

Report on

Franklin Mining Camp

Situated around Franklin Mountain

in the Greenwood Mining Division

Province of British Columbia

By: Franklin Mines Ltd., (N.P.L.)

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# Maps In Folder

| 1.             | Location Map & roads   | יי1 ≖                | 1500'                          |
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| 2.<br>?A<br>3. | Claim Map<br>Index Map for Various sheets<br>Geology: Glouster, Averill, Buffalo Zones | 1" =<br>/* =<br>1" = | 1500'<br><i>ובדי ו</i><br>200' |
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| 11.            | Maple Leaf Geology   | 1" =                 | 100'                           |
| 12.            | Maple Leaf Magnetic  | 1" =                 | 100'                           |
| 13.            | Yellow Jacket Geology  | 1" =                 | <b>2</b> 00'                   |
| 14.            | McKinley Geology   | 1" =                 | 200'                           |
| 15,            | GEOCHEMISTRY - AVERILL - BUFFALD - GLOUSTER.   | 1"=                  | 260'                           |

Statement of Qualifications of persons employed during the investigation of the Page, Tom, Len, D.P., P.T., and B.L.M. groups of Mineral Claims plus adjacent Crown Granted Mineral Claims in the vicinity of Franklin Camp.

1) Geology by :

R. P. Chilcott B.Sc.
University of B.C.
Eight years intermittently with various mining companies, including 2 seasons with H. Hill &
L. Stark and Associates Ltd., Mining Consultants, and 3 seasons with Buttle Lake Mining Co., Ltd., Huestis Mining Corp., and Northwest Ventures Ltd.

2) Geophysics and channel sampling by :

T. E. Lisle B.Sc.

University of B.C. Eight years intermittently with H. Hill & L. Stark and Associates Ltd., Mining Consultants, plus 2 seasons with Buttle Lake Mining Co., Ltd., Huestis Mining Corp., and Northwest Ventures Ltd.

3) Assisting in prospecting, road building and geochemistry :

D. Faulkner - ProspectorF. Cooke - Prospector

4) Labourers:

no previous mining experience

### SUMMARY AND CONCLUSIONS

Franklin Mines Ltd. hold a total of 254 Mineral Claims in the old Franklin Camp located approximately 40 miles north of the city of Grand Forks, and in the Greenwood Mining Division. The claims are comprised of 35 Crown grants, 178 full sized claims and 41 fractional claims held by location.

Access to the area is by secondary road which follows the Valley of the Granby River 28 miles north of the city of Grand Forks. From here a Forestry road runs 17 miles in a northerly direction along the Valley of the east fork of the Granby River to a point where camp was established for the past seasons work.

An exploration program costing approximately \$60,000.00 was conducted over the Mineral Claims from early May to October 23, 1964. Twenty-six and one-half miles of road were constructed on and around Franklin Mountain for access and some 463,455 cubic yards of material removed, including trenching.

Detailed investigations were made on the Glouster, Averill, Buffalo and Maple Leaf areas with preliminary work done on the Yellow Jacket and McKinley areas. Thirty-two and one-half miles of line were cut for the various grids over which geological, geochemical and geophysical surveys were made. These surveys were followed up by trenching and sampling in the interesting zones.

Within the map areas the geology was found to coincide fairly closely with that shown on C. W. Drysdale's map contained in Memoir #56 of the G.S.C. 1915.

The Black Lead formations underlying much of the Averill and Buffalo areas yielded only low values of Gold, Silver, Copper and Platinum where tested. Several magnetic anomalies detected within this area were found to be caused by disseminations of magnetite either within the Black Lead or along the margins of the Augite Syenite. Small concentrations of copper sulphides were found near the Averill and Buffalo

tunnels, however, these were found to be local rather than wide spread conditions. Anomalous zones found by geochemistry in this area are supported by a general background copper content within the Black Lead. On the Buffalo the weighted average of 157 feet of sampling yielded 0.157% Cu while on the Averill the weighted average was 0.136% Cu over 128 feet of sampling.

Survey work on the Glouster zone did not significantly add to surface indications. Some anomalous values were encountered with the magnetometer, however, outside of the known zone no strong magnetic trends were found. The mineralization occurs as a contact lens between rocks of the Franklin Group and Granodiorite and would appear to be the remnants of a contact deposit eroded during the last ice age. Geochemical highs found in this area are explainable by the surface exposures of chalcopyrite and by the steep side hill slopes on which they occur.

On the Maple Leaf area, channel samples taken from around the main workings indicate a zone containing mineralization of economic significance. The better mineralization occurs around a northerly trending fault which is thought to be structurally related to the fault system found in the Union workings to the south. The surface extent of the zone is relatively small (see assays and sketch), however, values in gold, silver, copper, tin and platinum are sufficiently strong as to warrant further investigation. This would be best done by diamond drilling.

Work on other areas of the property, including the Yellow Jacket, McKinley, White Bear and Lucky Jack, was of a preliminary nature and more follow up surveys are warranted.

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#### RECOMMENDATIONS

Some drilling will be required on the Maple Leaf showings to test the mineralization at depth. Efforts are currently being made to obtain geological information from the Hecla Mining Company on the Union and Maple Leaf areas of the Franklin Camp. When this information is received a thorough study should be made of it prior to laying out drill holes on the Maple Leaf.

Investigations of those mineral showings not covered during the past season should be made and should include mapping, magnetometer and geochemistry surveys to be followed up by trenching and sampling where necessary. Additional work should also be completed on the areas only partially covered, i.e., the White Bear, Lucky Jack, Yellow Jacket, McKinley, and the extension of the Black Lead formation northwest from the Buffalo.

With access to most of the main areas, the above work could be handled by a geologist and a crew of three men and could be completed in a three to four month period. The drilling would be contracted out and would be under the supervision of the geologist.

The open fraction west of the Kingfisher and Dodge Mineral Claims should be staked at the earliest convenience.

Further work on the Averill, Buffalo and Glouster zones does not appear justified at this time. The information obtained from these areas to date should be reviewed with other information gathered during the next field season.

### Introduction

In the months of May and June, 1964, Huestis Mining Corp., Northwest Ventures Ltd., and Buttle Lake Mining Co., Ltd., staked 178 full sized Mineral Claims and 41 Fractional Claims around a group of 34 Crown Granted claims previously leased by Huestis Mining Corp., and Northwest Ventures Ltd., all located in Franklin Mining Camp around Franklin Mountain. An additional 5 Crown Granted claims lie near the Granby River towards Grand Forks. The Franklin Camp claim block covers an area about 3½ miles wide in an east-west direction, by 7 miles long in a north-south direction. Two further groups of 3 claims and 2 claims were optioned from J. A. McDougall of Grand Forks, in August, on which assessment work was filed for 2 years and 1 year respectively by Franklin Mines.

The D.P. and P.T. groups were located in July, also for Franklin Mines.

With mineralized zones widely scattered over the claim area, it was decided at the outset of the season to make detailed investigations over as many of these areas as time would permit. These investigations would include geological, geochemical, and geophysical surveys which would be followed up by trenching and sampling of the interesting zones. To this end, a D-7 Caterpillar was hired to construct roads for better access.

During the season, work was completed on the Maple Leaf, Buffalo, Averill and Glouster zones with some preliminary surveys done on the Yellow Jacket and McKinley zones. Access roads were made to the Lucky Jack, White Bear, Banner, Homestake and Jimmy areas and included some trenching around some of the showings.

All located and Crown Granted claims were transferred to Franklin Mines on June 23, 1964, from each of the three companies above, and all subsequent staking done for Franklin Mines. The claims are now comprised of 34 Crown Grants, 178 full-sized claims and 41 fractions held

by location. Franklin Mines also own outright, the Bryan Crown Grant claim. Ten Crown Grants are held by various other companies and individuals in this area, including Hecla Mining Co. of Wallace, Idaho. All located claims are in good standing until at least May 9, 1965, by location. The "J.C." claims were staked and are held by a Jack Carson of Grand Forks. The "Cal" claims were staked by K. Sanders.

The work done is based primarily on observations made by the writers of this report and citing C. W. Drysdale's Memoir #56 of the Geological Survey of Canada. The work done this season is in more detail than has been done previously.

### Location and Access

The Franklin Camp property is situated in south-central British Columbia (latitude  $49^{\circ}$  34' - longitude 118° 22'), some 45 roadmiles (35 air-miles) north of Grand Forks. It lies between the east branch of the North Fork of the Kettle River (Burrell Creek) and Franklin Creek.

The claims are situated on the moderately rugged and steep terrain of Franklin, Tenderloin and McKinley Mountains and in the Franklin, Burrell and Glouster Creek Valleys.

