

Mount Nansen Mines Limited

and

Brown-McDade Mines Limited

PRELIMINARY BUDGET AND COMMENTS

Period October 1, 1969 - April 30, 1970

by

F. Bianconi

R.C. McCombe

R. Saager

Vancouver

Oct. 17, 1969

INTRODUCTION

Two programs have been discussed and analyzed in detail during the past few weeks since we returned from the mine on Sept. 22.

The first program embraces a complete shut down of the mine during the winter. As has been pointed out in earlier reports such a shut down would involve some serious implications; first of all this would mean that milling could not start during next year, unless a crash program is implemented. This, however, would be the wrong plan to follow, since obviously such a crash program would make control, proper mining and careful constructions of the cyanide plant and ancillary buildings very difficult and thus extremely and unnecessary costly. Furthermore during the shut down period we would gain no informations from the workings; i.e. no exploration or development would be performed during this very important period. In addition to this, the deterioration of the camp and mill buildings, as well as of the underground workings can not be estimated, but would certainly run into considerable figures. The shut down costs have been estimated to be approximately \$ 82'405.- (See detailed schedule).

The second program is part of a project which has been developed to bring the mine step by step back into operation over a period of one year. After this period, October 1969 to April 1970, the mine should be in a position to produce and mill 250 tons of ore per day without running into the same difficulties as during the previous milling period (Sept. 1968 to April 1969).

Five major steps can be distinguished and follow each other in a logical order:

- i) cleaning and repairs
- ii) diamond drilling (exploration)
- iii) development
- iv) raising and stoping
- v) milling

For accounting reasons, however, the year was divided into three stages, namely:

- a) Pre-exploration and development stage:
October 1, 1969 - April 30, 1970.
- b) Development and pre-production stage:
May 1, 1970 - July 31, 1970.
- c) Tune-up and early production stage:
August 1, 1970 - September 30, 1970.

A preliminary cost estimate of the first stage, from October 1, 1969 to April 30, 1970, is attached to this report. The total costs are estimated to be \$ 517'249.

The following two points must be given some considerable investigations and thoughts, and are, therefore, outlined somehow more detailed below.

A) Ore Dilution and Stopping Width

In the case of Mount Nansen the mineralized vein zones, which contain almost 100% of the silver and gold values have a width of 0 - 3 feet and are situated almost vertically in the unmineralized (barren) host rock; i.e. they appear like narrow elongated "mineralized silver and gold rich sheets" within the gold and silver free rock formations. It was found that the gold and silver content within the mineralized veins commonly vary in a wide range.

Obviously the ideal target is, to mine and extract only the gold and silver rich "mineralized sheets" from the barren host rock. Of course this cannot be accomplished in practice due to the fact that the mineralized zones are too narrow to be worked exclusively. This means that the material from the mineralized zones, during mining (stopping) operations, is diluted to a varying degree with adjoining gold and silver free country rock.

Example: Assume: - constant width of 2 ft. of mineralized zone;
- length of vein 120 ft., height of vein 50 ft;

This would give a volume of 12'000 cu.ft. of mineralized vein material, which equal to 1'000 tons of mineralized vein material.

- A constant value of \$ 80/ton for the mineralized vein material: this would represent a gross value of \$ 80'000.

In the ideal case, if only mineralized material is taken out, 1'000 tons of material representing a gross value of \$ 80'000 would be treated and handled in the mill. In practice, however, as pointed out earlier it is impossible to mine only the 2 feet wide mineralized vein, and one or more feet of barren material on each side of the mineralized vein are also extracted.

Assume: - 1 ft. of barren rock is broken on each side of the mineralized, gold and silver bearing material.

In this case the total width mined is 4 ft. and the total volume extracted, therefore is twice the amount of the first ideal assumption, namely 24'000 cu.ft. which equals 2'000 tons of ore material. This material of course has still the same gross value of \$ 80'000 or \$ 40/ton. To extract the \$ 80'000 worth silver and gold ore twice as much tonnage must be handled and milled as in the ideal assumption. It is therefore mandatory for any economical operation, that as little as possible barren material

is broken in order to obtain an as small as possible amount of millfeed which possesses an as high as possible gross value. Or quite simple the stoping width must be kept to a minimum if Mount Nansen should make any money.

These considerations are of primary importance and the problem must be solved before any larger scaled recovery and concentration tests can be performed in the mill.

B) Flotation and Cyanidation Problems

The transportation costs of our concentrate are extremely high; it is therefore important that in the mill the ore is concentrated as high as possible. In other words the obtained ore/concentrate ratio must be as high as possible. This point should always be kept in mind during the following discussion.

Two types of ore, both containing silver and gold, occur in our properties: one is primarily a sulphide ore, which can be flotated, the other one is primarily an oxide ore, which preferably should be cyanided.

Flotation

Up to now, not having a cyanide plant, both types of ore have been flotated. However, in order to reach an optimal recovery of silver and gold, this flotation could not be performed under ideal conditions and the concentration was low, i.e. too many tons of concentrate had to be transported. Since the oxide ore also contains silver and gold, but is not suitable for flotation, we lost a substantial amount of both the precious metals; this is reflected in the moderate recovery obtained.

Cyanide Plant

Unlike the flotation process, a cyanide process is a pure chemical one, where gold and silver are brought into solution and then precipitated as pure metals. This process would work on the oxide ore reasonably well, but not on the sulphide ores, mainly due to the fact that sulphide ore consume too much of the expensive chemical reagents and therefore make such a treatment uneconomical.

The proposed metallurgical tests, therefore, must take into account all the above mentioned points to provide us with an economical solution. Which should hopefully be a combination of flotation and cyanidation yielding an optimal recovery and simultaneously an optimal concentration.

COMMENTS ON THE PURCHASE OF A PILOT PLANT

On October 17, 1969 an initial discussion took place between Mr. P. H. Atkinson of Denver Equipment Co. and us. Main topics of the discussion were the feasibility, availability and costs of a pilot plant at the mine site.

A pilot plant is a 7 to 12 tons/day plant, which duplicates the complete mill circuit on a small scale. The advantage of the pilot plant is that it is built in a very flexible way and can be very easily altered to perform a wide range of tests. This, of course, is of big advantage to the 250 tons mill, where such alterations only could be performed during longer shut down periods involving high costs.

A further very important reason for acquiring a pilot plant is to bridge the gap between the laboratory test results (usually based on 100 - 200 pounds samples) and the full scale operation (250 tons per day in our case). This point is of great importance especially in the case of Mt. Nansen, due to the complexity of the mineralogy, the presence of two ore-types (sulphides and oxides) and to the remote situation of the mine. Several of these points have already been discussed in our last report, dated October 17, 1969, and also in many earlier reports of our consultants. It can, therefore, be concluded that a pilot plant must be installed early next spring, in order to obtain as many data on the unknown variables as possible and to be able to sort them out before we go into production. It seems logical that such a schedule should have been followed prior to the construction of the mill, which would have prevented substantial and unnecessary expenditures and losses.

Results of the discussion were that Denver Equipment would be able to supply a complete pilot plant for flotation and cyanidation on April 15, 1970, provided an order is placed up to middle of November. Costs of the plant, installed at the mine site (the plant would be assembled in Vancouver and then shipped to the mine in 3-4 components, which would enable us to reassemble it at the site quickly and easily by our own means) were estimated at \$75,000. These costs would be higher if the delivery time is shortened due to the fact that in such a case most of the parts would have to be constructed on special order.

The following personnel would be required to operate a pilot plant:

- i) A first class metallurgist, who should start by middle of February (one month earlier than anticipated in our budget). This early start is mainly caused by the fact, that the metallurgist has to familiarize himself with all the metallurgical data before the plant is operated and he furthermore should be present during the final stage of the assemblage of the pilot plant. Later he would become the Superintendent of the mill. Since efficient milling is of primary importance to an economical operation of the mine, no effort and money

should be spared to get somebody with an absolutely first class background for this key position.

- ii) Two operators per shift. It is anticipated that the plant will be in operation for two shifts per day, which would treat about 8 tons per day and produce an approx. \$250 worth concentrate per day. This sum should meet the operating costs of the plant.
- iii) In addition to this personnel, the operation involves purchase of various chemical reagents and laboratory equipment.

It is felt that the pilot plant should be in operation for about 5 months before the mill starts to run. This would mean installation of the pilot plant around the middle of April 1970 to enable production at the mill during September 1970. This five months period is required to perform as many different tests as possible and to alter the mill according to the results obtained from these tests.

The tune-up period of the mill should be considerably shorter and an optimal recovery should also be reached in a much shorter period having a pilot plant in operation. Furthermore, the pilot plant should enable us to make projections on the profit or loss of the mine much earlier and far more accurate than by just using the results from the laboratory tests.

It may well be the case that an early full scale operation could pay for the pilot plant in a matter of few months. It also must be taken into consideration that at the moment no pilot plant is operating in the Yukon; this means that we could obtain a relatively high resale price for the pilot plant. This price can be conservatively estimated at 65% after one year of operation, or it also could be rented out to various other mining companies. Since the plant is relatively small and easy to dismantle and reassemble, it could also be moved to our other properties in the Mayo Area for tests.

The conclusions from the above are:

- i) that the complexity of the metallurgy at Mt. Nansen and Brown-McDade requires a pilot plant to early determine and achieve an economic milling of the ore.
- ii) The purchase costs involved do not seem to us to be excessive, considering that they could be recovered during the first few months of production, and considering the high resale value of such a plant.
- iii) Operating costs should roughly be met by the income of the pilot plant. It also provides an excellent opportunity for training of future mill staff.

