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32D04SW0267 63.4956 CATHARINE

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Results of a Bulk Sampling Programme
Carried out on the
GOLD HILL PROPERTY

Kirkland Lake Area, Ontario
Catharine Township
47°59'55"N, 79°51'05"W

Prepared for
Goldbrook Explorations Inc.

Michael M. Magrum, P.Eng.
May 01, 1986

DM85-6-C-7

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Summary

The GOLD HILL property consists of nine patented claims in the Township of Catharine, 14 miles southeast of Kirkland Lake.

Previous work on the property was carried out from 1923 through 1929 by Gold Hill Mines Limited. High-grade gold values in narrow quartz veins were traced from surface to the 1,100-foot level by a 1,100-foot shaft and approximately 7,500 feet of lateral work.

Although gold values were very encouraging from underground sampling and from mill tests, the actual recoveries from the company's own mill were much lower. A total of 613 ounces of gold was recovered from 4,377 tons of ore resulting in a recovery of 0.14 ounces of gold per ton. As the narrow veins were found in shears of 4 feet or wider, it was thought that the vein material was being diluted by a factor as high as 10 to 1.

It was felt that the only mining method which could deal with an excessive dilution problem was the resuing method. In this method, the ore and the wallrock are broken separately and the waste is left in the stope.

The underground workings of the mine were dewatered and a programme of chip sampling and bulk sampling was carried out. Results from the chip sampling were much lower than previous results.

A bulk sample of approximately 200 tons was shipped to the Pamour custom mill in Timmins. This bulk sample had an average grade of 0.12 oz gold per ton.

No further work is recommended on the property.

Introduction

This report describes the results of a bulk sampling programme carried out on the GOLD HILL property of Goldbrook Explorations Inc. in the Township of Catharine, in the District of Temiskaming, Ontario. The GOLD HILL property was explored and mined for a bried period in the late 1920s. The gold showings were high-grade and often spectacular. Unfortunately the veins were narrow and suffered excessive dilution in mining. The property is located approximately 14 miles from Kirkland Lake which has an excellent infrastructure for mining.

During the summer of 1985, the underground workings of the GOLD HILL property were explored by chip sampling and bulk sampling down to the 300-foot level.

Property

The property consists of nine patented claims in the Township of Catharine, in the District of Temiskaming, Ontario.

- (1) Parcels of land (both surface and mining rights) registered in Register of South Section Temiskamiing:

<u>Parcel No.</u>	<u>Lot</u>	<u>Concession</u>
2766	NW ¼ of S ½ of 8	5
2800	SW part of N part of 9	5
2801	NE part of N part of 9	5
2802	NW part of N part of 9	5
2803	SE part of N part of 9	5

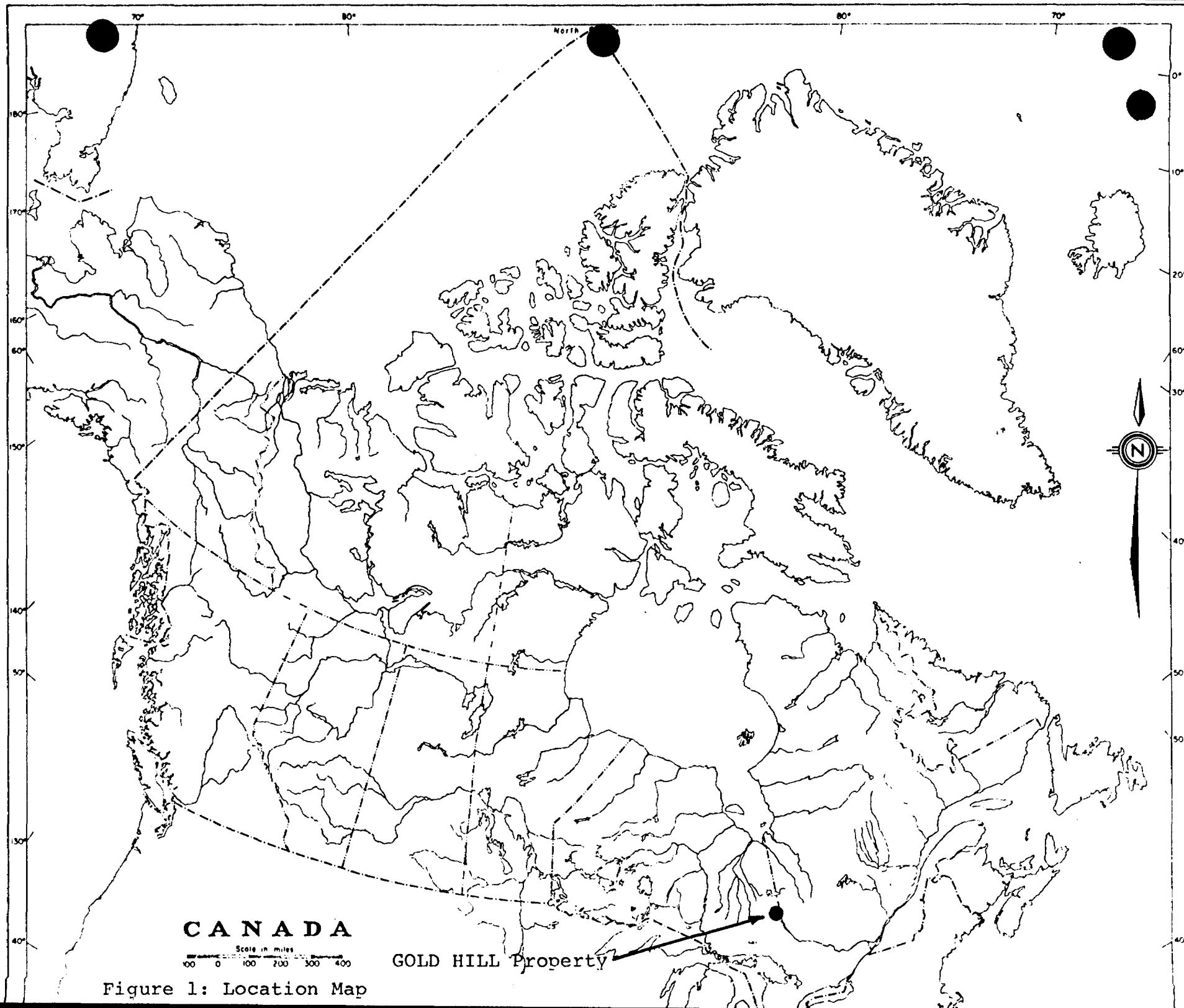


Figure 1: Location Map

2844	SW $\frac{1}{4}$ of S $\frac{1}{2}$ of 8	5
2852	SE part of S $\frac{1}{2}$ of 9	6
3556	NW $\frac{1}{4}$ of S $\frac{1}{2}$ of 7	5
3557	NE $\frac{1}{4}$ of S $\frac{1}{2}$ of 8	5

(2) Licences of Occupation granted pursuant to the provisions of The Mining Act and recorded in the name of the Owner:

<u>Number</u>	<u>Date</u>
1399	May 15, 1926
1400	May 15, 1926
1470	September 24, 1926

As no title search was carried out on the above property, a title opinion does not form part of this report.