Access to camp was by 28 miles of secondary logging road running northerly from Grand Forks, and by 17 miles of Forestry road passable by car, but more suitable for 4-wheel drive vehicles. The 26½ miles of roads constructed this summer from camp lead to the junction of Glouster and Pinto Creeks and from here around through the Buffalo and Glouster zones, around Franklin Mountain following Franklin Creek and joining up with the main road to Grand Forks, one mile south of camp. Another road leads from this road to cross the Glouster, G.H., and Mountain Lion zones and over the Homestake and Banner areas and down to Franklin Creek road one mile from it's junction with the main road to Grand Forks.

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Shorter access roads tying into these two main roads connect with the Averill, Banner and Jimmy areas and the pits and tunnels. The Banner-Jimmy road leading to the Homestake is very steep and not readily passable by vehicle. It is a cut, in effect, traversing the area.

Another 2 miles of road lead from camp to some cuts on the White Bear and Lucky Jack areas. The McKinley road was also cleaned out for access and the Maple Leaf road was extended over all the known cuts and mineralized zones. The Maple Leaf is now covered by the Par, Dodge and Kingfisher Claims staked by J. A. McDougall of Grand Forks. These claims are now under option to Franklin Mines.

Servicing of the camp was achieved by 2 Land Rovers twice a week, for supplies, etc..

### Physical Features

A series of broad ridges and mountains running in a northerly direction traverse the Franklin property. Elevations range from 2800 ft. a.s.l. in Burrell and Franklin Creeks, to 4500 ft. a.s.l. on Franklin Mountain between these two creeks. Franklin Creek drains into Burrell Creek at a point 3 miles south of camp and Burrell Creek in turn drains into the Granby River at about 28 miles north of Grand Forks near the Forestry access road and Bunch Grass Hill.

Sidehill slopes on the property range from low rolling to about  $48^{\circ}$  on McKinley Mountain. The slopes are normally about  $15^{\circ}$  - $20^{\circ}$ . Most areas are readily accessible both by road and on foot. A few steep areas on McKinley and south-east of the Glouster tunnel make access to these areas difficult. Outcropping is fairly extensive throughout the property except on the east of the Buffalo-Averill area at McDonald Creek where most of the "Black Lead" happens to occur. The zone was fairly well located by magnetometer. Other areas with poor

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outcropping are Franklin and Burrell Creek valleys, due to glacial till and sediments. Other areas of no outcropping but minor in nature, are beneath the various dumps from the workings on the McKinley, Buffalo, Glouster and Maple Leaf areas. These areas were stripped where possible by the 'cat'.

Second growth since the fires in the 1930's and 1910-1912 is becoming denser especially in the McDonald Creek, Burrell Creek and Franklin Creek areas. Most of the growth is evergreen and tamarack, with some poplar. A few areas, such as Dane Creek, are almost impassable now due to the dense second growth. Franklin Mountain, however, is still largely devoid of vegetation and accompanying overburden, making for excellent mapping conditions.

Precipitation apparently is about 30 inches per annum, although the past season would seem to exceed this somewhat. Up to about 10 feet of snow in camp and 15 feet at higher elevations would seem to fall. The snow left the higher elevations about the end of May and began again about October 24 this year. The summers are moderately warm and dry with cool nights dropping to the freezing point about September 15.

### History

The property was mapped by C. W. Drysdale in 1911 (G.S.C. Memoir #56). Hecla Mining Co., worked the Union C.G. in the 1930's and the property is cited in various Minister of Mines Reports, notably in 1928, and by a report on the Union Mine by J. A. Pike in 1935. The 1928 Minister of Mines Report also cites the other workings in the Franklin Camp. Platinum values were reported by Wm. Thomlinson in 1920 over the Maple Leaf, Golden Age, Averill, and Buffalo workings. Mention is made in the Bureau of Mines report on "Lode Gold Deposits of British Columbia" in 1932 of gold and platinum on the Homestake, Maple Leaf, Buffalo and Averill areas.

The 1914 Minister of Mines report by A. G. Larson and C. S. Verrill talks of Franklin Camp gold, silver and copper.

The Maple Leaf produced copper ore, hand cobbed, previous to 1918 and the owners were not paid for the platinum which reportedly ran up to 1/400z. per ton. The McKinley also shipped copper, silver and gold in a small way,

Hecla Mining Co. still holds some Crown Granted claims. The Franklin area has been staked several times and prospected with some small cuts dug by hand. The Union, McKinley, Maple Leaf and Glouster have been drilled, some by individuals and some by the Government, but the last recorded work was in 1954, as far as the writers of this report know.

This past season has seen the most extensive work carried out on this property. Mapping was carried out on a more detailed scale than before over all but the Union area.

### Exploration Program

All of May was spent staking claims and locating showings. Four men staked for four days (May 9-12, 1964) and the remainder was done by two men. All claims were located by chain and compass to tie into Crown Grants and to eliminate all but the most obscure open fractions.

A four man tent camp was established in June, after staying in an old shack on the Union mill site for the month of May. Only after the claims were all staked was time taken to establish the tent camp.

At the end of June, four more men and a cook were hired and a camp accommodating up to 14 men was established. A small 'cat' was hired in May to clean out the McKinley road and the road to Pinto Creek from camp.

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Near the end of June, a D-7 caterpillar was hired to construct more access roads after a preliminary survey located the known cuts and trenches. Four labourers were hired to cut lines for the various surveys to be carried out. The 'cat' stayed until the end of July and was brought back to the property in September to complete the work, after more extensive surveying could be done.

The enclosed claim map is a preliminary map as a more accurate follow-up survey has not been done yet except in the north-west corner where the lines have been cut.

The lines were run in by chain and compass and base lines checked by transit, all tied in to the north-east corner post of the Union C.G.. The stations were put in every 100 feet by pickets with 50 foot closure over the Buffalo, Averill, Glouster, Maple Leaf, Yellow Jacket and McKinley zones of mineralization. Geophysical readings were taken at all these stations and closed in to 50 foot centres over the showings. Geochemical soil samples were taken every 200 feet over the whole area with no closure on the mineralized zones.

During road building several cuts and trenches were dug out by the 'cat'. As mapping progresseed, the 'cat' was brought back in to the property and more trenches dug to clear the various zones notably more work on the McDonaldCreek area of the Buffalo-Averill zones where the Shonkinite-pyroxenite, or "Black Lead" zone was obscured by overburden. Work was also done on the Maple Leaf at this time.

The road construction encountered some rock work, but where possible this was avoided. Where unavoidable, these rocks were blasted out. The road is essentially for 4-wheel drive or high clearance vehicles. Since no small drills were available at this time, no trenches were blasted open, only stripped of overburden preparatory to channel sampling. Samples of the various areas were chipped out to a depth of 3 or 4 inches by hammer and moil over various lengths.

A total of 26½ miles of road was constructed and approximately 32½ miles of line cut for the various surveys.

The following summarizes the stripping and road building

by D-7 caterpillar:

| Buffalo                       | 78,007.5  | cu. y <b>ds</b> . |
|-------------------------------|-----------|-------------------|
| Glouster                      | 68,830.1  | 91 81             |
| Averill                       | 128,482.8 | 11 H              |
| Maple Leaf                    | 22,943.4  | 11 11             |
| Lucky Jack                    | 50,475.4  | 11 18             |
| Camp & miscellaneous<br>roads | 36,709.4  | fT f1             |
| Homestake                     | 50,475.4  | 11 11             |
| Alpha                         | 13,765.9  | tt \$1            |
| Banner                        | 9,177.3   | 11 11             |
| B. L. M. Claims               | 4,588.7   | 12 12             |
| Total                         | 463,455.9 | cu. yds.          |

Several samples were taken over the various zones and

assayed for copper, silver, gold, lead, zinc and platinum, as required. Platinum assays were sent to Sudbury Assay Office and the split samples were run for the other minerals by Coast-Eldridge of Vancouver. Crosschecks were run periodically.

The breakdown by zones is as follows :

| Buff <b>alo</b> | 25 | channel | <pre>samples</pre> | = | 314 | ft. | channel | sampling |
|-----------------|----|---------|--------------------|---|-----|-----|---------|----------|
| Glouster        | 14 | 11      | 11                 | = | 98  | rt  | 11      | 11       |
| Averil1         | 30 | 11      | **                 | = | 235 | "   | 11      | 11       |
| Maple Leaf      | 96 | **      |                    | = | 761 | Ħ   | Ŧt      | 11       |
| Alpha           | 7  | н       | 11                 | = | 60  | 11  | н       | 11       |

All the zones were prospected over by R. P. Chilcott,

D. Faulkner and F. Cooke during the season and various samples sent in from the workings.

The breakdown by zones is as follows :

| Buffalo            | 7 | grab | samples |
|--------------------|---|------|---------|
| Glouster           | 9 | н    | 11      |
| Averill            | 7 | 11   | 11      |
| Maple Leaf         | 9 | Ħ    | 11      |
| Lucky Jack         | 6 | 17   | 11      |
| Homestake          | 5 | 11   | 11      |
| Alpha              | 1 | 11   | 11      |
| Banner             | 4 | 11   | 11      |
| B.L.M. (Dane Area) | 5 | 11   | 11      |

Additional grab samples were taken over various smaller zones over the property. The results were low and unimportant.