October 21, 1969


Dr. R. Saager Dr. F. Bianconi

SHUT DOWN COSTS OF THE MINE DURING WINTER PERIOD
OCTOBER 1, 1969 TO APRIL 15, 1970

Monthly costs:

Watchman's wages	\$ 800.00
Costs at Carmacks (power)	200.00
Fuel at Carmacks 750 gallons/month	350.00
Fuel-oil at mine 900 gallons/month	420.00
Propane, Gas, repairs of Bombardier at mine	70.00
Insurance (3,500.00) and Vancouver office (6,500.00)	10,000.00
Employe's benefits	690.00
Total	\$12,530.00

Fixed costs:

Costs to improve Carmacks	\$ 750.00
Costs of moving trailer to water tank at mine	350.00
Bombardier repair (150.00), purchase of Ski-Doo(1,500.00)	1,650.00
Shut down costs, 500 hours work	1,750.00
Fall road repair costs, loader, grader, truck / 10 days @ Labour 1,900.00	2,930.00
Spring road repair: road grading	400.00
repair boilers at colverts	100.00
Labour and fuel to open road	850.00
Open camp	1,750.00
Close-down power plant (technician)	600.00
1,000.00: transportation out and in, 200.00: Kitchen stock to Whitehorse	1,200.00
Employe's benefits	1,160.00
Total	\$13,490.00

Contingencies: 15%

- Unknown:
- Additional costs to reopen mine
 - Repairs of frost damages at camp and road
 - road

Interests, Depreciation: Not included

Total costs

Total monthly costs for winter period	\$68,915.00
Total fixed costs for winter period	13,490.00
TOTAL	\$82,405.00 =====

SUGGESTED MINING PROCEDURES

One of the primary factors which led to the decision to shut down the Mount Nansen mine was the inability of the mining department to supply the mill with an acceptable grade of ore.

While it is accepted that criticism of past failures is never difficult, the following mistakes in mining procedure were self-evident:

1. Milling was started before the mine was ready or prepared to produce 250 tons per day.

Using shrinkage stoping methods, one-third of the mill feed is drawn from stopes being mined, while the remainder must be shipped from completed stopes which hold broken ore. When Mount Nansen began production there were no completed stopes available which forced the mine staff to find the additional requirements elsewhere. The shortage was made up by shipping very low grade ore from development headings, stope preparation, and low grade zones in stopes which should have been left as pillars.

2. Stopes were far too wide.

It is possible that stopes were mined excessively wide in order to gain extra tonnage for the mill. However, this is probably the result of poor supervision.

3. There were insufficient raises driven.

Apart from offering adequate ventilation and escape-way facilities in stopes, raises are required to define the width and dip of the vein between levels. Without this, stope crews will often get off vein when drilling and, once off the vein, the stope crews must slash the vein side of the stope, which results in excessive dilution.

4. No pillars were left in the stopes.

Low grade zones in the stopes should have been left as pillars to prevent the stope walls from falling in and diluting the ore.

5. Very little advance planning was done.

There were very little, if any, long or short-range plans prepared. Without advance planning, any venture will revert to being operated on a 'hit and miss' day-by-day basis. There should be enough development and preparation done in advance to ensure a constant feed to the mill and to cover emergencies without having to resort to crash programs to make up for errors and omissions.

To avoid repeating previous mistakes, sufficient completed shrink stopes must be ready before the mill begins operation; low grade development must not be sent to the mill, but should be stockpiled for possible future treatment; and, stopes must be held to a maximum width of four feet, unless vein width dictates otherwise. In order to hold stoping width to four feet or less, it is suggested that the following procedures be implemented:

1. Hire sufficient, competent supervisors.

(It goes without saying that adequate supervision is necessary if optimum costs, productivity, safety and profits are to be achieved.)

2. Set up a bonus system which penalizes overbreak.

Prior bonus systems were based on tonnage broken and, consequently, miners stoped wider to increase tonnage. It is suggested that a bonus system be set up in which tonnage is based on a stope width of four feet - regardless of how wide a stope has been mined. It is further suggested that a 15 per cent penalty be imposed for every six inch average overbreak beyond four feet and that, in addition, a special bonus be paid for breaking less than four feet wide.

3. Drilling pattern must be controlled.

Drilling must be closely supervised and controlled. The vein must be marked out before drilling commences and drilling should be such that a three foot pattern is established. All holes will be parallel to each other. This, again, is a matter of competent supervision.

4. Raises must be driven to establish where the vein is.

Raises are required to effect adequate drilling control; to allow sufficient ventilation; and, to establish escape-ways.

5. Blasting control will minimize overbreak.

It is proposed that the outer holes be loaded with a low strength explosive, such as Exactex, to prevent overbreak, while the centre holes may be loaded with higher strength explosives.

6. Pillars should be left in stopes.

Lower grade portions of the vein should be left behind as pillars. This will help maintain a higher grade and will also help support the stope walls.

In summation, it is believed certain that, if proper mining procedures are followed, stope widths of four feet or less can easily be achieved.

Proposed Work for the Winter Period October 1, 1969 - April 30, 1970

OCTOBER

Surface:

The main water-line has to be repaired and in parts newly insulated by two miners. 3 men are necessary to complete the fall road repairs and to prepare the Carmacks Site for the winter months. As soon as the main water-line is finished work has to start on the branch power- and waterline to Brown-McDade. For the installation of the Brown-McDade power-line and later in November for repairs in the Huestis Camp an electrician should be hired temporary for 4 to 5 weeks. As soon as the Carmacks Site repairs are finished the heavy equipment operator has to prepare the ore-dump at the Huestis 4100 adit.

Underground:

Two miners start cleaning and repairing the Huestis 4100 adit, water ditches must be dug to improve the drainage in this level, tracks must be leveled to improve haulage speed and also to improve the drainage.

Drilling:

No drilling takes place during this month.

Head office:

Start to establish contact with a competent metallurgical laboratory and start to compile all metallurgical data available. This work is of considerable importance, then without an improved recovery and concentration rate it seems to us that the ore even with an improved management is marginal. Therefore, no time and no expenses should be spared to solve the metallurgical problem. During October work must also start on a detailed monthly budget and on a new more simple accounting system for the mine.

NOVEMBER

Surface:

Finish branch power- and water-line to Brown-McDade. This should be done before the middle of the month. As soon as the ore-dump at the Huestis adit is finished a similar ore-dump has to be built at Brown-McDade. A compressor must be installed at Brown-McDade and the compressor shack repaired. This work is needed to enable underground working at Brown-McDade. Steam has to be brought to the Huestis 41 portal in order to prevent the formation of ice, furthermore urgently required repairs must be completed during this month in the Huestis camp buildings. For this work a steam-fitter and a carpenter must be hired temporary for one month. From the middle of the month one or two men are kept busy maintaining and ploughing the road.

Underground:

The Huestis 4100 adit must be repaired and be in working order by the middle of the month. As soon as this is finished Slash I at station D1-09+38 has to be prepared to get the platform ready for the diamond drill hole H 41-11. During the same period the manway between Huestis 4100 and 4300 at 59360/30490 must be repaired. This manway is used as an escapeway in case of an emergency and should therefore be finished before any major work is carried out in the Huestis mine. As soon as the underground work in Huestis is completed repair work at the Brown-McDade portal must start and subsequently work on the underground installations at Brown-McDade must commence.

Drilling:

Drilling starts around the middle of the month at Huestis 4100, station D1-09+38, with H41-11. This is a 650' long, flat hole in the direction S20°W. H41-11 should yield valuable informations on the position and ore-grade of the 12, 13, 15 and 17 Veins. 12 Vein is already developed in other portions of the mine. 13 Vein has been intersected by several diamond holes on both Huestis levels and has been drifted for approx. 500' at the Huestis 4300 level. 15 and 17 Veins have so far been intersected only by one hole at the Huestis 4300 level. The intersections indicated values of 30\$/ton and 20\$/ton respectively.

Head office:

By the middle of this month we must know which metallurgical laboratory is undertaking the investigations on the flotation and cyanidation. Around the 15th, metallurgical samples must be collected from Huestis 4100 and 4300, from Webber and from Brown-McDade. The compilation of the accessible metallurgical data must be finished by the end of the month. Polished sections must be studied in details. The results from this study together with our metallurgical data should enable us to specify further metallurgical tests better and more carefully than up to now. During this month a resident geologist for the mine must be interviewed, so that he can start work beginning December.

DECEMBER

Surface:

Due to the severe climatic conditions very little surface work can be done from December to March and all surface work during this period is restricted to general maintenance and repair work in the camp and workshop and to road maintenance and ploughing.

Underground:

At Brown-McDade continue to repair the installations, to level tracks, to dig a sump and to prepare the Slash no. III at Station 139+30'. All this work is a preparation for the projected drilling and exploration program in Brown-McDade. The four miners move to Huestis 4100, as soon as the Brown-McDade work is finished. At Huestis 4100 they start retimbering the X-cut between Station D1-11 and Station D1-01; at the same time Slash No. II, No. IIa and IIb as well as Slash No. III at the Stations D1-05, D1-08 + 28', D1-06+46' and 41x8 are prepared. Retimbering of the crosscut is urgent since it is in very bad ground and could collapse any moment. The slashes are needed for the different diamond drill holes discussed later. This work will be done by four miners and will continue after the Xmas - New Year holidays well into January.

Drilling:

During this month the hole H41-11 must be finished and the rig moved to Slash II, where the two holes DDH H41-12, flat, 650' long, direction S22°W, and DDH H41-12, inclined -45°, 350' long, direction S22°W are projected. The first hole should intersect 12, 13, 15 and 17 Veins and is planned to complement the results from H41-11. The second hole should intersect 12 Vein at the 4050 level and 13 Vein at the 3900 level: This should yield extremely valuable informations on the extension of the veins and their ore-grades down dip below the 4100 level. Up to now we know absolutely nothing what happens below the 4100 level and it seems obvious that before further far reaching decisions and estimates on the ore-body are taken, some data on the down-dip extension of the ore are collected. Since the two holes have a total length of 1000' this rig cannot be moved before the end of January.