Location and Access

The Gold Hill mine shaft is located at 47°59'55" north, 79°51'05" west, south of the Misema River, Township of Catharine, District of Temiskaming, Ontario. The property is 14 miles southeast of Kirkland Lake and 5½ miles from Boston Creek. The location is shown on Figures 1 & 2.

Access for exploration purposes is by road from Kirkland Lake. A good quality road is maintained as far as the Misema River during the summer months by logging and exploration companies. Goldbrook constructed a bridge across the Misema River and rehabilitated the road from the river to the property.

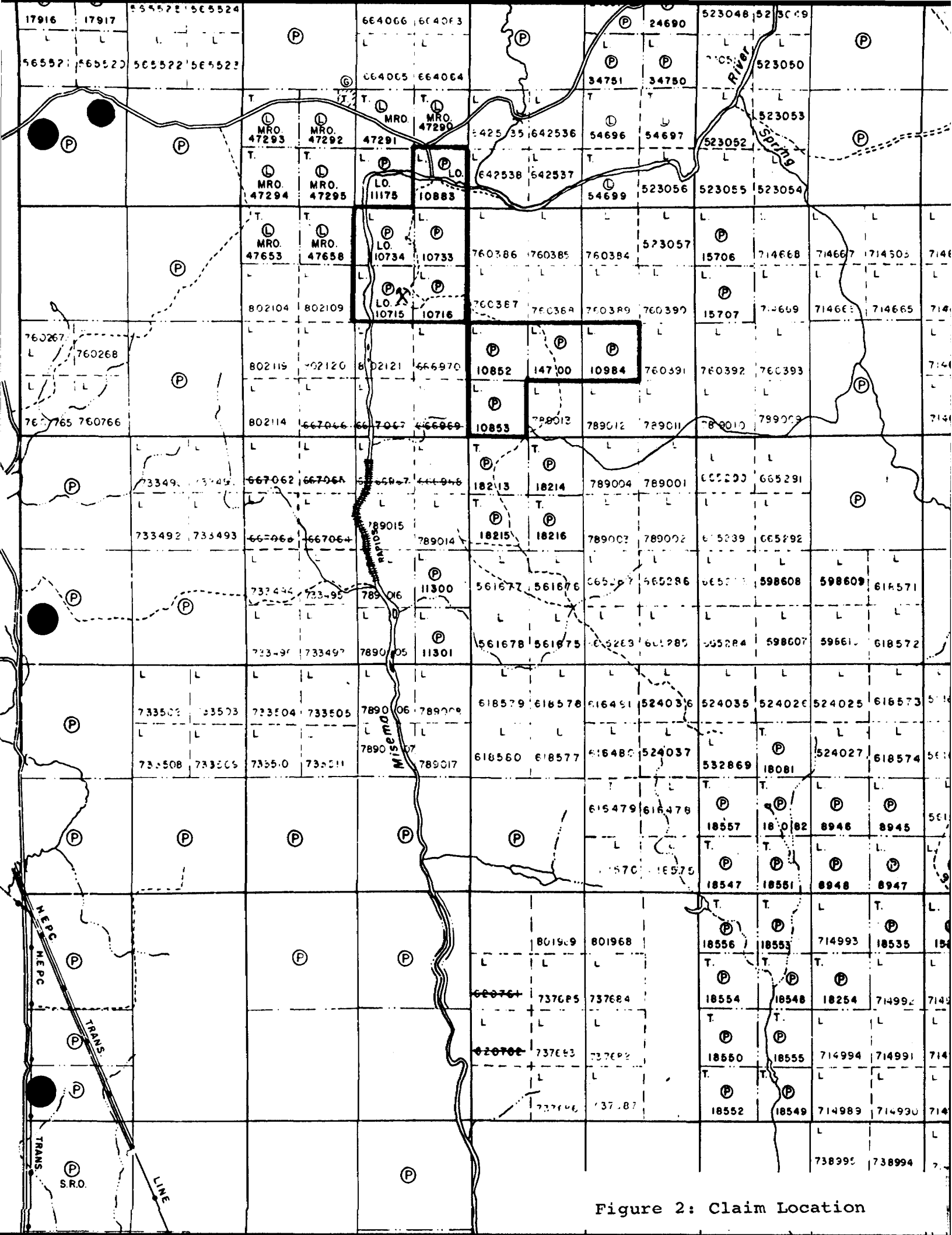


Figure 2: Claim Location

History and Previous Work

Gold was first discovered on the GOLD HILL property in 1923. The Gold Hill Mining Company was subsequently formed by a group of Haileybury mining people and shaft sinking began the same year on a narrow high-grade gold vein. Values in excess of 25 ounces gold per ton were found in the shaft at a depth of 140 feet.

By 1925 the shaft had been sunk to a depth of 300 feet. Several tons of ore from the shaft had been sent for testing and results indicated a grade in excess of 3 ounces gold per ton.

In 1926, Gold Hill Mines Limited was formed to take over the assets of Gold Hill Mining Company and provide new financing. By the end of the year the shaft had reached a depth of 800 feet. A test shipment consisting of a carload of ore from the 300-foot level was sent to Temiskaming Testing Laboratories in Cobalt and this ore averaged greater than 1 ounce of gold per ton.

A 75-ton-per-day mill was set up on the property in 1927. Approximately 4,400 tons of ore was treated with a recovery of 613 ounces of gold. It was felt that the reason for the low recoveries was excessive dilution in mining. The mill was closed until the dilution problem was solved.

By early 1928, the management of the Gold Hill retained the firm of Wright and Boydell to carry out an evaluation of the mine and property. Victor A. James of that firm concluded that the veins in the mine were too narrow to absorb the dilution in the mine. He recommended that the shaft be sunk deeper to check the possibility that two of the veins might converge at depth and result in a wider vein. Upon receiving these recommendations, the company continued sinking the shaft to the 1,100 foot level and carried out drifting. According to Northern Miner reports, the veins were wider at depth and the two main veins exposed in upper workings converged on the 1,100 foot level.

Further drifting and sampling was carried out in 1929 and another mine evaluation was carried out. A report by E. W. Todd recommended that no further work be carried out on the GOLD HILL property. The mill and mining plant was subsequently sold and the property became idle.

In 1981, the property was optioned by Dome Explorations (Canada) Limited, who carried out geological mapping, a magnetic survey, a program of lithogeochemical sampling, and who also drilled five holes totalling 2,658 feet. A sixth hole was drilled on an unpatented claim just south

of the Rivertun property. Only one of the holes, No. 171-5, was drilled on the known gold-bearing vein. It cut two narrow quartz veins at a vertical depth of about 185 feet below the shaft collar. The veins were about seven feet apart, with assays of 0.19 oz/ton gold over 1 foot (0.7 feet true width) and 0.22 oz/ton gold over 1 foot (0.7 feet true width). It appears that the first of these intersections corresponds to the main vein developed by the underground work. Two other holes were drilled 275 feet west and 295 feet east of the shaft respectively, and did not cut mineralized veins. Two holes were also drilled to the northeast of the shaft presumably to test for parallel veins, also without success. Dome received little encouragement from their work, and dropped the option.

