CIHM
Microfiche
Series
(Monographs)

ICMH
Collection de
microfiches
(monographies)

Canadian Institute for Historical Microreproductions / Institut canadian de microreproductions historiques

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

- [x] Coloured covers/ Couverture de couleur
- [x] Covers damaged/ Couverture endommagée
- [ ] Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- [ ] Cover title missing/ Le titre de couverture manque
- [ ] Coloured maps/ Cartes géographiques en couleur
- [x] Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- [ ] Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- [ ] Bound with other material/ Relié avec d'autres documents
- [ ] Tight binding may cause shadows or distortion along interior margin/ La raliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- [ ] Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- [ ] Coloured pages/ Pages de couleur
- [x] Pages damaged/ Pages endommagées
- [ ] Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- [x] Pages discoloured, stained or foxed/ Pages décolorées, tachatées ou piquées
- [ ] Pages detached/ Pages détachées
- [x] Showthrough/ Transparence
- [ ] Quality of print varies/ Qualité inégale de l'impression
- [ ] Continuous pagination/ Pagination continue
- [ ] Includes index(es)/ Comprend un (des) index

Title on header taken from:/ La titre de l'en-tête proviant:

- [ ] Title page of issue/ Page de titre de la livraison
- [ ] Caption of issue/ Titre de départ de la livraison
- [ ] Masthead/ Générique (périodiques) de la livraison

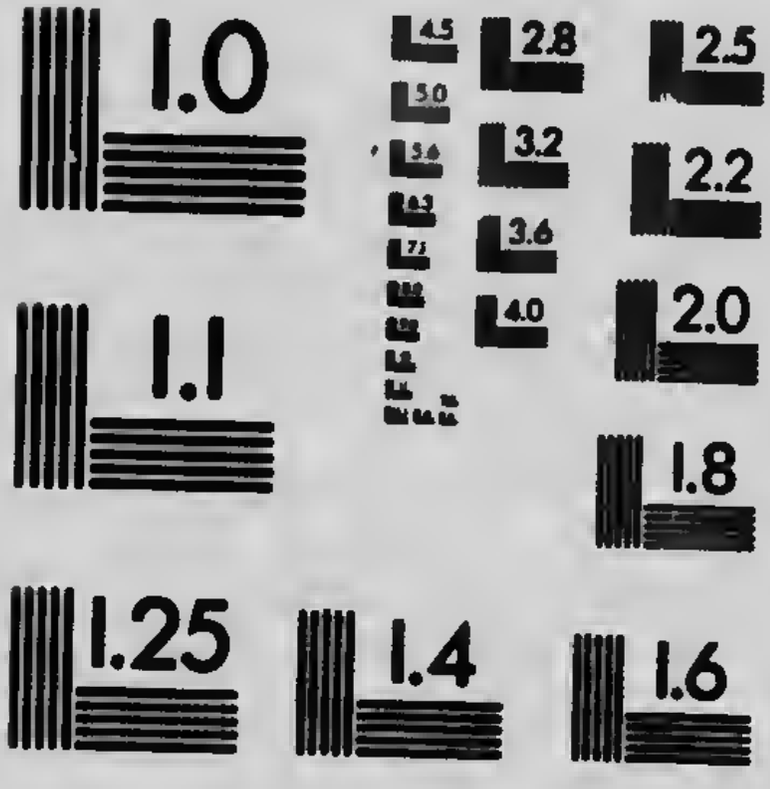
- [ ] Additional comments:/ Commentaires supplémentaires:

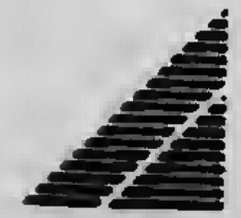
This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
							✓				

MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)





APPLIED IMAGE Inc

1653 East Main Street
Rochester, New York 14609 USA
(716) 482 - 0300 - Phone
(716) 288 - 5989 - Fax


The Canadian Forty-Mile
Gold Dredging Company
Limited
Gold Output for
Klondike to date
$130,000,000

A Summary Report

of

The Canadian Forty - Mile Gold Dredging Company

Limited

(Incorporated Under the Dominion of Canada Companies Act)

Authorized Capital, $600,000.00

In 6,000 Shares of $100 each, par value, to be issued as fully paid up and non-assessable

Solicitors
Blake, Lash & Cassels, Toronto, Ont.