In Brown-McDade drilling starts with a second rig at Slash I, Station 115+100' where two holes BD41-1 and BD41-2 are planned. The first hole, inclined -45°, 240' long, direction N77°E, should intersect Vein No. I at the 4000 level and Vein No. 2 at a 3900 level; the second hole, inclined -80°, 300' long, direction N77°E should intersect Vein No. I at the 3900 level and Vein 2 at a 3850 level. All these intersections yield extremely valuable informations on the continuity of the two veins down dip, below the present development and of course also give informations on the ore-grade in greater depths. All these informations are necessary before further exploration work at Brown-McDade is undertaken. Drilling operations at Slash No. I in Brown-McDade should come to an end before the Xmas and New Year holidays start.

Head office:

The mineralogical study must be finished early this month and a metallurgical laboratory should start with the flotation and cyanidation tests. We also must start compiling all geological, geochemical, mineralogical and structural data available from the different workings at Mt. Nansen and Brown-McDade.

From around the 22nd of December till the 5th of January it will be advisable to close all operations at the mine for Xmas and New Year holiday. Three to four men however have to stay at the camp to keep a watch on the property and also to man the power-house.

JANUARY

Surface:

General maintenance and repair, road maintenance and ploughing; due to climatic conditions the program is very restricted.

Underground:

Retimbering of X-cut in Huestis 4100 as well as preparation of the Slashes II, IIa, IIb and III should be finished around the middle of the month; as soon as this work is finished retimbering, cleaning, ditching and preparation of Slash IV at Station 646+30' and Slash V at Station 642+20' must start in the Huestis 4300 level. This work is mainly caused by bad ground conditions and bad timbering. Around the 15th of the month drifting should start at 12 Vein on Huestis 4100. This drifting is necessary to by-pass a fault which offsets the 12 Vein to the South. According to the projection from the 4300 level the fault should be intersected between H97+150' and H97+170'. As soon as this drift is finished drifting can start in Brown-McDade on No. 2 Vein. This drifting should last for about two month and expose approximately 400' on Vein No. 2. This development is needed to interconnect several small development drifts and to reorganize and streamline the underground workings at Brown-McDade. The above outlined work is performed by one shift consisting of two miners.

Drilling:

Drilling continues at Slash No. II where H41-13 and H41-12 should be finished at the end of the month under consideration. Just after the holiday period the second rig is moved to Slash No. III in the Huestis 4100 adit, Station 41x8, where two holes are planned. The first hole H41-14, flat, 500' long, direction N25°E is projected to intersect the large geochemical anomaly S to the north of the Huestis-Webber anomalies at the 4100 level. The second hole H41-15, inclined -45°, 400' long, direction S39°W is planned to intersect 12 Vein at the 3950 level and 13 Vein at the 3860 level. These two intersections should yield valuable informations as to the continuity of the vein systems down dip below the developed levels. This hole therefore must be regarded as a completion to H41-13. Since the total length of the holes drilled from Slash III amounts to 900' the operation at this station will continue well into the next month.

Head office:

Compilation of the geological data continues. The finished diamond drill holes must be evaluated and included in the present and further development and exploration program.

FEBRUARY

Surface:

Finish retimbering and repairing of 12 Drift at the Huestis 4300 level. This work should be completed around the 10th of the month, when raising should start at the H41-12-588 Stope in the Huestis 4100 level, which continues up to the middle of March. This work is necessary in order to start test-stoping the H41-12-588 Stope as soon as possible. This test-stoping is carried out to obtain a definite figure on the feasible mining-width, which is very important for the control of the dilution of the ore. Raising requires two men in one shift. At the same time as the raise, a 250' long development drift is started at the 4300 level by four miners. This drift should expose 13 Vein along a zone where diamond drilling indicated ore values in the region of \$ 40/ton. At Brown-McDade drifting continues during the whole month on No. 2 Vein.

Drilling:

At the beginning of the month, the two holes H41-13 and H41-12 should be finished and the rig moved to Slash IIa at Station D1-08 + 28', and subsequently to Slash IIb at Station D1-06 + 46'. From both slashes one hole each, H41-16 and H41-17, flat, 80' long, direction S22°W, is planned. Both holes should intersect 1e Vein at the Huestis 4100 level. This work must be finished around February 15th and the rig then moved to Slash VI at the face of 12 Drift in the 4100 level where hole H41-18, flat, 200' long, direction south, is planned. This hole should intersect 12 Vein after its displacement and also intersect 13 Vein. The situation of the two veins is important to know for further exploration and development work in the 4100 level. Drilling of H41-14 and H41-15 at Slash III should finish towards the end of the month.

The rig is then moved to Slash IV, Station 646+30' at Huestis 4300. From this Slash, H43-5, flat, 350' long, direction S30°W is planned to intersect 15 and 17 Veins; results of these intersections should cast some light on the development of the vein systems to the south of the developed workings.

As soon as H41-18 is finished this rig is moved to Brown-McDade, Slash II Station 126+15' where hole BD41-3, vertical -90°, 220' long is planned. This hole should intersect Vein No. 1 at the 4060 level and Vein No. 2 at the 3970 level and give some informations on the continuity of the ore-body down-dip.

Head office:

First results of the metallurgical test should be received and it should be discussed if a pilot plant is feasible, and according to the outcome of such a discussion such a plant should be purchased. If, however, delivery time of a pilot plant is very long, such a decision must be taken earlier.

MARCH

Surface:

General repair and maintenance. Road maintenance and ploughing.

Underground:

Continue raising on the Raise H41-12-588 and start test-stopping Stope H41-12-588 from around 15th of March. Drifting on 13 Vein at the Huestis 4300 starts beginning of the month and raising starts at the Raise H41-12-585. On Huestis 4300 raising is started at the Raise H43-12-585. Both raises will take up to the middle of April. In Brown-McDade drifting continues on the No. 2 Vein and approx. 400 ft. should be drifted by middle of March when underground development stops at Brown-McDade.

From the beginning of March two men are needed almost constantly for tramming.

Drilling:

In Huestis 4300 the rig is moved around the middle of the month from Slash IV to Slash V at Station 642+20' where one hole H43-6, flat, 350' long, direction S30°W is projected to intersect 15 and 17 Veins. This hole is planned to give some complementary informations to hole H43-5. Towards the end of March, diamond drilling should stop at Huestis 4300. In Brown-McDade the rig moves from Slash II to Slash III at Station 139+30' during the first half of the month. Here two holes are planned: BD41-4, flat, 200' long, direction N30°E and BD41-5, flat, 200' long, direction West. These two holes are planned as exploration holes and should give an indication on the extension of Vein No. 1 and No. 2 to the north of the present workings. According to the geo-chemical tests such an extension must be expected. Drilling at Brown-McDade should come to an end toward beginning of April.

Head office:

Metallurgical tests should be completed. Plans for the period May - July should be finished in detail, especially as far as the underground development and exploration is concerned.

APRIL

Surface:

General repairs and maintenance at the camp. Spring road repairs must start, for which approx. 4 men are needed. If it is planned to put a pilot plant into operation preliminary surface and installation works must be completed so that the pilot plant can start milling at a rate of 5 - 7 tons at the middle of this month.

Underground:

Continue test-stoping at Stope H41-12-588 and start with stope preparation on H41-12-585. On the 4300 level continue to work on the H43-12-585 Raise and from the middle of the month stoping can start at this stope. Two men are kept busy tramping raise- and stope-muck to the ore-dump during the whole month. No underground work is carried out at Brown-McDade.

Drilling:

No diamond drilling is carried out during this month. It is strongly suggested that in future all further short diamond drill holes should be drilled by our crew with our own little drilling machine and not by a contractor.

Head office:

Pilot plant results must be evaluated and projected, they also must be compared with the test results. All plans for the next three months must be finished in detail. The overall report on Mount Nansen compiled from all the accessible geological, geochemical, metallurgical and mining data must be finished.

CONCLUSION AND SUMMARY

The next twelve months until September 30, 1970 can be divided into the following three stages:

- i) Pre-exploration and development stage:
October 1, 1969 - April 30, 1970.
- ii) Development and pre-production stage:
May 1, 1970 - July 31, 1970.
- iii) Tune-up and early production stage:
August 1, 1970 - September 30, 1970.

Stage i) comprises the period needed to return the mine back into a condition from which a properly organized and meticulously controlled development program can be started. This stage is contained in the above presented mine progress plan. Stage ii) embraces the period of main-development, exploration and of mill-preparation. Stage iii) is the period during which production is started. At the end of this period (September) fall production-rate, projected recovery and concentration and programmed efficiency in mining must be reached.

The program presented in the present report includes exploration drifting (700'), diamond drilling (4200') and test-stoping (3 stopes). It also includes the necessary surface and underground-supporting work.

The program should give us the following informations:

- A. Huestis:
- i) Drifting will expose sections of 12 Vein in the 4100 level and of 13 Vein in the 4300 level.
 - ii) Drilling should furnish a considerable amount of data on the extent of 15 and 17 Veins in the 4300 level. It also should yield data on the extent of 12, 13, 15 and 17 Veins in the 4100 level. Furthermore, we will obtain information on the continuity of 12 and 13 Veins below the 4100 level; we also should collect the first underground data on the geochemical anomaly "S", which lies to the north of the developed vein-systems.
 - iii) Considerable weight is given to test stoping: by the end of April 1970 we must know exactly the minimum stoping width which can be mined under normal production conditions; we furthermore should know the exact figures of the stoping costs at Huestis. At the end of April

3 stopes will be in operation and a total of 5,500 tons of broken ore averaging 40 - 42\$ per ton ready to be mined. It is important to note that test-stopping cannot start before a considerable amount of preparation work is completed, which will take us up to the end of February.

