- supplies in to him. On weekends I would stay with him and prospect. Actually he was with me at this one at Isinglass Lake. I was standing there, he was a very good prospector, he was so good that his knife found it. I was not that good.

He had been in there for about three weeks. We had figured there was something there because of the rock formation. I said, "Let's stake a bunch of claims." So we staked a group of 30 claims. Well you have to have the money to look for it. I came in and he hadn't found a thing. I came in early that morning and he said, "Well, we might as well not put up the tent to come out. I don't think there's anything turning here. I haven't been able to find a thing here." "Well," I says, "we have all day. Lets go for a walk." "Where're you going to go?" I said, "I don't know." "Well," he says "lets go up on that diagonal up there." We were walking apart about 70-80 feet. Being green I was banging rock every second step and looking for it. Right up on the flat of the hill, you'd swear there was nothing in the rock at all. I broke out a piece and I could see the copper pyrite, which is a copper rock. Then I took a good look through my glass and I could see this pyrrhotite with a little purple shade around the edge. I thought right away I got nickel here. So I called Stan back as a joke. I stood on the rock with my foot, and broke it. I said, "Stan I found nickel." He said, "You're crazy. Lets go home!" I said, "Look at

this Stan." Stan was one of these well, well guys. He says, "Where did you bring that from?" I said, "Right here." He says, "I worked over this thing 8-10 times and I never seen a thing."

If you didn't break the rock you'd swear there was nothing in it. It was so leached out that in a search you didn't see if there's any narrow end. So then right away we staked a few more claims and recorded them. We turned it over to Dome and they drilled it. I still think that it has some chance because these nickel properties are odd. I think it should be built on the other side. That's just my thoughts.

Interviewer: So there have been lots of places that were missed?

Herb Bergman: Oh, yes. There are I'm sure, there are. When you're as old as I am they're sure to find mines in this area, within 200 miles of Kenora. It would be way more sophisticated than we did it, much improved methods.

Interviewer: They could probably make more money too if they find a mine.

Herb Bergman: Who knows that? It depends on cost. Cost for machinery, cost for wages, this sort of thing.

Time will tell.

I used to prospect with my brother, Gunner. Al Johnston used to come out sometime. Oh, a few other odd people, from time to time. I'd say I was alone most of the time. When you're alone you can go what ever direction you want. If you make a mistake, it was your own, but with someone, you hate to drag someone into a corner. I don't like to do that.

Actually I enjoyed being with these fellas, but I preferred being alone when I was looking for something because I could go where I wanted to.

Interviewer: How did you learn about different types of rocks?

Herb Bergman: From other people and reading books. We went to some prospector's classes.

Interviewer: Did they have any prospector's classes in Kenora?

Herb Bergman: Oh, yes. They used to come through every winter. You'd register for the classes and you'd go down. They'd explain various minerals and how they occurred. They had some samples. It was really good.

There wouldn't be any point in having them now because there wouldn't be enough people out to prospect anyway. With a lot of people its the hear of gold, I don't know why, but the word gold...

I like to look for base metals- nickel, copper, iron- things of that nature.

Interviewer: There's alot around here isn't there?

Herb Bergman: Yes, it's a matter of finding enough in one area. We found silver in Hat maker Lake. It wasn't good enough to make a mine. We found gold in the sand. Oh, you would take a pan full of this and pick it and pan it. Harry always would be no worse than picking up 3-5 dollars worth in a minute. He said it would be 50¢ to \$1 of gold. It would be up three times by now.

A lot of fellows were what you called stakers. They'd first follow up anyone finding anything and stake the adjoining ground hoping they would find something on their ground (that the vein would continue) that they could sell. Then of course there were times when the prospectors would stake the ground but, there are fellows that would wait 'til someone staked the ground and then they would go in and stake the ground adjoining. They were called stakers. Sometimes a staker would make a find.

Interviewer: The prospector would be annoyed.

Herb Bergman: Well, what could he do? He's found something and the company he got in turned it down but there is a time element and during this time the other companies he's negotiating with, while someone else is staking an adjoining claim. Some promoter who has a few hundred or thousand dollars, he hears about this land. He wants to get in the deal, and the people who have staked them have made a few dollars but the fella who originally found the thing, maybe the company turns that down. He doesn't get a thing for it.

I have heard of cases where people who have tied on have found the mine and the fella that did the staking didn't therefore.

Interviewer: Were there alot of shady dealings going on?

Herb Bergman: Oh, alot of funny deals.

I remember I found abit of copper in low ground. I couldn't afford to open it up and this company was interested in the area. They came in and offered \$1500 down on an option basis. I said no, but I'd option it at \$1000 with another payment of \$1500 in three months. They took that deal. They had to pay me \$2500 because it happened to be in the fall and freeze up period. They couldn't do anything until after freeze up period. By then three months were up. "Either give me my option or pay up the difference," that sort of thing. They made a choice and that was that. But these things happen all the time.

I never made alot of money on it, but some people did quite well.

Max Cameron

July 7, 1976.

Transcribed from a Taped Interview with Mr. Max Y. Cameron

Interviewer: What mines was your father involved with?

Max Cameron: Oh, my dad came here about 1881, and there was a lot of mining going on. I think the first place that was worked on was the Pine Portage mine, away back in the early nineties. He made a little money out of the Wendigo then. My dad always did have his hand in mining a bit. It was because he got quite a bit of money out of the mines here.

Interviewer: Did he become rich through mining?

M.C: Oh, no, I doubt whether he made very much. He used to run a wholesale grocery store in town. He ran a hotel, too. He said that in the nineties the town was full of money. There was no problem whatever. He thought that he'd like to get mining going again in the town. But the Wendigo has been about the only producer of any kind.

There's a big mine out in Shoal Lake, the Duport Mine on Cameron Island. I don't know whether it's going because there's a lot of arsenic in the ore, and ofcourse, Manitoba gets water from Shoal Lake. I think it would be a hard job to get the mine going.

Interviewer: Was Cameron Island named after your father?

M.C.: I think it was my dad but I'm not sure. I didn't hear him say so. My grandfather (Captain Henesy) was quite a guy too. He was with the man who secured the Sultana mine. He was a real Irishman and his partner was too, so it didn't work. They couldn't get along together. He sold his business to this other man.

In those days you couldn't stake the water, nobody ever did anyway. Then some bright guy came along when

the mine was going and could see that the vein was going out under the lake. This man decided he would stake some water claims and build a crib and call it the Burley Crib. It was a great big crib, twice the size of this house. He sank it and put a mining plant on it. They also sank a shaft there. But there were quite a lot of court cases going on about this thing and I think that they spent all the money they had in taking the case to arraignment. By the time they got through with that they didn't have any money to set the mine up again. The Burley crib was quite a feat. They built it on an island, floated it out there, and sank it. I've been on it.

A couple of men from Star Lake out by Falcon Lake came in and got a contract to take the water out of the shaft. They pretty well near lost their lives. It caved in on them and likely they just missed being in there. That's about all that has been done there as far as getting the mine going again.

Mr. Lindsley was one of the big mining tycoons. He just died recently at ninety odd years old. He had some men trying to take out ore out of Sultana at one time but they didn't find it worthwhile to carry on.

Interviewer: Have you ever been down in the shaft?

M.C.: Not at the Sultana, but I have at the Wendigo. Judge McClennan was with me. We went down and boy, that was enough for me! While we were walking around we had to climb up a little bit and go over a wall. When you get up there you hang on to a rope to pull yourself over. Your hands were really numb from that rope. I was holding it steady and thinking, no more of this for me. I don't think Judge McClennan was very tickled about it either. But I've been down in mine shafts. I used to go out to

the Wendigo about twice a week because I had a store there.

Interviewer: Do you think that gold mining helped the growth of the town at all?

M.C.: Oh, no doubt about that. My dad said money was no object at all. Everybody had money galore in the nineties. There were mining men from Buffalo particularly who would send a man up and try and buy some property. There was a lot of money turned over in this area for the mines. Although in those days they would see a quartz vein and right away there would be a lot of expense sinking a shaft when they hardly knew if there was any gold there. Most of them petered out. It was kind of hard on the name of this area for mining. They didn't have enough money to get started so what they did was mine the public mostly.

Interviewer: Were there any incidents of salting a mine? (Shooting gold dust into ore to make it appear richer to a buyer)

M.C.: Well, there was one case where they figured this man salted some samples. They went out to get samples and left this man to put them in a bag. Somehow or other, they figured the man had got hold of the stuff and salted the ore.

Interviewer: Was there much high-grading going on?

M.C.: No, we never had any of that. But I guess there was at the Mikado Mine. They even found a gold brick after it was hidden in the wall. It wasn't long before the walls were all torn down.

A gold brick is about the size of a small brick. They were worth about ten thousand dollars. It was really heavy, you couldn't carry it very far.

At the Wendigo there was a lot of copper in the ore, so after three years of running they decided to take the

copper out. I don't know what they did with it at the plant, but they'd save it. It was concentrated out there to make it higher grade, and sent out to Trail, and some of it went to Hudson Bay Mining and Smelting.

Interviewer: How many mines were there on the Lake of the Woods?

M.C.: Well, I don't know, but there must have been fifty or sixty. I was amazed myself when I did some prospecting especially up above Whitefish. It was just incredible the way they dug over the country, and you can see where they knocked some pieces off, way back where nobody was, in those days.

Interviewer: Did you do much prospecting?

M.C.: Oh, I'm a very amateur prospector. I've done a lot of staking claims. Somebody else does the prospecting. There were two or three real, well almost a rush, way above Whitefish, another one was down in Shoal Lake.

We had a great prospector at Islinglass Lake, by the name of Stanley Stevenson, who was a prospector, and Herb Bergman. Herb and Stevenson were out and they found this vein. We turned it over to this big mining company. They spent over \$100,000 on it in the summer, drilling and one thing and another. It looked pretty good, but they finally decided that there just wasn't enough there. Maybe they had drilled it wrong, who knows. It would have to be drilled again to find out for sure.

It was too bad that a lot of prospects weren't done right. Once they had been diamond drilled at all, it's very hard to get anybody to come back and look at them.

But I can remember one of the richest mines and the biggest in Canada was looked at about seventeen times and each time everybody walked off. Then some guy came along and finally found the secret to the whole thing. It just goes to show how easy you can miss it. We were hoping to get the Pine Portage mine going; at the end of last year, (1975) but it just wasn't there. It's been drilled a couple times and nobody wants to go back.

Interviewer: Did you ever have gold fever?

M.C.: Oh, yes, I guess I have. What's that story about the fella that went to heaven and he had some friends who went to hell. Finally in hell, they were kind of tired of the company that was down there, so they decided to send out a rumour that there was a big gold rush down in hell. Immediately, there was hundreds of people getting in on the rush.

Interviewer: Is there anything more you can tell us about Captain Henesy?

M.C.: I heard my dad talk about the Regina mine, and my grandfather had something to do with finding it. He had a peg leg, my grandfather. He had a leg off in a railroad accident, while working on the railroad at the time, but he got around quite a bit. He lived in that little house next to Northland Hotel. I can remember as a kid, about 5 years old, going down there and rapping at the door. I'd be on my way down to the warehouse where Frosted Foods are now. It used to be Cameron-Heap. I'd stop in to see my grandfather and when I got there it would be so thick with smoke you couldn't see hardly. There would always be three or four fellas there playing cribbage. Finally he'd come to the door and he was always good for a nickel. He'd never invite me in but he'd always give me a nickel- to stay out

I guess.

There was a man going to look at the Sultana, so my grandfather took one of the editors of the Examiner (that was by Lakeland Dairies), Mr. Weidman, so he could write a story about it. They went out in a sailboat, like a rowboat with a sail in the centre. On the way out, they had to go ashore, Mr. Weidman in particular. So they went ashore on Weidman's Rock by Bare Point, for a few minutes. Well, Mr. Weidman was a cantankerous old guy, terrible to talk to at times. Any way he was taking too long so my grandfather and the other man decided to get in the boat and take off. They went out to the mine, and picked Mr. Weidman up on the way back. He was pretty mad about it.

He finally took this man and they found the Regina mine, in Regina bay. That was worked several times and they had hopes but nothing came of it.

The man that had it in those days was an Englishman, a retired general, General Wilkinson. They tell a story that the mine never had a chance when he was there because the men at the mine worked till eleven, then they stopped and had a cup of tea. Then the whistle would go again at noon and they would have to come and have their dinner. It was very noisy there with the stamps pounding away making an awful racket, so they had to turn the machine off so Wilkinson could have his nap after dinner. They would go back to work until afternoon tea time. Down would go the mill and it worked for an hour or two. At the end of six o'clock they would quit because they didn't work at night. They would run out of money and Wilkinson would go to England, take six months before he got back. The miners would work again for a few months, then he would go again. He made several trips to England.

Interviewer: Why did mining fail in this area?

M.C.: What killed mining here was the rush to the Yukon. Then

right after that was the silver rush to Cobalt. Only one or two fellas stuck around after that.

A lot of people figured that there was a lot of scullduggery going on. It was okay when they drilled it first, but when they went to get it, it was all gone.

The Pine Portage mine had a big adit from which they were getting lots of gold. The chief outfit was a butcher and someone else who ran it. They didn't have too many brains because they set up a little mill on a creek and the creek dried up in the summer so they couldn't run the mill. It was things like that; poor management. They say they were mining the public.

The Story of Madame X

by Maxwell Y. Cameron
(paraphrased excerpts)

It was the beginning of March 1956. My wife, Jessie, had slipped on the icy steps of the school where she taught music, and as a result had broken her arm.

When I visited her in the hospital, I found it necessary to pass through the room containing three elderly ladies in order to reach the room in which my wife was situated. Naturally, I passed the time of day with all of them. One day, one of the ladies, suddenly asked me: "What kind of staff do you employ?" My reply was that they had been with me for some time, which speaks for itself. "I don't like to tell you this, but there is some pilfering or stealing going on in your establishment. I can't quite pinpoint it, but it seems to be happening outside the building- watch your goods, whatever it may be, as they come in or the delivery as the goods go out. And another thing; you are interested in some property around here?" I answer that I was. "Well, the one I'm thinking about is on the shore of a Lake that has the name of a bird to it and it is made up of three parts or pieces. Is it ever going to be good for you!"

I denied that I had any property of that description but everytime I came to the hospital she kept insisting that I did have property on the shore of a Lake that had the name of a bird to it. "You know, Mr. Cameron, you've been looking in the wrong place all the time. This bird that I mention is a long or high bird. When you find out what you are looking for, it goes down under the lake and it grows and the deeper it goes, the bigger it gets and it seems to go in all directions."

It was five weeks later when my wife and I called on the lady to see how she was convalescing at home. Again she told me to look at the property that I had near a lake with the name of a bird. She told me I was looking in the wrong place. She urged me to search the Northwest corner of that property and that I would find whatever I was looking for on the surface or near the surface of the ground. "And when I touch it with my thumbs they would turn green. The best way I can explain it to you is that it looks like huge big gobs of Roquefort or green cheese."

"Whoa!" I cried, "Now I know where you are talking about. It's a property of ours at the end of Bigstone Bay, on which there is a nice copper desposit. I did not recognize it sooner because you kept saying it was on the shore of a lake that had the name of a bird. As it happens, this property is situated on "Eagle Pass", which is a narrows running between Hay Island and the Main Land and is known as Mining location X-45. Furthermore, the whole property consists of X-45, and an additional group of claims to the East and South and a water claim to the Northwest which accounts for the three parts or three pieces. There happens to be a lot of Malacite on X-45 and that is what gave me the original clue. Certainly the answers all fit, including the part about looking in the wrong place I have spent alot of time on the property, mostly prospecting and have been over most of it, but strange to relate never had I ever prospected to the Northwest."

I felt a bit awed at the wonder of it all.

She continued to say that this property was going to be very good for me but that it would take a lot of time and effort.

In May my son, Ian, and I went out to the property and we discovered two small outcrops of greenrock but no continuity. When I told the lady that we could not trace it anywhere she replied, "Of course you can't. It goes down under the cliff that is there." This set me back a bit, because I certainly could never remembering mentioning a cliff to her, and there certainly was one there.

Sure enough, on my next trip out to the property I discovered a quartz stringer which carried a lot of Chalcopyrite. We dug a shallow trench for about 10 feet along the vein.

Just while I think of it I would like to mention at this point that I was constantly asking for direction and guidance in my prayers- and long before my first meeting with this lady at the hospital I had been doing similarly. She claims that this gift of hers is a gift from God. My figuring was, and still is, that if this clairvoyance of her is God's gift then He must be instrumental in assisting with her perception and this being the case I must surely come into the picture and the plan- otherwise why would all this be outlined so descriptively accurate, unless HE wanted me to work at it and eventually bring it into being.

Well, later in May I discovered that an employee of mine had been pilfering cartons of cigarettes from the store and selling them. Naturally I was excited with this turn of events. and phoned the lady to tell her that the pilfering had come to light. I mentioned that it would be grand if the second half of the prophesy would turn out as well as the first half.

She replied, "I have never been so sure of anything in my life as I am about your property. It is there- I know it is there." She continued that she saw herself standing in a cave or tunnel about 80 feet wide and all around her were red and greens that gleamed and sparkled. "Furthermore," she mentioned, "there must be a bottleneck there, for I want to take this thing with my two hands and squeeze it in and then it opens up big again."

Sure enough, the next time I went to the property and stood

on the stringer looking out across the water, I perceived a perfect bottleneck directly in line of strike. This was caused by a point jutting out from the mainland, and a sand bar which ran to an island just 150 feet from the point.

I diamond drilled several times but was disappointed.

In the summer of 1957, a hypnotist, Russel Baron, happened to be in town. I asked him about my property and if he could tell me where the mineral desposit on it could be. He threw himself into a trance and after a while pointed out on a map 100 feet Northwest of the "original find," then he drew his finger across the map 110 feet. Northeast and 10 feet Northwest again. "Now you must go down, down, down 320 feet, 320 feet. Oh! Ohh! It's gleaming! So bright!... It's Big. It's very Big and Rich, rich, very rich. There is a company in the States. You should contact them. They have a mine in Bisbee, a mine in Bisbee and another mine in Tucson, Arizona and their head office in New York. They want to come to Canada. Their name is... their name is... Oh I don't know, I don't know. Yes, it's Philips, Philips..., Philips... something... Philips. I just can't get it."

This happened the end of August and sometime in November, I read in the Northern Miner where the Phelps Dodge Corporation (Head office in New York and mines at Bisbee and Tucson) were negotiating for a mining property in B.C., but that it was not proving up and they were now endeavoring to get located in the East. This was their first Canadian venture. I believe the hypnotist knew nothing of the rocks or mining and furthermore he knew nothing regarding the Company he was trying to name for me.

When I took a mining engineer out to the property I was dumbfounded to hear him say that I should be drilling in a place only 10 feet or less from the spot Baron had described in his trance.

Well, that is my story as far as it has gone but naturally there will have to be a concluding chapter. You just can't leave a story like that unanswered but whether I will ever be able to gather the where-with-all to go the last step or perhaps interest someone or some company to do some development work, is still a problem for me and one that I will have to work on.

Incidentally, only recently I received a letter from the Phelps Dodge Corporation telling me that they would be here in the spring when the ice goes out to make an examination of the property X-45. Kind of sets you back, doesn't it?

Carl Holm

July 6, 1976.

Transcribed from a Taped Interview with Mr. Carl Holm

Interviewer: Which mines did you work at on Lake of the Woods?