Bankers
The Bank of British North America

Head Office
501 Markham Street, Toronto, Ontario, Canada

Directors

Mr. Wm. J. Smith, President
361 Brunswick Avenue, Toronto, Ont.

Mr. F. E. Davison, Vice-President and General Manager
493 Euclid Avenue, Toronto, Ont.

Dr. J. Ewart Brown, Secretary
501 Markham Street, Toronto, Ont.

Dr. Andrew S. Grant, Treasurer
Dawson City

Mr. Geo. D. Forbes, Hespeler, Ont.

Mr. J. E. Haines, Toronto, Ont.

Junction of Forty Mile and Yukon Rivers

Objects of the Company: The Company was incorporated on December 12th, 1905, under the provisions of the Dominion of Canada Companies Act, and will develop and operate by dredging that portion of the Forty-Mile River extending from the junction with the Yukon to the International Boundary, in all a distance of 23 miles.

Area and Titles: The Forty-Mile property consists of five Government leases covering a distance of 23 miles on the Forty-Mile River, and includes that portion of the river from where it empties into the Yukon to the International Boundary. The five leases were applied for and granted by the Dominion Government to James Joshua Rutledge in the year 1902 by the Minister of the Interior and are described as follows:—

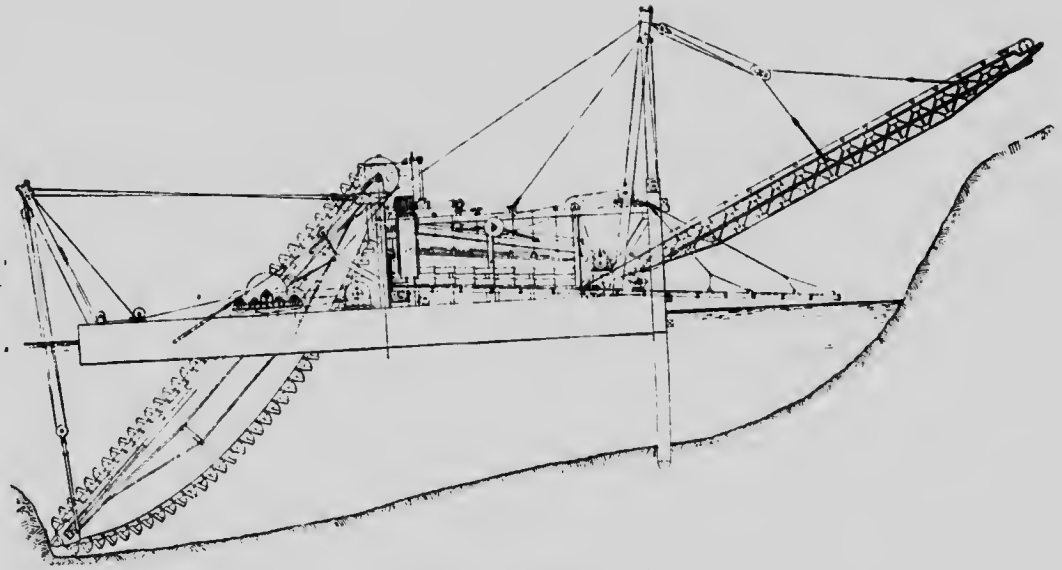
Starting at a point at the junction of the Yukon and the Forty-Mile River and running to the International Boundary up the Forty-Mile River. The five leases are on record in the Timber and Mines Bureau of the Department of the Interior, and numbered 279, 280, 281, 282 and 283. The file number is 430 and 685, dated December 23rd, 1902.

The titles consist of the usual 20 year lease from the Dominion Government, the validity of the transfers of which the Company is vouched for by the Company's solicitors.


©COPYRIGHT 1902 BY

History and General Character: The Forty-Mile River received its name from the fact that it empties into the Yukon River about forty miles below old Fort Reliance on the Yukon River, being about fifty miles below the present Dawson City, and has a length of about 150 miles extending into the mountain. The lower portion of the river varies in width from 200 to 250 yards. The banks, bars and islands are all gold bearing. The gravels vary from 5 to 15 feet to bedrock. The bedrock consists of a hard mica schist more or less irregular and broken, but easily mined.