In 1984, the GOLD HILL property was optioned by Goldbrook Explorations Inc., who carried out a bulk sampling programme in the summer of 1985.

Geology and Mineralization

The geology of the area has been mapped by James A. Grant of the Ontario Department of Mines (see Figures 3 & 4). The oldest rocks in the area are the Keewatin

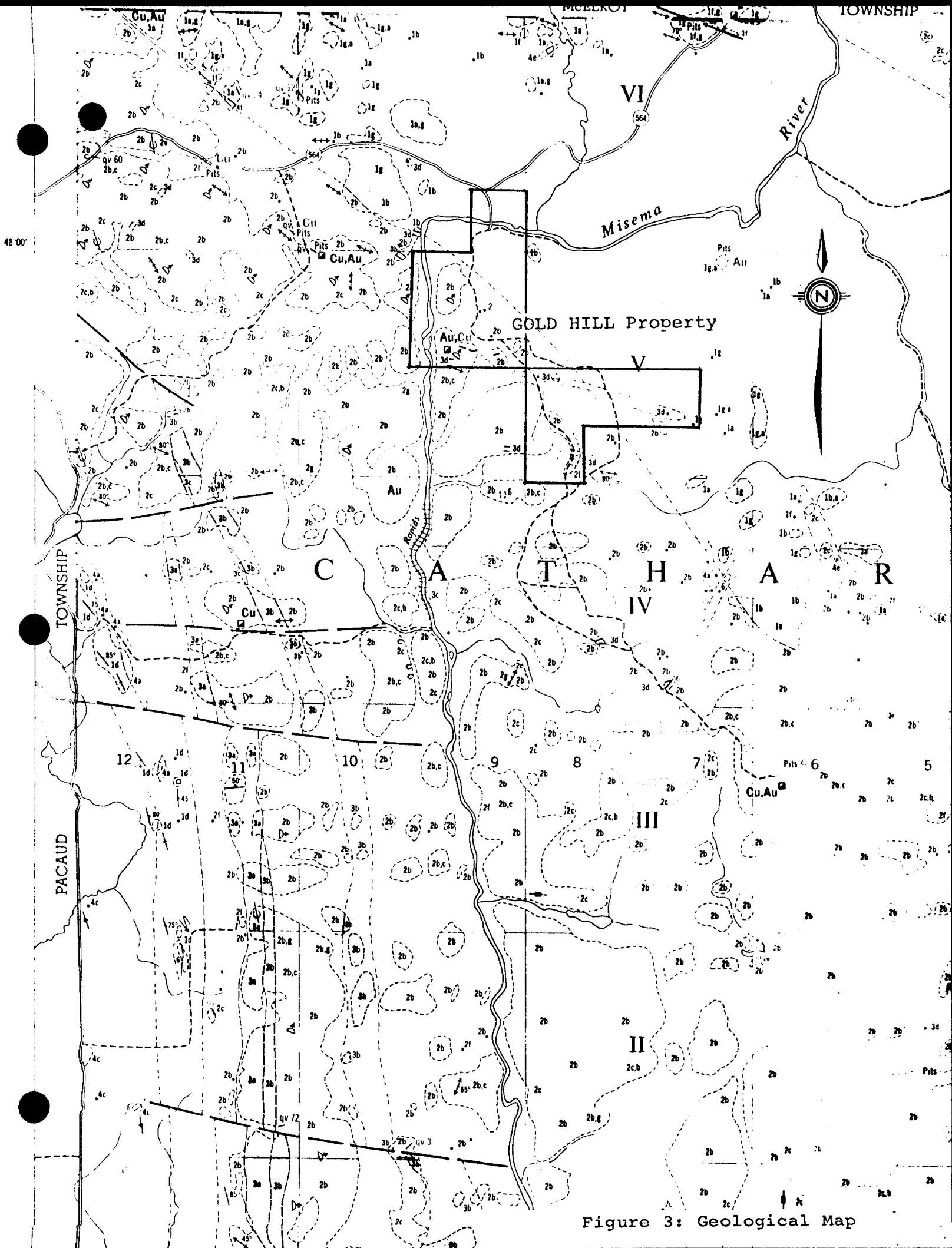


Figure 3: Geological Map

LEGEND

CENOZOIC*

PLEISTOCENE


Clay, sand and gravel.

GREAT UNCONFORMITY

PRECAMBRIAN**

PROTEROZOIC

KEWEENAWAN


 6 Diabase.

INTRUSIVE CONTACT

HURONIAN

COBALT GROUP


GOWGANDA FORMATION

 5a Conglomerate.
5b Greywacke.
5c Arkose, quartzite.
5d Argillite.

UNCONFORMITY


ARCHEAN

ALGOMAN ?

 4a Syenite.
4b Granodiorite.
4c Granodiorite gneiss (Round Lake pluton).
4d Albite porphyry, quartz-albite porphyry.
4e Lamprophyre.
4f Felsite.

INTRUSIVE CONTACT


POST-KEEWATIN

 3a Diorite.
3b Gabbro.
3c Serpentinized peridotite.
3d Diorite porphyry, dacite porphyry.


INTRUSIVE CONTACT


KEEWATIN

BASIC TO INTERMEDIATE VOLCANIC ROCKS (predominantly lavas)

 2b Dacite and andesite, including pillow lavas.
2c Diabase, diorite and gabbro.
2f Sheared volcanic rocks.
2g Fragmental lavas.
2v Variolitic lavas.

INTERMEDIATE TO ACID VOLCANIC ROCKS (predominantly pyroclastic)

 1a Porphyritic dacite and andesite, mostly crystal tuff.
1b Dacite and andesite, mostly aphanitic tuff.
1d Banded tuff and tuffaceous sedimentary rocks with minor iron formation.
1f Sheared volcanic rocks.
1g Agglomerate.
1r Rhyolite.

 Quartz veins, width in inches.

 Carbonatized rock.

Figure 4: Geological Legend

volcanics which are found in a steep anticlinal belt around the eastern margin of the Round Lake pluton. The volcanic rocks were first intruded by ultrabasic to intermediate dykes and sills and later by the Round Lake pluton and by numerous small, acid to intermediate and lamprophyric dykes.

Bell (1930, pp. 105, 106) gives the following description of the geology on the GOLD HILL property:

Adjoining the Hilltop on the east but lying chiefly on the east side of Misema River are nine claims in lots 9, 8, and 7, concession V, Catharine Township, which comprise the property of the Gold Hill Mines, Limited. Mine workings and buildings are confined to the central part of the north half of lot 9. In September 1928, a two-compartment shaft had been sunk to a depth of 1,000 feet, and in January 1929, the 1,200 foot horizon had been reached. In addition, a total of 6,000 feet of crosscutting and drifting has been done. A 100-ton mill was installed in the fall of 1927 and was operated during the winter of 1927-28. From this period of mill operation a small production is recorded.