- B. Brown-McDade:
- i) Drifting will expose further sections of Vein No. 2 which already have been intersected by diamond drill holes.
 - ii) Drilling will furnish more informations in the extent of Vein No. 1 and No. 2 at the 4100 level and also on the vertical development of these two vein systems. This is of primary importance for the future planning of the development of Brown-McDade. The obtained data is also needed to decide which mining technique can be used at Brown-McDade. Simultaneously both the drifting and drilling program will enlarge the present ore-reserves.

- C. Pilot-plant:
- The erection of a pilot-plant seems at the moment to be of primary significance. In such a 5-7 ton/day plant we should be able to test the different flotation and cyanidation programs obtained from laboratory tests under the most realistic conditions.

Mount Nansen Mines Limited and Brown-McDade Mines Ltd.

Proposed Work for the Winter Period October 1, 1969 - April 30, 1970

PERSONNEL REQUIRED (*)

<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>		<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>
1 Foreman 1 Mechanic 1 PowerhouseOp. 1 Storekeeper 1 Heavy Eqpt.O. 4 Miners	1 Foreman 1 Mechanic 1 PowerhouseOp. 1 Storekeeper 1 Heavy E. Op. 4 Miners	1 Foreman 1 Mechanic 1 Powerh.Op. 1 Storekeep. 1 H. Eqpt.Op 4 Miners 1 Geologist	CHRISTMAS AND NEW YEAR HOLIDAYS Only 3-4 men on property	1 Foreman 1 Mechanic 1 Powerh.Op. 1 Storekeep. 1 H.Eqpt.Op. 8 Miners 1 Geologist	1 Mine Captain 1 Mechanic 1 PowerhouseOp. 1 Storekeeper 1 Heavy E. Op. 8 Miners 1 Geologist 1 Assayer 1 Electrician (1 Accountant)	1 Mine Captain 1 Mechanic 1 Powerh. Op. 1 Storekeeper 1 Heavy E. Op. 10 Miners 1 Geologist 1 Assayer 1 Electrician 1 Engineer 1 Sampler (1 Accountant) 1 Shift Boss	1 Mine Captain 1 Mechanic 1 Powerh. Op. 1 Storekeeper 2 H. Eqpt. Op. 12 Miners 1 Geologist 1 Assayer 1 Electrician 1 Engineer 1 Sampler 1 Accountant 1 Shift Boss 2 Surf. Hands (1 Mill Sup't)
<u>Temporary</u> 1 Electrician (2 weeks)	2 Casual Hands (2 weeks) 1 Electrician (2 weeks) 1 Steamfitter (1 month) 1 Carpenter (1 month)						
(*): Only personnel hired directly by our company NOTE: All drilling work will be performed by outside contractors							

Mount Nansen Mines Ltd. and Brown-McDade Mines Ltd.

SURFACE

<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>		<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>
Repair main water line	Install compr., repair bldg.	General	CHRISTMAS AND NEW YEAR HOLIDAYS Only 3-4 men on property	maintenance and repairs			Spring road repairs
Finish road repairs	Steam to Huestis 4100						
Carmacks camp	Road maintenance and				plowing		
Power to Brown-Mcd.	Repairs at camp Huestis						
Water line to Brown-Mcd.							
Prepare Ore Dump Huestis 4100							
	Prepare Dumps Brown-McDade						

Mount Nansen Mines Limited

Proposed Work for the Winter Period October 1, 1969 - April 30, 1970

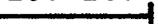
UNDERGROUND

	<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>		<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>
HUESTIS 4100	Adit: finish water ditch, level tracks, clean ┌───────────┐	Repair escape way ┌──────────┐	Retimber between st. D1-01; slash II at slash IIb at slash IIIa at slash III at ┌──────────┐	CHRISTMAS AND NEW YEAR HOLIDAYS Only 3-4 men on property	Drift 12 Vein from st. H97+136' to st. H97+170'? ┌──────────┐	Raise H41-12-588 ┌──────────┐	Raise H41-12-585 ┌──────────┐	Stope preparat. H41-12-585 ┌──────────┐
		Prepare Slash I at Station D1-09 + 38' ┌──────────┐			X-cut D1-11 and prepare st. D1-05, st. D1-06+46', st. D1-08+28', st. 41x8 ┌──────────┐	Break H41-12-588 Stope ┌──────────┐	Tramming ┌──────────┐	
HUESTIS 4300					Retimber 12 Drift between st. 604 and 162, ditch, clean, level tracks, repair installations. Prepare slash IV at st. 646 + 30' and slash V at st. 642 + 20' ┌──────────┐	Drift 13 Vein ┌──────────┐	Raise H43-12-585 ┌──────────┐	Break H43-12-585 Stope ┌──────────┐

Brown-McDade Mines Limited

Proposed work for the Winter Period October 1, 1969 - April 30, 1970

UNDERGROUND

<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>		<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>	
	<p align="center">Repair portal</p>  <p align="center">Repair or install pi- pes, track, sump. Pre- pare slash III at st. 139 + 30'</p> 		<p align="center">CHRISTMAS AND NEW YEAR HOL. Only 3-4 men on property</p>		<p align="center">100 ft.</p> 	<p align="center">Drift No. 2 Vein 200 ft.</p> 	<p align="center">100 ft.</p> 	

Brown-McDade Mines Limited

DIAMOND DRILLING

<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>		<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>
		Slash I, at st. 115+100': DDH BD 41-1, -45°, 240', N77°E, and DDH BD 41-2, -80°, 300', N77°E	CHRISTMAS AND NEW YEAR HOL. Only 3-4 men on property			Slash II, at st. 126 + 15': DDH BD41-3, -90°, 220'	
						Slash III, at st. 139 +30': DDH BD41-4, flat, 200', N30°E, and DDH BD41-5, flat, 200', due W	

Mount Nansen Mines Ltd. and Brown-McDade Mines Ltd.

HEAD OFFICE WORK

<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>	<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>
Find Metallurgical Lab. which is able to solve the flotation, cyanidation and concentration problems		Metallurgical tests carried out by a commercial Lab.			If feasible start erection of Pilot Plant	
Prepare and ship ore samples for polished sections	Collect metallurgical samples of Mount Nansen, Brown-McDade					Start Pilot Pl.
Prepare detailed monthly budget	Study polished sections					
Compile and study all metallurgical data available on Mt. Nansen and Brown-McDade		Compile and study all geological, geochemical, mineralogical and structural data available on Mt. Nansen and Brown-McDade				

Mount Nansen Mines Limited

DIAMOND DRILLING

	<u>OCTOBER</u>	<u>NOVEMBER</u>	<u>DECEMBER</u>		<u>JANUARY</u>	<u>FEBRUARY</u>	<u>MARCH</u>	<u>APRIL</u>
HUESTIS 4100		Slash I, at station D1-09+38': DDH H41-11, flat, 650', S20°W		CHRISTMAS AND NEW YEAR HOLIDAYS Only 3-4 men on property	Slash II, at st. D1-05: DDH H41-13, -45°, 350', S22°W and DDH H41-12, flat, 650', S22°W. Slash IIa at st. D1-08 +28': DDD H41-16, flat, 80', S22°W. Slash IIb, at st. D1-06 + 46': DDH H41-17, flat, 80', S22°W			
					Slash III, at st. 41x8: DDH H41-14, flat, 500', N25°E, and DDH H41-15, -45°, 400', S39°W		Slash VI, at face of 12 Drift: DDH H41-18, flat, 200', due S	
HUESTIS 4300							Slash IV, at st. 646+30': DDH H43-5, flat, 350', S30°W. Slash V, at st. 642+20': DDH H43-6, flat, 350', S30°W.	

Distribution of Costs Between Mount Nansen and Brown McDade
for the Winter Period October 1, 1969 - April 30, 1970

	Mt. Nansen	Brown McDade	
	\$	\$	%
OCTOBER	27'750	9'200	25
NOVEMBER	28'820	23'320	50
DECEMBER	41'045	17'500	30
JANUARY	70'425	7'825	10
FEBRUARY	85'300	9'480	10
MARCH	80'552	30'500	27.5
APRIL	85'532	-----	--
	-----	-----	
TOTAL	419'424	97'825	
	=====	=====	

This distribution has been made on the basis of man shifts worked underground in Brown McDade divided by the total man shifts worked underground on both Mount Nansen and Brown McDade.

Costs were calculated as accurately as possible. However, as there were very few reliable cost accounting figures available for past performance at Mount Nansen, the above costs were based on similar operations elsewhere, using either past experience or by calculating estimates which are believed to be reasonable.

In all cases where doubted existed, costs were slightly over-estimated.

Month: OCTOBER 1969

\$ \$

1-1 Wages and Benefits

1-1-	1	Mine Manager			
	2	Mine Captain			
	3	Mill Superintendent.....			
	4	1 Shift Boss.....		1050	
	5	Resident Geologist.....			
	6	Engineer.....			
	7	Accountant.....			
	8	Assayer.....			
	9	1 Storekeeper.....		670	
	10	Engineer Helper.....			
	11	Sampler.....			
	12	Timekeeper.....			
	13	1 Mechanic.....224@ \$ 4.03		910	
	14	1 Electrician.....5 days Carmacks		250	
	15	Carpenter.....			
	16	1 Powerhouse Operator.....264@ \$ 4.03		1070	
	17	2 Miners.....448@ \$ 3.49		1560	
	18	1 Heavy Equipment Operator....224@ \$ 3.63		820	
	19	Assayer's Helper.....			
	20	Mill Hands.....			
	21	Diamond Drillers.....			
	22	Surface Hands.....			
	23	Steamfitter.....			
	24	Cook House.....			
	25	Casuals. 2 miners (2 wks)....224@ \$ 3.49		780	7100

1-2 Additional Labour Costs

1-2-	1	Bonus - Underground 2 miners 2 @ 200		400	
	2	Bonus - Other.....			
		(Drift and Raise bonus included in costs)			
	3	Overtime - 10% hourly.....(Carmacks)		350	
	4	Benefits (Vac, Ins, etc.)...		1140	
	5	Travelling expences.....			
	6	Other.....			1890

1-3 Board and Room

1-3-	1	Board 310 shifts @ 10 \$...		3100	
	2	Credit 248 shifts @ 2.25\$...		560	2540

2-1 Fuel

2-1-	1	Fuel Oil 3100 gl @ 46 ¢ ...		1430	
	2	Diesel #1 9300 gl @ 46 ¢ ...		4280	
	3	Propane.....		50	
	4	Gasoline 1000 gl @ 50 ¢ ...		500	6260
	5	Other.....			