Gold was first discovered in the Yukon in the eighties, and a number of miners were engaged every season washing on the bars and prospecting on the many streams throughout the district. In the year 1886 the first coarse gold discovered in the country was found on Forty-Mile River. The following season witnessed great activity on this river, and according to the reports of William Ogilvie, Dominion Land Surveyor, in 1897, about $130,000 of gold dust was washed out of the bars by the primitive methods of rockers and panning. Ever since that date there has been a considerable amount of work done on the small streams flowing into the Forty-Mile, the main stream being not so easily worked on account of the high water. With the crude appliances at the com-



Skeleton of Dredge at work

mand of the miners, the gold in the deeper parts of the bars, and the still richer deposits in the actual channel of the river, could not be reached. The bars, as a rule, have never been worked to a depth of more than two or three feet from the surface. Below this depth the gravels of both bars and channel remain untouched, awaiting the coming of improved appliances for getting down to it. The gold is of a coarse quality characteristic of the district, and nuggets in value as high as $39.00 have been found.

Fuel: The entire watershed of Forty-Mile is more or less wooded with birch and spruce of dimensions that will furnish abundance of fuel for power on the dredges if necessary for many years to come. Coal also may be had at Forty-Mile town for $7.00 per ton.

Electric Power: About eight miles from the mouth of Forty-Mile River there is a large canyon with sufficient fall to furnish electric power for the operation of the dredges to be installed, thus making a great saving in the cost of operating.

Values of Forty-Mile: According to reports in the Yukon, where tests have been made, one man could not wash more than two or three cubic yards of gravel with rocker per day, and we note in McConnell's Government report of

A modern 3000 yards per day Bucket Dredge

1891, in speaking of the Forty-Mile River, he says: "In 1887 over two hundred miners were actively and successfully employed along the numerous bars, and the total yield for the season was variously estimated from $65,000 to $150,000."

Wm. Ogilvie, D.L.S., in his report to the Government, says: "The miners informed me that there was about $130,000 taken out during the season of 1887."

McConnell says, "The average value of labor is $10 a day per man, and bars which yield less than this are soon abandoned."

Therefore, according to the Government reports, the miners in those early days could not afford to spend time on gravel bars that did not yield at least $2 to $3 to the cubic yard, and with such simple gold saving contrivances as the pan and rocker, winnings from $10 to $50 per day to the man was not uncommon.

One of the present owners had portions of the river carefully prospected and these proved to be gold bearing, and in some instances running high in values, increasing in richness as bedrock was reached. This river has always borne the name among old miners of being one of the best gold bearing streams in the country.

Five and a half cubic foot Bucket

Development:. The Company has at present one dipper dredge which was installed just before navigation closed last season. Their intention is to instal a large bucket dredge of 3000 cubic yards per day capacity at the beginning of the season of 1906, and one each succeeding year until five have been installed, or one on each five mile lease.

The gravels of Forty-Mile River are not frozen as in the Klondyke and other creeks near Dawson, so that the dredges will be able to be worked more nearly up to their full capacity.

Size and Type of Dredge: The latest and most improved type of elevator dredge has a water-tight bucket. These buckets carry considerable water with the gravel, which facilitates the washing operation, and the material being brought up in smaller masses than by the dipper dredge, is more easily broken up and disintegrated in the revolving grizzley. For these reasons the elevator bucket dredge is the ideal type for placer mining, and was determined a few years ago in the New Zealand and Australian gold fields where this type has been successfully employed, and is now being worked with great success in the Yukon. These dredges may be operated by either steam or electricity. They have been so improved in the last few years that they are now capable of digging