Carl Holm: I worked at the Olympia mine and there was a fellow by the name of Vernon from Chicago. He owned that mine (Oly mpia) and property. There was a plant with ten stamps, and other equipment. A fellow by the name of Carl Lindstrom, was hired to haul 300 tons of ore from an open cut east of the Oly mpia mine.

The ore was taken out of an open cut, overburden and all, soil and everything, and hauled over the tailings of the old property of the Oly mpia. They had a little cart installed with a cable running upon inclined track and the "stuff" was shoveled into its own cart and hoisted up to the top and dumped into the top of the crusher and the "stuff" was then run through a ten stamp mill. There was a water process there too, that washed the crushed ore, through screens and out on the plates. The concentrating plates were covered with quicksilver and with some sulfurous amalgam and acid, I think. The operation continued- the gold or the sediment stuff was washed over the plates. The gold sank into the quicksilver and the other rock sludge was washed over and went into a trough at the lower end of the concentrating plates, which was lined with blankets. Any gold which happened to pass over would stay in the pockets. For example, after they had been running for awhile, the plates started to turn yellow. They then shut down the plant and used their rubber squeegee to move the gold to the lower edge of the plate and catch it in a cup. Then, they used heat. They used to put a container, a kettle for example, with this mixture over the heat. I don't know how they caught the quicksilver, but that went up in vapour and later was

condensed. The gold remained on the bottom of the container and the quicksilver disappeared into this container they had to catch the vapours, so they could use it over again after it had cooled.

300 tons of ore were mined at the Olympia mine. I didn't stay there till they finished, but they say that they got \$4,000 out of that 300 tons, so it must have been pretty good. Later the rest of the gang had been laid off and they kept two fellas there over the winter of 1918-19. I had to take some supplies to Holmstrom's fish camp on Shoal Lake and since I knew these two fellas were out there, I brought their mail out to them and some newspapers and other things I thought they might be interested in. So, I left the sleigh in Clytie Bay and walked across from the Mikado to the Olympia and stayed there overnight. They had in one corner, I don't know what you'd call it, like a little out-building next to the cabin, where they stayed. They had a pile of ore they had picked and saved for this fella Vernon, who owned the place. You could pick up any rock you wanted to and there were kernals of gold as big as wheat in some of them. And I think those two fellas thought they'd saved the best because they both disappeared over to Sweden! Well, it must have been rich because I remember they were puttin' in a track from a tunnel over the property, towards the Olympia mine. I guess they had figured on keeping on operating it, and they had to blast out a hump of rock, close to where this open cut was. And there was a slip of rock that landed on the train and one of the fellas that was working there picked up this grey piece of rock and there was a nugget in it.

Interviewer: What other mines were you familiar with on Lake of the Woods around 1935?

Carl Holm: The Mikado. I don't know when it shut down. I am not too familiar with that. I never worked there, but there was a pretty good size plant there. I think they had three horizontal boilers, a 20-stamp mill, crushers, and everything else needed for operation. I don't know the exact year it went but it must have been 1911 or 1912, I guess, that it shut down. And they were operating it again in 1934 or '35. I think the concentrators and some of the stuff was shipped to town.

There was another mine operating out there- just about the same time- the Duport; the Cameron Island mine. There's a big ore body there but it's not freemilling. The ore has to be roasted. There's so much sulphide in it, that it has to be burnt and then I think they used a cyanide process too. They concentrated it to a certain point and then shipped it to town in 90 pound bags; hauled it to the station, put it in cars, and shipped it to the States for refining. But I guess by the time they got through that, there was too much transportation to hold operations up.

Then there was Cedar Island in Mikado Bay. That was in operation too. I forget now when that was terminated, possibly about the same time- 1935 or something like that.

Interviewer: How did they haul supplies out to the mines?

Carl Holm: Oh, that was either by boat in the summer time or hauling by horses and sleighs across the ice in the winter time. There were no trucks then, you know. All they had in 1934-35 was Tom Markham. He was out doing all the hauling for the Machin outfit out to the Mikado.

There was a fellow by the name of Nickerson that was operating the Mikado mine when it folded up, I think he owed alot of money for supplies intown. There was a fellow by the name of Seegmiller, who was head of the outfit. He paid off the debt from what I hear, and then Nickerson went to the Ophir mine. That mine was south of the Sultana. He got operating this mine and did the exploratory work too. I think the shaft was 230 feet. I don't know what other work was done. I don't think very much was done. But then an engineer came there to report on their progress and when he got down the shaft and looked at it there was no vein showing in the shaft, so he told them to fold up.

The vein was still there only you follow the vein in what ever direction it takes and continue in that direction. This vein took a slant under the hanging wall. All they had to do was cut deep in the right direction and they would have found it. You'd know. But they didn't so the place was shut down. Nickerson was the fella that was heavy on shutting it down.

The place was lewstered in 1916. A fella by the name of William Richards, mining engineer, hired a farmer to come ou there with a horse power outfit and dig that place out. What for? Nobody knows! But they say Nickerson had gathered up a bunch of high grade ore in bags that he threw down because he couldn't get into town to get rid of it!

Interviewer: Was there a lot of high grading (stealing rich ore) going on?

Carl Holm: Well, there was alot of that going on. I had an uncle who worked in a mine and he had nuggets the size of raisins that he used to make brooches for people out of, and tie pins, and stuff like that.

During the depression, me and another fellow went out to a big island outthere, and we cut five cords of birch wood, piled it up on shore and we went over the lake pulling the sleigh with our equipment. Coming back again, I happened to think of this Ophir mine, so we stopped there and went up and had a look at it and there was ice on the water in the shaft about eight feet down, I guess. I think there was a ladder there too, standing intact, so we went down the ladder and swept the ice clean; found a couple of drift poles. We used them to chip some of the stuff off the walls. We swept that up and took it in and we washed it and panned it. We got a piece of gold about the size of a good-sized bean out of it; so there still is stuff down there.

They dewatered it in 1934 but. I didn't hear any more about it.

Interviewer: Why did they never work on it again?

Carl Holm: I don't know really why, but it's a funny thing ! I guess the price of gold was too low, it was only around \$35.

Interviewer: Do you remember anyone becoming a millionaire by mining here?

Carl Holm: No I don't remember that. You've got to be a big shot to get in on that.

Interviewer: Did you work at the Sultana too?

Carl Holm: Yes, I dewatered the mine there. The machinery was in good shape, and we reactivated the boilers and put in a new hoist, also a new steam line from the boiler house right up the hoist and started boiling. It took 28 days working in two shifts to get the water out. When we got towards the fourth level we wondered why the water in the shaft never went down. It didn't seem to move at all. But finally we got down and the water started to drop, so me and someone else went down to have a look at it. We could see the reason why. A little hole to the left or to the south of the shaft, a type of stope, 60 feet to the ceiling, was back filled with waste rock that had been taken and thrown there because there was no gold bearing ore. It was 90 feet across and 100 feet in length. Besides that, to the left of the stope was a tunnel going 1,000 feet over towards the property that was called Crown Reef vein. So this Caldwell, that was operating the Sultana mine, was tramming the ore from the open cut that runs westwards and then curves towards the south. The same vein was operated by the Burley interests. They had a shaft sunk inside a crib on a rock or a reef there. Anyway, they had a bit of difficulty when the Sultana mine was bailed out because at every level there was what we call a chair- a skip to rest on. Sometimes if you were going to lower ore from a certain level, the attendant at that level would pull a lever and the chair would be pulled up, which was mounted on the rock below the level floor, by 2 eyebolts in the rock and it's a heavy iron bar about 1 and a half inches thick and about 4" wide with kind of a "V" slot in top of it. It was operated by a cable from underneath the level, underneath the floor. But they had a lever at the top. Well, all this and the cables had just rusted during the thirty years the mine shut down. And so the chairs were down in place and of course everytime you came down to one of those chairs

you couldn't get down. The fella that was down below had to wait till the skip got a 2" by 4" or something to hold this chair out of the way till they could get down and tie it up again. That kept on practically every level.

Interviewer: Would you describe a level?

Carl Holm: It is a tunnel from the shaft going north and south because the vein (at the Sultana) was going north and south.

From the fourth level to the seventh level there were no drifts on the south side. You couldn't see if there was any openings. That pocket that they were working on up at the top of the fourth level may have gone down to the 7th level, I don't know. I never saw any of the old timers that worked there, but there were 90,000 tons sticking out of that pocket there. Then on the 7th level there was a drift running 200 feet, I guess, and it ended there because they couldn't find the vein at the top. They diamond drilled about 100 feet in from the shaft, westward, and there was nothing showing there either. They went about 100-150 feet with the diamond drill. It was a big desposit, what we call "quartz porphyry." It was about 300 feet long and how deep it was nobody knows and ^{how} far from north to south nobody knows that either. But they had diamond drilled the place. The quartz porphyry ran 150 feet, \$1.50 to the ton. It was too low to be mined, to make a profit on it. You had to have a hell of a big plant, and you'd take out most of the country! Anyway, I worked on the diamond drill there for a while we moved from

there.

I think it was the first time drilling was done on the fourth level. When we got past the stope, we diamond drilled every 50 feet, westwards. When we got the greenstone- core bar in the dip- then we quit. We turned the drill around and drilled eastward the same distance. The same thing happened; there was no vein showing in the east side. Three veins intersected westward in every hole. From what I understand there was a fellow that was there mapping and they sent the returns of the diamond drill core down to Quebec to have it analyzed.

The gold in the diamond drill core averaged about \$200 ot the ton, and it was a funny thing that it was never visible anywhere. When we were diamond drilling, we examined the core and we could never see any nuggets or free gold. It was fine gold, I guess.

Later on I think, we moved down to the 7th level and did some diamond drilling there too. We did some drifting. We drifted on the same spot we used for diamond drill holes, we call that an eye hole. We drifted in 100 feet, that's what you call a crosscut, then swung around and headed south another 100 feet. 50 feet in, we slabbed out on one side, I think, so we could diamond drill rock. We diamond drilled at 60 degrees downwards so we could intersect any vein below there. If we hit the water faucet we'd have to go the hell out of there.

Interviewer: What kinds of tools did miners use underground?

Carl Holm: Well, at that time, it was all pretty well modern. It was what we call a water liner, a drill run by compressed air; and also a water feed line for washing the mud out of the hole. The drill ran about 120 pounds, and if I am not mistaken they lift it on their back. The drill steels were sharpened

at the plant in the blacksmith shop.

Interviewer: What is freemilling?

Carl Holm: The ore that is freemilling doesn't have to have the concentrate burned. In places like the Duport and the same thing with the Golden Horn; there is so much sulphide, sulphur-bearing ore, that you had to burn it off before you could have the gold cleared out.

At the Mikado mine they had something there too, to do the concentrating. It was a long oven they put it through to burn the sulphide.

Interviewer: Did gold mining help the growth of the town?

Carl Holm: Of course it did, but it ended too soon, I guess. An outfit moved out to the Duport about 2 years ago to check that out again. I don't know whether they left or what. I never heard any more about it so I guess they folded up. They were doing a lot of diamond drilling out there.

Interviewer: What was the pay like for miners?

Carl Holm: On well, I was getting about \$5 a day around 1934, we call that depression times. In 1918 at the Rognon Mine (near Dryden), I think we were getting \$4 a day and board, which wasn't bad!

Interviewer: What was the social life like out at the mines?

Carl Holm: Oh, there was nothing much to do except sit and play cribbage, unless you got a way of getting into civilization.

Interviewer: Did you have music out there?

Carl Holm: Well, you didn't see too much of it.

Interviewer: I guess you just wanted to relax at the end of the day.

Carl Holm: When I worked out at Minnitaki, we got out there early September and we never came out of there until the 17th of October. But it wasn't too bad. It gave us something to do.

Interviewer: Did you come out from underground to eat your lunch or did you eat it down below?

Carl Holm: Everyone came up.

Interviewer: Did you have coffee breaks?

Mrs. Holm: That was a modern invention!

Carl Holm: No we didn't have a coffee break.

Interviewer: Did you live out at the mine?

Carl Holm: Well, yes. There were men from Manitoba, and Falconbridge. It was the only place they could stay. Me and other fellas from town went in once a week, Sunday, when the mine wasn't operating.

I don't know how many people were living there but northeast of the mine was a little town they called "Swede Town". They put up little buildings and stayed there year round. They came into town by boat and over the ice in the winter time.

Interviewer: Are the remains of this town still out at the Sultana?

Carl Holm: They tore down most of the buildings that were left to get the lumber in 1934. The buildings were burned by vandals. First there was the bunkhouse, then there was the stables, then the manager's office and the shaft house and any other buildings around. All the machinery was taken out during World War II, when we needed iron. The only thing left there was the skip that we used to get the water in the mine with and to hoist the ore up with. All the rest was nothing but a few pieces of sheet metal.

Interviewer: Were the underground shafts heated? Was it cold down there?

Carl Holm: No it wasn't too cold. We wore warm underwear and the rest of the paraphernalia, a pair of rubber pants and a rubber coat and jacket, rubber boots with steel inserts to protect your feet. An iron insert into the rubber which you

could use by putting in your shovel and pry it over when you were mucking.

Interviewer: How many men were working at the Sultana when you were there?

Carl Holm: There were two diamond drillers per shaft and two miners on drifting. Later on there would be 2 men per shift. Getting towards the end of operations they had two fellas from Falconbridge working. They dewatered the diamond drill on one shift. So there were two diamond drillers, two shifts.

They laid off the whole gang around Christmas time. The machines, pump and everthing was left down there because they had to keep the mine dewatered until they had an option.

We used to go out to the mine and look around, and land on the sand there, the tailings, and we have a lunch and we'd go up to the shaft and have a look once in awhile. I'd throw a rock down the shaft and you could hear the water far down. I think it took pretty near 2 years before it filled up again!

Golden Horn

The Golden Horn is located in Rush Bay about a mile west of Kings fish camp. This mine operated somewhere around 1900. It is situated on a mineralized belt or zone stretching all the way to Shoal Lake and there are innumerable pits and tunnels everywhere. About half a mile west of the Golden Horn on the same shore a short tunnel with a crosscut, is located. In Echo Bay a 70 foot tunnel exists on the north shore, and there is a diamond drill hole in the left bottom corner. This was likely driven to intersect a vein running east and west up in the hill.

The shaft house had blown down sometime around 1948 because the timbers showed a fresh break. Some old castings laid there, and a big timber bolted to the rock remained. This had been the base for the air compressor. A circular machine that had functioned as some sort of a stampmill remained. There was a brass plate attached with the inscription, Nordstroms Concentrator Co. Chicago. Some barrels filled with partly treated concentrate were there. Emil Hubner had worked there and an Irishman that I knew only as Bill had also worked there.

There seems to be a big ore body but contains iron pyrite or sulfide and is not free milling. It must be burnt or roasted, and a cyanide process used. Don't know when it was shut down, but a Mr. McMeecen was running the plant, and also had the honour of shutting down.

Granite Mine or Nonsuch Mine

There was another mine called the Granite mine on the south shore of Echo Bay about 400 feet east of the portage going to Canoe Lake. Nothing remains of any buildings, but there had been a bunkhouse with accomodations for about 50 men. The building had been torn down by people going through the area and the winter road to Shoal Lake.

At the entrance to Echo Bay is an island that belonged to a man by the name of Oscar Leroue and I believe it was called Nonsuch Island or Mine. There is an open cut on the right hand side as one enters the channel. Some exploration and diamond drilling was done in the vicinity around 48 to 50 feet.

Olympia Mine

The Olympia Mine is located in Helldiver Bay, Shoal Lake about a mile south of the Mikado Mine. Most of the mining was in tunnels at surface level and by hand, but there was a shaft sunk about 100 feet from the stampmill and it may have been used.

In 1916 a man by the name of Emil Hubner, his wife and daughter lived there. In the spring of 1916 the wife and daughter were murdered while Mr. Hubner was away at his farm further east at what is now Miss. Barbara Machin's Gold Point Lodge.

The mine was not operating at this time and Mr. Hubner likely was the caretaker.

In the spring of 1916 a man by the name of Vernon from Chicago, (I believe the owner) hired some men, possibly with the help of Oscar Cronlund and activated the plant again. Mr. Vernon had 300 tons of ore quarried in an open cut on an adjoining claim about 500 feet east of the plant, and this had been during the winter, and dumped on a flat near the stampmill. Carl Lindstrom, presently of Kenora Fish Market had done the hauling.

The crew consisted of an old engineer by the name of John Hanson, one Lars Hanson, one by the name of Wickstrom, (the blacksmith) and the rest laborers.

The equipment consisted of a marine boiler taken out of a steamer called the Mary Hatch, a 1 cylinder horizontal compound steam engine, one small hoist, a crusher, a water pump and a 10 stamp mill. I helped Mr. Lindell overhaul the machinery and when everything was ready we started up. Mr. Lindell fired the boiler, operated the hoist and looked after the engine and pump. One man shovelled ore in to a small mining ore car which was pulled up an inclined track and dumped in to a hopper above the crusher at the top of the stampmill.

My job was to receive the ore car and feed the crusher. Mr. Vernon took care of the stamps and the concentration plates. The plates were copper with a silver coating, on top of which an amalgam of quicksilver and some kind of acid was applied. When the sludge from the stamps flowed over the plates the gold sunk into the quicksilver and the pulverized rock flowed on in to a trough at the lower end of the plates. This trough was riffled and with pieces of wool blanket on bottom to catch any gold that washed over the plates. The blankets were dried then burnt to retrieve the gold. I did not stay till they were finished. I understand that the 300 tons of ore netted \$4,000. Some time about 1935 to 37 some work was done there I believe by the Venturers Ltd. Miss Barbara Machin likely will know about that.

Les Ingo

July 14, 1976.

Transcribed from a Taped Interview with Mr. Les Ingo

Interviewer: What was your job at the Wendigo?

Les Ingo: I was office manager. That involved purchasing all the materials.

Interviewer: Do you remember when the Wendigo was at its peak production?

Les Ingo: It reached its peak somewhere in 1939. In the spring of 1936 it started milling. I think it was about the spring of '44 that it closed. I'm not sure because I was away in the army at the time. I left in the fall of '41, so I just don't know what happened after that. I know it was certainly well out of ore when I left. They were having problems. All their good miners had gone into the army and they couldn't get any others and it wasn't economical to operate.

H.B. Young, the manager out there, always said, "If it doesn't pay, shut it down." He was preparing to shut down when I left, but he was exploring all possibilities before he shut down. They diamond drilled the whole property in case there was more ore there than what they had already found.

Interviewer: Was H.B. Young the president of the company?

Les Ingo: Yes he was the president of the Wendigo Gold Mines, Ltd.

Interviewer: Was the company composed entirely of Kenora business men?

Les Ingo: Oh no, there were people like W.J. Cameron here in town who was a director and J.P. Williams of Williams Hardware and there were other directors from down east but I can't recall all the names. They were at the mine an awful lot

but I didn't get to know them very well.

Interviewer: How many men were working at the mine?

Les Ingo: Oh, we had about 125 there. About 40 or 50 were married and had their families out there. Max Cameron had a store out there and we had a one-room school. We also had a radio phone. We got our mail everyday. Kron's truck would come in when they got the road in. We used to have to use boats and planes.

Interviewer: How many of the men were miners?

Les Ingo: About half of them were miners. We had a lot of men cutting wood. Wood was burned in boilers for steam power to run the hoist. Then we had men running the mill, the crusher house and the boiler house.

Interviewer: Were many of the men Swedes?

Les Ingo: There were a few Swedes, alright. I'd say maybe a third were Swedes. They were a few Finns. I can remember them more than I can remember the Swedes. They were the characters.

Interviewer: What did you do for social activities?

Les Ingo: Well, everyone used to play a lot of bridge and we all had radios. The fellows' social activity was to go into town on the weekend.