Month: OCTOBER 1969

\$ \$

3 Equipment Preventive Maintenance (Servicing)

3-1 Heavy and Automotive Equipment

3-1-1	Pickup	3600	mi. @	34¢.....	110	
2	Bombadier	30.00	\$ per month.....		30	
3	3 ton Truck	1500	mi. @	4¢.....	160	
4	Grader	100	h. @	150¢.....	150	
5	D6 Bulldozer		h. @	150¢.....		
6	D7 Bulldozer	100	h. @	150¢.....	150	
7	955 Loader		h. @	150¢.....		
8	Compressor (600cfm)		h. @	100¢.....		
9	Other					

3-2 Surface Equipment: (Welders, port. Equip., etc.). 200

3-3 Stationary Equipment

3-3-1	Waukesha Power Plants		h. @	50¢.....		
2	I-R Air Compressors		h. @	10¢.....		
3	Cat D342 Power Plant	600	h. @	50¢.....	300	
4	Volcano Boiler	600	h. @	10¢.....	60	

3-4 Spareparts (1% of gross value of \$ 174'000) 720 1580
extra spares needed during month

4 Road

4-1 Road Maintenance: (Glacier fires, ploughing, etc.)

4-2 Road Repairs: (Culverts, washes, etc.).....

5 Materials

5-1 Explosives

5-1-1	Drifting		ft. @	\$ 5.85.....		
2	Raising		ft. @	\$ 3.50.....		
3	Stoping		ft. @	\$ 0.72.....		
4	Other.....					
5	Other.....					

5-2 Timber 6000 board ft. @ \$ 0.13..... 780 780

5-3 Drilling

5-3-1	Drill Repair		tons @	21¢.....		
2	Steel and Bits		tons @	26¢.....		

Month: OCTOBER 1969

\$ \$

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office).....

- 5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.) fittings, pipes..... 1000
- Water-Air to Brown-McDade 1010 2010

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment.....

6 Development (Underground)

6-1 Drifting

- 6-1-1 Drifting ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-2 Raising

- 6-2-1 Raising ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-3 Stope Preparation.....

6-4 Stoping

- 6-4-1 Stoping tons @ \$
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....
- 5 Credit: Drilling @.....

7 Diamond Drilling ft @ \$ 12.00.....

Month: OCTOBER 1969

	\$	\$
8 <u>Milling</u> tons @ \$		
9 <u>Vancouver Office</u> : (Salaries, Postages, Phone, Electricity, Stationary, etc.)....	7690	7690

Sub Total for the Month		29350

10 <u>Contingencies</u> 14 per cent of Sub Total		4100
11 <u>Research and Tests</u> : (Metallurgical Tests, Polished Sections, Analyses, Micro- photography, etc.).....		
12 <u>Capitalizations</u> : i).....		
ii).....		
iii).....		
iv).....		
v).....		
sub total		-----

13 <u>Insurances</u> : (as quoted by S&N).....	3500	3500

Total for the Month.....		36950
		=====

Month: NOVEMBER 1969

		\$	\$
<u>1-1 Wages and Benefits</u>			
1-1-	1	Mine Manager	
	2	Mine Captain	
	3	Mill Superintendant.....	
	4	1 Shift Boss.....	1050
	5	Resident Geologist.....	
	6	Engineer.....	
	7	Accountant.....	
	8	Assayer.....	
	9	1 Storekeeper.....	770
	10	Engineer Helper.....	
	11	Sampler.....	
	12	Timekeeper.....	
	13	1 Mechanic.....216 @ \$ 4.03	870
	14	1 Electrician..... 5 days	250
	15	1 Carpenter.....1 month.....216 @ \$ 4.13	890
	16	1 Powerhouse Operator.....264 @ \$ 4.03	1070
	17	4 Miners.....864 @ \$ 3.49	3010
	18	1 Heavy Equipment Operator....216 @ \$ 3.63	780
	19	Assayer's Helper.....	
	20	Mill Hands.....	
	21	8 Diamond Drillers.(10.days)..	
	22	Surface Hands.....	
	23	1 Steamfitter..1 month.....216 @ \$ 4.13	890
	24	Cook House.....	
	25	2 Casuals..(2.weks).....216 @ \$ 3.38	730 10310

1-2 Additional Labour Costs

1-2-	1	Bonus - Underground .4 miners 4@ 200	800
	2	Bonus - Other..... (Drift and Raise bonus included in costs)	
	3	Overtime - 10% hourly.....	780
	4	Benefits (Vac, Ins, etc.)...16% Payroll	1600
	5	Travelling expences.....	
	6	Other.....	3180

1-3 Board and Room

1-3-	1	Board 405 shifts @ 10 \$...	4050
	2	Credit 345 shifts @ 2.25\$...	780 3270

2-1 Fuel

2-1-	1	Fuel Oil 3600 gl @ 46 ¢ ...	1660
	2	Diesel Fl 10800 gl @ 46 ¢ ...	4970
	3	Propane.....	50
	4	Gasoline 1200 gl @ 50 ¢ ...	600
	5	Other.....	7280

Month: NOVEMBER 1969

\$ \$

3 Equipment Preventive Maintenance (Servicing)

3-1 Heavy and Automotive Equipment

3-1-1	Pickup	3600	mi. @	34¢.....	110
2	Bombadier	30.00	\$ per month.....		30
3	3 ton Truck	1500	mi. @	4¢.....	60
4	Grader	100	h. @	150¢.....	150
5	D6 Bulldozer	50	h. @	150¢.....	80
6	D7 Bulldozer		h. @	150¢.....	
7	955 Loader	50	h. @	150¢.....	80
8	Compressor (600cfm)	200	h. @	100¢.....	200
9	Other				

3-2 Surface Equipment: (Welders, port. Equip., etc.).

3-3 Stationary Equipment

3-3-1	Waukesha Power Plants		h. @	50¢.....	
2	I-R Air Compressors		h. @	10¢.....	
3	Cat D342 Power Plant	600	h. @	50¢.....	300
4	Volcano Boiler	600	h. @	10¢.....	60

3-4 Spareparts (1% of gross value of \$ 174'000) 1740 2810

4 Road

4-1 Road Maintenance: (Glacier fires, ploughing, etc.) 400

4-2 Road Repairs: (Culverts, washes, etc.)..... 400

5 Materials

5-1 Explosives

5-1-1	Drifting	ft. @	\$ 5.85.....
2	Raising	ft. @	\$ 3.50.....
3	Stoping	ft. @	\$ 0.72.....
4	Other.....		
5	Other.....		

5-2 Timber board ft. @ \$ 0.13.....

5-3 Drilling

5-3-1	Drill Repair	tons @	21¢.....
2	Steel and Bits	tons @	26¢.....

Month: NOVEMBER 1969

\$

\$

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office).....

5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.).....

1000

1000

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment.....

6 Development (Underground)

6-1 Drifting

- 6-1-1 Drifting ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-2 Raising

- 6-2-1 Raising ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-3 Stope Preparation.....

6-4 Stoping

- 6-4-1 Stoping tons @ \$
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....
- 5 Credit: Drilling @.....

7 Diamond Drilling 200 ft @ \$ 12.00.....

2400

2400

Month: NOVEMBER 1969

	\$	\$
8 <u>Milling</u> tons @ \$		
9 <u>Vancouver Office:</u> (Salaries, Postages, Phone, Electricity, Stationary, etc.)....		7190

Sub Total for the Month		37840

10 <u>Contingencies</u> 14 per cent of Sub Total		5300
11 <u>Research and Tests:</u> (Metallurgical Tests, Polished Sections, Analyses, Micro- photography, etc.).....		
12 <u>Capitalizations:</u> i).....1. Pickup..... 5500		
ii).....		
iii).....		
iv).....		
v).....		
	sub total	
	5500	5500

13 <u>Insurances:</u> (as quoted by S&N).....		3500

Total for the Month.....		52140
		=====

Month: DECEMBER 1969

\$ \$

1-1 Wages and Benefits

1-1-	1	Mine Manager		
	2	Mine Captain		
	3	Mill Superintendant.....		
	4	1 Shift Boss.....	1050	
	5	1 Resident Geologist.....	780	
	6	Engineer.....		
	7	Accountant.....		
	8	Assayer.....		
	9	1 Storekeeper.....	770	
	10	Engineer Helper.....		
	11	Sampler.....		
	12	Timekeeper.....		
	13	1 Mechanic.....200 @ 4.03	810	
	14	Electrician.....		
	15	Carpenter.....		
	16	1 Powerhouse Operator.....264 @ 4.03	1070	
	17	4 Miners.....800 @ 3.49	2800	
	18	1 Heavy Equipment Operator...184 @ 3.63	670	
	19	Assayer's Helper.....		
	20	Mill Hands.....		
	21	8 Diamond Drillers.....		
	22	Surface Hands.....		
	23	Steamfitter.....		
	24	Cook House.....		
	25	Casuals.....		7950