Intruding the Keewatin lavas and diabase is a complex series of intrusions classed as Algoman but differing considerably in form, composition, and age relationships. These rocks, which are particularly abundant in the vicinity of the mine, occur usually as narrow dykes and as irregular stock-like masses, and range from diorites and hornblende syenites to syenite and feldspar porphyries. Some of them are highly altered and sheared along veins and fractures, while others are relatively fresh and unaltered and frequently intersect the veins, and are thus clearly younger in age. The mine shaft

and drifts are in Keewatin basic lavas. Keewatin diabase was encountered in a crosscut to the north on the 800 foot level, and two Keweenaw diabase dykes were intersected in crosscuts to the north and south of the main vein on the same level. On all levels, a diorite dyke, at some points altered along the vein to chlorite schist, forms in part the hanging wall of the No. 1 or south vein. Outcrops of this dyke may be seen on the surface to the west of the shaft. On the 700 foot level the vein was cut off by a sill of feldspar porphyry near the shaft, and it was found necessary to cut a raise for a short distance in order to drift on the vein above the sill. A pegmatite dike outcrops on the surface to the southeast of the shaft, and was encountered in a crosscut to the south on the 800 foot level. The crosscut was driven as a result of diamond drilling, which indicated values in or near the dyke.

The major development has been confined to No. 1 vein, which strikes N60°W and near the shaft has a steep dip to the north. West of the shaft, however, the dip tends to become vertical. No. 1 vein can be traced on the surface for a distance of only about 500 feet, chiefly to the west of the shaft. It has been drifted on underground for a maximum distance of 900 feet. No. 2 vein is 70 feet northeast of No. 1 vein on the surface and has the same general strike and a similar steep dip to the north. Drifting on this vein has been done only on the 300 and 800 foot levels. It occupies a fairly well-defined fracture on the surface which can be traced for some distance, principally to the east of the shaft. There have been a few minor displacements of both veins due to faulting but not sufficient to cause any serious difficulty in tracing them underground. No. 1 vein carried good values over narrow widths, averaging about 14 inches, with the result that stopes were made as narrow as possible to avoid dilution of the ore. It has not been found commercially possible to mill ore of the grade obtained from the narrow

shoots in the veins, even with the practice of hand-sorting which has been employed at the mine. A certain amount of stoping of No. 1 vein has been done on all levels, and a very small stope was opened up on No. 2 vein on the 800 foot horizon. No. 1 vein has been stoped over a distance of 250 feet on this level. It is the hope of the management that the veins will widen, or possibly converge at greater depth.

The enriched vein matter consists of banded quartz and sulphides with parrallel bands of green chloritic schist, which is in part replaced by quartz and sulphides; pyrite, which is the most abundant; chalcopyrite, molybdenite, and smaller amounts of galena. Gold is usually associated with chalcopyrite, and is occasionally visible in fine grains. Gold values are largely restricted to the quartz, although the wall rock shows a certain amount of mineralization, chiefly pyrite. Calcite occurs sparingly with the quartz as gangue, and epidote was noted in a drift on the 500 foot level.

Previous Development and Results

The Gold Hill mine is developed by a two-compartment vertical shaft to a depth of 1,100 feet. Levels have been opened at the 100, 300, 400, 500, 600, 700, 800, and 1,100 foot levels. Approximately 7,500 feet of drifting has been carried out (see Fig. 5). A total of 3,600 feet of diamond drilling has been done for which no records are available. The drilling was mainly done from the west drift on the 800 level.

Underground sampling by previous operators had found numerous sections of the underground workings to carry appreciable gold values. The most significant of these are shown on Figure 5 and are tabulated below:

<u>Level</u>	<u>Assay (oz Au/ton)</u>	<u>Width</u>	<u>Length</u>
100	1.61	7.5"	68'
100	2.06	11.8"	39'
300	2.25	18.7"	138'
300	1.78	20.0"	44'
400	1.04	5.1"	66'
500	1.17	5.0"	16'
600	1.49	3.6"	34'
600	11.30	3.5"	26'
800	0.96	9.4"	65'
800	1.10	15.5"	57'
800	0.89	15.0"	135'

Very good underground records are available for the mine down to the 800 foot level. Unfortunately, the records for the 1,100 foot level are not available. According to reports in the Northern Miner while the mine was in operation, good values over good widths were obtained. At the present time, these reports cannot be substantiated.

Using the mine cross section (Fig. 5), an attempt was made to determine the tonnage mined on the property. This tonnage is divided by the level from which it was obtained.

<u>Level</u>	<u>Tonnage</u>
100	880
300	312
400	1,687
500	94
600	433
700	94
800	<u>3,604</u>
	<u>7,104</u>

From the above ore, production as reported to the Ontario Department of Mines was as follows:

Ore raised	6,035.4 tons
Ore cyanided	4,377.4 tons
Gold bullion recovered	1,293.75 crude ounces
Crude bullion shipped	1,293.75 ounces
Final recovery - 612.958	fine ounces gold
195.42	fine ounces silver

From the above, it can be seen that the overall recovery for the ore milled was 0.14 ounces of gold per ton and before sorting the grade would be 0.10 ounces gold per ton. According to Todd, the rock surrounding the quartz vein was commonly sheared for a width of 4 feet or more.

1985 Programme

The 1985 programme was carried out with a twofold purpose. The first was to check the actual gold content of vein by bulk sampling and the second was to determine if the resuing mining method could be used.

The work programme began in June, when Teck Northern Roads Limited constructed a timber bridge across the Misema River. In July, work was begun rehabilitating the access road from the Misema River to the minesite. Numerous delays were encountered due to abnormally high rainfall and the clay roadbase. Eventually, most material was hauled into the site by a rented skidder.

The underground workings were dewatered using two Flyght submersible pumps and a 25 Kw generator wired for 575 volts. A model B-2125-2 (13 hp) pump was initially used to dewater down to approximately the 200-foot level. At that point, a dam was built on the 100-foot level. A model B-2051 (1.6 hp) pump was used to pump from the dam through the raise breaking through approximately 40 feet above the 100-foot level. The 13 hp pump was then used to continue pumping to below the 300-foot level. A 4-inch thinwall steel pipe was used to deliver water to surface. When bulk sampling commenced, the same pipe was alternately used for supplying air and pumping out water.

A 35-foot high timber headframe was constructed over the shaft collar. A door was installed and a wall was built on the side of the headframe so that approximately

75 tons of muck could be dumped before the pile had to be moved. The shaft timbers were completely rotted out to a depth of 30 feet and partial replacement and reinforcement of the timber sets down to approximately 70 feet was required. In addition, the shaft was plugged with mine muck, concrete, timber and miscellaneous debris for a depth of 30 feet. An air-powered hoist was installed for hoisting and was powered by a 325 cfm compressor.

Chip sampling was carried out on the 100-foot and the 300-foot level to check old sampling results and to sample each lift as it was mined. On the drift backs, sample locations were located as close to old sample locations as possible. On the 100-foot level, it was not possible to sample the back after the second lift because the workings were too narrow to enter.

Bulk sampling was carried out on the 100-foot and 300-foot levels. On the 100-foot level (see fig. 6) the back was taken down to a height of 19 feet above the track over a length of approximately 35 feet. On the 300-foot level (see fig. 7), the back was taken down to a height of 19 feet above the track over a length of approximately 80 feet.