They had dances in the school house there. I don't think they had canned music. They had a piano and a fiddle. There was a couple of fiddlers around. For people who liked social activities there was always something to do.

Interviewer: Did you get many visitors to the mine?

Les Ingo: Oh yes, especially in the summer, not really any during the winter. They didn't go underground. We took very few of them underground. It would have been too hard to look after people. You'd almost have to have them by the hand.

Interviewer: Were there any accidents in the mine?

Les Ingo: Oh yes, there are always mine accidents. We had a couple of men killed there.

Interviewer: What was the cause of these accidents?

Les Ingo: One of them, he was where he shouldn't have been after the warning, and he was blown up. Another chap was also where he shouldn't have been. He was cleaning down on the 500 foot level. He had gone into the shaft, and you're not supposed to do that at all when anyone is working above on the shaft house. He climbed into the shaft to clean up some dirt on the timbers. A timber fell down from the top of the shaft and it got him right in the back of the neck and went right through him.

There were other minor cuts and scratches from rocks. But accidents occurred mainly through carelessness.

Interviewer: What kind of warning was given before a blast?

Les Ingo: It was a horn on the level where they were going to blast. I can't imagine how anyone couldn't hear it because it could sure wake the dead.

Interviewer: Did the town get rowdy when the miners came into town?

Les Ingo: Oh no, no one ever got in jail or in trouble with the police. They may have gotten a bit inebriated and might be a day late in getting back to work. We had a pretty good group on the whole.

Interviewer: Was the mine ever shut down at any time between 1936 and 1944?

Les Ingo: Oh, a couple of times for a day or so. We had trouble with the generator and had to go to Winnipeg for parts. But there was not a long shut down.

Interviewer: Did the mine open at the same time as the mill started operations?

Les Ingo; They did what you call development work. They dug the shaft. That was all done before the mill was built. You got underground before you started building a mill.

Interviewer: Was the shaft sunk on old workings?

Les Ingo: Yes there was a shaft there originally. It was a small shaft sunk before I was around. The shaft was down 300 feet when I came. It went to 500 feet, then to twelve.

Interviewer: Would you explain the milling process used at the Wendigo?

Les Ingo: When they started they were using amalgamation and cyanidation process. Amalgamation was a process where they mixed the ore in a barrel with mercury and the mercury would pick up the gold and not bother with the rest of the stuff. Then they were reviewing concentrates that you get from cyanide.

But it turned out that the cyanide wasn't the process at all. There was too much copper in the ore. So within a year they changed to flo tation process which floats the copper off the top, and they were able to take the copper out. Then they could do something with the gold.

Interviewer: Did they have any use for the copper?

Les Ingo: Oh yes, they sent the copper concentrates to Kartaract(?) New Jersey, and they would smelt the stuff and get the copper and silver and gold that were in the concentrates. We would ship carloads of these concentrates out there.

Interviewer: Did you have your own barges out there?

Les Ingo: No, Kron used to bring it in by truck. Before the road was built in 1937 we had a boat, a couple of barges.

Interviewer: Was there any difference in wages between surface workers and underground workers?

Les Ingo: Oh yes, the miners got more money than anyone because they were the skilled men. All the muckers that used to just shovel the ore, they wouldn't be paid any more than the surface workers. They would shovel the ore into the chute, it would run into a car and they'd push it out. Timbermen got paid a lot more. It depended on what jobs they were doing. Some were sorting ore, standing there picking out all the bad ore and putting it in the waste bin. They didn't get paid very much. They get more an hour today than they did a whole day.

Interviewer: What kind of equipment were used to get the ore out?

Les Ingo: There were sledge hammers and drills. There were

air compressors up on the surface to make holes into the face of the ore and then there were pneumatic drills.

Interviewer: And what happened to the ore after it was taken out?

Les Ingo: Say the vein was three feet wide, but they only had a machine that would go in maybe six feet so there was all that waste rock. So it would come up and go through machines that would separate the ore and the pieces of waste rock. They'd throw that stuff out in the waste dump and the rest would go to the crusher. The crusher was a ball mill, and the ball mill was a great big cylinder which rotates with iron balls inside that went around and around and crushed the ore. And then it comes out like a fine sand in water. Then it goes over blankets, corduroy blankets with ripples in them. All these little particles would float over the blanket and the gold being heaviest would sink into the little troughs in the blanket, and this other stuff would go on into the flotation to float off the copper. I've just forgotten now, the process.

Interviewer: Were there any mines around the Witch Bay area besides the Wendigo?

Les Ingo: No mills, but there were other mines. There was the Blue Star Mine (Stella) about two miles north of the Wendigo on Stella Lake. But it never did produce. They found a lot of high grade ore there though. I've got a piece from that mine. There's two ounces of gold in that little piece of ore--about \$200. That was found right on the surface.

Interviewer: Have you ever heard of a mine being salted?

Les Ingo: Oh yes, but not around here. But I've heard stories

from men who have mined all over the world. Oh yes, they put gold dust into a shot gun and shot it all over the rock face.

Interviewer: Miners around here were fairly honest then.

Les Ingo: Well, I wouldn't say that. There were some pretty sharp operators in the mining business around here.

Interviewer: Were there many incidents of high- grading?

Les Ingo: There wasn't any high-grading where we were. We suspected someone in the mill but we were never able to prove anything. It may have been just a coincidence that as soon as he left, the production went up, but not by much.

Interviewer: Was it easier to steal ore from the mill than the mine?

Les Ingo: Well, just as easy I guess. Take that piece of quartz I showed you. It would be easy enough to just slip it in your pocket, it's small enough. You wouldn't know unless you searched them.

Interviewer: Do you think mining will ever start up again in this area?

Les Ingo: It's going on all over the place right now! Prospecting

not so much gold, but copper, nickel, platinum, uranium.

Interviewer: Who were the managers of the Wendigo?

Les Ingo: First there was C.L. Spencer, and then there was a fellow by the name of Campbell. Then Mr. Young came and ran it himself. He was the fellow that ran the Howey Gold Mine at Red Lake- about the only fellow that could run that mine and make a profit. He was a great man on detail. He wanted to know the costs each day. The ore was only about \$5 a ton but he made it pay!

He'd take samples of the tailings about every hour and if it consistently assayed over a dollar, the crew would have to come and answer to him.

Interviewer: Would you say that gold mines are more profitable now than they were in the thirties?

Les Ingo: Oh , well gold prices now- of course miner's wages have gone up too. But the most we ever got on gold prices was \$35 an ounce. Wages were a quarter of what they are now.

Now, they don't even look at the mine unless they can get 1,000 tons of ore out.

Interviewer: How did they locate the mineral desposit?

Les Ingo: They'd ususally find a vein on the surface.

In the old days they didn't have a diamond drill hole. But in the thirties we put a diamond drill hole down at an angle to the vein so that it would intersect it about 100 feet below the surface. If the core was quartz with gold in it we knew the vein was good down to 100 feet. Then we'd diamond drill some more along the vein. Then we'd put down a shaft to 50 or 100 feet. They worked in gold mines by what was called

stoping. They didn't dig down, they knocked the roof down in a stope, they mined upwards. They blasted in sections in angles up to the roof. Once the first blast loosened the rock the second blast would go off. A second later the third blast went off. The rock would then go down a chute, put into cars, then moved out.

Barbara Machín

August 23, 1976.

A Talk with Miss Barbara Machin

Barbara Machin apparently has the oldest Prospector's Licence in Ontario dating from 1932. She has lived out at her Gold Point Camp since 1936. Her mother and father had a home in Kenora but spent summers out in Shoal Lake.

Colonel Machin was a very prominent figure in mining around Kenora during the first couple of decades in 1900. He was M.P. for this district and Director of Military Service in Canada during World War 1.

The only mine he was really involved with was the Mikado. He was the president of the Kenora Mines, Ltd. which ran the mine from around 1910. Later on Mrs. Machin took over the Olympia. Contrary to popular belief, Mr. and Mrs. Machin did not name such mines as the Yum-Yum or the Mikado from Gilbert and Sullivan productions. These mines were named long before the Machins ever came to the area. Mrs. Machin prospected with her husband quite a bit. In 1908, they went up to northern Quebec to prospect for copper.

Barbara Machin's knowledge of prospecting came from just being around her family. She says she never was as interested and she doesn't know as much as everyone thinks she does. But she also admits that prospecting is in the blood, and although she has no time to seriously prospect now, she does look around everytime she goes out. Gold, she says, is the base of everything and everyone will always come back to gold.

She owns several mining properties and hopes to open them up eventually, but right now costs of labour and equipment are too high. Diamond drilling and explorations have been done off and on for years at Cameron Island, for example.

The ore body has been all blocked out and they know the assay but the company can't get the money to put it in production.

In her earlier days of prospecting the divining rod was an important piece of equipment. A divining rod is a forked rod that divines the presence of water and minerals by dipping downwards or upwards when over a vein. It has something to do with the electrical and magnetic currents in the world. A pendulum is also used to look for water and minerals. A pendulum is composed of a coin attached to string and suspended from a horizontal pencil. The pencil is cradled on the two forefingers by its ends. The coin moves backward and forwards or in circles to indicate the presence of minerals or water. It is said that a person is even able to tell whether or not the water is pure.

Many people believe that the area wasn't good as a gold field but the Mikado's production belies this belief. The reports state that almost \$500,000 worth of gold was taken out of the mine and the work was entirely financed from the mine. If not for the amount of high-grading that went on, the production figures would have probably touched the one million dollar mark. There were a number of crooks in the mining business, and even mine managers were not immune to the lure of rich high-grade ore. These crooks usually instigated the bad rumours that the area was a poor gold field. Of course, in many cases, mismanagement helped to create this impression. Companies made the mistake of putting a shaft down the center of the vein instead of going in from the side. Thus the whole vein could not be extracted.

As an interesting side note, the engineer who reported about the Mikado in 1911 stated that he was favorably impressed with the mine because of its accessibility. It only took two weeks for a letter to get to London!

Miss Machin says that she has in her possession a gold machine that was given to her by a friend. The man who 'invented' it sold these gold-making machines for \$5,000 a piece. The machine was composed of a large box with a tray in the centre in which plaster-of-paris and various chemicals were to be mixed together to form gold. Apparently he found some takers for this machine because he made over \$40,000.

Barbara Machin sees a hopeful future for mining in this district. She believes that there are still large pockets of gold ore in the Shoal Lake- Lake of the Woods area which could be profitably mined in the future.

John Peterson

July 12, 1976.

An interview with Mr. John Peterson

Interviewer: What kind of work did you do out in the Wendigo mine?

John Peterson: I did electrical work at the mine from 1935 to 1942. The mine shut down in 1942 and the mill started operation in 1936. Mr. Spencer was the first mill manager and Mr. Young after him. Charles Morton and Les Ingo (from Standard Realty) were the office managers. Ernie Carlson was the shift boss and Jack Edwards was master mechanic.

Interviewer: Were you originally from Kenora?

John Peterson: Oh no, I'm from far away: Sweden. I came in 1908 and first worked for the Town of Kenora as an electrician.

Interviewer: Why were there so many Swedes working in the mines?

John Peterson: I don't really know, but probably work in the mines was the only sort of job they could get at the time. Lakeside used to be called Swede Town, because all the people living in this area were Swedes.

Interviewer: Was the Wendigo very productive when you were working there?

John Peterson: Well, it paid its way. I would say it was as productive as the Sultana was.

Interviewer: Were there many accidents at the mine?

John Peterson: No, there weren't very many accidents. I remember when a man, Harold Sampson, lost his hand. I don't know the details of the accidents, I just remember seeing him come out of the shaft with his hand hanging by the skin. He was drilling or something. It might have been caused by dynamite, but I don't know.

Interviewer: How many men worked out at the mine?

John Peterson: There must have been forty-five or fifty men, working the shifts and of course for maintenance. The men worked eight hours a day, in 8-hour shifts and there were three shifts a day. There was very little change in the manpower. Most of them stayed from the time the mill started right to when it shut down. We got an average of 50-75 cents an hour. I remember them giving us a bonus one year to encourage the men. The conditions in the mine were good. The pumps worked steadily to keep it dry. Jack Newman was the cook and the food was always good.

Interviewer: Did the men live out at the mine?

John Peterson: Oh yes, there were two bunkhouses, a cook shack, a dining room and houses for families down by the lake. There was a school there and a girl from Keewatin was school teacher. Max Cameron owned a store out there too. The buildings were all torn down. Most of them ^{were} bought by Carl Walsten for lumber. I think there were several good roads out to the mine. A tourist outfit bought some of the property.

Interviewer: What kind of social life was there out at the Mine?

John Peterson: It wasn't too bad. They held decent, respectable dances out there. A local group, the Sudnes Orchestra, played for the dances. Mr Sudnes played the bass violin, I think. Mrs. Sudnes played the piano, and their daughter, Lily, played the accordian.

Interviewer: Do you remember the mine in the early years?

John Peterson: I remember going hunting there before the 1920's. There were people there testing a mine hole.

Interviewer: Was there any special clothing worn underground?

John Peterson: Yes, rubber suits. They also wore helmets with a battery-charged headlight. The battery was carried in a belt at the miner's side.

J.B. Simpson

July 9, 1975.

An excerpt from an interview with Mr. J.B. Simpson.

The Hubner Murders

I don't know whether you remember or have heard of the murder of Mrs. Hubner on the Lake of the Woods. Two fellows killed Mrs. Hubner and her daughter at the Mikado gold mine. They shot them.

Mr. Hubner was working another claim about ten miles away. These two fellows decided that they would go and get some food, so they called on him where he was working and asked for some food. He said he only brought enough to do him the two or three days he is going to be there, but if they went over to the Mikado his wife would give them some food. So anyway, on the way over there, they decided that they would kidnap the daughter and shoot the mother. From where they stood across from the Mikado mine, they could see quite plain the mother going in and out of the house as she was working. They decided that the next time she came out they would shoot her. Well, it got towards dusk, and I guess they made a mistake. The daughter came out instead to go to the storehouse where all the food was kept, and they shot and killed her. They didn't find out till they went over, that it was the daughter they had shot. So they shot the mother too because she knew who it was. There was no reason for it. They promised to give them food- and then that's what they got.

I was raising bloodhounds then for tracking, for prisons. We brought two dogs down from Winnipeg where they were on show, and trailed those two fellows for ten days right into Manitoba and north of Norway House before we caught up to them. We had to use a canoe in case of portaging. They didn't always follow the same portages across, they knew better than that, because they knew we were hunting them.

So it was difficult- we lost alot of time. It was a case of getting off places, turning the dogs in, packing them up again and trying some other place. Well, anyway, we finally

got them and they were sent to Stony Mountain. One of the murders' names was Wapiok.

* Mr. Simpson was former officer of the R.C.M.P. and also in the Secret Service.

Carl Walsten

July 1976.

Transcribed from a Taped Interview with Mr. Carl Walsten

Interviewer: You worked in the Wendigo mine, didn't you?

Carl Walsten: Yes, I did, from 1935-43.

Interviewer: What was your job there?

Carl Walsten: I was the mill superintendent. The mill was the place where the gold came out and was poured in bricks and that sort of thing. I started in the crusher house the first year and then was transferred to the amalgamation part, where you take gold out of the concentrate. Every ten days we would pour a brick.

Interviewer: Was a gold brick made in a mould?

Carl Walsten: Yes, a big mold. The average brick weighed about 15-20 pounds. Quite heavy. But no one thought much of it; in fact, Kron did the freighting there; they used to just throw the brick in the floor of the cab, and drive it to town, then take it down to the station and ship it to Ottawa.

Interviewer: Did they have any security?

Carl Walsten: No, not really. No, not abit. A lot of visitors came along and after cooling the brick, (it's molten hot at first) by pouring water over it, people would want to handle it, because it was exciting for them to see gold.

Interviewer: Were there any problems with any people stealing gold?

Carl Walsten: No, no. It's amazing.

Interviewer: Apparently the milling process was changed in the late '30's from cyanidation-amalgamation to flo tation.

Carl Walsten: It first started with cyanidation. The ore went through cyanide, which dissolved the gold in liquid form and then it was picked up with zinc after and processed that way, but there was so much copper in the ore that it interfered with the cyanidation. They put in straight amalgamation and flo tation. They floated off the copper in cells and then some minute gold would go with it. It was then shipped to Consolidated Mining and Smelting at Trail B.C., and that way we got paid for the copper also. I think at that time it was 8-10 cents a pound, and copper now is around 50 cents, but it paid the expenses for milling process and operation of the mine.

Interviewer: Was the ore very rich?

Carl Walsten: The gold content averaged about \$14 a ton and the copper was about 2% copper which would be about 16-20 cents a ton.

Interviewer: Was the flo tation unit added to the existing cyanidation plant?

Carl Walsten: We took out all the cyanidation tanks and then installed the flo tation system. In 1936 it was cyanidation, then in '37 it was changed over.

I think most of the equipment was taken out after the mine closed. The ball mill was sold, the jigs were sold; they all went out west. The flo tation cells and the crusher and some stuff was left, but most of it was sold.

Interviewer: When we were out at the mine we noticed a piece of equipment that looked like a hoist.

Carl Walsten: That would be a steam hoist. The big hoist underground was electrical.

Interviewer: What was the steam hoist used for?

Carl Walsten: They brought in wood into the boiler house. There was a small railway there and a small hoist. They had what we called a trigger hoist underground, for scooping up the ore and putting it in the car.

Interviewer: Was there once a swamp in front of the tailings?

Carl Walsten: Yes, that's where all the waste rock was put. Also the tailings from the mill, as it was ground up, flowed out there with the water. It was quite hard in the summer. We used to play ball there and we had a skating rink in the winter.

I guess, now, it's orangy and crusty, because the minerals in it went rusty.

Then we had a good size curling rink and tennis courts. They were on the flat before you make the turn on the left hand side to the mine, but it may have grown over now.

The shaft itself was 1700 feet deep.

There was a headframe on top of it. We poured a cement slab over the shaft when the mine closed down. The law says you have to cover them when the mine closes because someone may fall in. Sorta dangerous.

Interviewer: Do you remember how much money you got out of the mine?

Carl Walsten: The total? I'm not sure, but I think it was

three million dollars. The mine was rated as a 100 ton mill, but the liners, when ground down, could push through 125 tons a day - that's 24 hours. The mill ran steadily 24 hours a day, whereas the underground just worked two shifts. They could supply enough ore in say, 16 hours, to keep the mill running 24 hours.

Interviewer: What was the most dangerous job at the mine?

Carl Walsten: I think underground was the most dangerous. I think there were three killed in that mine the time it ran.

One was injured and one died in the ore blast there. We never missed them 'til morning. They were on the last shift coming up. I guess the hoistman never counted how many came up and in the morning we noticed that two men were missing.

We went down and one was still alive with his hands sticking through the muck pile but the other one was dead. We had a radio at the mine, so we radioed Kenora that there was a dead man and an injured man here. Doug Cameron flew his plane in through a snow storm and got the man out. Luckily he lived, but he was in hospital for a long time.

Another one was working in the shaft and they were lowering a timber, that was wet. The bark came off of it and it slipped through the rope. It went through the man's back and came out the front.

I think shaft work was really the most dangerous because you're working underneath the bucket and lowering the stuff down.

The mill was built in 1935. They used the same shaft they had put down originally. It was an inclined shaft; it's not

a vertical. I forget the degrees it was put down, but at the time they followed the vein. The vein was not straight up and down, and they followed it to make sure they didn't lose it.

They started building the mill in '35, and then it was either February or March of '36 when it went into production.

Interviewer: Did you know anything about the Blue Star Mine?