### Geology\*

The Franklin Camp area, a tectonic depression enclosed by granitic mountain ranges, contains numerous dykes and irregular masses which have in places formed volcanic vents giving rise to lavas and ejectamenta such as on Tenderloin and McKinley Mountains.

The Franklin Group of quartzites, tuffs and argillites are the oldest rocks of the district and were followed by the north-east trending zone of the Glouster crystalline limestone.

The ores of contact metamorphic origin were formed at the time of the batholithic invasion. These ores can be found on the Glouster C.G., and are also controlled by movement along the contact plane which has caused brecciation of the greenstones near the contact. The fissure type silver-lead deposits such as the Union and Banner are thought to also have formed at this time by solutions emanating from the batholith through crustal fractures.

A period of erosion laid bare the older rocks and probably eroded some of the contact-metamorphic zones just mentioned. After this, followed a time of uplift and it was in this period that the Kettle River formation of conglomerates was uplifted. Erosion after this peak of uplift deposited tuffs and grits in the present river valleys.

The monzonite was then intruded during the erosion cycle. The monzonite is a dark grey mottled rock containing some quartz crystals. In the miocene period, porphyritic syenite chonoliths were intruded with little alteration of the surrounding rock, at least on the Yellow Jacket which was the only area of this type observed this summer.

Then came the extrusion of the shonkinite-pyroxenite and augite syenite, two immiscible solutions differentiated and segregated before extrusion. The shonkinite is a transitional facies between the syenite and pyroxenite and originates by local enrichment of alkali felspar with pyroxene crystals. The heavier basic pyroxenite was extruded first and the syenite following settled mostly in the lower contacts of the pyroxenite. The syenite has a characteristic trachytic flow structure of its felspar laths and intensely altered the surrounding formations giving them a mashed or brecciated appearance. It was at this time that contact metamorphism produced the sulphides adjacent to the syenite and also the magmatic segregation type of ore.

Pulaskite and minette dykes, mostly striking in a northeasterly direction along previous planes of weakness, are abundant in the Buffalo-Averill area. The pulaskite is porphyritic with phenocrysts composed essentially of potassium felspar and is related to the syenite with slightly less silica and containing some felspathoids. The pulaskite is a medium grained sandy brown rock broken by numerous fractures and cross-fractures.

The ice age brought most of the igneous activity and mountain building to a close.

The Kettle River conglomerate is made up of rounded boulders up to one foot in diameter and fine sandy compacted cement containing the older formations as fragments, guartzites, cherts, greenstones, etc..

The arkosic grits are white to creamy white with sharp to sub-angular fragments breaking with a crumbly fracture. The fine acidic

tuffs of the group are a light grey rock and are mainly dense (cherty) to fine having a conchoidal fracture. The tuffs, probably water lain, were later uplifted.

The Glouster formation of crystalline limestone contains brown stain in places but is mainly blue-grey/colour in the area studied between the McKinley and Yellow Jacket zones. A brief look was also made at the Banner where a coarse calcareous conglomerate was found. The inherent rock fragments were found to be composed of quartz and chert in the calcareous cement. The conglomerate was also found on the McKinley Road. The limestone between the McKinley and Yellow Jacket zones occurs in pods dipping west to north-west up to 90° and weathered.

The quartzites of the Franklin Group are greenish to almost black near the contacts and contain up to 30% mafic material at these contacts. The mafic material is magnetite and secondary hormblende and chlorite. These hard, dense quartzites are readily breakable into angular blocks along invisible fracture planes and are often disseminated with pyrite. The Franklin Group greenstones are similar but darker and sometimes contain white felspar phenocrysts to resemble a migmatic rock. The rock is so altered as to obscure its origin and ranges into cherty quartzites. Often the two phases are indistinguishable from one another.

The granodiorite in the area, whose appearance varies with degrees of metamorphism, is generally a light grey colour weathering to white and exhibiting 'en echelon' and 'step-like' fractures due to its high degree of alteration. The mafic content ranges up to about '60% of the rock, especially near the monzonite and is at times very difficult to differentiate from this Tertiary intrusive. Epidote follows some of these fractures in the granodiorite but not apparently in the monzonite - also, the monzonite is mottled and fresher looking than the granodiorite away from the contacts. The hornblende in the granodiorite is altered to chlorite and limonite near the contacts but in other less altered areas it is hypidiomorphic to the felspars. The quartz is up to 15% in a few places and occurs interstitially with the felspar to

cause this granodiorite to resemble the monzonite.

The monzonite, of a diorite nature, ranges from medium to coarse grained and up to 60% mafic to very much resemble diorite but for its association with the alkalic syenite, and its speckled appearance. Near the contacts and dykes epidote and chlorite occur as alteration products from the hornblende and biotite present. The plagioclase crystals form short laths as does the syenite and show twinning in the better developed crystals.

The augite syenite is generally a grey-green colour, medium-grained and mostly felspathic (up to 40% mafic near pyroxenite borders), the felspars developing a flow or trachytic structure. When it does range into a coarser facies, the rock breaks readily along these laths to exhibit a hackly fracture. Limonite and chlorite are alteration products. Also near the pyroxene, minor magnetite appears to be shot through the rock.

The porphyritic syenite on the Yellow Jacket zone formed very long crystals and is more acidic with the contained quartz. The hornblende is altered to chlorite and limonite.

The shonkinite-pyroxenite (Black Lead) though heavier than the augite syenite, was intruded just before the syenite along previous planes of weakness and is a result of subsurface basic differentiation. It is coarse grained and ranges from 60-100% ferromagnesian constituents, especially pyroxene. It ranges from dark green to black and is very rotten and easily broken in its more basic forms and contains magnetite, pyrite, and secondary hornblende in its less basic and altered forms. The mafic constituents are biotite, hornblende, and augite, giving rise to limonite and chlorite. Orhtoclase appears interstitially with the mafic. The rock occurs in lower border facies of the syenite and also as local alterations and 'endogenous inclusions' within the syenite body.

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Quartz porphyry dykes occur near the monzonite and syenite contacts, especially to the north of camp on the Buffalo and White Bear areas. It is light grey porphyry with smoky quartz phenocrysts. Two sets of aplite dykes cut the area:

- The Granodiorite aplite cuts the granodiorite near its contacts and is a grey colour with typical sugary fracture.
- The monzonite aplite is found in dykes cutting the monzonite and has no biotite as the granodiorite aplite does.

The rhyolites and rhyolite porphyries vary from quartz porphyries to flow and vesicular structural types. The only place it was observed by the writers was on McKinley Mountain. The rhyolite contained quartz and felspar phenocrysts and was white to light grey and contained a few black specks (less than 10%). The rhyolite porphyry was a coarser transitional phase and was purplish grey but otherwise the same as the rhyolite.

#### Glouster Zone

Being of a contact metamorphic type of deposit between the granodiorite and Franklin Group rocks, the minerals are confined to within a few feet of the contact but exhibit better dissemination on the Franklin Group side. The mineralization is due probably to the intrusion of the granodiorite batholith and to subsequent crustal movements developing joints in the granodiorite. The rock has been mashed along the southerly dipping contact due to slippage and this is probably the main cause of the chalcopyrite, magnetite and chloritization. The Franklin rocks appear to be too hard and tight to permit anything but restricted contact metamorphism. The joints and slips in the granodiorite are too tight and welded now due to age, to have permitted any passage of solutions containing mineral for any distance.

The movement along the contact after the batholithic intrusion has seemed to concentrate the oxides and sulphides in the immediate contact zone, particularly in the Franklin Group greenstones and quartzites. The rock is mashed and blocky with numerous minute fracture planes. The minerals present are chalcopyrite, pyrite, pyrrhotite and molybdenite flakes in a host of magnetite. Epidote, chlorite, quartz, and calcite stringers run through the slips. The slips run in an easterly to northerly strike and dip steeply to the north and east. The easterly-westerly slip appears to be offset by the more recent northerlysoutherly movement both showing left-hand throw near the contact. The contact dips steeply to the south-east and the granodiorite appears on the surface again on the north slope of Newby Creek draw, south-east of the Glouster Tunnel. The strike of the stringers, almost vertical, ranges from N45E to N45W.

The tunnel, about 180 feet long, passed through the contact and mineralization but missed passing along the contact and therefore may have missed better mineralization.

The G. H. cuts are in the quartzites near the contact and are blocky with brown stain and pyritized, but otherwise contain very little mineralization of any note. Very weak shears and lineations run through the area in a northerly direction, dipping mostly about  $30^{\circ}$  - $40^{\circ}$  westerly. No mineral concentration appears present along these slips.

No bedding is visible in the Franklin Group due to chloritization and silicification in the contact zones. The shearing was not intense enough in many places to lead to schistosity, only weak lineation.