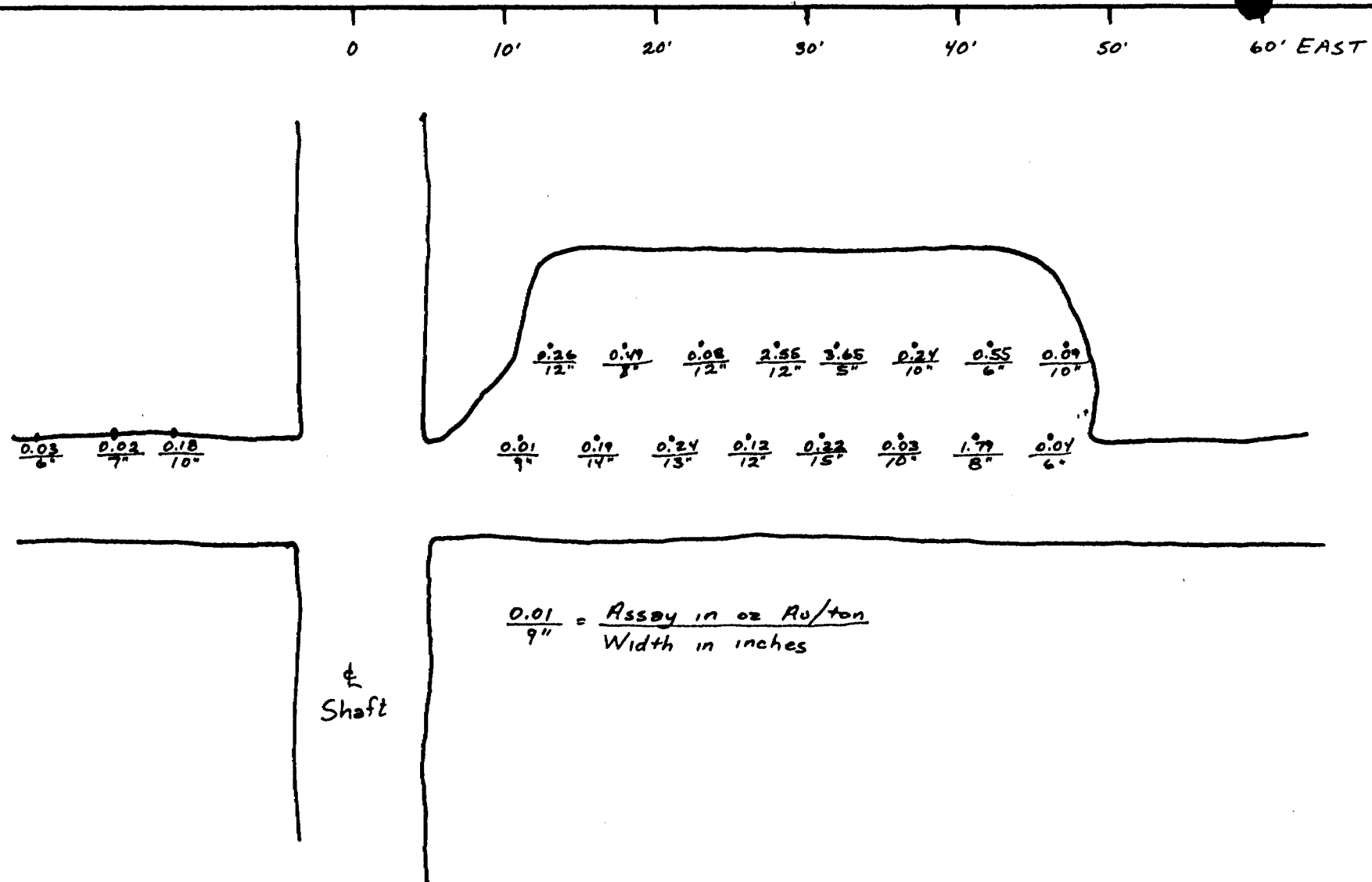
Approximately 200 tons of ore was hoisted and shipped to the Pamour mill in Timmins.

When mining was completed, a concrete cap was installed over the shaft and over the raise breakthrough.

1985 Programme Results

Chip sampling was carried out on the drift backs on the 100-foot and the 300-foot levels where bulk sampling was contemplated. On the 100-foot level a section grading 2.06 oz gold per ton across 11.8 inches over a length of 30 feet was resampled and returned values averaging 0.29 oz gold per ton across 11 inches over a length of 35 feet. On the 300-foot level, a section grading 2.25 oz gold across 18.7 inches over a length of 138 feet was resampled over a length of 80 feet. This section averaged 0.12 oz gold over a width of 15 inches.

The 100-foot level was sampled first and the decision to bulk sample was made even though previous results were not confirmed. It was felt that the erratic nature of the high grade mineralization might be the problem. Although the sampling results on both levels are low (see figures 6 and 7) erratic high-grade values are present. The highest value was found at the top of the first lift on the 300-foot level where 5.27 oz gold per ton across 18 inches was returned.



ASSAY SECTION - 100-FOOT LEVEL
 1" = 10'

Figure 6

90' WEST

80'

70'

60'

50'

40'

30'

20'

10'

0

$\frac{0.16}{12''}$	$\frac{0.40}{12''}$	$\frac{1.15}{24''}$	$\frac{5.00}{12''}$	$\frac{0.10}{12''}$	$\frac{0.01}{8''}$	$\frac{0.74}{20''}$	$\frac{0.19}{18''}$	$\frac{0.06}{12''}$	$\frac{0.11}{18''}$	$\frac{0.08}{20''}$	$\frac{0.14}{20''}$	$\frac{0.14}{18''}$	$\frac{0.21}{12''}$	$\frac{0.12}{12''}$	$\frac{0.09}{16''}$					
$\frac{0.56}{18''}$	$\frac{0.50}{16''}$	$\frac{5.27}{18''}$	$\frac{0.08}{4''}$	$\frac{0.08}{12''}$	$\frac{1.33}{16''}$	$\frac{0.08}{12''}$	$\frac{0.60}{16''}$	$\frac{0.10}{12''}$	$\frac{0.02}{12''}$	$\frac{0.13}{16''}$	$\frac{0.02}{18''}$	$\frac{0.07}{16''}$	$\frac{0.15}{12''}$	$\frac{0.24}{12''}$	$\frac{0.72}{16''}$	$\frac{0.06}{8''}$				
$\frac{0.04}{18''}$	$\frac{0.19}{18''}$	$\frac{0.17}{16''}$	$\frac{0.08}{16''}$	$\frac{0.38}{12''}$	$\frac{0.50}{6''}$	$\frac{0.24}{8''}$	$\frac{0.01}{14''}$	$\frac{0.06}{12''}$	$\frac{0.17}{16''}$	$\frac{0.002}{18''}$	$\frac{0.01}{18''}$	$\frac{0.13}{16''}$	$\frac{0.03}{16''}$	$\frac{0.02}{18''}$	$\frac{0.39}{16''}$	$\frac{0.09}{12''}$	$\frac{0.11}{14''}$	$\frac{0.13}{18''}$	$\frac{0.16}{14''}$	$\frac{0.08}{18''}$

$\frac{0.04}{18''} = \frac{\text{Assay in oz Au/ton}}{\text{Width in inches}}$

↑
Shaft

ASSAY SECTION - 300 FOOT LEVEL

1" = 10'

Figure 7

A bulk sample consisting of 200.52 short wet tons was delivered to the Pamour custom mill in Timmins. After allowance for the moisture content, the sample weighed 195.61 short dry tons. The shipment was sampled every 5 tons, with a total of 40 samples taken (see Appendix II). The highest value returned was 0.561 and the lowest was 0.062 oz gold per ton with an average of 0.12 oz gold per ton.