Carl Walsten: Yes. It was only 3 or 4 miles from the Wendigo. I forget the name of the lake it is on, but it never successfully sunk a shaft. The ore wasn't up to grade.

Well, they worked there for about a year and then they gave it up.

Percy Hutchi son was the original staker for the Blue Star. He's passed away now. He was an old time prospector.

Interviewer: Jack Edwards was involved with the Wendigo too, wasn't he?

Carl Walsten: Jack Edwards was the master mechanic at the mine. He looked after the mechanical stuff, and the power house. The power house was generated by diesel engine, so there were generators there and he was in charge of all that and looking after repairs in the mill and things like that.

Interviewer: Do you do any prospecting now?

Carl Walsten: I did up till now, but this year, I haven't been out. The last year, and years previous I have , yes.

Interviewer: What do you look for when you go prospecting?

Carl Walsten: The indications are rusty if you are looking for base metals because all metals rust through weathering.

If you run across rusty zones you start scratching and try and get some solid rock, and have it assayed. Where-as gold, you're looking more for veins, which are white, and if you have a mortar you can crush it up fine and you can pan it. Gold is heavier and as you pan it, it will hang behind where-as the lighter rock will wash away.

Interviewer: Have you ever found any gold around here?

Carl Walsten: Oh, yes, but no great amount, no. Not really. Copper's easy to distinguish. A lot of them like sulphides are kind of yellowish-looking too and a lot of people think it's gold when it's not. Gold is very malleable; you can take a knife and practically cut it. Where chalcopyrite is hard-it contains alot of other impurities like iron. Chalcopyrite contains about 32% copper.

Interviewer: To what extent is mining going on here now?

Carl Walsten: There's quite a few companies still exploring. No one has come up with anything big that would make a mine, but they sure are hunting. They haven't been able to see anything visually so now they're using instruments to locate the ore under swamps or earth where you can't see it.

They take readings and they can tell from the readings if there's mineral there. What they'll do is put in a diamond drill and drill it and bring up the core and have it assayed. Mining is getting really sophisticated today.

Gold has to be more or less located visually. Gold doesn't show up on electronic instruments whereas other minerals will.

Interviewer: Why has gold mining never really been successful here?

Carl Walsten: There weren't big enough desposits found, I think that was the problem. They spent more money then they got out of it. The largest desposit here was the Wendigo and it only lasted seven years. If they had had a 500- ton mill it wouldn't have lasted long at all. It's not like grain or vegetables that you can sow, but gold- once you've taken it out it's gone.

Interviewer: Who was the manager at the mine?

Carl Walsten: The first manager was Mr. Spencer. We had several after that. I can't think of them all, but the last one we had was Mr. Ken North. He and I, after the mine closed down, went to Werner Lake Cobalt and I was mill superintendent there.

Interviewer: There are a lot of mines closing around here now.

Carl Walsten: Yes. There's one closing in Red Lake, the Madsen. There's only the Dickinson and the Campbell in Red Lake left, I believe, actually mining. But they seem to have quite a few years ahead of them, especially the Campbell, it's quite large.

Interviewer: Well, they sure have taken enough gold out of there.

Carl Walsten: They sure have. The shareholders have made good.

It was nice when the mine was running at the Wendigo. There were about 100 employed. They all had houses back in the bush, but they were not permanent because you didn't know how long the mine would run. They weren't more than log cabins or tar paper shacks. Max Cameron had quite a large store there and then there was a school there. We used it for dances and of course there were card games,

although we didn't have much time for recreation. We had to work seven days a week in the mill, twelve hour shifts- we didn't have much spare time. At times, we went into town. Maybe once a week for groceries. We went into town because it was alot cheaper to buy in town than Cameron's store because he charged for the freight.

There weren't many cars, but there were taxis. Couple men at the mine had their own and charged so much a trip, I think \$5 a trip. Before 1937, when they built a road to the mine, the cars in the winter went over the ice to town, and in summer went by boat.

Interviewer: Were most of the miners from Kenora?

Carl Walsten: No, but there were some. There were quite a few from Kenora, but there were a majority from Novia Scotia, especially the shaft sinkers, but there were a few from here- the Edwardsbrothers-Jack, Cec., Bert, and Les Ingo, who worked in the office, Ceril England and his brother Leo, John Peterson, who worked under Jack Edwards in the powerhouse as an electrician. He did all the electrical work. Most of the shaft sinkers were from Novia Scotia. I don't know why most of them followed that trade. Most of them were heavy drinkers. Then they would be too sick to go to work the next day.

We had good times though. Some of the people here would make their own beer. They would buy this can of malt, and the women would bottle it. Some of it was so potent, that when you opened it it would blow up and hit the ceiling. I think they had toomuch yeast or what ever there is in it.

Interviewer: Where there alot of women at the mine?

Carl Walsten: Quite a few. Well, to start with there was only a few-four or five, who were married, but then as they went on, they started with alot of singles, but then they hired married people. The single people would work a week

or two or month then take off for greener pastures, so once they got married people in, they stayed alot longer. Oh, there must have been thirty families, maybe forty.

Interviewer: So there must have been a real community.

Carl Walsten: Yes, there was one large log cabin, the school house, and opposite it was the cookery. Jack Newman was the cook. He's passed away now. Oh, and they had two bunkhouses for the single men. They were all log.

Interviewer: Was the property large?

Carl Walsten: The property was quite large, but I don't know how many acres. It was quite tremendous. The only desposit found was right at the mine.

Interviewer: So there were no other shafts on the property, except the mine?

Carl Walsten: No. They blasted little pits for sampling and there was a lot of diamond drilling. Actually they were underground when they quit but the grade was a lot lower and they were going to replace the mill. It was practically worn out.

Also, putting in a vertical shaft was going to be too costly so the shareholders decided to wind it up. They sold the property and equipment to Doc Eisentrout from Illinois, I think, for something like \$6,000, all patented. He started a tourist camp and ran it for a few years, then sold it. I think it has changed hands quite a few times since then. It's Witch Bay Resort.

About a month after the mine closed, they offered me the mill, the shaft house and the other buildings for \$500, so I bought it. I tore down the mill and the shaft house and in the meantime I cleaned up what gold I could find. I think I took about \$1,700 worth of gold out of there after I got all the lumber that caught the gold for \$500. I went back there after they sold it to Eisentrout, cleaned and scraped around, and got a couple of small bricks. Doc. Eisentrout got half and I got half, so it was worth it. You can't find much there now, it has been pretty well scratched over.

I set up some blanket tables and a pump and shovelled all the findings in and washed it down these blanket tables. I washed the blankets then and I could always find a little bit of gold.

Interviewer: Do you think any of the old workings in the area will ever start up again?

Carl Walsten: It's hard to tell. I was hoping it would when gold almost reached \$200 an ounce, but I see it's back down to \$120. A lot of mines are complaining now that they can't make a profit. The costs have gone up. The cost of dynamite and labour costs are just too high. Of course you use gold for jewelry, but it doesn't seem to have any monetary value now as far as your dollar bill is concerned. Help is hard to get too. You've got to train all new people, whereas if you get experienced help it means alot.

The equipment was costly in those days too. The mill itself was expensive. Every so many months, the liners in the mill, would wear out and we would have to stop for 10 or 12 hours to reline it. There was so much friction in there that it created alot of heat, so after we had dumped it all and cleaned it out, we had to wait so long before we could get in there to take the liners out and put the new ones in. The new liners would take up quite a bit more room than the old liners did (they had worn so thin) that you couldn't get the tonnage in till they were worn down a bit.

For flo. tation you have to use certain different types of oils, reagents, to bring the froth up. The copper and gold clings to these frothy bubbles. The other stuff sinks to the bottom and goes out while the gold and copper comes up to the top with the froth and is skimmed off the surface.

Interviewer: How do you stake a claim properly?

Carl Walsten: Well you start with a number one post and erect it wherever you think you have found a mineral desposit. You blaze the post on four sides and write your name, license number, the date and time of staking, the year, and the number of the post. Then you pace off 1320 feet, which is pretty hard to do exactly when you're in the bush and going uphill or down hill. Then you erect a number two post and put your name, and license number, on it. You're not required to put the date on it. After that, you pace 1320 feet west and put up a number three post, always blazing the line so someone can follow it. From there you go north 1320 feet, and then back to your number one post. But a lot of people would run the outside boundary if they were going to stake twenty claims and then afterwards, to save a lot of time and money, they would cut it up in claims. Some of them would forget to run a line or two and their claims would be cancelled, if the mining claims inspector came along. There was always somebody who tried to take short cuts.

You could keep the claims for a year. If you did forty days of work like trenching or blasting, then you could keep it for another year. Eventually if things looked good enough, you could apply for a patent. That was in the old days, now you get a lease. It had to be surveyed also.

Interviewer: What was the mining inspector's job?

Carl Walsten: Well, mining claims, mostly. We were also in charge of disposing of all the gravel on Crown lands. We had to draw diagrams and write up reports about what we had found. If a dispute went to court, then we had to appear in court to give evidence.

Interviewer: Were you also responsible for the safety in the mines?

Carl Walsten: No, Dick Murray was Safety Engineer for Kenora. But we travelled together alot. At one time we had to locate all the old mining shafts that were abandoned in the early 1900's and have them fenced because they were unsafe. He is still with the department as an inspector. He goes down all the mines to see that there's no loose rock hanging where the men are working, and checking all the drilling holes that are being blasted. He also makes sure the men are all wearing hard hats for safety.

Interviewer: Do you remember the early years of the Wendigo?

Carl Walsten: Not really too much. I forget when it first came into prominence but I do remember that Percy Williams of Williams Hardware and Mr. Cameron of Cameron Wholesale had quite an interest in it.

Interviewer: Were you associated with any of the other mines around here?

Carl Walsten: I went to Sioux Warrows to the old Horseshoe mine. It had several names—Horseshoe, Goldwood, Black Eagle, Regina. The wife and I moved out there one summer after the

Wendigo closed, and I cleaned the gold out of that one. Jack Shannon was the last one to operate it. He went broke in underground mining and he had to close it down, so I got the chance to take it over and clean it up. I did fairly well for the few months I was there.

Interviewer: Was there just the one main shaft at the Regina?

Carl Walsten: There was an old adit there too. It was driven in a hill but it wasn't minable really.

The mill was right down by the water. When I left there around 1946 the mill was still standing and a lot of the houses and manager's home were still there.

The Sultana was standing in 1968. The mill was a beautiful building. It wasn't a ball mill, it was a stamp-mill. But it was burned down. I think it was Harry Hawes that hauled all the machinery out for scrap and sold it.

*Albert & Olive
Zeemel*

August 16, 1976.

Transcribed from a Taped Interview with Mr. and Mrs. Zeemel

Mr. Zeemel: There was mining here before the 1900's, here and there. The Sultana mine was one of the older ones and it was situated just a little ways around the bay. If you have a pan with you and you dig a little hole in the sand there, you could pan some gold. The sand is some of the old tailings from the mine, actually groundings from the mill, so there's a little bit of gold left in it and you can get quite a nice tail, sometimes.

This is a mortar. All prospectors have a thing like this in camp. They have small ones that they carry around with them, if they're industrious. If they're not very industrious they'll just take the sample home. You know, if there is really something you want and it's interesting and you think you've got it, then you like to find out right away. You don't like to walk around all day keeping it in your pocket. You mortar it or crush it, then pan it with water. Swirl it around a bit, moving the sand forward. The gold is heavy and hangs behind. You can just crush a sample up right away to find gold, and you don't have to send it to get assayed or anything. Sometimes gold floats. When it's dry, little pockets of air in the water attach to the irregular-shaped gold, and you wonder how that happens when gold is nineteen times heavier than water.

Interviewer: Is prospecting becoming a lost art?

Mr. Zeemel: Well, it is, very much so. People are getting pretty lazy. If they can get something for nothing or if someone else will do it for them or pay them real well then they'll go at it, otherwise it's becoming a lost art. It's work. There's mosquitoes in the thick bush that you have to fight.

Interviewer: How long have you been prospecting?

Mr. Zeemel: I have been prospecting about 30 years, and I still do. I once flew all around the world looking for uranium desposits. In Lake of the Woods there's one spot here that has a touch of uranium. I just forget the name of the island, now, but there isn't very much.

But all to the north, going east and west there are good indications of uranium throughout the country. We have flown alot of it when the price of uranium was low. Now it's high (\$50 to a pound), I really should be going back there. I'm sort of semi-retired now so I'm not rushing.

Interviewer: How can you tell if there's uranium in the ground?

Mr. Zeemel: You have a scintillometer and a geiger counter. A geiger counter will give a tick if there is any radioactivity. You have an earphone and it will start buzzing very hard, if there's a lot of uranium there. It's not a very sensitive instrument. The scintillometer is very sensitive. We used this camp as an airplane base. I was working for Gunner Mines, for Gilbert LaVene. He was the first fellow to find uranium back in 1930 at the Great Bear Lake. That is where the first uranium came from, from which the bomb was made that was dropped on Hiroshima.

I found chromite up in the Bird River area in Manitoba. The company held the claims for a long time. My agreement was such that once they didn't want them anymore, they'd return them to me. I'm holding them now, and right now there are people in London, England that are interested in going in t here and making a mine out of it. In the early days, chromite was a metal that was hard to extract because it was very closely associated with iron. But chromium is a very hard, armor-plating complex, so that it is a very important metal, even now it is used for going up into the stratisphere. They have found a process now by which they can seperate the

chromite from the iron.

The next thing I found was uranium up at Lake Athabasca. It turned out to be an open pit mine, the only one for a long time.

Interviewer: What is easier to mine, an open pit or an underground mine?

Mr. Zeemel: Oh, an open pit is easier and cheaper. The vein doesn't go in a straight line, it faults, zigs and zags. You miss sometimes and you've got to look for it, in underground mining. It's less expensive if you can mine with big mobile equipment on the shore, big shovels and what-not. You are able to mine larger tonnages and as a result, do cheaper mining.

Interviewer: What other mines on the lake did you have an interest in?

Mr. Zeemel: I really wasn't interested with this lake. We never found anything large enough of commercial grade. There's a lot of gold scattered around in some places, even some real high grade like the Ophir mine on Sultana Island. But it was just erratic and small. It costs a lot of money to start a mine. You have to have a big tonnage to make a profit. Right now gold may be \$135 an ounce instead of \$35 an ounce but everything else is so high. The costs are just too high to make a profit.

In the old days, you were able to buy a package of land, and they named it number so-and-so. The moment they did any mining or prospecting on it they called it a mine, when it was really just a prospect. So actually there may have been over a hundred prospects but only 20 mines did any real mining. Gold is an interesting thing and anyone who had money wanted to have something to do with it. They had someone else staking the mine. As long as they saw quartz, that was good enough, and they immediately gave it a name. Old maps showed

mine this and mine that but they were only prospects. When they put in a few holes and had some assays taken and found there wasn't much gold in there, or no gold in there, then they forgot about it, but on the map the name was there already.

Mrs. Zeemel: Albert still goes over to the Sultana and if there is anyone there, like the boys from Camp Stevens, he'll pan gold for them on the beach.

A few years ago, the old stamp mill was still standing, before it was hit by lightning and burned down. It was very fascinating. Even though the stamp mill wasn't operating, you could see how it had operated. You could see how these big stamps came down on the metal plate and broke up the ore. These huge hammers or pistons were operated by steam engine. They had great big steamboilers. But it was still standing up until maybe fifteen years ago when a fire went through. The beauty of it is, it was just a low building from the lake shore but there's a high cliff behind it and inside the building you can go up four flights of stairs to the pit at the back. The mill was built at the side of the cliff so that the top of the stamp mills were at the top of the second floor, and you could go up above that. It was really fascinating to go through the old building and see great big B.C. timbers that you'd think had been hewn yesterday.

Mr. Zeemel: I suppose you've heard of the Burley Crib? You couldn't stake anything in the old days that was under water. It had to be above water. So one time, a bunch of the boys got together and during the night they pulled a raft down there with some rock and staked it. They put rocks down there so it would come above the water. Then they built a complex right around it and sunk a shaft through it and they did a little mining. If you see it now the logs are pretty well all rotten. So that's how interesting gold is. People wanted to get next to it and they did get next to it but they didn't get enough to make it pay. There were quartz veins but it

it was erratic; either big lenses or maybe just one edge of it carried a little gold.

The mine on Cameron island opened up a few years ago. They did a lot of diamond drilling on the island but I don't think they found enough to open it up at this time and make a profit. So if you can't make a profit, you can't operate. Our Manitoba government is the only one that can operate without a profit.

Interviewer: Were there any incidents of a mine being salted?

Mr. Zeemel: Everybody's not honest.

Mrs. Zeemel: Apparently at the La Mascotte mine gold had been purchased and blasted into the rock with a shotgun to make it look like there was gold in it.

Mr. Zeemel: At Bird Lake in Manitoba there was an incident of salting too. They put fine, fine gold dust in the bags and when they dumped the rock out, some of the gold dust dropped out too and it assayed. So people put up money and started mining.

Maybe it assayed well on the surface of a mine but if they went down below and discovered it didn't assay maybe someone thought they'd better put a little in when the boss came around to make it interesting, to keep on working and maybe find some more.

Mrs. Zeemel: There were lots of reasons why they would do that really. One, to make it saleable because you had visible gold in the rocks; and as Albert said, if the men thought it was petering out they might take some highgrade samples and mix it with the ore that was coming up so it would look as if it was good ore.

Have you interviewed Barbara Machin? She could tell you alot about the mines. Old Colonel Machin and his wife just loved the Gilbert and Sullivan operettas and so the Yum Yum, and the Mikado and the Olympia were names they gave to the mines.

Interviewer: Mrs. Machin was English, wasn't she?

Mrs. Zeemel: She came from an English family and her father was one of the discoverers of the Kimberley Diamond Mines. When Colonel Machin was a soldier in the Boer War he met Mrs. Machin and they were married. Colonel Machin had lived in Kenora for a good many years and was a lawyer here.

Interviewer: How did you become interested in prospecting?

Mr. Zeemel: When I was about 12 years old I had a bad case of scarlet fever which impaired my hearing. I liked girls and I'd be so embarrassed if I said the wrong thing, so I thought I better get away all by myself and go out prospecting. If you said the wrong thing to a girl you really liked, it didn't work out too well.

Interviewer: Where did you learn to prospect?

Mr. Zeemel: My dad was a prospector. The Manitoba government also used to give courses in the old days and when I finished my course I was quite well qualified.

Interviewer: Have you ever thought of reopening any of the mines around here?

Mr. Zeemel: When we were out panning gold at Sultana one time, the chap who was in charge of the boys at Camp Stevens asked me, "How much could you make if you quit this job and start panning?" Well, you can't pan if it's someone else's claim. The Sultana was sold for taxes to a chap I know. He took it over and then he sold it to somebody else. But you can't open a mine unless the conditions are such that you can make a profit.

Interviewer: Is individual prospecting worthwhile now?

Mr. Zeemel: In Manitoba it isn't! In the first place, in Manitoba, if you find anything they take half of it right away.

Mrs. Zeemel: There aren't that many individual prospectors simply because it's not a sure way of life and it's strictly seasonal. If young people are hired today they'll only get six months of wages because you certainly can't prospect when the ground is covered with snow. And you really don't make twice as much in the summer months!