## "Black Lead" Zones

The Buffalo, Maple Leaf, and Averill areas are of a magmatic segregation type of deposit between the shonkinite-pyroxenite and the augite syenite. Further proof to a segregation type of deposit is the fact that the minerals are intimately mixed in the host rock and

no regional metamorphism is evident to lead to peripheral mineralization. The sulphides are chalcopyrite, pyrite, sphalerite and and <u>platinum (?)</u> with malachite and azurite present as oxides, in a gangue of quartzite and greenstone on the Mountain Lion C.G. and in a pyroxenite and syenite gangue on the Maple Leaf, Buffalo and Averill zones.

The chalcopyrite is often found enclosed in orthoclase, a product of secondary segregation, especially on the Maple Leaf at the shaft. The pyrite is often found with magnetite disseminated through the shonkinite and sometimes through the syenite as between the Buffalo and Averill zones.

The Maple Leaf area contains the mineralization at the Franklin Group and shonkinite-pyroxenite contact and is well disseminated through the latter rocks with pyritization through the quartzites. The quartzites near the contact are black and contain a good deal of magnetite shot through them. Chlorite and limonite as secondary constituents are also abundant as the syenite phases through to the pyroxenite.

The parent magma of the pyroxenite and syenite is thought to be the same and segregated by gravitational forces before extrusion. The heavier shonkinite appears to have welled up first along the contact and other planes of weakness. The syenite came very soon after and appears to have further segregated, leading to the orthoclase-rich inclusions at the main tunnel where chalcopyrite is contained.

There are two zones of shonkinite on the Maple Leaf near to the trachytic flow contact on Franklin Mountain. These would seem to be endogenous inclusions within the syenite. Magnetite and pyrite are abundant here too. These zones, as well as that near the tunnel, were stripped with a 'cat' and sampled over the stripping and over old cuts and pits.

The shear zone striking through the pits near the Maple Leaf in a northerly direction and dipping easterly may be part of, or related to, the Maple Leaf fault located near the Union #4 tunnel. It swings from a north-westerly direction in the tunnel to northerly near

the pits. The shearing may be related to the uplift of the Kettle River formation. The Maple Leaf fault is offset by east-west faults at the Union and this may also be so at the higher elevations near the Maple Leaf pits. Several faults run through the area in a north to north-east direction and it will take a drilling program to obtain any more information.

Flow lineation is evident in the syenite striking from N7OW to N4OE all dipping northerly from  $60^{\circ}$  -  $70^{\circ}$ . Two sets of joints are also evident, one parallel approximately to the lineation and the other dipping southerly. Both sets carry through to the shonkinite.

The syenite is almost flat with a slight northerly dip to the Franklin Creek formation. The shonkinite inclusions seem to be almost vertical on a steep southerly dip.

A quartz vein in the north-west corner strikes northeasterly and is almost vertical. It carries pods of chalcopyrite and is approximately parallel to the draw and Kettle River contact in the north-east corner. Some fine chalcopyrite is also in an aplite dyke near the old cabin in a cut, but is not of any economic significance.

The syenite contains up to 60% mafic near the contacts, mostly in the form of chlorite, limonite and secondary hornblende.

The Maple Leaf fault striking north-westerly near the tunnels and Franklin Group contact dips westerly up to  $74^{\circ}$ . Northeasterly striking faults dipping south-east to east appear either to offset the Maple Leaf fault to the right and cut it off completely about 200 feet north of the shaft or they have caused the Maple Leaf fault to change dip to the east  $50^{\circ}$  -  $60^{\circ}$  and strike through the draw near the corner posts of the Kingfisher, Dodge and Par mineral claims. A hole would have to be drilled to obtain more information.

Two sets of shears run through the Buffalo Area, one to the north-east and dipping up to  $80^{\circ}$  south-east, the other striking north-east to north-west and dipping westerly up to  $80^{\circ}$ . The pulaskite dykes followed the north-east planes of weakness and were later jointed in their direction of strike (due to cooling?), and at right angles to

this. The later jointing may be due to the second direction of movement to the north-east. The shonkinite was extruded along a general west to north-west direction and is near vertical with the syenite contact. If a drill program were initiated, a series of holes cutting this shonkinite inclusion would seem called for, at right angles to the strike.

The Averill zone is traversed by a north-easterly trending pulaskite dyke, which followed northerly planes of weakness at times to give it a 'jog'. Jointing in this dyke is mostly at right angles to the strike and is usually surrounded by the shonkinite since it is structurally weaker than the syenite. The shonkinite appears to be an 'endogenous inclusion' within the syenite and contains pods of syenite within it. The shonkinite ranges from a rotten cleavable pyroxenite containing disseminated magnetite and pyrite to where the secondary alteration trends to less than 60% hornblende and chlorite within a residual lath structure.

The McKinley zone was only briefly looked at and mapped. The Franklin Group and Glouster crystalline limestone have formed a contact metamorphic type of deposit due to the batholith intrusion. Galena, chalcopyrite, pyrite and sphalerite occur but the two rock types are of a nature so as to afford little dissemination of mineralized solutions. Two sets of north-westerly striking faults, one dipping westerly about  $50^{\circ}$  and the other dipping about  $85^{\circ}$  easterly, cut the zone. The nature of the movement is difficult to see though, as no shearing is evident. Both faults carry through the quartzites (which are brecciated near the faults) and through the limestone. Very poor outcropping seriously restricted proper mapping of the area but the limestone seems to occur in north-easterly trending pods within the Franklin Group rocks from about 400 feet below the rhyolite contact to Franklin Creek and McKinley Creek junction and up the west flank of Franklin Mountain through the Yellow Jacket area. The limestone dips north-west  $40^{\circ}$  -  $45^{\circ}$  into the quartzites. Some joints in the area dip up to  $50^\circ$  -  $60^\circ$  to the north-west and may indicate bedding, while others dip south-east up to 70°.

The rhyolite and rhyolite porphyry above the pulaskite dyke to the south-west of the McKinley showings, on McKinley Mountain dip south to south-west about 22<sup>°</sup>. The pulaskite dips north-east 80<sup>°</sup>.

The Yellow Jacket is local alteration due to extrusion of the porphyritic syenite into the limestone pods and Franklin Group quartzites. Very little mineralization was found other than the pyrite but the limestone was stained brown near the contacts. A northerly striking, easterly dipping shear  $(34^{\circ} \text{ dip})$  cuts the limestone-Franklin Group contact in a draw but the direction of movement was not apparent. A south-easterly striking set of joints dipping up to  $80^{\circ}$  west cuts the quartzite and another set strikes in the same direction as the syenite-Franklin Group contact and dips north-west about  $42^{\circ}$ . The limestone dips north-east  $19^{\circ}$  into the quartzite. A window of quartzite dips  $75^{\circ}$  southwest into the limestone. Little surface encouragement of any extensive mineral was found.

The White Bear-Lucky Jack pits were stripped and an access road run out from camp. Sparse pyrite in blocky quartzites was found. Very low platinum values were obtained in the shonkinite inclusion within the monzonite-syenite contact. More work such as mapping may follow next year. The area was not mapped, nor were any lines run over it, due to lack of surface encouragement and time.

### Magnetic Surveys

All magnetic surveys completed at the Franklin Camp during the past season, with the exception of those on the Yellow Jacket and McKinley Areas, were done by Mr. T. E. Lisle. Those done on the abovementioned areas were by Mr. L. C. Armstrong. A Sharpe M.F.1 magnetometer, serial number 30544, was used on all Surveys.

For surveys on the Averill-Buffalo and Glouster areas the instrument was adjusted to zero at the outset and all subsequent readings adjusted to this base with control readings taken approximately every two hours. For surveys on the Yellow Jacket, McKinley and Maple Leaf areas all readings were adjusted to centrally located points on the individual grids.

For ease of plotting and contouring, an arbitrary figure of 2000 gammas was added to all readings. The accurate values on the enclosed maps are those shown less 2000 gammas.

As the surveys of the McKinley and Yellow Jacket areas were of a preliminary nature, the information obtained is somewhat sketchy. The maps from these areas are on file in the company office. Detailed maps of the other areas covered and contained in this report are as follows:

| No.4  | - | Averill-Buffalo-Glouster | - | 1 <sup>11</sup> = | 200 | ft. |
|-------|---|--------------------------|---|-------------------|-----|-----|
| No.6  | - | Glouster Area            | - | 1" =              | 100 | ft. |
| No.8  | - | Averill Area             | - | 1" =              | 100 | ft. |
| No.10 | - | Buffalo Area             | - | 1" =              | 100 | ft. |
| No.12 | - | Maple Leaf Area          | - | 1" =              | 100 | ft. |

# Averill-Buffalo-Glouster - Map No.4 (1" = 200 ft.)

Over the Main grid area a strong northwesterly magnetic trend was detected and was found to coincide with the augite-syenite-pyroxenite formations. A persistant ridge of magnetic highs lie along the northeasterly contact of the augite-syenite and are particularly strong where it contacts with the Black Lead. This pattern appears similar along the southwesterly contact, however, only a short part of the contact was covered by the Survey.