1-2 Additional Labour Costs

1-2-	1	Bonus - Underground 4.miners 4 @ 200	800	
	2	Bonus - Other..... (Drift and Raise bonus included in costs)		
	3	Overtime - 10% hourly.....	540	
	4	Benefits (Vac, Ins, etc.)...16% payroll	1270	
	5	Travelling expences.....	600	
	6	Other.....		3210

1-3 Board and Room

1-3-	1	Board 442 shifts @ 9 \$...	3960	
	2	Credit 360 shifts @ 2.25\$...	810	3150

2-1 Fuel

2-1-	1	Fuel Oil 3720gl @ 46 ¢ ...	1720	
	2	Diesel Fl 11160gl @ 46 ¢ ...	5130	
	3	Propane.....	50	
	4	Gasoline 1200gl @ 50 ¢ ...	600	
	5	Other.....		7500

Month: DECEMBER 1969

				\$	\$
3	<u>Equipment Preventive Maintenance (Servicing)</u>				
3-1	<u>Heavy and Automotive Equipment</u>				
3-1-1	2 Pickup	3600 mi. @	34¢.....	110	
	2 Bombadier	30.00 \$ per month.....		30	
	3 3 ton Truck	1200 mi. @	4¢.....	50	
	4 Grader	100 h. @	150¢.....	150	
	5 D6 Bulldozer	50 h. @	150¢.....	80	
	6 D7 Bulldozer	h. @	150¢.....		
	7 955 Loader	20 h. @	150¢.....	30	
	8 2 Compressors(600cfm)	400 h. @	100¢.....	400	
	9 Other			
3-2	<u>Surface Equipment: (Welders, port. Equip., etc.)</u>			100	
3-3	<u>Stationary Equipment</u>				
3-3-1	Waukesha Power Plants	h. @	50¢.....		
	2 I-R Air Compressors	h. @	10¢.....		
	3 Cat D342 Power Plant	720 h. @	50¢.....	360	
	4 Volcano Boiler	720 h. @	10¢.....	75	
3-4	<u>Spareparts (1% of gross value of \$ 174'000)</u>			1800	3185
4	<u>Road</u>				
4-1	<u>Road Maintenance: (Glacier fires, ploughing, etc.)</u>			400	
4-2	<u>Road Repairs: (Culverts, washes, etc.)</u>				400
5	<u>Materials</u>				
5-1	<u>Explosives</u>				
5-1-1	Drifting	ft. @	\$ 5.85.....		
	2 Raising	ft. @	\$ 3.50.....		
	3 Stopping	ft. @	\$ 0.72.....		
	4 Other.....	20 cases @	18 \$ + 30%.....	470	
	5 Other.....			
5-2	<u>Timber</u>	3000 board ft. @	\$ 0.13.....	390	860
5-3	<u>Drilling</u>				
5-3-1	Drill Repair	tons @	21¢.....		
	2 Steel and Bits	tons @	26¢.....		

Month: DECEMBER 1969

\$ \$

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office).....

5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.)..... 1000 1000

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment.....

6 Development (Underground)

6-1 Drifting

- 6-1-1 Drifting ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-2 Raising

- 6-2-1 Raising ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-3 Stope Preparation.....

6-4 Stoping

- 6-4-1 Stoping tons @ \$
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....
- 5 Credit: Drilling @.....

7 Diamond Drilling 750 ft @ \$ 12.00..... 9000 9000

Month: DECEMBER 1969

	\$	\$
8 <u>Milling</u> tons @ \$		
9 <u>Vancouver Office</u> : (Salaries, Postages, Phone, Electricity, Stationary, etc.)....		7690

Sub Total for the Month		43945

10 <u>Contingencies</u> 14 per cent of Sub Total		6100
11 <u>Research and Tests</u> : (Metallurgical Tests, Polished Sections, Analyses, Micro- photography, etc.).....		5000
12 <u>Capitalizations</u> : i).....		
ii).....		
iii).....		
iv).....		
v).....		

sub total		

13 <u>Insurances</u> : (as quoted by S&N).....		3500

Total for the Month.....		58545
	=====	

Month: JANUARY 1970

\$ \$

1-1 Wages and Benefits

1-1- 1	Mine Manager		
2	Mine Captain		
3	Mill Superintendant.....		
4	1 Shift Boss.....	1050	
5	1 Resident Geologist.....	780	
6	Engineer.....		
7	Accountant.....		
8	Assayer.....		
9	1 Storekeeper.....	770	
10	Engineer Helper.....		
11	Sampler.....		
12	Timekeeper.....		
13	1 Mechanic..... 208 @ 4.13	860	
14	Electrician.....		
15	Carpenter.....		
16	1 Powerhouse Operator..... 248 @ 4.13	1020	
17	8 Miners..... 1664 @ 3.59	6000	
18	1 Heavy Equipment Operator.... 208 @ 3.73	780	
19	Assayer's Helper.....		
20	Mill Hands.....		
21	8 Diamond Drillers.....		
22	Surface Hands.....		
23	Steamfitter.....		
24	Cook House.....		
25	Casuals.....		11260

1-2 Additional Labour Costs

1-2- 1	Bonus - Underground .Repair. 4 @ 200	800	
2	Bonus - Other..... (Drift and Raise bonus included in costs)		
3	Overtime - 10% hourly.....	870	
4	Benefits (Vac, Ins, etc.)...16% Payroll	1800	
5	Travelling expences.....	800	
6	Other.....		4270

1-3 Board and Room

1-3- 1	Board 660 shifts @ 9 \$...	5940	
2	Credit 570 shifts @ 2.25\$...	1280	4660

2-1 Fuel

2-1- 1	Fuel Oil 4340gl @ 46¢ ...	2000	
2	Diesel Fl 19200gl @ 46¢ ...	8830	
3	Propane.....	70	
4	Gasoline 1500gl @ ¢ ...	750	
5	Other.....		11650

Month: JANUARY 1970

\$ \$

3 Equipment Preventive Maintenance (Servicing)

3-1 Heavy and Automotive Equipment

3-1-1	2	Pickup	4000	mi. @	34¢.....	120	
	2	Bombadier	30.00	\$ per month.....		30	
	3	3 ton Truck	1500	mi. @	4¢.....	60	
	4	Grader	100	h. @	150¢.....	150	
	5	D6 Bulldozer	50	h. @	150¢.....	80	
	6	D7 Bulldozer		h. @	150¢.....		
	7	955 Loader	30	h. @	150¢.....	50	
	8	2 Compressor (600cfm)	800	h. @	100¢.....	800	
	9	Other					

3-2 Surface Equipment: (Welders, port. Equip., etc.) 100

3-3 Stationary Equipment

3-3-1	Waukesha Power Plants	300	h. @	50¢.....	150		
	2	I-R Air Compressors		h. @	10¢.....		
	3	Cat D342 Power Plant	720	h. @	50¢.....	360	
	4	Volcano Boiler	720	h. @	10¢.....	70	

3-4 Spareparts (1% of gross value of \$ 174'000) 1800 3770

4 Road

4-1 Road Maintenance: (Glacier fires, ploughing, etc.) 400

4-2 Road Repairs: (Culverts, washes, etc.)..... 400

5 Materials

5-1 Explosives

5-1-1	Drifting	150	ft. @	\$ 5.85..inc..in.costs		
	2	Raising	ft. @	\$ 3.50.....		
	3	Stoping	ft. @	\$ 0.72.....		
	4	Other.....			300	
	5	Other.....				

5-2 Timber 2000 board ft. @ \$ 0.13..... 260 560

5-3 Drilling

5-3-1	Drill Repair		tons @	21¢.....		
	2	Steel and Bits	tons @	26¢.....		

Month: JANUARY 1970

\$ \$

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office).....

5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.)..... 1000 1000

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment.....

6 Development (Underground)

6-1 Drifting

- 6-1-1 Drifting 150 ft. @ \$ 50.00..... 7500
- 2 Credit: Shifts @.52.hrs.@.29\$..... 1510
- 3 Credit: Powder @.150.hrs.@.2.50.\$..... 370
- 4 Credit: Bonus @..... 400 5220

6-2 Raising

- 6-2-1 Raising ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-3 Stope Preparation.....

6-4 Stoping

- 6-4-1 Stoping tons @ \$
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....
- 5 Credit: Drilling @.....

7 Diamond Drilling 1200 ft @ \$ 12.00..... 14400 14400

Month: JANUARY 1970

	\$	\$
8 <u>Milling</u> tons @ \$		
9 <u>Vancouver Office:</u> (Salaries, Postages, Phone, Electricity, Stationary, etc.)....		7960

Sub Total for the Month		65150

10 <u>Contingencies</u> 14 per cent of Sub Total		9100
11 <u>Research and Tests:</u> (Metallurgical Tests, Polished Sections, Analyses, Micro- photography, etc.).....		500
12 <u>Capitalizations:</u> i)..... ii)..... iii)..... iv)..... v).....		
sub total	-----	

13 <u>Insurances:</u> (as quoted by S&N).....		3500

Total for the Month.....		78250
	=====	

Month: FEBRUARY 1970

		\$	\$
<u>1-1 Wages and Benefits</u>			
1-1-	1	Mine Manager	
	2	1 Mine Captain	1200
	3	Mill Superintendant.....	
	4	Shift Boss.....	
	5	1 Resident Geologist.....	780
	6	Engineer.....	
	7	1 Accountant.....	700
	8	1 Assayer.....	700
	9	1 Storekeeper.....	770
	10	Engineer Helper.....	
	11	Sampler.....	
	12	Timekeeper.....	
	13	1 Mechanic.....192 @ 4.13	790
	14	1 Electrician.....192 @ 4.13	790
	15	Carpenter.....	
	16	1 Powerhouse Operator.....224 @ 4.13	920
	17	8 Miners.....1536 @ 3.49	5520
	18	1 Heavy Equipment Operator....192 @ 3.63	720
	19	Assayer's Helper.....	
	20	Mill Hands.....	
	21	8 Diamond Drillers.....	
	22	Surface Hands.....	
	23	Steamfitter.....	
	24	Cook House.....	
	25	Casuals.....	12890