The Mines Today

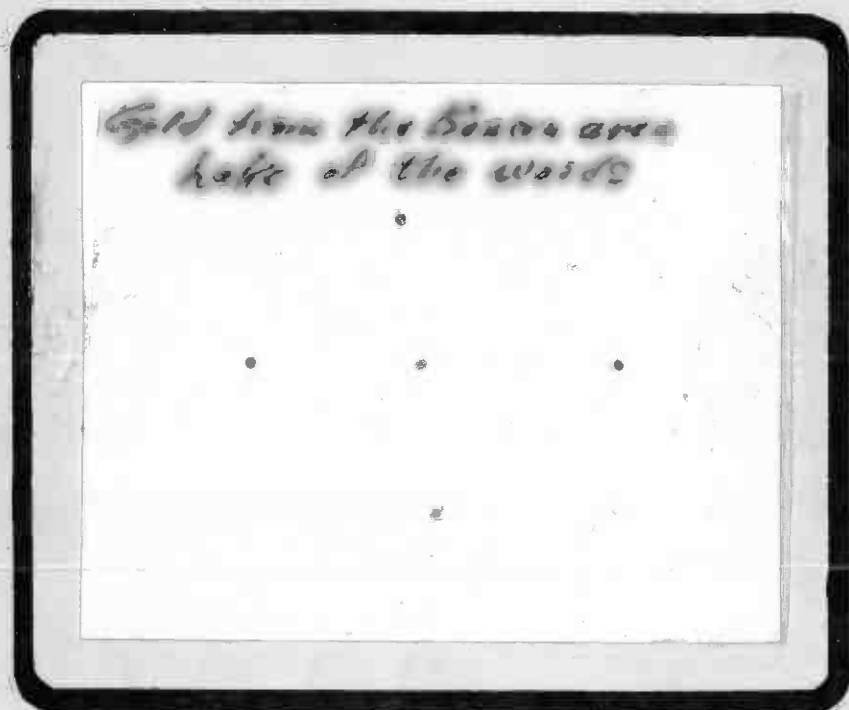
Kenora District Production Statistics of Gold Mines 1885-1936
(Value includes gold and silver, and exchange and equalization have been added since 1920)

MINE	YEAR	QUANTITY TONS	VALUE
Black Jack	1893	50	300
Britannia	1899	20	110
Cameron Island (Damascus) ¹	1898, 1906, 1934, 1935, 1936	1287	163,871
Camp Bay	1904-1906	7,717	7,531
Cedar Island (Cornucopia) ²	1896, 1932, 1935, 1936	17,050	174,146
Champion (Bad)	1900	100	
Cornucopia (Cedar Island)			
Crown Point	1900	150	900
Duport (Cameron Island)			
Gold Hill	1886, 1893	220	19,610
Kenland (Regina)			
Kenora Prospectors and Miners (Cedar Island and Mikado)			
Mikado ³	1896-1902, 1910, 1911, 1931	57,813	421,070
Minerva	1885	28	1,372
Olympia	1906, 1911, 1912	1,148	3,564
Ophir	1893, 1894, 1900, 1911	6,089	22,677
Quarry Island	1899	176	1,063
Regina ⁴	1895-1899, 1902, '04, '05, '36	28,718	156,275
Rush Bay (Golden Horn)	1906, 1907	350	560
Sultana	1894-1902, 1904-1906	77,436	428,638
Treasure	1898	34	529
Wendigo	1900, 1936	17,136	115,618
TOTAL		215,522	1,733,356

Foot Notes for Production Statistics

1. Acquired by Duport Mining Company Ltd., in 1929.
2. Acquired by Kenora Prospectors and Miners Ltd., in 1928.
The mine was called Cornucopia prior to 1932.
3. Acquired by the Kenora Prospectors and Miners Ltd., in 1928.
4. Or Black Eagle; acquired by Kenland Gold Mines Ltd., in 1936, from Horseshoe Mines Ltd.

Gold Sample from
Lake of the Woods
panned by Mr. A. Zeemel



July 1976.

Burley Shaft

The Burley shaft is situated about fifty feet from the Sultana shoreline and about five hundred feet south of the beach. The crib could be mistaken for a small island overgrown with trees and brush except for its square sides and the barely visible timbers of the crib. The timbering is still fairly intact although starting to rot out, laying bare a few long rusty spikes. The outer edge of the crib consists of large chunks of broken rock (used to sink the crib originally) which made it unsafe to land, although the centre was solidly packed earth. On the side nearest shore, the crib has given away causing the rocks to largely block the passage between the shore and crib.

In the centre of the crib is a small shaft opening plugged with rocks, soil and water.

From the eastern corner of the crib can be seen the remains of a building on shore which was possibly the Burley power plant. No machinery or buildings are left on the crib.

July 1976.

Kenricia

The mine is located along the Kendall Inlet Road on a property presently owned by B.E. Friesen.

Of the four shafts reported to be there, only one could be located at the base of a cement ramp, known as the Kenricia shaft. It had been plugged up with waste rock to prevent accidents, as the area is well trafficked by camp owners. The three older shafts, sunk before the turn of the century, could not be located.

There were numerous cement foundations, still left on the property, evidence of a large crusher house and cyanide mill, and several smaller unidentified mine buildings. No machinery was left at the site.

July 1976.

Regina

The Regina mine is located approximately two miles south of Sioux Narrows on Regina Bay. Numerous wooden buildings, probably bunkhouses, dwellings and the manager's home, are still standing and relatively intact. There is a small shack marked "poisons" which was probably the assay office where chemicals and acids were used for assays.

The concrete foundation of the mill is situated right by the lake with a steep hill immediately behind it. The pile of wasterock lies on either side of the mill down the north face of the hillside. Pieces of old equipment are still out at the mine including an old air receiver for compressed air, perched on a rock halfway up the side of the hill, a rustypneumatic drill with rubber hose still attached, and an unidentified piece of machinery, possibly a part of a hoist.

The main shaft is located near the top of the hill but there is no evidence of any shaft house. Three more shafts are located in the bush but could not be reached.

July 1976.

Sultana

Little is left of the buildings and workings at the Sultana mine. The stone foundation of the mill is still there as well as the foundations of the settlement buildings. There is evidence that the mill was destroyed by fire as there are some burned timbers remaining. Missouri bricks and rusted spikes and sheet metal are all that is left of the mill.

Only two of the three shafts were located. One of them, at the top of the hill above the mill, was presumed to be an open cut. Metal rungs placed up the wall of the shaft were still there. Some rotten timbering can still be seen in the shaft. About ten feet down snow and ice is visible.

The other shaft is located a few hundred feet north of the open cut and is filled with water within thirty feet of the top. Drifts off to either side of the shaft had been partly boarded up. Rusted metal juts out of this shaft and appears to have been tracks from an old tramway.

Neither of the shafts were fenced off.

None of the mining equipment is left although there is a heavy wire coil on a spool at the base of the waste rock pile. The waste rock, of relatively fine broken rock, is piled near the west shoreline.

On the north side of the property wooden buildings, probably dwellings, are still half standing. In the pasture are several small garbage dumps overgrown by grass. Dock cribs are still seen long the shore south of the mill.

Because Sultana Island is a popular picnic area, the paths to the mine are well-trodden. Garbage also litters the beach area.

July 1976.

Wendigo

The mine is located on the right hand side of the Witch Bay road about two miles from Witch Bay Resort. A narrow gravel road leads directly to the shaft. The waste rock dump can be seen clearly from the Witch Bay road. There is a large area at the base of the waste rock pile, originally a swamp, where the tailings from the mill were dumped. The tailings are a crusty orange residue probably due to the rusting minerals.

The mill was built above this, on top of the hill. Just the concrete foundations are left as the buildings were torn down after the mine closed. On the foundation is inscribed a date Dec. 1937, the date when the mill was converted into a flotation plant. In what used to be the crusher house was found a cylindrical piece of machinery used probably to wash the dust off the ore. Also found in the bush near the foundations was an old steam hoist.

At the top of the hill were the shafts. The old stope is now fenced off with barbed wire as it has not been filled with water or debris. The remains of the shaft house are located a few feet away. The floor timbers laid in a grid pattern are almost intact though some parts are caved in due to rotting. The main shaft could be partially discerned.

The west shaft is now used as a garbage dump for the tourist camp in the area.



RETURNS TO HOME BASE -- A trim little Fox Moth plane taxis up to gas pumps at Kenora airport Wednesday afternoon with Captain Garth M. Martin, one of Wardair Canada Ltd. top jet pilots at the controls. The

plane, once based in Kenora and owned by Jack Edwards, is enroute to the CNE in Toronto to participate in air shows. Another photo, page 3.

(Staff photo)

Fox Moth wings its way "home"

Several interested people showed up at the Kenora airport Wednesday afternoon to watch the arrival of Captain Garth M. Martin, Toronto, one of the top pilots of Wardair Canada Ltd., touch down, while at the controls of a Fox Moth aircraft.

Mr. Martin is flying the aircraft -- the only remaining post-war-produced ship of its type -- to Toronto for appearances at the Canadian National Exhibition air show.

On hand at the airport were Jack and Cec Edwards, both of whom spent countless hours in the plane when it was owned by Jack Edwards Diamond Drilling, Kenora.

Both recalled trips in the plane during the 20 years it was flown by Jack Edwards. Some of those flights weren't the most pleasant. Often he flew in the dead of winter when fuel lines froze up or when darkness fell before the plane could get to its destination and a "touch-down" would be necessary to await morning.

Mr. Edwards recalls purchasing the plane from the Hayberg Brothers in Kenora who were using it to haul fish. He flew the plane extensively while engaged in mineral exploration throughout northwestern Ontario.

He sold the plane to Max Ward,

president of Wardair, a few years ago. The bi-plane is a sister to the one that started Mr. Ward's charter airline in Yellowknife, N.W.T.

Mr. Martin said the plane performs very well, cruises at 85 miles per hour and has a 25 gallon gasoline tank which allows for a range of 300 miles. He said he is thoroughly enjoying the experience of flying the aircraft from Edmonton to Toronto and admits it is "quite different" than the sophisticated "big jobs" which he commands. The trip to Toronto will cover approximately 1,976 miles.

Enroute the plane will participate in a number of air shows. Fuel stops were made at Swift Current and Broadview in Saskatchewan and Winnipeg in Manitoba while enroute here.

The prop had barely stopped turning after the touch-down at Kenora when Jack Edwards was invited aboard to sit at the controls which he was observed to lovingly touch as he checked over the interior of the cockpit.

Mr. Martin had originally planned on winging on to Thunder Bay Wednesday but after being greeted by a number of people and chatting with the Edwards brothers, he decided to

overnight in Kenora and was scheduled to take off this morning.

Jack Edwards needed no second invitation to go for a "flip" and demonstrating he hadn't forgotten his old touch, he "hand-bombed" the motor to get it fired-up. This move, however, wasn't necessary as the plane has recently been equipped with an electric start.

"That's the only way we could get the old girl chugging in the old days, winter or summer, rain or shine," Jack Edwards recalled.

Three area mines close operations

Three major mining properties terminated operations in the Kenora region during the last six to eight months.

In the Red Lake district, Cochenour Willans GML suspended operations on their Wilmar property in late December, 1975.

Mining of the main Cochenour orebodies on the property was terminated in 1971. Total production during the mine's 32 years of life amounted to approximately \$43 million.

Surface and underground equipment and buildings are presently being disposed of and the mine is being allowed to flood. At the time of closure about 40 men were employed on the property.

More recently, the Madsen Mine (Bulora Corp. Ltd.) also terminated mining and milling operations on its Red Lake gold property. This mine, which first came into production in 1938, has produced over \$88 million in gold.

Production from the mill has now ceased, and the mine is being allowed to flood. Approximately 165 men were employed at the time of closure in June.

In the Werner Lake area, north of Kenora, the mill of Consolidated Canadian Faraday Mines Ltd. also ceased all milling operations in June. Since the closure of the Werner Lake

Mine in 1972, this mill has been treating copper-nickel ore trucked in from Dumbarton Mine in Manitoba.

The Cumbarton ore has now been exhausted as well, and no new ore zones were discovered during recent exploration in the vicinity of the mine. Production from the Werner Lake Mine was in excess of \$24 million over the life of the mine.

At the time of closure about 50 men were employed at the mill complex in Ontario. The tailings area is being rehabilitated by the company this summer.

The Mayburn Mine of Sheridan Geophysics Ltd., located at Atikwa Lake, east of Sioux Narrows, remains on a standby basis, apparently awaiting better metal prices before re-opening. This mine employs approximately 40 men, when in production.

Net loss in direct employment due to recent closure is about 250 jobs.

No new mines have opened in recent months to take up the slack in lost jobs and production. The last mining property to start up in the northwestern Region was the Sturgeon Lake Mine in September, 1974.

Only one new mine is scheduled to commence production in 1976. This is Umex's Thierry Mine at Pickle Lake. This copper mine is scheduled to go on stream in October, 1976 with a

production of about 4,000 tons per day.

It will employ about 365 men when production starts. Costs are expected to reach \$114 million, up considerably from an estimated \$36 to \$42 million at the start of the project.

Closer in time, but less significant, is the planned re-opening of Mt. Jamie Mines Ltd. gold mine, located off Pipestone Bay of Red Lake. A small portable gold mill has been set up on the property and will mill stockpiled ore, starting in July or August, 1976. The old underground workings have been dewatered and a headframe is presently being emplaced over a newly poured shaft collar. A straight gravity concentration is planned, so should cause few, if any, environmental problems for the area.

The only other major mine on the horizon is the Lyon Lake orebody of Mattagami Lake Mines Ltd. This zinc-copper-silver orebody, located in the Sturgeon Lake area, is not slated for production until late 1977. No mill is being constructed on the site, and the ore will be trucked to the Mattabi mill, nearby. Shaft sinking is now in progress.

Selco Mining Corporation Ltd. has recently reported the discovery of significant base metal mineralization on a claim in the Trout Lake area, east of Ear Falls.

Several drills are presently testing the deposit to determine its economic viability.

Glossary

A

Adit - a tunnel open at one end and used for mining or drainage.

Air Shaft - a shaft used to ventilate a mine.

Amalgam - an alloy of mercury and one or more other metals, usually gold or silver.

Amphibolite - a group of silicate minerals.

Assay Foot - the assay value multiplied by the number of feet across which the sample was taken.

Assay Grade - the percentage of an element or compound determined in a sample.

Assay Value - the value of gold or silver in ounces per ton of ore.

Attitude - the position in space of a rock body or structure, including strike, dip, plunge.

Auriferous - containing gold.

B

Bedrock - solid rock, either exposed or covered by loose material.

Blind Shaft - one that is not open to the surface.

Bonanza - a find of rich ore.

Borehole - an exploratory hole made in prospecting.

Boss - a dome-shaped mass of igneous rock exposed by erosion.

C

Chalcopyrite - a yellow mineral CuFeS_2 , consisting of copper-iron sulfide and constituting an important ore of copper.

Chimney - an ore shoot or other vertical structure.

Chute - a passage for the descent of ore.

Cofferdam - a watertight enclosure from which water is pumped to expose the bottom of a body of water.

Collar - the top of a mine shaft.

Compressor - a machine that compresses gases.

Crib - a mine structure built of timber arranged like a log cabin.

Crosscut - a horizontal passage in a mine, at right angles to the main tunnel or adit or crossing a vein.

Cross-section - a slice or plan at right angles to the trend or strike.

Cut - a hole drilled to make the first blast in a series of explosions.

Cyanidation - the process of extracting gold and silver from ores by treatment with a sodium cyanide or calcium cyanide sol'n.

D

Dikes - a tabular body of igneous rock that has been injected while molten into a fissure.

Dip - the angle at which a vein or tabular body is inclined from the horizontal.

Divining Rod - a forked piece of tree branch (or man-made substitute) used to detect a mineral deposit.

Drift - a horizontal passage in a mine usually following a vein.

Drifting - extending a horizontal mine working, especially along a vein.

Dump - the waste pile of a mine.

Dwt - abbreviation for pennyweight (1.555 grams)

E

Entry - an adit or slightly inclined shaft in a mine.

F

Face - the working surface of a mine.

Fault - a fracture in the earth's crust accompanied by a displacement of one side of the fracture with respect to the other.

Felsite - fine-grained, light-coloured rock.

Fissure - an extensive crack in rock.

Fissure vein - an ore vein in a rock crack.

Footwall - the lower side of a fault.

G

Gouge - soft material on the wall of a vein.

Greenstone - greenish igneous or metamorphic rock of various kinds.

H

Hanging Wall - the upper side of a fault.

Headframe - a structure built over a mine shaft for various operating purposes.

I

Igneous - relating to, or resulting from the intrusion or extrusion of magma or the activity of volcanoes.

Incline - a sloping shaft, tunnel, drift, or other opening in a mine.

Intermediate Level - a horizontal working starting from a mine raise rather than a main shaft.

L

Lateral - a horizontal mine working.

Level - a horizontal mine opening at a given elevation driven from the shaft.

Location - a mining claim; also, fixing the legal boundaries of a mining claim.

M

Malachite - a mineral $\text{Cu}_2\text{CO}_3(\text{OH})_2$ that is a green basic carbonate of copper used as an ore.

Mesh - the opening in a sieve or screen; also the size of opening.

Milling Ore - ore that must be concentrated before being shipped.

Muck - loose, broken, useless, or mixed debris in a mineral deposit or mine.

Mucker - a mine shoveler.

N

Native - applies to a mineral that occurs as an element.

Nugget - a lump of mineral, usually water-worn and metallic.

O

Option - an agreement to buy.

Orebody - a vein and closely surrounding rock.

Ore Shoot - a rich part of a steep vein.

Outcrop - the part of a rock formation that appears at the surface of the ground.

Overburden - uncoated material, either loose, or solid that lies above a mineral deposit.

P

Pay Dirt - placer material of commercial value.

Pay Load - useful material taken from a mine.

Pay Ore - ore of commercial value.

Pitch - the angle at which the axis of a body is inclined from the horizontal.

Placer - an alluvial or glacial deposit containing particles of gold.

Prospect - an unproved but promising mineral property.

Pyrite - a mineral that consists of iron disulfide FeS_2 .

Pyrrhotite - a bronze colored mineral FeS of metallic luster that consists of ferrous sulfide.

R

Raise - a vertical or inclined opening driven upward from a mine level.

S

Schistose - refers to a banded rock that splits readily.

Shoot - a rich part of a steep vein.

Siderite - a native ferrous carbonate FeCO_3 that is a valuable iron ore.

Soda - applies to sodium or several sodium compounds.

Stamp Mill - a mill in which ore is crushed with a pestle or heavy instrument.

Stope - the place where ore is being mined.

Strike - the compass direction of a vein or tabular body.

Stringer - a narrow vein.

Strip - to remove overburden from useful material.

Sump - a pit for collecting water.

T

Tabular - occurring (as a mineral) in flat plates or (as a mineral deposit) in a flat bed.

Tailings - residue separated in the preparation of ores.

Trenching - digging a long cut in the ground.

Trend - strike, direction, or Gearing of a vein, rock body, or other structure; also a variation in grade of ore.

W

Wildcat - a risky venture in mining in an untested area.

Winze - a vertical or inclined opening driven downward from a mine level.