Within the augite-syenite and particularly to the northwest of the map area, magnetic lows occur flanked by relatively high values to the northeast and southwest. If the augite-syenite and the shonkinitepyroxenite segregated from a common magma before intrusion, the contained magnetite would tend to sink and crystallize with the pyroxenite. With pyroxenite occurring both to the northeast and southwest of the augitesyenite in the northwestern part of the map area, the magnetic lows may be explained by an almost complete segregation of the magma. In the south-

eastern part of the map area only few outcrops of pyroxenite were found to the northeast of the augite-syenite. The somewhat higher values within the augite-syenite would seem to indicate a less complete segregation of the magma than that to the northwest.

In addition to the Glouster (discussed later) two other anomalous zones were located (see 62W-68N & 58W-73N). Both zones lie near the contact between the granodiorite, monzonite and shonkinite-pyroxenite, and were found to be caused by lenses of massive magnetite. The more prominent zone at 58W-73N is approximately 100 feet long by 30 feet wide of massive magnetite with minor amounts of chalcopyrite.

Readings over the grid area ranged from a low of -3980 gammas to a high of 21,215 gammas. Background would fall in the range of -500 gammas to 200 gammas, varying from place to place within the map area.

# Glouster - Map No.6 (1'' = 100 ft.)

Previous work in this area had been concentrated along the mineralized contact between granitic rocks of the Nelson Intrusion and tuffs, quartzites and greenstones of the Franklin Group. Massive magnetite with chalcopyrite and pyrrhotite occurs in a lens up to 4 feet wide and approximately 100 feet long. Weaker and more erratic mineralization is traceable on each end of the lens for a total strike length of over 200 feet with widths up to 10 feet. The mineralization is the remnants of a contact deposit much of which was eroded during the last ice age.

Magnetic readings taken at 50 foot intervals with some closures to 25 ft. on lines 100 feet apart, ranged from a low of ~980 gammas ' to a high of 3990 gammas. Anomalous conditions were found only over the known mineralized zone - outside of this no strong trend was detected.

### Averill - Map No.8 (1'' = 100 ft.)

Previous work on this area was centered on bands of pyroxenite showing traces of copper.

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Magnetic readings ranged from a low of -1630 gammas to a high of 3120 gammas. Several small anomalies were detected and were found to be caused by disseminations of magnetite in narrow bands of pyroxenite.

The main tunnel of the old workings undercuts the northwest end of the highest anomaly encountered. Here minor amounts of chalcopyrite are associated with the magnetite, but this condition was found to be local and not encountered elsewhere.

### Buffalo - Map No.10 (1'' = 100 ft.)

Most of the past work in this area was concentrated into a long tunnel and a series of small pits in the pyroxenite which showed traces of copper sulphides.

Magnetometer readings ranged from a low of -4685 gammas to a high of 21,215 gammas. Strong anomalous zones follow the general northwesterly trend and within the grid lie fairly close to the monzonitepyroxenite and augite syenite-pyroxenite contacts. As in the Averill area, disseminated magnetite was responsible for the anomalous conditions and copper occurrences of a local rather than a general nature.

## Maple Leaf - Map No.12 (1'' = 100 ft.)

In the central part of the map area values ranged from -1720 to 1805 gammas. Weak anomalous values were encountered over some areas of the pyroxenite-augite syenite formations, however, the highs and lows are erratic and no strong trend was detected. To the north, readings over the augite syenite were more even where no outcrops of pyroxenite were found. Over the Franklin Group of rocks to the south values were fairly consistent and fall within a range of -500 to -600 gammas.

# Geochemical Survey: Footnote:

# Rubeanic Acid Test for Copper.

The geochemical samples were taken by scraping off the top 12 - 18 inches or so, of leaf mold with a mattock to obtain as fresh a soil sample as possible. The soil was gathered in  $3" \times 6"$  polyethylene bags and tied securely.

The samples were taken every 200 feet at each station over the entire. Buffalo-Averill-Gloster grid (Map #15 in folder) net-work. The test was not used elsewhere due to lack of time and also it did not prove sensitive enough for our uses. The biquinoline test would have been more desirable but it was not feasible at the time.

The samples were to give a relative indication only and not absolute values. One of each colour range on the rubeanic acid paper was sent to be cross-checked with the biquinoline test for copper and gave the parts per million readings as indicated in the main body of this report.

The samples were dried and screened and a small portion of each placed in 20 ml. test-tubes with stoppers and placed in acetate solution. The sample solutions were then treated with rubeanic acid test paper, as per H. V. Warren's and R. E. Delevaux' method outlined in the January 1959 edition of Western Miner and Oil Review.

The rubeanic acid test is very crude, although a simple field test, and if care is not taken all of the copper may not come down, resulting in lower values.

Since none of the samples gave consistently high values for any large area, further cross-checking was eliminated. Little value was placed on these readings by acid paper as far as recommendations for further work go.

The split samples were all kept and labelled according to their locations, should any further testing be desirable.

### Geochemical Survey

Soil samples taken from the main grid of the Averill-Buffalo-Glouster Area were tested for copper by means of the rubeanic acid test. The procedure followed was as outlined in an article by H. V. Warren and R. E. Delevaux, published in the January 1959 edition of the Western Miner and Oil Review.

Results of the tests were plotted and contoured and gave six relative intensities of copper concentrations. Representative samles from each zone were then analyzed for copper using the biquinoline test\*, the results of which are as follows :

| <u>No.</u> | Station | <u>Values</u> (parts per million) |
|------------|---------|-----------------------------------|
| 0.         | W46-N52 | 400                               |
| 1.         | W46-N46 | 250                               |
| 2.         | W50-N50 | 300                               |
| 3.         | W74-N76 | 5000                              |
| 4.         | W80-N50 | 5000                              |
| 5.         | W82-N80 | 5000                              |

Sample numbers 0 - 2, taken from an area southwest of the Glouster showings, yielded comparatively low values. Corresponding to these are bed rock channel samples at W50-N50, which ran from 0.09% to 0.19% Cu.

Samples numbers 3 - 5, taken from the western part of the map area, are representative of the three higher intensities obtained by the rubeanic acid test and were found in areas predominantly underlain by black lead formation. The higher values obtained in these samples are supported by channel samples taken from the Buffalo and Averill areas. In the Buffalo area copper content in the channel samples ranged from Tr. to .50%, while those on the Averill ranged from 0.03% to .41%.

The discrepancies apparent in the results of the two tests are explainable by the types of tests used. The rubeanic acid test,

\* Biquinoline tests by Mr. L. C. Armstrong - Procedure used is from : Analytical methods used in Geochemical Exploration by the U. S. Geological Survey :- Geol. Survey Bulletin #11525.

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while simple to use in the field, gives rather crude results, and if care is not taken to bring the soil solution to the right consistency some of the copper may not be extracted, hence values will show in the wrong range.

The biquinoline test is performed under laboratory conditions and gives a more accurate quantitative measure of the contained copper. All results are compared to standards known to contain certain amounts of the element and consequently can be found within a narrow range.

### Sample Data

The following is a list of weighted channel sample averages of assays and are broken down into areas and trenches. The locations are available on the geology maps of the respective zones.

|        |                                 | <u>Au(oz)</u> | <u>Ag(oz)</u> | <u>Cu(%)</u> | Pt(oz) |
|--------|---------------------------------|---------------|---------------|--------------|--------|
| Buffal | o Samples                       |               |               |              |        |
| 1)     | Overall grade of samples taken: |               |               |              |        |
|        | 157 ft. of sampling             | Tr.           | Tr.           | .157         | -      |
|        | 252 ft. of sampling             |               |               |              | .003   |
| 2)     | Tunnel:                         |               |               |              |        |
|        | 62 ft. of sampling              | Tr.           | Tr.           | .28          |        |
|        | 92 ft. of sampling              |               |               |              | ni1    |
| 3)     | Pits:                           |               |               |              |        |
|        | Samples Nos.15638, 15639 -      |               |               |              |        |
|        | 40 ft. of sampling              | .01           | .26           | .115         | .0015  |
|        | Samples Nos.9847, 9849 -        |               |               |              |        |
|        | 50 ft. of sampling              |               |               |              | .0025  |