Five and a half Open Connected Bucket and Upper Lund

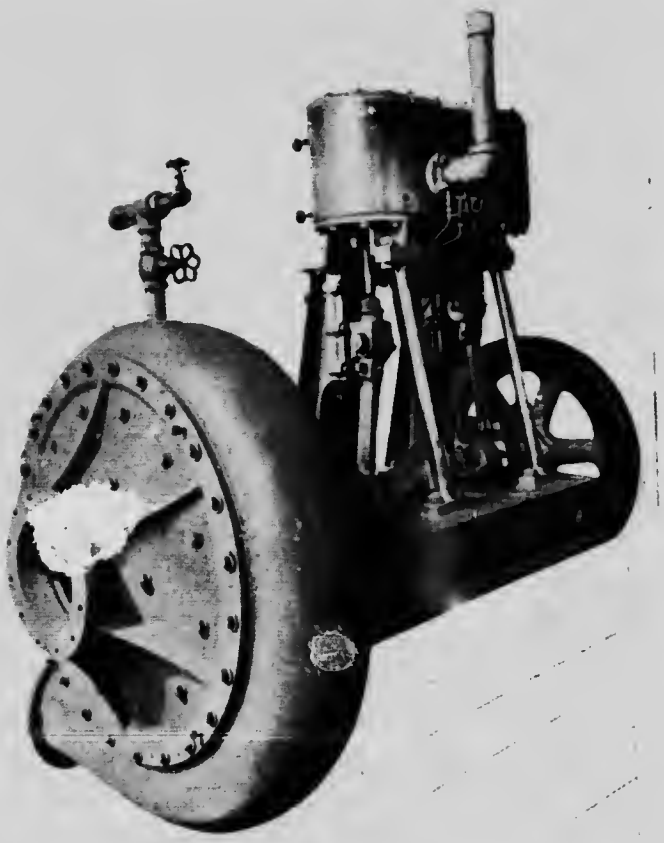
to a depth of 75 feet, and have the capacity of handling over 3000 cubic yards per day. The buckets have been increased from 500 pounds to over 1200 pounds each, having lips made of manganese steel which will dig very hard bedrock. All parts subjected to much wear and tear are made of manganese steel and easily replaceable.

The average power used for a large dredge is about 200 H.P. The gold saving tables on these dredges have an area of about 1200 square feet. The tailings and waste are carried back on a rubber belt elevator, depositing them 90 feet behind the dredge.

For the past three years a small bucket dredge has been operated successfully on Bonanza Creek, near Dawson, but not until the past season was there a large dredge of the latest and most improved type installed by the Canadian Klondyke Mining Company, which handled approximately 3000 cubic yards per day, and the savings of which amounted to over $100,000 for the first 30 days, on ground which had been previously worked by the old methods. Another of these large dredges was installed by the Bonanza Gold Basin Dredging Company a short time before the season closed and it also proved very successful during

Tailings Elevator

the time it was in operation. It has been demonstrated in the Yukon, where expenses are high, that with these dredges with large capacity, the gravel can be handled at a cost of less than ten cents per cubic yard in unfrozen ground. It is useless to predict what the future has in store for gold dredging so rapidly has the industry developed during the past three years. The improvement is steady and the field is constantly increasing. Ground is being handled to-day that three years ago was placed out of the possibility of dredges. Not only can harder and coarser deposits be handled but the depth to which these machines can attain is constantly increasing. In the Yukon there is by far the richest, auriferous gravels the world has ever known, covering a large area of country, and a very large proportion of this area can be worked by the dredge and made to pay handsome profits.



Twelve inch Pump
with 50 Horse Power
Compound Engines

Values and Profits: A large dredge ~~may~~ will be installed at a cost not exceeding $125,000.

The cost of operation per day will not exceed $210.00. The average length of a season for dredging in the Yukon is 170 days, but to be conservative we place it at 150 days. Making the cost of operation for the season approximately $31,250.

The dredge has a capacity of 3000 cubic yards per day, but we have reduced this to 2,500 yards per day, which in a season of 150 days would treat 375,000 cubic yards of gravel.

By taking the Government reports of Wm. Ogilvie and R. G. McConnell the value of the gravels of Forty-Mile River, worked by the miners of 1887, must have averaged between two and three dollars to the cubic yard; but to be extremely conservative we have placed the average values at 75 cents per cubic yard. This would give an earning capacity of $281,250, at a cost of $31,250, leaving a clear profit of $250,000 on one dredge for a full season's work. When the five dredges are installed and at work one can see that the possibilities are very great, and would still be handsome even at a profit of half the above figures.

Gold Saving Tables

Conclusion: Do not mistake quartz mining for placer mining. In the quartz mine the gold is in the solid rock and requires intricate and expensive methods of extracting it, while in the placer mine the gold is loose in the gravel and only requires washing with water to acquire the gold. So that the chief aim has been to adopt a process that will treat the greatest amount of gravel at the least cost, and no method can compare with the modern dredge, as its capacity is so great, and three men only are required to work it. It not only saves all nuggets and fine gold, but also saves the float and microscopic gold. It will work on ground that is level and without grade, and only requires the smallest stream of water, in fact, the full of a two inch pipe would be sufficient. There is no investment, commercial or otherwise, that can be estimated with greater certainty than gold dredging, as the exact cost of the dredge, property, labor, fuel, etc., as well as the values of the ground may be ascertained. The capacity of the dredge is also definite, so that an investment in a proposition of this nature can be estimated with greater certainty than the average commercial enterprise.