1-2 Additional Labour Costs

1-2-	1	Bonus - Underground	
	2	Bonus - Other.....Dr. Rep. 6 @ 50	300
		(Drift and Raise bonus included in costs)	
	3	Overtime - 10% hourly.....	870
	4	Benefits (Vac, Ins, etc.)...16% Payroll	2060
	5	Travelling expences.....	400
	6	Other.....	3630

1-3 Board and Room

1-3-	1	Board 700 shifts @ 8 \$...	5600
	2	Credit 560 shifts @ 2.25\$...	1260
			4340

2-1 Fuel

2-1-	1	Fuel Oil 3920gl @ 46 ¢ ...	1800
	2	Diesel #1 17920gl @ 46 ¢ ...	8240
	3	Propane.....	70
	4	Gasoline 1500gl @ 50 ¢ ...	750
	5	Other.....	10860

\$ \$

Month: FEBRUARY 1970

3 Equipment Preventive Maintenance (Servicing)

3-1 Heavy and Automotive Equipment

3-1-1	2 Pickup	4000 mi. @	34¢.....	120
2	Bombadier	30.00 \$ per month.....		30
3	3 ton Truck	1500 mi. @	4¢.....	60
4	Grader	100 h. @	150¢.....	150
5	D6 Bulldozer	50 h. @	150¢.....	80
6	D7 Bulldozer	h. @	150¢.....	
7	955 Loader	30 h. @	150¢.....	50
8	2 Compressor (600cfm)	1000 h. @	100¢.....	1000
9	Other			

3-2 Surface Equipment: (Welders, port. Equip., etc.) 100

3-3 Stationary Equipment

3-3-1	Waukesha Power Plants	300 h. @	50¢.....	150
2	I-R Air Compressors	h. @	10¢.....	
3	Cat D342 Power Plant	670 h. @	50¢.....	335
4	Volcano Boiler	670 h. @	10¢.....	335

3-4 Spareparts (1% of gross value of \$ 174'000) 1800 4210

4 Road

4-1 Road Maintenance: (Glacier fires, ploughing, etc.) 500

4-2 Road Repairs: (Culverts, washes, etc.)..... 500

5 Materials

5-1 Explosives

5-1-1	Drifting	450 ft. @	\$ 5.85.....(2630)..	
2	Raising	180 ft. @	\$ 3.50.....(630)..	
3	Stoping	ft. @	\$ 0.72.....	
4	Other.....			400
5	Other.....			

5-2 Timber 3000 board ft. @ \$ 0.13..... 390

5-3 Drilling

5-3-1	Drill Repair	tons @	21¢.....	
2	Steel and Bits	tons @	26¢.....	790

Month: FEBRUARY 1970

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office).....

5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.)..... 1200

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment..... 1200

6 Development (Underground)

6-1 Drifting

6-1-1	Drifting	450 ft. @ \$ 50.00.....	22500	
2	Credit: Shifts	@.928.Hrs..@.\$3.59...	3330	
3	Credit: Powder	@.450.@.\$2.50.....	1120	
4	Credit: Bonus	@.....	2250	15800

6-2 Raising

6-2-1	Raising	180 ft. @ \$ 50.00.....	9000	
2	Credit: Shifts	@.272.Hrs..@.\$3.59...	980	
3	Credit: Powder	@.180.@.\$1.45.....	260	
4	Credit: Bonus	@.....	2000	5760

6-3 Stope Preparation.....

6-4 Stoping

6-4-1	Stoping	tons @ \$		
2	Credit: Shifts	@.....		
3	Credit: Powder	@.....		
4	Credit: Bonus	@.....		
5	Credit: Drilling	@.....		

7 Diamond Drilling 1020 ft @ \$ 12.00..... 12240 12240

Month: FEBRUARY 1970

	\$	\$
8 <u>Milling</u> tons @ \$		
9 <u>Vancouver Office</u> : (Salaries, Postages, Phone, Electricity, Stationary, etc.)....		7960

Sub Total for the Month		80180

10 <u>Contingencies</u> 14 per cent of Sub Total		10600
11 <u>Research and Tests</u> : (Metallurgical Tests, Polished Sections, Analyses, Micro- photography, etc.).....		500
12 <u>Capitalizations</u> : i)..... ii)..... iii)..... iv)..... v).....		
	sub total	-----

13 <u>Insurances</u> : (as quoted by S&N).....		3500

Total for the Month.....		94780
		=====

Month: MARCH 1970

		\$	\$
<u>1-1 Wages and Benefits</u>			
1-1-	1	Mine Manager	
	2	1 Mine Captain	1200
	3	Mill Superintendant.....	
	4	1 Shift Boss.....	900
	5	1 Resident Geologist.....	780
	6	1 Engineer.....	850
	7	1 Accountant.....	850
	8	1 Assayer.....	700
	9	1 Storekeeper.....	770
	10	Engineer Helper.....	
	11	1 Sampler.....208 @ 3.59	750
	12	Timekeeper.....	
	13	1 Mechanic.....208 @ 4.13	860
	14	1 Electrician.....208 @ 4.13	860
	15	Carpenter.....	
	16	1 Powerhouse Operator.....248 @ 4.13	1020
	17	10 Miners.....2080 @ 3.59	7470
	18	1 Heavy Equipment Operator...208 @ 3.73	780
	19	Assayer's Helper.....	
	20	Mill Hands.....	
	21	8 Diamond Drillers.....	
	22	Surface Hands.....	
	23	Steamfitter.....	
	24	Cook House.....	
	25	Casuals.....	17460

1-2 Additional Labour Costs

1-2-	1	Bonus - Underground Tram.2@300, Break 4@200	1400	
	2	Bonus - Other.....		
		(Drift and Raise bonus included in costs)		
	3	Overtime - 10% hourly.....	1170	
	4	Benefits (Vac., Ins., etc.)...16% Patroll	2820	
	5	Travelling expences.....	600	
	6	Other.....		5990

1-3 Board and Room

1-3-	1	Board 961 shifts @ 8 \$...	7690	
	2	Credit 744 shifts @ 2.25\$...	1670	6020

2-1 Fuel

2-1-	1	Fuel Oil 4340 gl @ 46¢ ...	2000	
	2	Diesel Fl 22320 gl @ 46¢ ...	10270	
	3	Propane.....	80	
	4	Gasoline 1500 gl @ 50¢ ...	750	
	5	Other.....		13550

Month: MARCH 1970

\$ \$

3 Equipment Preventive Maintenance (Servicing)

3-1 Heavy and Automotive Equipment

3-1-1	2 Pickup	4000 mi. @	34¢.....	120
2	Bombadier	30.00 \$ per month.....		30
3	3 ton Truck	1500 mi. @	4¢.....	60
4	Grader	100 h. @	150¢.....	150
5	D6 Bulldozer	50 h. @	150¢.....	80
6	D7 Bulldozer	h. @	150¢.....	
7	955 Loader	30 h. @	150¢.....	50
8	Compressor (600cfm)	1000 h. @	100¢.....	1000
9	Other		

3-2 Surface Equipment:(Welders, port. Equip., etc.). 100

3-3 Stationary Equipment

3-3-1	Waukesha Power Plants	600 h. @	50¢.....	300
2	I-R Air Compressors	h. @	10¢.....	
3	Cat D342 Power Plant	720 h. @	50¢.....	360
4	Volcano Boiler	720 h. @	10¢.....	72

3-4 Spareparts (1% of gross value of \$ 174'000) 1800 4122

4 Road

4-1 Road Maintenance: (Glacier fires, ploughing, etc.) 500

4-2 Road Repairs: (Culverts, washes, etc.)..... 500

5 Materials

5-1 Explosives

5-1-1	Drifting	ft. @	\$ 5.85.....	
2	Raising	410 ft. @	\$ 3.50....(1430)..	
3	Stoping	1600 ft. @	\$ 0.72.....	1150
4	Other.....			300
5	Other.....			

5-2 Timber 4000 board ft. @ \$ 0.13..... 520

5-3 Drilling

5-3-1	Drill Repair	1600 tons @	21¢.....	340
2	Steel and Bits	1600 tons @	26¢.....	420 2730

\$ \$

Month: MARCH 1970

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office)..... 300

5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.)..... 1200

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment..... 1500

6 Development (Underground)

6-1 Drifting

- 6-1-1 Drifting ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-2 Raising

- 6-2-1 Raising 410 ft. @ \$ 50.00..... 20500
- 2 Credit: Shifts @ .1040 Hrs. @ \$ 3.59... 3730
- 3 Credit: Powder @ .410 @ \$ 1.45..... 590
- 4 Credit: Bonus @..... 3060 13120

6-3 Stope Preparation.....

6-4 Stoping

- 6-4-1 Stoping tons @ \$
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....
- 5 Credit: Drilling @.....