|        |                                     | <u>Au(oz</u> ) | <u>Ag(oz</u> ) | <u>Cu(%)</u> | <u>Pt(oz)</u> |
|--------|-------------------------------------|----------------|----------------|--------------|---------------|
| Glous  | ter Samples                         |                |                |              |               |
| 1)     | Overall grade of all samples taken: |                |                |              |               |
|        | 68 ft. of sampling                  | Tr.            | Tr.            | .357         |               |
|        | 30 ft. of sampling                  |                |                |              | .0015         |
| 2)     | Pits:                               |                |                |              |               |
|        | Samples Nos.275, 276 -              |                |                |              |               |
|        | 13 ft. of sampling                  | .01            | .369           | 1.32         |               |
|        | Samples Nos.278, 279 -              |                |                |              |               |
|        | ll ft. of sampling                  | Tr.            | Tr.            | .076         |               |
|        | Samples Nos.15642-15648 -           |                |                |              |               |
|        | 30 ft. of sampling                  | Tr.            | Tr.            | .14          |               |
|        | Samples Nos.15649 & 15650 -         |                |                |              |               |
|        | 30 ft. of sampling                  | Tr.            | Tr.            |              | .0015         |
|        |                                     |                |                |              |               |
| Averil | 1 Samples                           |                |                |              |               |
| 1)     | Overall grade of all samples taken: |                |                |              |               |
|        | 128 ft. of sampling                 | Tr.            | Tr.            | .136         | .0013         |
| 2)     | Tunnel:                             |                |                |              |               |
|        | 55 ft. of sampling                  | Tr.            | Tr.            | .155         |               |
|        | 60 ft. of sampling                  |                |                |              | .0013         |
| 3)     | Pits:                               |                |                |              |               |
|        | Samples Nos.226-228 -               |                |                |              |               |
|        | 13 ft. of sampling                  | Tr.            | Tr.            | .082         | .001          |
|        | Samples Nos.286-288, 292 -          |                |                |              |               |
|        | 15 ft. of sampling                  | .01            | .10            | .08          | .001          |
|        | Samples Nos.298-300, 9837,9838      |                |                |              |               |
|        | 19 ft. of sampling                  | Tr.            | Tr.            | .097         | .002          |

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|       |  | <u>Au(oz)</u> | <u>Ag(oz)</u> | <u>Cu(%)</u> | <u>Pt(oz)</u> |
|-------|--|---------------|---------------|--------------|---------------|
| Maple | Leaf Samples                           |               |               |              |               |
| 1)    | Overall grade of all samples           |               |               |              |               |
|       | taken:                                 |               |               |              |               |
|       | 417.5 ft. of sampling                  | Tr.           | Tr.           | .187         |               |
|       | 350.5 ft. of sampling                  |               |               |              | .0176         |
| 2)    | Upper Tunnel:                          |               |               |              |               |
|       | 78.5 ft. of sampling                   | Tr.           | Tr.           | .067         | .001          |
| 3)    | Lower Tunnel:                          |               |               |              |               |
|       | 35 ft. of sampling                     | .01           | Tr.           | .188         |               |
| 4)    | Pits:                                  |               |               |              |               |
|       | Sample Nos.249-256                     |               |               |              |               |
|       | 29 ft. of sampling                     | Tr.           | .12           | .148         | .001          |
|       | Sample Nos.270-273                     |               |               |              |               |
|       | 15 ft. of sampling                     | Tr.           | .13           | .03          | .002          |
|       | Sample Nos.236-248, 16498-165          | 00            |               |              |               |
|       | 60 ft. of sampling                     | Tr.           | Tr.           | .045         | .001          |
|       | Sample Nos.257-261                     |               |               |              |               |
|       | 20 ft. of sampling                     | Tr.           | .10           | .07          | Tr.           |
|       | Sample Nos.16494, 16496,16497          |               |               |              |               |
|       | 25 ft. of sampling                     | Tr.           | Tr.           | .04          | Tr.           |
|       | Sample Nos.262-269                     |               |               |              |               |
|       | 32 ft. of sampling                     | Tr.           | .18           | .075         | .001          |
|       | Sample Nos.16472-16481,16483-<br>16485 |               |               |              |               |
|       | 50 ft. of sampling                     | Tr.           | .06           | .46          |               |
|       | Sample Nos.16470, 16471,16482          |               |               |              |               |
|       | 10 ft. of sampling                     | Tr.           | .60           | .80          | .051          |
|       | Sample Nos.16487-16490                 |               |               |              |               |
|       | 15 ft. of sampling                     | .01           | Tr.           | .073         | .002          |
|       | Sample Nos.16486, 16491-16493          |               |               |              |               |
|       | 14 ft. of sampling                     | .063          | .53           | 1,36         | .259          |
| Alpha | Tunnell                                |               |               |              |               |
|       | 60 ft. of sampling                     | Tr.           | Tr.           | .119         |               |

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# Mineral Claims

All Mineral Claims in the Len, Page, Tom, D.P., P.T., and B.L.M. Groups are held by location by Franklin Mines Ltd.. The Dates of Expiry are as follows :

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| Len 4 - 8         | - | May 19/65  |
|-------------------|---|------------|
| Page Group        | - | May 19/65  |
| Tom Group         | - | May 19/65  |
| B.L.M. Group      | - | June 10/65 |
| Len 9 - 17        | - | June 10/65 |
| <b>P.T. 1 - 4</b> | - | July 14/65 |
| P.T. 5 - 17       | - | July 17/65 |
| D.P. Group        |   | July 17/65 |

The following is a list of Crown Grant leases held by Franklin Mines :

By Bill of Sale from Northwest Ventures Ltd., and expiring July 22/65 :

| White Bear (L.1025-S)  | √ Net <b>a (L.996)</b>   |
|------------------------|--------------------------|
| 🗸 Fantantine (L.1477)  | Lone Star Fr. (L.1446-S) |
| Rio (L.441-S)          | ✓ Tripoli (L.1613-S)     |
| Munster (L.923-S)      | Last Chance (L.586-S)    |
| Alto Fr. (L.926-S)     | Antelope (L.928-S)       |
| / Athelstan (L.1325-S) | Ax (L.927-S)             |
| Bullion (L.1200)       | Bystander (L.1028-S)     |
| Cottage (L.585-S)      | Eclipse (L.925-S)        |
| Eganville (L.1016-S)   | Nellie (L.1017-S)        |
| Thuot (L.455-S)        | Yellow Jacket (L.924-S)  |
| Waverley(L.578-S)      |                          |

By Bill of Sale from Huestis Mining Corporation Ltd., and expiring July 15/65:

> Evening Star (L.1321-S) Bonanza (L.1617) Buffalo (L.920-S) Copper King (L.1319-S) B. C. (L.1318-S) Alert (L.930-S) Chicago (L.3504) G.H. Fr. (L.932-S) G.H. (L.2810) Alpha (L.1204) Glouster (L.2809) Glouster Fr. (L.145-S) Golden Age (L.967-S) Mountain Lion (L.144-S) Opher (L.2811) Verde (L.1011-S) Hennekin (L.439-S) Violet Fr. (L.588-S)

In addition, the Bryan Crown Granted Claim (L.3241) is owned outright by Franklin Mines,

The Kingfisher, Par and Dodge Mineral Claims are held under option from J. A. Mc Dougall of Grand Forks, and have had 2 years work filed by Franklin Mines, to August 18/66.

The Jimmy and Jimmy Fr. under option from the same party as above, have had work filed by Franklin Mines to July 21/65 and August 18/65 respectively.

The "J.C." Group was staked by a Jack Carson of Grand Forks and has nothing to do with Franklin Mines.

The "Cal" Group was staked by K. Sanders and also has nothing to do with Franklin Mines.

Signed:

Signed:

For: Franklin Mines Ltd. (N.P.L.)

# APPENDIX #1

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| 1. | Assay sketch of Main Maple Leaf Workings  | 1" = 20" |
|----|---|----------|
| 2. | Assay sketch of lower Maple Leaf Workings | 1" = 20' |
| 3. | Tabulated assays of Maple Leaf Area       |          |
| 4. | Assay sketch of Averill Tunnel            | 1" = 20' |
| 5. | Assay sketch of Buffalo Tunnel            | 1" = 20' |
| 6. | Assay sketch of Alpha Tunnel              | 1" = 20' |