In testing the resuing mining method, it was found that extensive slabbing occurred when taking down the first lift above track level due to the influence of the wide opening below. However, in the second lift, slabbing was minimal.

Conclusions

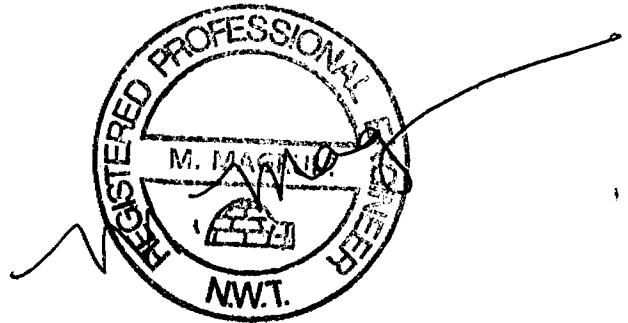
From the results of the chip sampling and bulk sampling, it must be concluded that the previous sampling results from the work carried out by Gold Hill Mines Limited are not representative of the values contained in the vein. No attempt is made to explain the discrepancy.

The resuing mining method appears to be a viable method to extract a narrow quartz vein in slabby wallrock. It is feasible to mine a vein as narrow as 18 inches.

Recommendation

It is recommended that no further work be carried out on the property at the present time.

Respectfully submitted,



Michael M. Magrum, P.Eng.
Geological Engineer

REFERENCES

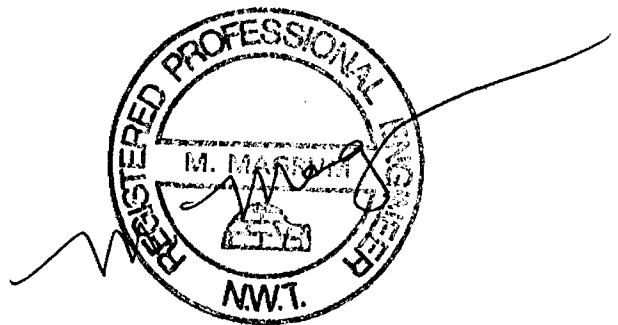
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ENGINEER'S CERTIFICATE

I, MICHAEL M. MAGRUM, of the City of Yellowknife, Northwest Territories, Canada, certify that:

- (1) My address is #4 Otto Drive, P.O. Box 2045, Yellowknife, Northwest Territories and that my occupation is that of a Geological Engineer.
- (2) I am a graduate of the University of Alaska in Geological Engineering, 1976, with the degree of B.Sc.
- (3) I have been a practicing engineer in the Yellowknife area since 1976 and I am a member of the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.
- (4) I have no interest either directly or indirectly, nor do I expect to receive any interest, in the property covered in this report or in the shares of Goldbrook Explorations Inc.
- (5) The accompanying report is based on work carried out under my supervision and on a review of all technical information available on the property and articles published by the Northern Miner during the period that work was carried out by Gold Hill Mines Limited.
- (6) I consent to the use of this report in a Prospectus or Statement of Material Facts.

DATED this 1st day of May 1986 at Yellowknife, Northwest Territories.



Michael M. Magrum, P.Eng.
Geological Engineer

APPENDIX I

Sample Descriptions

100' Level Drift Back (Track Plus 7 Feet)

East Side

101- 1 - 11' - 9" qtz
101- 2 - 16' - 5" qtz (main)
101- 3 - 16' - 7" wallrock
101- 4 - 16' - 2" vein (south)
101- 5 - 21' - 13" qtz
101- 6 - 26' - 12" (6" qtz and 6" schist of north wall)
101- 7 - 31' - 15" (6" qtz and 2-1" stringers on south side)
101- 8 - 36' - 10" (2-1" qtz stringers)
101- 9 - 41' - 8" (2" white qtz)
101-10 - 46' - 6" (3" qtz)

West Side

102-1 - 12' - 10" (8" qtz)
102-2 - 16' - 2" qtz
102-3 - 21' - 6" qtz

Distances are from centerline of shaft.



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642-3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

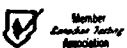
Certificate No. 60810 Date: Aug. 21, 1985
Received Aug. 19, 1985 13 Samples of rock
Submitted by Goldbrook Explorations Inc., Toronto, Ontario

	SAMPLE NO.	GOLD Oz./ton	
<i>East</i>	101-1	0.01	11' / 9"
	2	0.01	15"
	3	0.02	16' / 7"
	4	1.24	
		1.27	12"
	5	0.24	21' / 13"
	6	0.12	26' / 12"
	7	0.22	31' / 15"
	8	0.03	36' / 10"
	9	1.77	41' / 8"
	1.81		
	10	0.04	46' / 6"
<i>West</i>	102-1	0.18	12' / 10"
	2	0.02	16' / 7"
	3	0.03	21' / 6"

100 level (back of dr. A)

Per G. Lebel
G. Lebel, Manager

ESTABLISHED 1928



Sample Description

100' Level East-Track Plus 13 Feet

- # 1 - 28' - 4" qtz w/abundant sulphide in shear - 12" sample
- # 2 - 23' - 4 stringers (about 3½" qtz) sulphides in shear - 12" sample
- # 3 - 18' - 6" qtz w/sulphide in shear - 8" sample
- # 4 - 13' - qtz 6" to 2" w/sulphide, composite sample over 1 foot

Distances are from centerline of shaft.



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 61038

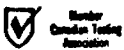
Date: Sept. 17, 1985

Received Sept. 12, 1985 4 Samples of rock

Submitted by Goldbrook Explorations Inc., Toronto, Ontario Att: C. Bowdige

SAMPLE NO.	GOLD Oz./ton
#1	2.42 2.56
second pulp	2.52 2.71
#2	0.08
#3	0.49
#4	0.26

Per 
G. Lebel, Manager



ESTABLISHED 1928

Sample Descriptions

100' Level East-Track Plus 13 Feet

- # 1 - 47' - 10" mud seam w/about 3" qtz
- # 2 - 42' - 4" qtz in 6" shear
- # 3 - 37' - 6" qtz in 10" shear w/plentiful sulphides
- # 4 - 32' - 4 to 5" qtz w/abundant sulphides

Distances are from centerline of shaft.