7 Diamond Drilling 1050 ft @ \$ 12.00..... 12600 12600

Month: MARCH 1970

	\$	\$
8 <u>Milling</u> tons @ \$		
9 <u>Vancouver Office:</u> (Salaries, Postages, Phone, Electricity, Stationary, etc.)....		7960

Sub Total for the Month		85552

10 <u>Contingencies</u> 14 per cent of Sub Total		12000
11 <u>Research and Tests:</u> (Metallurgical Tests, Polished Sections, Analyses, Micro- photography, etc.).....		10000
12 <u>Capitalizations:</u> i).....		
ii).....		
iii).....		
iv).....		
v).....		
sub total		-----

13 <u>Insurances:</u> (as quoted by S&N).....		3500

Total for the Month.....		111052
		=====

Month: APRIL 1970

\$ \$

1-1 Wages and Benefits

1-1- 1	Mine Manager		
2	1 Mine Captain	1200	
3	1 Mill Superintendant.....	1150	
4	1 Shift Boss.....	900	
5	1 Resident Geologist.....	780	
6	1 Engineer.....	850	
7	1 Accountant.....	700	
8	1 Assayer.....	700	
9	1 Storekeeper.....	770	
10	Engineer Helper.....		
11	1 Sampler..... 208 @ \$ 3.59	750	
12	Timekeeper.....		
13	1 Mechanic..... 208 @ \$ 4.13	860	
14	1 Electrician..... 208 @ \$ 4.13	860	
15	Carpenter.....		
16	1 Powerhouse Operator..... 248 @ \$ 4.13	1020	
17	12 Miners..... 208 @ \$ 3.49	8760	
18	2 Heavy Equipment Operator.... 208 @ \$ 3.73	1560	
19	Assayer's Helper.....		
20	Mill Hands.....		
21	Diamond Drillers.....		
22	2 Surface Hands..... 208 @ \$ 3.01	1260	
23	Steamfitter.....		
24	Cook House.....		
25	Casuals.....		22120

1-2 Additional Labour Costs

1-2- 1	Bonus - Underground ..Breaking 6 @ 400	2400	
2	Bonus - Other.....Tramming 2 @ 400 (Drift and Raise bonus included in costs)	800	
3	Overtime - 10% hourly.....	1530	
4	Benefits (Vac, Ins, etc.) .16% payroll	3570	
5	Travelling expences.....	800	
6	Other.....		9100

1-3 Board and Room

1-3- 1	Board 840 shifts @ \$.8.00	6720	
2	Credit 630 shifts @ 2.25\$...	1420	5300

2-1 Fuel

2-1- 1	Fuel Oil 4320gl @ 46 ¢ ...	2000	
2	Diesel Fl 22320gl @ 46 ¢ ...	10270	
3	Propane.....	80	
4	Gasoline 1500gl @ 50 ¢ ...	750	13100
5	Other.....		

\$

\$

Month: APRIL 1970

3 Equipment Preventive Maintenance (Servicing)

3-1 Heavy and Automotive Equipment

3-1-1	2 Pickup	4000	mi. @	34¢.....	120	
	2 Bombadier	30.00	\$ per month.....		30	
	3 3 ton Truck.	1500	mi. @	4¢.....	60	
	4 Grader	100	h. @	150¢.....	150	
	5 D6 Bulldozer	50	h. @	150¢.....	80	
	6 D7 Bulldozer		h. @	150¢.....		
	7 955 Loader	30	h. @	150¢.....	50	
	8 2 Compressor (600cfm)	1000	h. @	100¢.....	1000	
	9 Other					

3-2 Surface Equipment:(Welders, port. Equip., etc.). 200

3-3 Stationary Equipment

3-3-1	Waukesha Power Plants	200h.	@	50¢.....	100	
	2 I-R Air Compressors	600h.	@	10¢.....	60	
	3 Cat D342 Power Plant	720h.	@	50¢.....	360	
	4 Volcano Boiler	720h.	@	10¢.....	72	

3-4 Spareparts (1% of gross value of \$ 174'000) 1800 3882

4 Road

4-1 Road Maintenance: (Glacier fires, ploughing, etc.) 300

4-2 Road Repairs: (Culverts, washes, etc.) Spring Repair 1500 1800

5 Materials

5-1 Explosives

5-1-1	Drifting	ft. @	\$ 5.85.....	
	2 Raising	110 ft. @	\$ 3.50.....	(380)
	3 Stopping	2100 ft. @	\$ 0.72.....	1510
	4 Other.....			300
	5 Other.....			

5-2 Timber 4000 board ft. @ \$ 0.13..... 520

5-3 Drilling

5-3-1	Drill Repair	2100 tons @	21¢.....	440	
	2 Steel and Bits	2100 tons @	26¢.....	550	3320

Month: APRIL 1970

5-4 Mill (Maintenance, Servicing)

- 5-4-1 Reagents.....
- 2 Balls.....
- 3 Liners.....
- 4 Spares.....
- 5 Belting, etc.....
- 6 Other.....
- 7 Other.....

5-5 Laboratory Material: (Assayer's Office)..... 300

5-6 General: (Mine Office, Camp Maintenance, Sample bags, Paint, etc.)..... 1200

5-7 Spare Parts for Underground Equipment and Maintenance of Underground Equipment..... 1500

6 Development (Underground)

6-1 Drifting

- 6-1-1 Drifting ft. @ \$ 50.00.....
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....

6-2 Raising

- 6-2-1 Raising 110 ft. @ \$ 50.00..... 5500
- 2 Credit: Shifts @... 416 Hrs. @ 3.59..... 1490
- 3 Credit: Powder @... 110 @ 1.45..... 160
- 4 Credit: Bonus @..... 400 3450

6-3 Stope Preparation.....

6-4 Stoping

- 6-4-1 Stoping tons @ \$
- 2 Credit: Shifts @.....
- 3 Credit: Powder @.....
- 4 Credit: Bonus @.....
- 5 Credit: Drilling @.....

7 Diamond Drilling ft @ \$ 12.00.....

Month: APRIL 1970

\$ \$

8 Milling tons @ \$

9 Vancouver Office: (Salaries, Postages, Phone,
Electricity, Stationary, etc.).... 7960

Sub Total for the Month 71532

10 Contingencies 14 per cent of Sub Total 10000

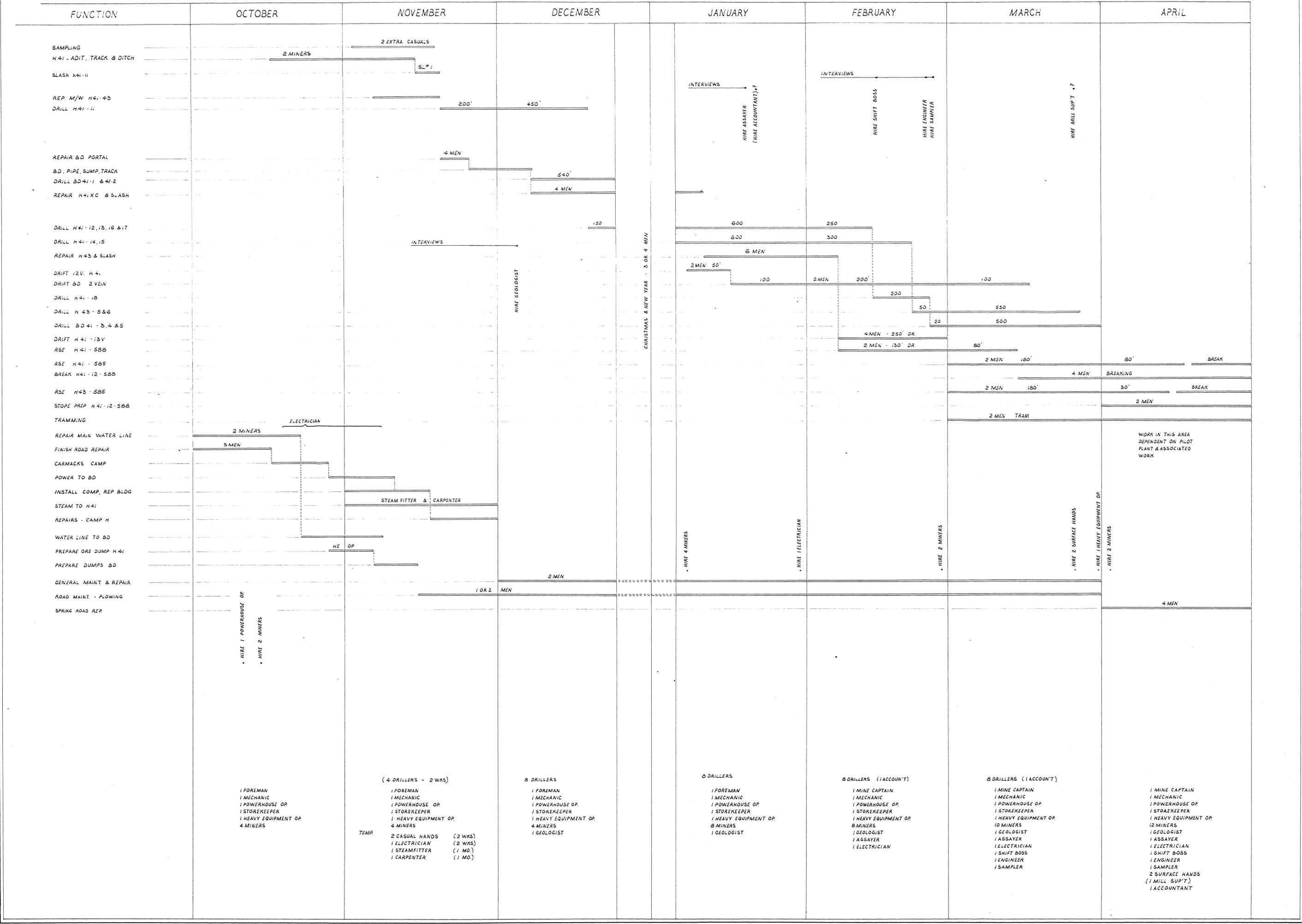
11 Research and Tests:(Metallurgical Tests, Polished
Sections, Analyses, Micro-
photography, etc.)..... 500

12 Capitalizations: i).....
ii).....
iii).....
iv).....
v).....

sub total

13 Insurances:(as quoted by S&N)..... 3500

Total for the Month..... 85532



CHRISTMAS & NEW YEAR - 3 OR 4 MEN

WORK IN THIS AREA DEPENDENT ON PILOT PLANT & ASSOCIATED WORK