List of Illustrations

- 35a Sketch map of the main showings on the surface and underground workings, Franklin mine, 1936.
- 59a Cameron Island Gold Mine, 1925.
- 59b Geological Sketch map of Cameron Island, Shoal Lake, Dupont Mining Co., Ltd., 1934.
- 59c Geological map of Cameron, Stevens, Dominique, and adjacent islands, Shoal Lake, 1936.
- 69a Geological Sketch map of Cedar Island, Bag Bay, Shoal Lake, Kenora Prospectors and Miners, Ltd.
- 87a Sketch map of the Johnson-Nelson claims showing the location of the trenches and shaft, 1934.
- 139a Mikado and Olympia Gold Mines, 1925.
- 139b Mikado, East side - Hanging Wall, West side - Foot wall, circa 1934.
- 159a Sketch map showing the location of the veins on the O'Sullivan property (Split Lake Gold Mines, Ltd., 1936.
- 186a Vertical section of Underground workings, Regina mine, 1896.
- 187a Regina Gold Mine, 1925.
- 187b Vertical section on No. 3 vein, Horseshoe mine showing underground workings, 1925.
- 200a Geological Sketch map showing the location of veins and sheared zones on the claims of Stella-Lac La Belle Syndicate, 1934.
- 209a Underground workings of the Sultana, 1921.
- 209b Sultana and Ophir mines, 1925.
- 217a Geological Sketch of claim P211, Kenricia Gold Mines, Ltd. Clearwater Bay, 1936.
- 233a Longitudinal section in the plane of No. 1 vein, looking south, showing the underground development at the Wendigo mine, 1934.
- 233b Geological Sketch map of the claims of Wendigo Gold Mines, Ltd., 1934.
- 237a Geological sketch map of the showings on the group of claims, Witch Bay Gold Mines, Ltd., 1934.
- 239a Map of West Shoal Lake, Lake of the Woods area, by A.L. Parsons, showing locations of the Tycoon, Bullion, Sirdar, Cornucopia, Mikado, Yumyum, & Olympia, 1921.

Index

A

Abraham, Michael, 28
 Abraham claims, 18, 28
 accidents, 129-130, 138, 207
 244, 262, 307, 318, 346
 Adair, R.V., 34
 Adams, Charles, 262
 Adams, L., 77
 adit, 175, 271, 283, 334, 352
 Africa, 8
 African Rand, 136
 Ahn, R.H., 70, 77, 82, 86,
 124, 131, 167, 245, 246,
 247, 248, 257
 Aikens, Henry W., #P1
 air compressor, 301, 310
 air receiver, 347
 air shaft, 70, 352
 airplane, 265, 267
 Alaska, 17, 241
 Albrecht, J.A., 46
 Alding Kenora Mining
 Syndicate, 86-87
 Algoma Ore Properties, #P3
 Alice A. mine, 241, 261
 Allie Island mine, 18, 29,
 115
 alluvial, 259
 altered trap, 54
 amalgamation, #P2, 7, 55, 69,
 231, 263, 308, 322, 323, 352
 Amazon mine, 18
 Ambrose mine, 96
 America, 191
 American Gold Fields, 242
 American Smelting and Mining
 Co., 59
 amphibolite, 54, 352
 Anderson, Charles, 262
 Andrew Bay, 65, 104, 212
 Angell, 219
 Anglo-Canadian, 17
 Argyle Gold Mining Co., 8
 Argyle mine, 7, 18
 Arizona Camp Bay Gold Mining
 Co., 46, 47
 Armstrong, Hugh, 32
 Arnold mine, 18
 Aronek mine, 18, 30
 arsenic, 277
 assay, #P2, #P4, 53, 72, 80,
 81, 84, 103, 106, 110, 116,
 136, 139, 148, 189, 195, 199,
 212, 213, 225, 230, 246, 247,
 259, 312, 315, 338, 339, 347
 assayer, 63, 245
 assay foot, 352

assay grade, 352
 assay value, 352
 asurite, 65
 Atikaminike Bay (Grassy Bay),
 224
 Atikwa Lake, 351
 Atkinson, D.C.T., 39
 Atlantic, 247
 attitude, 352
 auriferous, 5, 17, 84, 141,
 161, 252, 352
 Australia, 8, 245, 250, 254

B

Bad mine, 10, 18, 31-35a, 108,
 261, 342
 Bag Bay, #P2, 67, 70, 127, 139
 153, 196, 197, 218, 225
 Bald Indian Bay, #P1, 189, 202
 ball mill, 79, 182, 310, 323,
 334
 Bank of Ottawa, #P4, #P5
 Barbary, Harry, 272, 273, 275
 Bare Point, 11, 282
 Baridon, L.R., 92
 Barnes, E.W., 223
 Baron, Russell 287
 Barr Gold mine, 18
 Barry, Tom, 43
 base metals, 265, 271, 275,
 351
 Bath Island mine, 18, 36
 Bath Island Mining Co., 36
 bedrock, 352
 Beebe, J.C., 261
 Beehive mine, 241
 Belt vein, 197
 Ben Harrison mine, 18
 Benson, Andrew, 40, 192
 Bergman, Gunnar, 274
 Bergman, Herbert, 265-276, 280
 Bigstone Bay, 8, 15, 86, 149,
 160, 285
 Bigstone Bay Gold Mines, 81
 Birbeck and Associates, 37,
 99
 Birbeck mine, 18, 37
 Bird Lake, 339
 Bird River, 336
 Bisbee, 287
 bismuth, #P2
 Black Cat Mining Co., 71
 Black Eagle mine, 125, 179,
 180, 187, 333, 343
 Black Eagle Mining Co. Ltd.,
 179

Black Fox mine, 18
 Black Hawk mine, 18, 38
 Black Hawk Mining Co., 38
 Black Jack mine, 18, 39, 342
 Black Jack Mining Co., 39
 Black Sturgeon Lake, 119
 Black Sturgeon mine, 10, 18, 40, 192, 262,
 blasting, 244, 332, 333
 Blindfold Lake, 86, 121
 blind shaft, 352
 Block B mine, 18, 41
 Blue, Archibald, 17, 240
 Blue Star Gold Mines Ltd., 200
 Blue Star mine, 199, 310, 326
 Boer War, 45, 340
 Bolivia, 264
 bond, 235
 boom, 9, 11, 242, 246, 247
 bonanza, 352
 border, 249
 bore holes, 197, 225, 353
 boss, 353
 Boston, 229
 Boston Institute of Tech., #P4
 Boulder mine, 19, 42
 boundary, 245, 250
 Boyd, H.M., #P1
 Brae Breest mine, 19, 43, 73, 74, 111
 Brehaut, R.O., 132
 Breidenbach, Theo., 127, 128, 135, 139, 187, 196, 260
 Brent, Charles, 33, 45, 118, 166, 193
 Brereton, Ed., 165, 244
 Britannia mine, 19, 342
 British Columbia, #P2, #P4, #P5, 9, 261, 264, 287
 Broadview Sask., 350
 Brocunier, T.H., 260
 Bronson Co., #P5
 Bronson, F.P., #p4, #p5
 Brown, A.G., 214
 Brown, F., 236
 Bryson, John, 138
 Buffalo, 55, 63, 103, 279
 Buffalo Mining and Dev. Co., 148
 Bulldog mine, 39
 Bullfrog mine,
 Bullion mine, 10, 18, 44, 196
 Bullion Mining Co., 32, 33, 143
 Bullion No. 2, 19, 45
 Bullion No. 2 Mining Co., 45
 Bully Boy mine, 19, 46-47
 Bully Boy Mining Co., 47
 Bulora Corp. Ltd., 351

Bulmer, H. Jr., 202, 203
 Bunker Hill mine, 19, 48
 Bunn, Charles, 127, 139
 Burley Gold Mining Co., 49, 210, 294
 Burley mine, 9, 10, 15, 18, 49-52, 154, 210, 260, 278, 338, 345
 Burley-Smith, J., 49, 51, 239
 Burns, 84
 Butcher Boy mine, 9

C

calcite, 177
 Caldwell, J.F., 8, 49, 203, 207, 253, 294
 Caldwell, Wm., 53, 174
 California, 17, 42, 245
 Calligan, P., 40
 Cameron and Neap, 228, 281
 Cameron, Donald, 55
 Cameron, Doug, 286
 Cameron, Ian, 286
 Cameron Island, 277, 12, 314
 Cameron Island mine, 10, 14, 19, 53-59c, 116, 291, 339, 342
 Cameron Is. Mining and Dev. Co., 53
 Cameron Is. Syndicate Ltd., 55
 Cameron, J.H., 237
 Cameron, Jessie, 284
 Cameron, Maxwell Y., 277-288, 306, 318, 328, 329, 333
 Cameron, W.J., 53, 305
 Camp Bay, 41, 46, 63, 201, 342
 Camp Bay and Crow Lake Railroad, 63
 Camp Stevens, 338, 391
 Campbell, 328
 Campbell, G.S., 232
 Campbell, Neil, 119, 199, 261, 312
 Canada, #P3, #P4, 9, 264, 281, 314
 Canadian Homestake Mining Co., 191
 Canadian Gold Mining Co., 8, 19
 Canadian National Exhibition, 350
 Canadian National Railway, 58
 Canoe Lake, 302
 Caribou mine, 10, 19, 60
 Carlson, Ernie, 317
 Carmichael, Angus, #p1
 Caron, Fred, 187

Cartwright, Sir Richard, 227
 Caswell, N.S., 234
 Cedar Island Gold Mining Co., 66
 Cedar Island property, 12, 58, 66, 67, 69, 291, 242
 Cedar (Cedartree) River, 79
 chalcopyrite, 54, 286, 327, 352
 challenge ore feeders, 206
 Champion Co., 33
 Champion mine, 14, 34, 91, 98, 108, 342
 Champion, E.A., #P1
 Chatham, 192
 Cheeseworth, J.W., 142
 Chemical Gold Mining Co., 92
 Chicago, #P2, #P4, 289, 303
 Chien d'Or mine, 19
 Chile, 264
 Chilkoots, 2
 chimney, 353
 China, 264
 Chippewa Consolidated Gold Mining Co., 228
 chlorination plant, 168, 171, 204, 226, 247
 chromite, 336, 337
 chute, 353
 Cincinnati, 71
 cinnobar, 263
 clairvoyance, 286
 Clearwater Bay, 8, 12, 15, 74, 213, 215, 216
 Clearwater Bay Syndicate, 213
 Clearwater Lake, 268
 Clelland, 137
 Clendenan, Geo., #P1
 Cleveland, 95
 Cliff Island, 72
 Clifford, J.R., 42
 Climax Gold Mining Co., 61
 Climax mine, 19, 61
 Clytie Bay, 70, 94, 101, 142, 144, 290
 Coates, John R., #P4, #P5
 Cobalt, 171, 283
 cobalt, #P4
 Cochenour Willans G.M.L., 351
 Cofferdam, 50, 353
 Colcleugh, J.W., 120
 Colcleugh Gold Mining Co., 120
 Coleman, Prof. A.P., 17, 186
 collar, 78, 353
 Collins, J., 163
 Colonist, 245, 249, 252
 Colorado, #P4
 Combination mine, 19, 62
 Combination vein, 62
 Combined mine, 19, 63-64
 compressor, 353
 compressor plant, #P2, 73, 230
 concentrates, 247, 297, 301, 308, 309, 322
 concentrate plates, #P2, 177, 289, 304
 Confederation Lake, 139
 Conisten property, 268
 conjuring lodges, 186
 Conmee, James, #P1
 Consolidated Canadian Farady Mines Ltd., 351
 Consolidated Mining and Smelting Co., 39, 89, 323
 Contact mine, 19
 contract, 198, 199
 copper, #P2, #P4, 29, 30, 65, 115, 227, 266, 275, 276, 279, 280, 285, 304, 309, 312, 314, 323, 327, 332, 351
 Coppercliff, 67
 Copper mine, 19, 65
 Corneillie, Harry, 234
 Cornucopia mine, 14, 19, 66-69 a, 342, 343
 Coronation Gold Mining Co. Ltd., 51
 Coste, Eugene, 15, 160
 Cotter, Alex, 206
 covellite, 161
 C.P.R., #P5, 6, 75, 98, 106, 170, 171, 184, 250, 252
 crib, 49, 50, 294, 345, 348, 353
 Cripple Creek, 9
 Cronlund, Oscar, 211, 303
 Crooker, W.H., 63
 Cross, J.G., 56, 58
 crosscutting, #P1, #P3, 13, 296, 301, 353
 cross-section, 353
 Crow Lake, 85
 Crowley, Colonel, 116
 crown land, #P1, 333
 crown patents, 39, 253

Crown Point mine, 14, 19, 70-71, 342
 Crown Point Mining Co., 70
 Crown Reef vein, 207, 210, 294
 crusher, #P2, #P4, #P5, 107, 160, 161, 206, 210, 228, 231, 236, 289, 291, 303, 304, 306, 310, 322, 323, 346, 349
 curling rink, 232
 Curtis, James, 93
 cut, 353
 cyanidation, 353
 cyanide plant, #P2, 7, 128, 176, 180, 182, 184, 217, 226, 231, 346
 cyanide process, 291, 301, 308, 323

D

Dakota, 99
 Damascus mine, 53
 Damascus Mining Co., 55
 Darby, T.A., #P5
 Darlington Bay, #P5
 Daunais, Oliver, 146, 215, 251
 Daunais vein, 150
 Davies, John, 139
 Dawson City, 2
 Deacon, T.R., 19, 41, 129
 Deadbroke Island, 72
 Deadbroke mine, 20, 72
 Denver, 249
 Department of Mines, 5, 42, 139
 Derry, George, 190
 Detroit, 192
 Devil's Gap, 186
 Dewart, H.H., #P1
 diamond drilling, #P3, 13, 14, 41, 43, 55, 59, 66, 73, 81, 87, 96, 111, 120, 130, 132, 158, 197, 198, 209, 225, 227, 230, 239, 274, 280, 281, 283, 287, 295, 296, 297, 300, 301, 302, 305, 312, 314, 330, 339
 Dick and Banning, #P4
 Dickman, M.E., #P2
 Dickson mine, 328
 Dickson, W.J., 73
 Dicky Mac mine, 20, 73
 Dicky Mac Syndicate, 73
 die, 210

dikes, 72, 353
 dip, 237, 266, 354
 dip needle, 266
 disputes, 5, 49, 154, 202, 210, 228, 242, 250, 333
 divining rod, 191, 315, 354
 Dobie, 160
 Dome Mining Co., 267, 274
 Dominion Bureau of Mines, 17
 Dominion Gold Mining and Reduction Co., 62, 76, 86, 167, 170, 172, 247
 Donaldson, H.L., 149, 159
 Dougherty, Thomas, #P2
 Dove, W.H., 31
 Downey, J., 226
 Downing, H.F., 218
 Drewry, George, #P1, 120
 drift, 295, 348, 354
 drifting, 5, 13, 296, 300, 354
 drills, 265, 270
 driving shed, 193
 Drummond, W.B., 79
 dry-house, 216
 Dryden, 122, 297
 Dryden Timber and Power Co., 122
 Duff, David A., 216
 Duluth, 56
 Dumbarton mine, 351
 dump, 354
 Duport Mining Co., 56, 58, 68, 343
 Duport Property, 12, 14, 277, 291, 297, 342
 dwt, 354
 Dwyer, Ed., 234
 dynamite, 211, 244, 318
 dynamo engine, #P2, #P5, 131, 175, 205

E

Eagen, N.B., 195, 261
 Eagle Lake Milling Co., 55
 Eagle Pass, 285
 Ear Falls, 351
 Earngey, Joseph Patullo, #P5
 Eastern Ontario, 15, 264
 Eastricia mine, 20, 74
 Echla mine, 20
 Echo Bay, 37, 93, 103, 146, 301, 302

Echo Bay mine, 20
 Eclipse Office Furniture Co.,
 #P5
 Edmison, Dr., 239
 Edmonton, 350
 Edwards, Bert, 329
 Edwards, Cecil, 329, 350
 Edwards Diamond Drilling,
 350
 Edwards, Jack, 317, 326,
 329, 350
 Eisentrout, Doc., 330, 331
 El Diver mine, 20, 75, 163
 electricity, 17, 186, 193,
 205, 216, 217, 315, 317
 Elfick, 171
 Elphinstone mine, 20, 76
 Elsie, 20, 77
 Emerald Isle mine, 20
 Emo, 268
 Emperor mine, 100, 261
 Empire Syndicate, 145
 Empress mine, 251
 Enen Lode, 20
 England, 8, 282, 329
 Engledue, Colonel W.,
 127, 136, 139
 Entry, 354
 Epell, 150
 Equador, 264
 Errington, Joseph, 215, 216
 Eschweiler, 20, 78, 98, 257
 Eureka mine, 20
 Europe, #P3
 Examiner, 282
 eye hole, 296

F

face, 354
 Fairburn, Bill, 234
 Falcon Lake, 278
 Falconbridge, 210, 299, 300
 Fall, F., 47
 fault, 354
 faulting, 10, 16, 207, 337
 felsite, 354
 Ferguson, 247
 Ferguson, mine, 241
 Ferrier, Robert Wallace,
 #P2
 Finnan, J.C., 30
 Fish Market, 303

fissure, 354
 Flaherty, R.H., 49, 51,
 239, 260
 Flin Flon, 58, 59
 Flint Lake mine, 20, 79, 187
 Flint Gold Mining Co., 79
 Float vein, 56, 57
 Floete, Franklin, 152
 Florida, Martin, 125
 floatation, 232, 309, 310, 323,
 332, 349
 F.M. 72, 20, 80
 Foley, James, 83, 260
 Foley mine, 15, 240, 251, 260,
 261
 foot wall, #P2, 354
 Forsythe pulverizers, 54
 Fort William, 215
 Fort William Times-Journal,
 264
 Foster, G.E., #P4, #P5
 Foster, J.J., 53
 Fowler, Dr. Joseph, 55
 Fox, L., 147
 Fox Moth, 350
 France, 264
 Franklin mine, 34
 Franklin Mining Co., 34
 Franks, W.J., 39
 Fraser, A.W., #P4, #P5
 Fredute, Joseph, 213
 free gold, #P2, 30, 104, 136,
 148, 155, 174, 177, 223, 229,
 246, 247, 256, 296
 freemilling, #P2, 17, 37, 53,
 219, 225, 247, 253, 291, 297,
 301
 French Narrows, 29, 186
 Friesen, B.E., 346
 Frosted Foods Ltd., 281
 frue vanners, #P4, #P5, 55,
 161, 206
 Fryling, 94

G

Gagne, Israel, 153, 227
 Gale, James, 205
 galena, 161
 Galena shaft, 207
 Galt, G.F., 203
 Galt, J., 203
 Gardiner, Frank, 190
 Gardner mine, 20