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

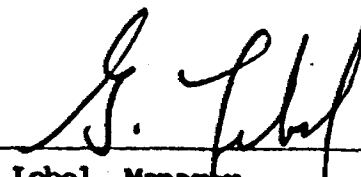
Certificate No. 60936

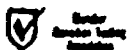
Date: Sept. 6, 1985

Received Sept. 3, 1985 4 Samples of rock

Submitted by Goldbrook Explorations Ltd., Kirkland Lake, Ontario Att: C. Bowdidge

SAMPLE NO.	GOLD Oz./ton
1	0.09
2	0.54 0.56
3	0.23 0.25
4	3.49 3.81

Per 
G. Lebel, Manager



ESTABLISHED 1928

Sample Description

300' Level West-Drift Back (Track Plus 7 Feet)

- # 1 - 10' - 6" qtz in 18" shear
- # 2 - 13' - stringers in shear over 14" w/sulphides
- # 3 - 17' - 18" shear w/6" qtz in stringers w/sulphides
- # 4 - 22' - 4" qtz in 14" shear
- # 5 - 26' - 12" shear w/3" qtz, sulphides
- # 6 - 30' - 4" qtz in 16" shear w/sulphides
- # 7 - 34' - 4" qtz in 18" shear, sulphides
- # 8 - 39' - 4" qtz in 16" shear w/sulphides
- # 9 - 43' - same as above
- #10 - 47' - 3" qtz in 18" shear, sulphides
- #11 - 51' - same as above
- #12 - 55' - 3" qtz in 16" shear, sulphides
- #13 - 59' - 4" qtz in 12" shear, abundant sulphides
- #14 - 63' - 3" qtz in 14" shear w/sulphides
- #15 - 67' - 3" qtz in 8" shear, plentiful sulphides
- #16 - 71' - 3" qtz in 6" shear, plentiful sulphides
- #17 - 75' - 4" qtz in 12" shear
- #18 - 79' - 4" qtz in 16" shear, sulphides
- #19 - 83' - 4" qtz in 16" shear, sulphides
- #20 - 87' - 6" qtz in 18" shear, sulphides
- #21 - 91' - stringers in 16" shear

Distances are from centerline of shaft.



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 61151

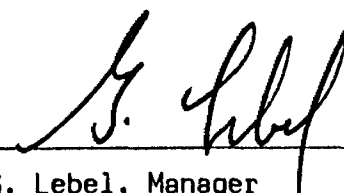
Date: Sept. 27, 1985

Received Sept. 25, 1985 22 Samples of ore

Submitted by Goldbrook Exploration Ltd., Toronto, Ontario Att'n: C. Bowdidge

SAMPLE NO.	GOLD Oz./ton	SAMPLE NO.	GOLD Oz./ton
1	0.03	16	0.46
2	0.16		0.56
	0.16	second pulp	0.50
3	0.13		0.47
4	0.11	17	0.38
5	0.09	18	0.08
6	0.41	19	0.17
	0.37		0.16
7	0.02	20	0.19
8	0.03	21	0.04
9	0.13	22	0.20
- 10	0.04		<i>Fines from chute</i>
	0.04		
11	0.002		
12	0.17		
13	0.06		
	0.06		
14	0.01		
15	0.24		

Per


G. Lebel, Manager

ESTABLISHED 1928

Sample Description

300' Level West-Track Plus 13 Feet

- # 1 - 12' - 8" qtz and shear, sulphides, sample over 16"
- # 2 - 16' - 6" qtz in 16" shear, abundant sulphides
- # 3 - 20' - 12" qtz w/sulphides
- # 4 - 25' - 5" qtz in 12" shear, abundant sulphides
- # 5 - 30' - 4" qtz in 16" shear, sulphides
- # 6 - 35' - 4" qtz in 18" shear, sulphides
- # 7 - 40' - 6" qtz in 16" shear
- # 8 - 45' - 4" qtz in 12" shear, sulphides
- # 9 - 50' - 5" qtz in 12" shear
- #10 - 55' - 4" qtz in 16" shear, abundant sulphides
- #11 - 60' - 4" qtz in 12" shear, sulphides
- #12 - 65' - 2" qtz in 16" shear
- #13 - 70' - 3" qtz in 12" shear
- #14 - 75' - 4" qtz with sulphides
- #15 - 80' - 6" qtz in 18" shear, abundant sulphides
- #16 - 85' - 2" qtz in 16" shear
- #17 - 90' - 5" qtz in 18" shear, abundant sulphides

Distances are from centerline of shaft.



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis


Certificate No. 61391

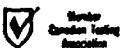
Date: Oct. 25, 1985

Received Oct. 15, 1985 17 Samples of ore

Submitted by Goldbrook Explorations Ltd., Toronto, Ontario

SAMPLE NO.	GOLD Oz./ton
1	0.06
2	0.74 0.69
3	0.24
4	0.15
5	0.07
6	0.02
7	0.13
8	0.02
9	0.10
10	0.60
11	0.08
12	1.91 1.95
13	0.08
14	0.08
15	5.14 5.41
16	0.50
17	0.56

Per 
G. Lebel, Manager



ESTABLISHED 1928

Sample Description

300' Level West-Track Plus 19 Feet

- # 1 - 14' - 2" qtz in 16" shear, minor sulphides
- # 2 - 20' - 4" qtz with abundant sulphides in 12" shear
- # 3 - 25' - same as #2
- # 4 - 30' - 2" qtz in 18" shear
- # 5 - 35' - 5" qtz and 3" porphyry dyke in 20" shear, sulphides
- # 6 - 35' - porphyry dyke in shear, 3"
- # 8 - 40' - 4" qtz in 20" shear, minor sulphides
- # 9 - 45' - 3" qtz in 18" shear, sulphides
- #10 - 50' - 4" qtz in 12" shear, minor sulphides
- #11 - 55' - 3" qtz in 18" shear, sulphides
- #12 - 60' - 5" qtz in 20" shear, abundant sulphides
- #13 - 65' - 3" qtz in 8" shear, sulphides
- #14 - 70' - 3" qtz in 12" shear, minor sulphides
- #15 - 75' - 4" qtz in 12" shear, very abundant sulphides
- #16 - 80' - 5" qtz in 24" shear, abundant pyrite
- #17 - 85' - 3" qtz in 12" shear, abundant sulphides
- #18 - 91' - same as #17

Distances are from centerline of shaft.



SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0

TELEPHONE: (705) 642-3244

ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

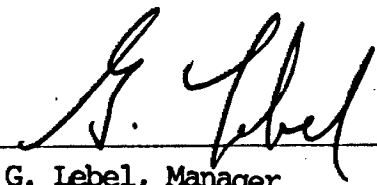
Certificate No. 61508

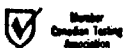
Date: Nov. 7, 1985

Received Oct. 29, 1985 17 Samples of ore

Submitted by Goldbrook Explorations Inc., Toronto, Ontario Att'n: C. Bowdidge

SAMPLE NO.	GOLD Oz./ton
1	0.09
2	0.12
3	0.21 0.21
4	0.14
5	0.14
6	0.01
7	sample missing
8	0.08
9	0.11
10	0.06
11	0.19
12	0.74
13	0.01
14	0.01
15	4.98 5.03
16	1.24 1.07
17	0.40
18	0.16

Per 
G. Lebel, Manager



ESTABLISHED 1928

APPENDIX II

Pamour Porcupine Mines, Limited
Administration Building
P.O. Bag 2010
Timmins, Ontario, Canada P4N 7X7

pamour

December 16, 1985

Mr. Colin Bowdidge
Suite 509
215 Victoria Street
Toronto, Ontario
M5B 1T9

Dear Mr. Bowdidge:

This is to confirm the message passed to your answering service on December 12, 1985, that our letter of September 16, 1985, is amended to a charge of \$11.50 per Short Dry Ton when the sampling frequency is increased to one sample for approximately every 10 tons. If you so wished, our charge would be \$13.00 per Short Dry Ton for a frequency of 1 sample every 5 tons.