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|------------------------------|----------|------------|-------|------|-------|-------|-----|-----------|-----------------|------------|--------------------------|-----------------------------|------------|----|
| Sample No                    | Width    | Aulog      | Aqlez | abl  | PHay  | 5/901 |     | Sample No | Width           | Auton)     | Agias                    | Gu/2)                       | P11cg      |    |
| 268                          | 15       |            |       |      | .001  |       |     | 16496     | .5              | Te         | T.                       | .05                         |            |    |
| 269                          | . 1.7    |            |       |      | . 001 |       |     | 16497.    | 5               | TA         | 1.                       | .06                         |            |    |
| 270                          | 5        | TI         | .10   | .04  |       |       |     | 16498     |                 | TA         | Tr                       | .04                         |            |    |
| () 271                       | -        | 1          | 10    | 01   |       |       |     | 16479     | 5               | Th         | 14                       | . 03                        |            |    |
| 2.72                         | 6        | 10         | 26    |      |       |       |     | 14,000    | 5               | 174        | 17.                      | .05                         |            |    |
| - /                          | 10       | 1.         |       |      |       |       |     | Same      | 11 -            |            |                          |                             |            |    |
| × × 15                       |          |            |       | •    | .00.  |       |     | 200257    |                 |            |                          |                             |            |    |
| 9854                         | 75       | -          |       | 1    | 11.   |       |     | 5.00.132  | 3               | 12         | 11                       | .06                         |            |    |
| 9858                         | ٦.       | 10         | .90   | .65  | {     |       |     | 6 80333   | 6               |            |                          |                             |            |    |
| 15618                        | 5        | TA         | Ţ,    | .01  | {     | {     |     | 803.54    | 6               | Th         | 1.                       | .03                         |            |    |
| 15619                        | 5        | . 01       | 14    | 11   | [ .   |       | · · | \$ 80355  | 10              | The        | 14                       | 10                          |            |    |
| 3 15620                      | 5 .      | Tr         | Tr    | .09  |       | · ·   |     | 80356     | 10              | 01         | 12                       | .22                         |            |    |
| \$ 15621                     | 5        | 11         | . 75' | .15  | · .   |       |     | 80357     | IQ              | . 01       | Tr.                      | .17                         |            |    |
| 15622                        | 5        | 12         | 54    | .04  | l.    |       |     | 80358     | 15              | .01        | 11                       | .18                         |            |    |
| 15623                        | 5        | TA         | Te    | .04  | ]     |       |     |           |                 |            |                          |                             |            | Ι, |
| 15624                        | 5        | T          | 12    | .03  |       |       |     |           |                 |            |                          |                             |            |    |
| \$ 15625                     | 5        | T          | To    | 01   |       |       |     | -         | Î               |            | {                        |                             |            |    |
| 15626                        | 5        | Tr         | 14    | .04  |       |       |     |           |                 |            | {                        |                             |            |    |
| 15627                        | 5        | Th         | To .  | .04  | ľ     |       |     |           |                 |            | 1                        | <b>i</b> .                  |            |    |
| 15628                        | . 5      | Tr         | 54    | 03   |       |       |     |           |                 |            |                          |                             |            |    |
| 156.29                       | . ج      | r.         | Tr    | 03   |       |       |     | •         |                 | <b>I</b> . | ĺ                        |                             |            |    |
| 15630                        | 5        | 170        | 10    | .28  |       | •     |     |           |                 |            | <b>]</b> .               |                             |            |    |
| 15632                        | 8.5      | Th         | .85   | T.   |       |       |     |           |                 |            |                          | ł .                         |            |    |
| 15634                        | 20       |            |       |      | TA    | 7.4   | -   |           |                 | ł          | ł                        |                             | }          |    |
| 186.25                       | 70       | ļ          | · ·   |      | 1.001 |       |     |           |                 |            | 1                        | ł                           |            |    |
| 1 1/26                       | 20       | Į.         | ł     | ŧ i  | 001   | [     | 1   |           | í               |            | 1                        | [                           |            |    |
| 11/27                        | 22 6     | •          |       | ]    | 001   |       |     |           | 1               |            | ]                        |                             |            |    |
| 11470                        |          | 01         | -     | 1 10 | 1.000 |       |     | •         |                 |            |                          |                             |            |    |
| 1/43/                        |          |            | 1.20  | 1,50 |       |       |     |           |                 |            | Į                        | Į                           |            |    |
| 10411                        |          |            |       |      |       |       |     |           | Ì               |            |                          |                             | <i>r</i> . |    |
| 16412                        |          | ,07        | 11    |      |       |       |     | ÷         | 1               |            | {                        |                             |            |    |
| 10413                        | 3        | 11         | . 20  | 1.07 |       |       |     |           |                 |            |                          |                             |            |    |
| · /G 4/4                     |          | . 01       |       |      |       |       |     |           |                 |            |                          | }                           |            |    |
| 16415                        | 5.       | 14         | . 20  | 1.01 |       |       |     |           | <u> </u>        | ]          |                          | <u> </u>                    | ļi         | ;  |
| 16416                        | 5        | .0/        | 54    | .40  | ţ.    |       |     |           |                 |            |                          |                             | •          |    |
| 16411                        |          | "          | .70   |      |       |       |     |           |                 |            |                          |                             |            |    |
| 16410                        | 5        | 14         | 1.10  | .10  | ĺ     |       |     | •         |                 |            | •                        |                             |            |    |
| 16414                        | <b>.</b> | . 01       | .10   | 10   | 1     |       |     |           |                 |            | •                        | ,                           |            |    |
| 16480                        | 3        | 7.         | 14    | .04  | }     |       |     | Maple     | . Leof          | Tabu       | la te                    | d                           |            |    |
| 16481                        |          | Tu         | 54    | . 04 |       |       | i l |           | ,               | _          |                          |                             |            |    |
| 16482                        | 10       |            |       | }    | . 251 | .06   | i i | A         | cray A          | Res 4/     | ts                       |                             |            |    |
| 16483                        | 15       |            | Ì     | 1 ·  | . 018 | .06   |     |           | · 1 · ·         |            |                          |                             | -          |    |
| 16484                        | 15       | t ·        | {     | 1    | .102  | .03   |     |           |                 | · · v      |                          |                             |            |    |
| 18485                        | 20       | 1          | 1     |      | .001  |       |     | cont      | d on            | Maple      | Lia                      | F 60                        | alog 4     | 1  |
| 16486                        | . 14     |            |       | 1    | .259  | .02   |     |           |                 | . /        |                          |                             | - 77       |    |
| 1.6487                       | 15       | 1.         |       |      | . 002 |       |     |           |                 | •          | 110                      | (q, p)                      | ,          |    |
| 16488                        | 5        | .01        | Tr.   | 1.05 | [     |       |     |           |                 | D          | $\mathcal{D}\mathcal{A}$ | AA ,                        | 11         |    |
| ( )6489                      | 5        | . 01       | 1.    | .08  | {     | 1     | К., |           | •               | ×. ×       | - A                      | liol                        |            |    |
| 16490                        | 5        | 11         | .10   | 09   | ]     | ]     |     |           | • •             | -          |                          |                             |            |    |
| 16491                        | 5        | . 01.      | .20   | . 32 | 1     |       | i   |           | •••             |            |                          |                             | `          |    |
| 16492                        | 5        | 10         | .90   | 1.90 | ł     |       | ;   | · ·       | -               |            |                          |                             |            |    |
| 16473                        | 5        | :08        | .50   | 1.87 | Į     | .     |     |           |                 |            |                          |                             |            |    |
| 16494                        | 15       | 14         | To    | .03  | TA    |       | 2   |           |                 |            |                          |                             | _          |    |



22 Dit.

Assay Skitch Averill Main Workings Scole 1"= 20' R. P. Cont

Dec 7. 1964 by . R.P. Chilcott Drown



Assay Sketch Buttalo Tunnel Scale: 1"=20' R. P. Dec 7, 1964. Drawn by: R. P. Chikott

5',

| s. |  |  |
|----|--|--|

Sample No 1% width quilde Ja In 7830 .06 10 Tr T. 9831 Tr 10 **T**+ .08 9832 10 12 Fr .06 9833 10 Tr Tr . 06 9834 10 Tr. .04 .01 9835 5 .02 0.1 .80 9836 5 0.2 .02 .03

To Glouster 9835 9834 9833 9832 9830 9830 9830 7830 7830

Scale: 1"=20' Dec. 16, 1964 .

Drawn by: R.P. Chilcott

## APPENDIX NO.2

Expenses incurred during the investigations of the Len, Tom, Page, D.P., P.T., and B.L.M., mineral claims and various crown granted claims on the Franklin Mines property approximately 40 miles north of Grand Forks in the Greenwood Mining Division. On subsequent pages of this appendix the claims are broken down into the Franklin 1 - 7 groups.

| 1. | Wages:     |  |
|----|------------|--|
|    | *F. Cooke  | - 111 d <b>ays</b> @ \$22.08/day - Administrat-        |
|    |            | ion and prospecting, June - November \$2,450.96        |
|    | *T. Lisle  | - Engineering and Geology -                            |
|    |            | Fieldwork: August 9 - October 23 =                     |
|    |            | 76 days  |
|    |            | Officework: October 24 - December 31                   |
|    |            | = 69 days  |
|    |            | Total = 145 days at \$20.20/day 2,929.28               |
|    | *P. Chilco | - Engineering and Geology -                            |
|    |            | Fieldwork: May 1 - October 23 =                        |
|    |            | 176 days   |
|    |            | Offiçework: October 24 - December 31                   |
|    |            | = 69 days  |
|    |            | Total = 245 days at \$18.63/day 4,563.95               |
|    | *D. Faulkn | - Geochemistry and Prospecting -                       |
|    |            | Fieldwork: May 1 - October 23 =                        |
|    |            | 176 days   |
|    |            | Officework: October 24 - October 31                    |
|    |            | = 7 days   |
|    |            | Tota1 = 183 days at \$16.07/day 2,940.39 $\$12.884.58$ |
|    |            |  |