Gates Iron Works, #P4
 Gauthier, Arthur, 212
 Gauthier, Joseph, 103
 Gaylord, E.W., 75
 geiger counter, 336
 geological, 11, 12, 13, 15
 Geological Survey, #P2
 George Heenan mine, 20
 Gibbs, 84
 Gibson, Thomas W., 93
 Gilbert and Sullivan
 productions, 314, 340
 Gilchrist, F.W., 40
 Gilmour, John T. #P1
 Gilmour, T.H., #P1
 glacial activity, 17
 Gleason, Thomas W., 93
 God, 286
 gold bricks, 51, 130, 249,
 260, 279, 322
 gold bullion, 69, 118, 136,
 168
 Gold Bullion Co., 44, 45
 Gold Coin mine, 20
 Gold Creek mine, 20, 81
 Gold Creek Mine Ltd., 81
 gold fever, 5, 281
 Gold Hill mine, 10, 14, 20,
 82, 86, 151, 241, 245, 251,
 242
 Gold Leaf Mining Co. Ltd.,
 147
 gold-making machine, 316
 Gold Mountain mine, 20, 83
 Gold Point Camp, 303, 314
 gold production (yield), 8,
 9, 10, 13, 15, 208, 232, 233,
 246, 254, 256, 260, 261, 263,
 315, 351
 Gold Reef mine, 21, 84
 gold rush, 3, 10, 280, 281,
 282
 Gold Sun mine, 21, 85
 Golden Gate Mining Co.,
 247, 248
 Golden Gate Mine, 21, 82, 86-
 87a, 246
 Golden Horn mine, 14, 21, 88-
 90, 124, 297, 301, 342
 Golden Star Mine, 15, 240, 261
 Golden Reef Mines, 15
 Gold house and Co., 78, 251
 Goldwood Gold Mines Ltd., 183,
 333
 Gooderman, Charles, 227
 Gordon, C.W., 11
 Gordon, Colonel J., 11
 Gordon, James, 91, 150
 Gordon-James property, 21,
 92
 Gordon property, 21, 91
 Gordon, Wm., 239
 gouge, 354

governments: Provincial, 5,
 202, 242, 339, 340
 Federal, 6, 202, 242
 grab hoe, 265, 266
 grade, 17, 232
 high, #P2, 17, 56, 67, 139,
 280, 310, 337, 339
 low, #P2
 Graham, Charles, 212
 Grande Presqu'île, 173
 Granite mine, 302
 Grant Mahood and Co., 81
 Great Bear Lake, 336
 Great Britain, 25
 Great Granite Co., 93
 Great Granite mine, 21, 93
 Great Lakes: Superior, 17, 245
 Huron, 17
 Great Northwest Co., 94, 101
 Great Northwest mine, 21, 94
 Greater Wpg. Water District
 Railroad, 57
 Greenland, C.W., 215, 216
 green rock, 286, 296
 greenstone, 355
 Grey Eagle mine, 21, 38, 95
 Griffin, P.S., 226
 Griffiths, J.S., 150
 Guess, Henry A., #P4, 106,
 239
 Gull Island, 96
 Gull Island mine, 21, 96
 Gunflint Lake, 15
 Gunner Mines Ltd., 336
 Gwyn, W.I. and Assoc., 98

HC

Haas, Charles, 262
 Hall, Mrs. 256
 Hall, L.A., 261
 Halstead, S.V., 192, 193,
 251
 Hamilton, 162
 Hamilton Manufacturing Co.,
 #P4
 Hammill, Ed., 88, 147
 Hammond Reef, 15, 240, 261
 hanging wall, #P2, 292, 355
 Hanson, John, 303
 Hanson, Lars, 303
 hardrock mining, #P3
 Hare, A.A., 100
 Harrison, Jack, 113
 Hart, 203
 Hatmaker Lake, 275
 Hawes, Harry, 334
 Hawk Lake, 173
 Hay, A.M., 66, 167, 169, 170

Hay, George, #P4, #P5
 Hay Island, 7, 9, 10, 15, 21, 97, 285
 Hay Island Gold Mining Co., 97
 Hay Island mine, 8, 48, 105
 Hayberg Bros., 350
 Haycock Township, 31, 251
 headframe, 13, 51, 216, 231, 355
 Heenan, George, #P1, 7, 156
 Heenan Mining Co., 8
 Heenan's Point, 61
 helldiver, 75
 Helldiver Bay, 100, 143, 150, 303
 Henesy, Jacob, 7, 165, 173, 202, 277, 281
 Herald Tribune, 11
 Rheimster, H. M., 43
 Hicks, Joseph, 194, 223
 high grading, 279, 292, 311, 315
 High Lake, 112
 Hildreth, James, 32
 Hilliard, H.H., 11
 Hilly Lake, 21, 98, 158
 Hillyer, George, 261
 Hiroshima, 336
 Hodge, Frank, 117
 hoisting apparatus, #p2, #P3, 32, 39, 55, 69, 96, 97, 100, 204, 210, 262, 324, 349
 hoistman, 211
 Holm, Carl, 210, 211, 289-304
 Holmes, H.H., 31, 32
 Holmstrom's Fish Camp, 290
 Homestake mine, 21, 99
 Hopkins, Percy, 34
 Hopkins, W.H., 148
 Horseshoe mine, 28, 181, 333
 Horseshoe Mines Ltd., 145, 181, 343
 Hotchkin, Harry, 11
 Howard, J.F., 17
 Howe, John, 262
 Howey mine, 312
 Hubell, A.C., 261
 Hubner, Emil, 152, 301, 303, 320
 Hubner murders, 320-321
 Hudson's Bay, 17
 Hudson's Bay Co., 127, 139, 186
 Hudson Bay Mining and Smelting Co., 58, 59, 280

Huggins, A.E., 44
 Hughes, Joe, 210, 306
 Hunt, H.B., 54
 Hunter, M.N., 98
 Hunter, M.T.T., 165, 205, 227, 260
 Huntingdon mill, 89
 Huntley, R., 176, 185
 Huronian boundary, 188
 Hutchison, Percy, 226
 hypnotist, 287

I

ice-house, 193, 205
 Idaho, #P2
 igneous, 355
 Imperial Bank of Canada, #P2
 Imperial mine, 21, 100
 Inace, George H., 69
 inclined shaft, #P2, 32, 56, 57, 67, 127, 129, 229, 233, 262, 355
 Independence mine, 261
 Indian Dept., 202
 Indian Joe, 239
 Indian Joe mine, 21, 94, 101
 Indian Reserve #38B, #P1, 158, 189, 202
 Indians, 263
 Inglis Lake, 234
 Ingo, H.L., 305-313, 317, 329
 Intermediate level, 355
 International Boundary, 245
 International Gold Mining Co., 95
 investor, 3, 241, 252
 iridium, 20
 iron, #P2, 65, 184, 266, 275, 336, 337
 Isinglass Lake, 267, 273, 280
 Island Lake, 262
 Islet Lake, 62

J

Jaffray Township, 44
 James, J.M., 178
 James, Wm., 39, 54

Jane Gold Mines, 30
 Jenny Leigh mine, 21, 102
 jugs, 323
 Johnson, Albert, 205, 206
 Johnson, Hilding, 69, 86, 152
 Johnson, Joseph, #P2, 207
 Johnston, Al., 274
 Jones, Clarkson, 227
 Jones, John M., 178, 179, 185,
 186
 Josie (steamship), 187, 196

K

K 170, 21, 103
 Kakagi Lake, 120, 201
 Kartaract, New Jersey, 309
 Kathleen, 21
 Keenora mine, 21, 104
 Keenora Mining Co., 67, 168,
 193
 Keewatin, #P4, #P5, 4, 8, 15,
 33, 109, 184, 313
 Keewatin Diabase, #P2, 151
 Keewatin Lumber Co., #P5
 Keewatin mine, 10, 21, 105
 Keewatin Power Co., #P5, 4
 Keewatin Reduction Works,
 #P1, #P4, #P5, 22, 32, 33,
 106-110, 219, 221, 239
 Kelly, 210
 Kelpin, O.P., 120
 Kelwynn, Muir, 4
 Kenbrae Gold Mining Syndi-
 cate, 111
 Kenbrae mine, 22 74
 Kendall, 65, 66 115, 205
 Kendall Inlet, 149,
 Kendall Inlet Road, 346
 Kenecho, mine, 198
 Kenjoe, mine, 213
 Kenjoseph Gold Mines Ltd.,
 214
 Kenland Gold Mines Ltd.,
 145, 182, 183, 243
 Kennedy, John, 95
 Kenopo Mining and Milling Co.,
 22, 98, 112
 Kenora, #P2, 11, 43, 48, 61,
 98, 112, 139, 145, 148, 149,
 158, 176, 193, 210, 211, 265,
 268, 305, 314, 317, 329, 333,
 350, 351
 Kenora Airport, 350
 Kenora-Fort Frances Hwy., 13,

46, 120, 145, 231
 Kenora Miner and News, 13,
 139, 151, 169, 350, 351
 Kenora Mines Ltd., #P2,
 131, 139, 314
 Kenora Paper Mill, 217
 Kenora Prospectors and Miners,
 12, 58, 66, 68, 132, 139, 242,
 243
 Kenosha Gold Syndicate, 113
 Kenosha mine, 22, 113
 Kenricia Gold Mines Ltd., 11,
 113, 216
 Kenricia mine, 14, 111, 113,
 149, 213, 234, 346
 Kimberley Diamond Mines, 340
 King mine, 22, 114
 King Solomon, 22, 115
 King's Fish Camp, 301
 Kingsmill, A., 82
 Kingston, Ont., #P4
 Klondike, 1, 9, 10, 240-241
 Kobold, G.A., #P1, 22
 Kreissman, Charles, 17
 Kron, John, 306, 309, 322

L

La Belle Lake, 227
 La Rose, E., 9, 10
 Labrinth Bay, 195
 Lac La Belle Mines Syndicate,
 200
 La Chance, 5, 92
 Lady of the Lake mine, 22, 116
 Laird, Robert, 147
 Lake Athabasca, 337
 Lake Hill Gold Mines Ltd., 96
 Lake of the Woods, #P1, #P2,
 #P4, #P5, 3, 5, 8, 9, 10, 11,
 13, 14, 15, 17, 43, 46, 80, 82,
 93, 100, 109, 122, 127, 136,
 160, 176, 185, 186, 186a, 191,
 202, 210, 211, 227, 232, 238,
 242, 248, 249, 251, 252, 255,
 256, 260, 280, 289, 290, 316,
 320, 336
 Lake of the Woods Flour Mill,
 #P4, 106, 184
 Lake of the Woods Gold and
 Silver Reduction Co., 166
 Lake of the Woods Gold Mining
 Co., 8
 Lake of the Woods Journal (The
 News), 241, 242
 Lake St. Joseph, 17

Lake Winnipeg, 245
 Lakeland Dairies, 282
 Lakeside, 317
 Lamport, W.A., 181
 Lands and Forest, Ministry of, 210
 lateral, 355
 Laurentian mine, 16
 LaVene, Gilbert, 336
 Lawson, Andrew C., 161
 Lawyer, C.L. and Co., 154
 Laycock, W.A., 86
 LeClaire, E.F., 42
 Leechman, John, 185, 186
 Leona mine, 22, 117
 Leroue, Oscar, 302
 level, 294, 295, 307, 355
 L'Heureux, Phil, 215
 Lily Lake, 83
 lime, 84
 Lindbergh, Gus, 234
 Lindell, 118, 303
 Lindsley, Ther., 67, 278
 Lindstrom, Carl, 289, 303
 liners, 331
 Linn, 16, 172
 litigation, 228
 Little Bobs mine, 22, 118
 Little, John C., 138
 Little Neepawa mine, 241
 Lobstick Bay, 125
 location, 355
 Lock, Teddy, 241
 Lockwood, Wm., 7, 235
 London, 17, 156, 173, 186, 249, 315, 336
 Long Bay, 186
 Long Point Is., 149
 Lowry, Andy, 7
 Luchman, J., 178
 Lucky Coon mine, 241, 251
 Lyon Lake, 351

M

Mill mine, 150
 Macdonnell, Dr., 244
 Machin, Barbara, 303, 304, 314-340
 Machin, H.A.C., #P2, 11, 131, 139, 291, 314, 340
 Machin, I.A., 152
 Machin, I.F., 152
 Machin, Mrs., 314, 340

Mackenzie, Captain, 138
 Madame X, 284-288
 Madsen mine, 328, 351
 magnetic, 266, 270, 271, 315
 Maiden mine, 22
 Main St., Kenora, 259
 maladute, 65, 285, 355
 Mammoth mine, 22, 119
 management, #P2, 5, 36, 49, 106, 136, 161, 228, 230, 256, 283, 312, 315
 Mandarin mine, 22
 Manitoba, 59, 249, 255, 277, 299, 320, 336, 339, 341, 351
 Manitoba Consolidated Gold and Silver Mng. Co., 8
 Manitoba Consolidated mine, 22
 Manitoba Free Press Mining Supplement, 135, 191
 Manitou district, 17, 108, 241
 Manitou Lake, 16, 249
 Margach Station, 33
 Mariposite vein, 57, 53
 Markell, Clinton, 153
 Markham, Tom, 291
 Martin, Captain Garth M., 350
 Mary Hatch (steamship), 303
 Mascotte mine, 22, 120, 339
 Master Jack mine, 22, 121
 Mather, John, #P4., #P5
 Mather, R.A., #P4., #P5
 Mather and Beveridge Soapstone Claims, 22, 122
 Matheson, Alexander, #P1
 Mattabi mine, 351
 Mattagmi Lake Mines Ltd, 351
 Mayburn mine, 351
 McA 52, 22, 124
 McArthur-Forrest Process, 176
 McCallurn, Finley, 73
 McCarthy, Wm., 227
 McClelland, H.L., 35
 McClelland, Judge, 278
 McDonald, Mrs., 256
 McDonald, C.W., 209, 210,
 McDonald, J., 213
 McFadden, 7
 McGillivray, John F., #P2
 McGree, 165
 McGuire, John, 129, 138
 McInkstor, R., 53
 McKellar, Peter, 260
 McLean, John, 173

McMeecan, 301
 McMillan, N.C., 128, 138, 187
 McNolty, J.P., 154
 McVeigh and Broderick's Liquor Store, 259
 McVittie Graham Mines, 145
 mechanic, 189, 317
 Medicine Ledge mine, 22, 123
 mercury, #P2, 263, 308
 mercury traps, 206
 mech, 355
 metallurgist, #P4
 micaceous, 155
 Michigan, 84
 Michigan and Ohio Co., 22, 125
 Michigan Gold Reefs Co. Ltd., 84
 Middle Is. mine, 23, 126
 Midland, 258
 Midland Free Press, 258
 Mievile, John F., 36, 178
 Mikado (play), 128, 139
 Mikado (steamship), 128
 Mikado Bay, 291
 Mikado Gold Mining Co. Ltd., 127, 135
 Mikado mine, #P2, 8, 10, 14, 15, 16, 17, 23, 45, 53, 66, 84, 100, 127-139b, 150, 196, 225, 260, 261, 279, 290, 291, 292, 303, 314, 315, 320, 340, 342
 Mikado vein, 150, 197, 225, 226
 Military Service, Director of, 314
 mill, #P2, #P3, #P5, 39, 58, 63, 75, 81, 82, 109, 112, 133, 140, 169, 174, 184, 186, 204, 205, 230, 306, 308, 317, 318, 322, 325, 334, 338, 347, 348, 349
 milling ore, 355
 Mille Lacs, 249
 Miller, George, 181
 milling, #P2, 7, 160, 228 305
 millionaires, 258
 Milne, Alexander, 138
 Milwaukee, 98
 Mina Grande, 23, 140
 mineral belt, 248, 249, 301
 mineral desposit, 15, 242, 265, 270, 271, 287, 312
 Miners Act, 27
 Minerva Island, 141
 Minerva mine, 23, 141, 342
 Minerva Mining Co., 141
 Mines Contract and Investigation Co., 142, 247
 Mines Contract mine, 23, 142, 251
 Mingy, 6
 mining companies, 266, 270, 276, 280, 315
 mining engineer, #P2, #P4, 17, 118, 161, 186, 203, 215, 262, 270, 287, 292, 315
 Mining Regulations, 27, 134
 Mining Research Corp., 111, 113
 mining schools, 179, 275
 Minnitaki mine, 298
 mint, 133, 136
 mispeckel, 161
 Moberly, 6
 molybdenite, 177
 Monarch mine, 10, 23, 143
 Montana, #P2, 17, 241
 Monte Cristo, 23, 144
 Montreal, #P1, 78, 88, 92, 96, 203
 Montreal mine, 45
 Montreal Mining Exchange, #P2
 Moore, Charles A., 7, 202
 Moore, John T., 218
 Morgon, Colonel, 38
 Morris, C.S., 223
 Morrison, D., 224
 Morrison, T.F., 55
 Morrison's Gold Savers, 259
 Morton, Charles, 317
 Mount Jamie Mines Ltd., 351
 Motley, W.E., 173, 174, 249
 muck, 356
 mucker, 356
 mucking, 300, 309
 Murdock, Wm., 6
 Muriel mine, 23
 Murphy, Denis, #P4, #p5
 Murry, Dick, 332
 Mutton Long Lac Gold Mines, 30
 Mysore, India, #P2

N

Nanki poo mine, 23, 139
 native, 356
 Near, James, 224
 Neda Gold Mines, 145
 Neda mine, 23, 145
 Nelson, C., 58
 New Jersey, 80
 New Klondyke Camp, #P5
 New York, 64, 116, 181,
 203, 287
 New York Engineering and
 Mining Journal, 3, 27
 New Zealand, 245
 Newark, 80
 Newman, Jack, 318, 330
 Niagara Falls, 64
 nickel, #P4, 184, 267, 273,
 274, 275, 312, 351
 Nickel mine, 23
 Nickerson, R.B., #P2, 131, 154,
 292
 Nilson, Elgot, 86
 Nola Lake, 147
 Nonsuch mine, 10, 23, 146, 215,
 251, 302
 Norah mine, 10, 23, 147
 Nordstroms Concentrators Co.,
 Chicago, 301
 Norma H. mine, 23, 148
 Norman, 9, 112
 Norman, Henry, 191, 192
 Norrington, Henry, 198
 North, Ken, 233, 328
 North America, #P3
 Northern Crown mine, 82
 Northern Miner
 Northland Hotel, 281
 Northstar mine, 23
 Northwest Angle, 6, 270
 Northwestern Ontario, 208, 264,
 350
 Norway House, 320
 Norway mine, 23, 192
 Nova Scotia, 329
 nuggets, 290, 292, 356
 Nutt, Jack, 43

O

Ohio, 71
 Old Faithful, 130
 Olive mine, 15, 240, 261
 Oliver-Severn Gold Mines Ltd.,
 23, 149, 158
 Olympia mine, 14, 23, 150-152,
 230, 289, 290, 303-304, 314,
 340, 342

Ontario, #P4, 64, 240
 Ontario Boulder Mining co.,
 42, 46
 Ontario Bureau of Mines,
 #P2, 17, 67, 139, 167, 185,
 186, 186a, 196, 207, 227,
 245
 Ontario Champion Mines Ltd.,
 33
 Ont. Companies Act, #p2
 Ont. Gold Fields, 10, 258
 Ont. Homestake mine, 99
 Ont. Ltd. Gold Mining Co.,
 23, 153
 Ont. Mining Co., 202
 Ont, properties, 17
 Ont. Prospectors Mining and
 Dev. Co., 199
 open cut (pit), #P3, 50, 289,
 290, 294, 302, 303, 337, 347
 Ophir Consolidated Mines, 155
 Ophir mine, 14, 23, 154-157,
 256, 292, 293, 337, 342
 option, 11, 31, 32, 81, 90,
 131, 149, 158, 179, 192, 199,
 209, 212, 215, 234, 266, 267,
 276, 300, 356
 ore body, #P1, #P2, #P3, 10,
 12, 13, 14, 56, 69, 213, 253,
 256, 291, 301, 315, 351, 356
 ore shoot, 57, 68, 356
 ore skip, 210, 211
 Orillia, 258
 O'Sullivan, J.J., 158
 O'Sullivan Claims, 24, 158-
 159a
 Ottawa, #P4, #P5, 49, 83, 185,
 322
 Ottawa Gas Co., #P5
 Ottawa Gold Milling and Mining
 Co. Ltd., #P4, #P5, 106, 108,
 109, 190
 Ottawa Transportation Co., #P5
 outcrop, 356

P

panning, 103, 271, 272, 335,
 338, 341, 344
 Parcoe, 173
 Partridge, L.W., 192, 251
 Pasha vein, 207
 Passow, F.M., 237
 patents, 202, 253, 332