The present ore run in our Go-Mill is scheduled to end on December 21, 1985, and after cleaning out the bin, we would crush, sample and restockpile your ore.

For your information we received a total of 8 loads of ore on December 8 - 9, 1985, with a net weight of 200.52 Short Wet Tons. Average moisture was 2.45% which gives a total of 195.61 Short Dry Tons.

If you have any questions, please contact us.

Yours truly,



J. J. Bell,
Assistant Superintendent,
Metallurgical Operations.

cc: W. W. Holmes
R. D. Lindsay
C. Vos
P. Wilson

JJB/lha

timmins

Analytical Services

P.O. Box 842
McIntyre Road
Schumacher, Ontario
Canada P0N 1G0
Phone 705-264-5111

CERTIFICATE OF ANALYSIS

Samples of: Go-Mill Belts

Date: January 31, 1986

No.: A - 13 - 86

Samples from: Colin Bowdidge, Goldbrook Exploration Received: January 1986
Ltd.

Lab number	Shipper number	o.p.t. Au	o.p.t. Au				
	1956	.108	.084				
	1957	.066	.066				
	1958	.176	.162				
	1959	.086	.106				
	1960	.094	.096				
	1961	.072	.078				
	1962	.064	.068				
	1963	.074	.080				
	1964	.092	.108				
	1965	.090	.090				
	1966	.090	.094				
	1967	.166	.158				
	1968	.092	.102				
	1969	.134	.142				
	1970	.190	.204				
	1971	.092	.108				
	1972	.066	.078				
	1973	.060	.064				
	1974	.182	.184				
	1975	.176	.192				

timmins

Analytical Services

P.O. Box 842
McIntyre Road
Schumacher, Ontario
Canada P0N 1G0
Phone 705-264-5111

CERTIFICATE OF ANALYSIS

Samples of:

Date:

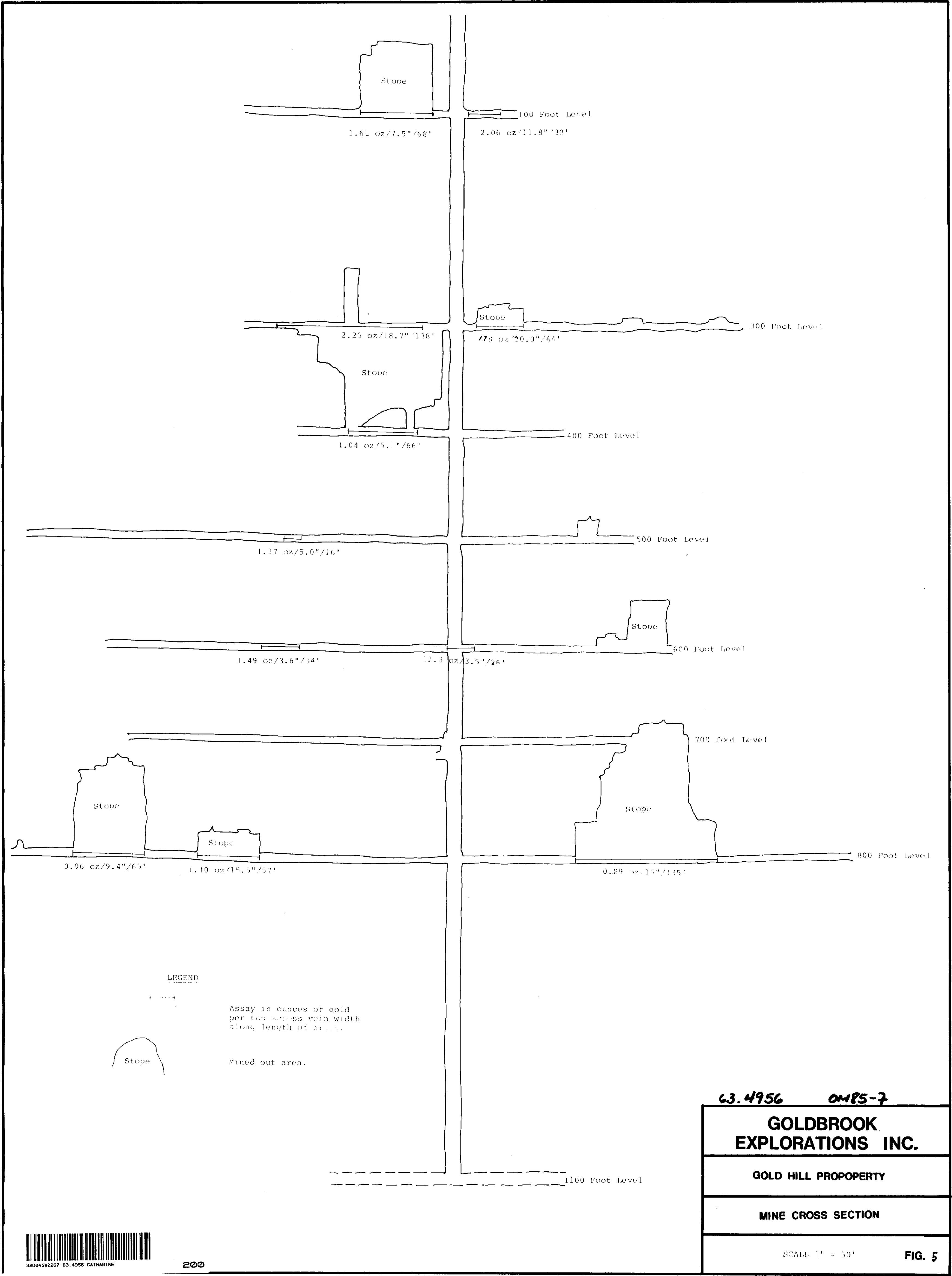
No.:

Samples from:



Received:

pg 2

Lab number	Shipper number	o.p.t. Au	o.p.t. Au				
	1976	.092	.088				
	1977	.090	.082				
	1978	.068	.076				
	1979	.086	.090				
	1980	.142	.144				
	1981	.056	.058				
	1982	.082	.096				
	1983	.084	.070				
	1984	.130	.146				
	1985	.109	.106				
	1986	.096	.070				
	1987	.082	.086				
	1988	.094	.090				
	1989	.094	.096				
	1990	.540	.582				
	1991	.310	.318				
	1992	.064	.056				
	1993	.054	.080				
	1994	.108	.094				
	1995	.172	.152				



LEGEND

-  Assay in ounces of gold per ton across vein width along length of stope.
-  Mined out area.

63.4956 0M85-7

GOLDBROOK EXPLORATIONS INC.	
GOLD HILL PROPOERTY	
MINE CROSS SECTION	
SCALE 1" = 50'	FIG. 5