Patterson, A., 63
 pay dirt, 356
 pay load, 356
 pay ore, #P2, 10, 356
 Pender, D.A., #P2
 pendulum, 315
 Penguilly, F. Cardell, 128, 135
 Perkins, Fraser and Burbridge, solicitors, #P4, #P5
 Peru, 264
 Peterboro, Ont., #P4
 Peterboro canoes, 186
 Peters, Wm., 32, 261
 Peterson, F., 180
 Peterson, John, 317-319, 329
 Pfau, Fred, 55, 228
 Phelps Dodge Corp., 287, 288
 Picard, Roy, 75, 220
 pick, 265
 Pickel Lake, 351
 Pinchin, Sidney, 63, 63
 Pine Portage Bay, 114, 118, 160, 223
 Pine Portage Gold Mining Co., 8
 Pine Portage mine, 10, 11, 24, 114, 160-162, 256, 277, 281, 283
 Pipestone Bay, 351
 Pipestone Lake, 268
 Pipestone Point, 251
 Pipestone Portage, 122
 pitch, 356
 placer, 356
 placer gold, 240
 platinum, #P4, 180, 312
 pneumatic drill, 296, 310, 347
 Poirier, J.A., 112
 Poo-Bah, 24
 population, 6
 Porcupine area, 11
 Porcupine rush, 139
 porphyry, 155, 295
 Port Arthur, #P1, 6, 56, 215, 249
 Potter, A.M., 231
 power house, 201, 205, 216
 Powers, 166, 172
 Prescott, A.H., 17
 Preston, W.H., 261
 Princess Gold Mining Co, of Ont, Ltd., 163
 Princess mine, 24, 163
 Pringle, Henry A., 178, 260
 Privy Council, 5, 202
 promoters, 267, 276

prospect, 357
 prospector, 3, 4, 6, 8, 214, 241, 245, 252, 265, 270, 272, 273, 275, 280, 314, 335, 340
 Prospectors' and Mine Owners' Assoc., 11
 Prospector's Licence, 314
 Proudfoot, F., 244
 Proudlock, Hamilton, 125, 195
 Proulx, Paul, 173
 Ptarmigan Bay, 37, 103
 Purchase, 235
 Purnall, O.F., 167, 174
 pyrite, 54, 161, 177, 273, 301, 357
 pyrrhotite, 54, 67, 273, 357

Q

Quarry Island mine, 11, 24, 154, 342
 Quebec, 264, 296, 314
 Queen mine, 24
 Queen Bee Island, 49, 164
 Queen Bee mine, 11, 24, 154, 164, 260
 Queen of Sheba mine, 24
 quicksilver, 263, 289, 304

R

radio activity, 336
 Rainy Lake, 241, 242, 243, 247, 249
 Rainy Lake City, 242
 Rainy Lake Herald, 241
 Rainy River District, #P1, #P5
 Rainy River Gold Mining Co., 6
 raise, 357
 Rajah Gold Mining Co., 165, 173
 Rajah mine, 24, 165, 173
 Rand Canadian Syn., 235
 Rat Portage, #P1, 3, 4, 8, 15, 32, 38, 44, 51, 53, 61, 83, 88, 92, 95, 98, 115, 117, 118, 120, 127, 128, 135, 136, 139, 143, 148, 156, 160, 165, 173, 176, 184, 185, 186, 189,

190, 202, 205, 207, 219, 223,
 225, 228, 239, 243, 245, 246,
 247, 249, 251, 258, 259, 260,
 261, 262
 Rat Portage Bay, 166
 Rat Portage Hospital, 138
 Rat Portage Lumber Co., 187
 Rat Portage Miner and Rainy
 Lake Journal, 6, 9, 41, 109,
 129, 130, 137, 155, 240, 256,
 257, 258, 259, 260, 261, 262,
 263, 264
 Rat Portage Reduction Works,
 #P1, 24, 31, 42, 66, 72, 136,
 139, 166-172, 195, 227, 247,
 251
 R.C.M.P., 321
 Red Lake, 14, 265, 270, 312,
 328, 351
 reduction plant, #P4, 8
 Reed Narrows, 186
 reefs, 17, 200, 249
 refractory ores, 253
 refining, 291
 Regina Bay, 185, 282, 347
 Regina Gold Mine Co. Ltd.,
 179, 186, 247
 Regina mine, 7, 8, 9, 10, 14,
 15, 24, 28, 173-187b, 235, 241,
 249, 250, 251, 254, 260, 261,
 281, 282, 333, 334, 342, 347
 Regina Mining Co., 173
 Report of the Gold Mines of
 the Lake of the Woods, 160
 Rice mine, 241
 Richards, Wm. J., 96, 154, 292
 Rideout, Harding, #P2, 88, 89
 Rideout-Swaze Gole Syn., 34
 Rioch, George McChyne, #P2
 Rock Lake, 111
 Rognan mine, 297
 Ross, 46
 Ross, Geo., 224
 Ross, Brown, and Hall Sawmill,
 166
 Rossland Station, 75, 160, 219
 Rothwell, C.G., 205
 Royal mine, 24, 188
 Rudd, W.H., 63, 178
 Rumania, 264
 Rush Bay, 88, 142, 301
 Rush Bay and Golden Horn
 Mining Co., 88
 Ryerson Lake, 270
 S 70, 24
 S 120, 24
 Sabaskong Mining Co., #P1,
 24, 189
 Safety Engineer, 333
 safety valves, 210, 306
 Sakoose mine, #P5, 108
 salting, 279, 310, 339
 Sampson, Harold, 318
 San Fransisco, 249
 Sargeant, F.D., 221
 Savage, J.M., 120
 Sawa-Shunia mine, 15, 251
 Sawbill mine, 15, 251
 Sawmill, 205
 Sawyer, Bannell L., 39
 Scager, Edmond, 238
 Scandinavia, 191
 schistosehornblende, 161,
 357
 Schnab, Paul, 234
 School of Mines, #P4
 scintillator (scintilometer),
 267, 336
 Scott, C.S., 162
 Sotty Island, 190
 Scotty Is. mine, 24, 190
 Scovil, Dr. S.S., 29, 104,
 115, 127, 139, 202
 Scramble mine, 24, 78, 188,
 191-194, 251
 scullduggery, 233
 Seager, 140
 Secret Service, 321
 Seegmiller, M., 292
 Seine district (Upper and
 Lower), 15
 Seine River, 249
 Seico Mining Corp., 351
 Selected Canadian Gold Mining
 Co., 209
 Sentinel Consolidated Gold
 Mining Co., 195
 Sentinel mine, 24, 195, 261
 Seven Sisters, 217
 Seybold, E., #P4, #P5
 Shannon, J.D., 183, 334
 shareholders, #P1
 Sharp, W., 70
 sheared zone, 28
 Shebandowan, Lake, 249
 Sheridan Geophysics Ltd., 351
 Sherlock, 7
 Shields, Harry, 84
 shifts, 36, 175, 204, 262,
 300, 318
 Shoal Lake, #P2, 8, 13, 15,
 41, 45, 56, 101, 113, 127,
 136, 139, 144, 150, 197,
 218, 225, 269, 303, 380,
 290, 301, 302, 303, 314,

S

316
 Shoal Lake Narrows, 76, 269
 shoot, 357
 Shore vein, 150
 Shragge, Alex., #P2
 siderite, 65, 357
 silver, #P4, 55, 99, 154, 165, 247, 275, 304, 309, 351
 Silver, Captain H.E., 81
 Silver King, 215
 silver rush, 283
 Silverman, H., 43
 Simoneau, S., 43
 Simpson, J.B., 320-321
 Sioux Lookout, 14
 Sioux Narrows, 186, 333, 347, 351
 Sirdar mine, 10, 24, 45, 135, 196
 Sirdar Mining Co., 196, 197
 Sirdar Point, 25, 196, 197
 sizing screen, 206
 Skagways, 2
 skating rink, 233
 skip (chair), 294, 295, 299
 skip dump, 210
 Skunk Is., 146
 Slater, H. Kersail, #p2
 slime plant, #P2
 Small, 45
 smelter, 133, 167, 309
 Smith, Charles, 62, 169, 170
 Smith, F.L., 67
 Smith, O.R., 196
 Snyder, F.T., #P4, 106, 110
 soapstone, 122
 social life, 298, 306, 319
 soda (sodium), 267, 268, 357
 sorting plant, 128
 Sovereign mine, 25
 Spencer, C.L., 200, 229, 231, 312, 317, 328
 Split Lake Gold Mines Ltd., 149, 158
 Squaw (steamship), 176, 177, 185, 186
 St. John, 88
 St. Paul, Minn., 199, 242
 stables, 202, 205
 stake claims, 43, 86, 139, 149, 265, 266, 273, 274, 275, 280, 332, 337
 stakers, 275
 stamp mill, #P1--#P5, 36, 46, 53, 54, 55, 60, 70, 82, 89, 106, 109, 168, 171, 180, 182, 203, 205, 210, 236, 246, 249, 263, 289, 291, 301, 303, 334, 338, 357
 stamps, #P4, #P5, 60, 139, 161, 169, 174, 175, 250, 251, 261, 282, 289, 304, 338
 Standar Gold Mining Co., 117
 Standard mine, 25, 198
 Standard Reality, 317
 Star Lake, 278
 steam power, 17
 steam pressure, 210
 steamboat, 50, 255
 steamboat landing, 224, 228
 steamline, 210
 steel, 184
 Stella Lake, 310
 Stella mine, 9, 15, 25, 92, 199-200a, 230, 261, 310
 Stevens, Hattie B., #P1
 Stevenson, Stanley, 273, 280
 Stirling, C., 46, 201, 306
 Stone, Jack, 170
 Stone Boat Works, 210, 306
 Stony Mountain Penitentiary, 321
 stope, #P2, #P3, 58, 133, 135, 136, 139b, 232, 294, 296, 313, 349, 357
 Straw Lake, 268
 strike, 77, 87, 133, 230, 287, 357
 stringer, 28, 286, 287, 357
 stripping, 30, 66, 72, 81, 96, 119, 150, 213, 235, 357
 Strong, Wm., 193
 Surgeon Falls, 241
 Sturgeon Lake mine, 351
 Sudbury, 8, 11, 184, 245, 262
 Sudnes Orchestra, 319
 Sullivan, Alan, 17
 Sullivan mine, 25, 46, 201
 sulphide, 291, 297, 301
 Sultan mine, 25
 Sultana Gold Mine Ltd., 207
 Sultana Is., 7, 49, 154, 164, 189, 202, 337, 345, 348
 Sultana Junior mine, 25
 Sultana mine, 8, 9, 10, 14, 15, 16, 17, 25, 38, 50, 52, 141, 154, 155, 202-212, 241, 246, 250, 251, 252, 254, 260, 261, 277, 278, 282, 292, 293, 294, 295, 299, 300, 217, 334, 335, 338, 341, 342, 348
 Sultana Mine of Canada Ltd., 206
 sump, 357

Sunblad, 119
surveyor, 6, 238
Sutherland, J., 86
Swanson, A., 31
Swanson, G., 98
Swede Town, 210, 299, 317
Sweden, 25, 264, 290, 317
Swift Current, 350

T

tabular, 358
Tacoma, 59
tailings, #P2, #P5, 7, 176,
177, 183, 204, 208, 289, 300,
312, 335, 349, 351, 358
tampstick, 244
tank leeching, #P2
Taylor, C.W., 158
Tennant, George, 220
test-pitting, 37, 41, 43, 44,
62, 86, 88, 99, 154, 189,
212, 213, 234,
Thompson, 25
Thompson, J.E., 5
Thompson, J.M., 182
Thor Gold Mining Synd., 25,
212
Thorarinson, M.J., 210
Thorne, B.T., 89
Three Friends mine, 25, 213-
214
Three Ladies mine, 11, 25, 213,
215-217a
Thunderbay, 350
Thurber Geo., 40, 46, 54
topographical features, 245
Toronto, #P1, #P2, 53, 181,
229, 350
Toronto and Western Mines
Dev. Co., 25, 134, 196,
218, 260
Toronto University, 80
torpedo bucket, 210, 306
tow gold values, 237
tow shaft, 227
Trail, B.C., 280, 323
trammer, 138, 204
tramway, 205, 210, 306, 348
Trans Canada Highway, 158, 216
transformer motors, 193
Traverse City, 84
Treasure mine, 10, 25, 219-220,
342
Treasury stock, #P2, 236

Tremereau, #p2
trenching, 5, 13, 30, 43,
86, 158, 214, 234, 237, 286,
332, 358
trend, 358
Trethway, Tom, 179, 187
Triggs, J.H., 221, 260
Triggs Gold Mining Co. of
Ont., 221
Triggs mine, 9, 10, 15, 25,
223, 256, 260
Trojan mine, 25, 224
Trout Lake, 351
Tucson, Arizona, 287
Tudor, Henry, 229
tunnel, 31, 65, 72, 211,
286, 290, 294, 295, 301, 303
Tycoon mine, 25, 134, 225-
226
Tycoon Mining and Dev. Co.
of Ont. Ltd., 225

U

Uchi Lake, 139
United States, #P3, 8, 9,
291
Upton, A.B., 219, 220, 223,
260
uranium, 267, 312, 336, 337
Umex's Thierry mine, 351

V

Venezuela, 264
Venturers Ltd., 56, 208, 210
304
Vereker, J.E.P., #P2
Vermilion Range, 15
Vernon, Geo., 151, 152, 289,
290, 303, 304
vertical shaft, 190, 221
Vickers Mine Ltd., 34
Victoria mine, 25
Virginia mine, 261
visible gold, 259, 339
volcanic activity, 14, 17

W

Wabigoon, 249
 wages, #P1, 8, 9, 46, 189,
 274, 297, 309, 312, 318,
 341
 Wagner, Fred, 61
 Waite, C.E., 90
 Waite, J.H.C., 234
 Waite claims, 98, 234
 Walsh, Thomas, #P2, 46, 201,
 224
 Walsten, Carl, 318, 322-334
 Wapick, 321
 War Eagle mine, 262
 Ward Air Canada Ltd., 350
 Ward, Max, 350
 Warden Central Prison, #P1
 Washington, D.C., 59
 waste rock, #P3, 294, 310, 346,
 347, 348, 349
 water claims, 338
 water liner, 296
 water locations (claims, lots)
 11, 49, 79, 84, 141, 210, 225
 277, 285,
 watershed, 17
 Watson, 95
 Watson, W.E., 38
 Waubushene, 258
 Waugh, J.P., 233
 Wawa, Ont., #P3
 Webster, J.H., 75, 219
 Webster, P.W., 51
 Weidman, James, 6, 261, 282
 Weidman's (Wydeman's) Rock,
 282
 Weigand mine, 241
 Wendigo Gold Mines Ltd.,
 229, 237, 305
 Werner Lake, 351
 Werner Lake Cobalt, 328,
 351
 Wendigo mine, 12, 14, 26, 108,
 118, 199, 212, 227-233, 277,
 278, 342
 Western Gold Fields, 8
 Western Ontario, #P4, #P5,
 9, 10, 17, 135, 191, 256,
 257
 Western Peninsula, 83
 Westricia Gold Mines Ltd.,
 234
 Westricia Gold Syn., 234
 Westricia mine, 36, 234
 Whalen, James, #P1
 Whelan, L.T., #P1
 Whimpster, H.M., 98
 White Czar, 26
 White Partridge Bay, 43, 73
 Whitefish Bay, 140, 149, 173

186, 187, 224, 249, 280
 Whitefish Lake, 187
 Whitefish Rapids, 18
 Whitehead, A.B., 201
 Whiting, J.S., 81
 Whiting, Sam, 65, 66
 Wickstrom, 291, 303
 wildcat, 358
 Wiley, A.M., #P1
 Wilkinson, General (Lieut-
 Major), 176, 177, 180,
 184, 185, 186, 249, 282
 Wilkinson claims, 26, 235
 Williams, Frank, 182
 Williams, J. Percy, 88, 94,
 101, 210, 305, 333
 Williams, W.R., 182
 Williams Hardware, 305, 333
 Wilmar property, 351
 Wilmington, North Car., #P5
 Wilson, J.A. and Co., 44
 Wimor mine, 261
 Winnipeg, #P2, 61, 78, 203,
 308, 320, 350
 Winnipeg Consolidated Co.,
 236
 Winnipeg Consolidated mine,
 7, 10, 26, 236
 Winnipeg Electric Railway
 Co., 217
 Winnipeg Free Press, 249
 Winnipeg River, #P5, 4, 166,
 169
 winze, #P2, #P3, 58, 59,
 70, 132, 138, 207, 358
 Wisconsin, 141
 Witch Bay, 118, 199, 221,
 227, 228, 230, 310
 Witch Bay Gold Mines Ltd.,
 237
 Witch Bay mine, 26, 237-237a
 Witch Bay road, 249
 Witch Bay Resort, 330, 349
 Wolf, S.E., 34
 Woodchuck, mine, 26
 Woodridge, D.E., 17
 World War 1, 314
 World War 2, 299
 Wright, E.V., 83
 Wright, J.F., 159

X

X-45, 285, 288

y

Yellow Girl Bay, 186
 Yellow Girl mine, 7, 26, 238
 Yellow Girl Point, 238
 Yellow Knife, N.W.T., 350
 Young, Charles, 198
 Yoke Lake, 265
 Young, Horace B., 229, 230,
 305, 312, 317,
 Young's Bay, 120, 201
 Yukon, 264, 282
 YUM YUM Gold Mining Co. Ltd.,
 239
 YUM YUM mine, 9, 10, 15, 26,
 139, 239-239 a, 260, 314, 340

Z

Zeemal, F., 214
 Zeemel, Albert, Olive, 335-
 341
 zinc, 184, 323, 351

- Sources -

Books and Reports

- Beard, Richard. *Geologist's Reports*.
Cameron, Max. *Story of Madame X*. circa 1957.
Centennial Review of Rat Portage and Lake of the Woods. 1967.
Central Canada Chamber of Mines Goldfields Statistical Analysis. July 1900.
Department of Mines Reports. 1895 - 1943.
Final Report of the International Joint Commission.
Section VIII - Mining. circa 1917.
Gibson, Thomas W. *Mining in Ontario*. Toronto: T.E. Bowman, 1937.
Holm, Carl. *Articles on the Golden Horn mine, Nonsuch, Olympia, and Sultana*.
Pearl, Richard M. *Handbook for Prospectors*. 5th edition.
New York: McGraw-Hill Book Co., 1913.

Maps

- Chalmers and Charlesworth. *Mining Location map of Lake of the Woods and Shoal Lake*. 1897.
Colonist Location Map of the Lake of the Woods Gold Fields.
January 1897.
Lake of the Woods Gold Fields. 1896.
Lake of the Woods Gold Fields. October 1900.
Seegmiller, M. *Northern Part of the Lake of the Woods*.
circa 1900.

Newspapers

- Argus*. 1884.
Colonist. May 1896.
Lake of the Woods Mining Journal. 1894.
Manitoba Free Press. 1899.
Rat Portage Miner, Kenora Miner & News. 1895 - 1943.
Toronto Saturday Globe. Dec. 7, 1895.
Toronto World. July 23, 1899.

Acknowledgements

Mr. Richard Beard, resident geologist,
Ministry of Natural Resources.

Mr. Herb Bergman.

Mr. Max Cameron.

Mr. James Campbell.

Miss Nancy Forbes, librarian, Kenora
Public Library.

Mr. & Mrs. Carl Holm.

Mr. Les. Ingo.

Mrs. Joyce Kennedy and Mr. Peg Reeves,
Lake of the Woods Museum.

Mr. Joe Macdonald, CJRL.

Miss Barbara Machin.

Mr. Jack McKinnon.

Mr. & Mrs. John Peterson.

Mr. & Mrs. J.B. Simpson.

Mr. Carl Walsten.

Mr. & Mrs. Albert Zeemel.

Mrs. Vern Holm.