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... Appendix No.2

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|        |             |   | Brought forward                        |            | \$12,884.58 |
|--------|-------------|---|--|------------|-------------|
| Lin    | ne Cutters: |   |  |            |             |
| (+)P.  | Kabatoff    | - | 63 days - June - October at            |            |             |
|        |             |   | \$22.02/day                            | \$1,387.21 |             |
| Α.     | Churldave   | - | 95 days - June - October at            |            |             |
|        |             |   | \$21.75/day                            | 2,066.77   |             |
| (+)H.  | Kinakin     | - | 94 days - June - October at            |            |             |
|        |             |   | \$21.67/d <b>a</b> y                   | 2,037.17   |             |
| w.     | Waselenkoff | - | 61 days - August - October at          |            |             |
|        |             |   | \$21.75/day                            | 1,326.64   |             |
| T.     | Fenton      | - | 38 days - June - July at               |            |             |
|        |             |   | \$18.60/d <b>a</b> y                   | 706.93     |             |
| (+)K.  | Kinakin     | - | 24 days - July - September at          |            |             |
|        |             |   | \$16.34/day                            | 392.16     |             |
| H.     | Lorenz      | - | 29 d <b>a</b> ys - July - September at |            |             |
|        |             |   | \$16.34/day                            | 473.74     |             |
| N.     | Bartlett    | - | 42 days - July & August at             |            |             |
|        |             |   | \$13. <b>12/da</b> y                   | 551.12     |             |
| Co     | ok:         |   |  |            |             |
| <br>J. |             | _ | 87 days July - October at              |            |             |
|        |             |   | \$21.64/day                            | 1,891.30   |             |
| Ca     | t Swampers: |   |  |            |             |
| к.     | Kinakin     | - | 32 days - July & August at             |            |             |
|        |             |   | \$16.34/day                            | 523.21     |             |
| H.     | Lorenz      | - | 32 days - July & August at             |            |             |
|        |             |   | \$16.34/day                            | 523.21     | \$11.879.46 |
|        |             |   |  |            | \$24,764.04 |
| _      |             |   |  |            |             |

\* Denotes salaried personnel - field wages calculated on a 7 day week. (+) Includes surveying.

... Appendix No.2

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 $\left(\begin{array}{c} \\ \\ \end{array}\right)$ 

|    | . Brought forward                             |    |          | \$24,764,04 |
|----|---|----|----------|-------------|
| 2. | Camp Costs:                                   |    |          |             |
|    | Includes gas and oil, mining supplies, tents, |    |          |             |
|    | lumber and hardware -                         |    |          |             |
|    | 1136 man days at \$6.95/man/day               |    |          | \$ 7,897.75 |
| 3. | Engineering Expenditures                      |    |          |             |
|    | Map and Blueprints                            | \$ | 53.85    |             |
|    | Topographic Map and Aerial photography        |    |          |             |
|    | (Hunting Survey Corp.)                        |    | 948,04   | 1,001.89    |
| 4. | Equipment Rental                              |    |          |             |
|    | 2 Land Rovers and 1 Power Wagon               | 2  | 2,045.90 |             |
|    | 1 Magnetometer                                |    | 600.00   |             |
|    | l Transit                                     | _  | 125.67   | 2,771.57    |
| 5. | Roadwork and stripping - Bryant D-7'Cat'      |    |          | 11,860.50   |
|    |   |    |          | \$48,295.75 |
|    |   |    | 1        |             |

Other expenditures incurred, but not applicable to assessment work, include assaying, travelling, lodging, office, administrative and capital expenses.

<u>3</u>

Expenditures incurred during the investigation of the <u>FRANKLIN NO.1 GROUP</u> of mineral claims which is comprised of the LEN 5, 7, 9, 11, 13, 15, PAGE 5 Fr., 6, 7 Fr., 8, 15 Fr., 16 Fr., 17 Fr., 18 Fr., 19, 21, 22, 23, GLOUSTER C.G., WHITE BEAR C.G., and which is situated in the Greenwood Mining Division.

Work consisted of :

- Road construction on the Len 15, Page 5 Fr., 6, 7 Fr., 15 Fr., 16 Fr., 17 Fr., 18 Fr., 19, 21, 22, 23, Glouster C.G., White Bear C.G., mineral claims.
- Trenching on the Glouster C.G., White Bear C.G., mineral claims.
- Line cutting, geological, geophysical and geochemical surveys on the Page No.23 and Glouster C.G., mineral claims.

The costs of the above investigation to be applied for 4 years assessment work on the Franklin No.l Group are as follows :

| *1) | Wages   | \$4,179.58 |            |
|-----|---|------------|------------|
| *2) | Camp costs - 191.7 man days at \$6.95/man/day | 1,332.52   |            |
| 3)  | Engineering expenses                          | 169.09     |            |
| 4)  | Equipment rental                              | 467.77     |            |
| 5)  | Roadwork - construction and trenching         | 2,001.77   | \$8,150,73 |
|     |   |            | +0,100000  |

Expenditures incurred during the investigation of the <u>FRANKLIN NO.2 GROUP</u> of mineral claims which is comprised of the TOM 2, 2 Fr., B.L.M. 27, 28, 42, LEN 4, 6, 8, 7 Fr., PAGE 1, 2, 3, 4, 10, OPHER C.G., G.H. C.G., G. H. Fr. C. G., GLOUSTER Fr. C.G., GOLDEN AGE C.G., MOUNTAIN LION C.G., and which is situated in the Greenwood Mining Division.

Work consisted of :

- Road construction on the Tom 2 Fr., Len 4, Page 2, 4 and 10, Opher C.G., G. H. Fr. C.G., Glouster Fr. C.G., Mountain Lion C.G. mineral claims.
- Trenching on the G.H. C.G., Glouster Fr. C.G., Mountain Lion C.G., mineral claims.
- Line cutting, geological, geochemical and geophysical surveys on the G. H. C.G., Glouster Fr., C.G., Golden Age C.G., and Mountain Lion C.G. mineral claims.

The costs of the above investigation are to be applied for 4 years assessment work on the Franklin No.2 Group and are as follows:

| *1)        | Wages   | \$4,179.58 |            |
|------------|---|------------|------------|
| *2)        | Camp costs - 191.7 man days at \$6.95/man/day | 1,332.52   |            |
| 3)         | Engineering expenses                          | 169.09     |            |
| 4 <b>)</b> | Equipment rental                              | 467.77     |            |
| 5)         | Roadwork - construction and trenching         | 2,001.77   | \$8.150.73 |
|            |   |            |            |

Expenditures incurred during the investigation of the <u>FRANKLIN NO.3 GROUP</u> of mineral claims which is comprised of, TOM 1, 1 Fr., 3, 4 Fr., 5 Fr., 6 Fr., 8 Fr., 9, 9 Fr., 10, 11, 12, 13, 14, 15, PAGE 26, 27 Fr., 29 Fr., ALPHA C.G., EGANVILLE C.G., mineral claims and situated approximately 40 miles north of Grand Forks in the Greenwood Mining Division.

Work consisted of :

- Road construction on the Tom 5 Fr., 6 Fr., 8 Fr.,
   11, 13, Page 26, 27 Fr., 29 Fr., Alpha C.G., and
   Eganville C.G., mineral claims.
- 2. Trenching on the Page 26 and 27 Fr., mineral claims.
- Line cutting, geological, geochemical and geophysical surveys on the Page 26, 27 Fr., 29 Fr., and Alpha C.G. mineral claims.

The costs of the above investigations are to be applied for 3 years assessment work on the Franklin No.3 Group of mineral claims and are as follows :

| *1) | Wages  | \$3,134.69 |            |
|-----|--|------------|------------|
| *2) | Camp costs - 143.80 man days at \$6.95/man/day | 999.39     |            |
| 3)  | Engineering expenses                           | 126.83     |            |
| 4)  | Equipment rental                               | 350.84     |            |
| 5)  | Roadwork - construction and trenching          | 1,501.33   | \$6,113.08 |
|     |  |            |            |

Expenditures incurred during the investigation of the <u>FRANKLIN NO.4 GROUP</u> of mineral claims which is comprised of, PAGE 24, 25, 32, 34, 35 Fr., 36, 37, 38, 39, 40, 41, BUFFALO C.G., P.T. 15, 17, 19, 23, 25, 27, 29, and 31 mineral claims, situated approximately 40 miles north of Grand Forks in the Greenwood Mining Division.

Work consisted of :

- Road construction on the Page 24, 25, 32, 34, 35 Fr., 37, 39, and Buffalo C.G., mineral claims.
- Trenching on the Page 24, 25, 32, 34, 35 Fr., 37 and Buffalo C.G., mineral claims.
- 3. Line cutting, geological, geochemical, geophysical surveys on the Page 24, 25, 32, 34, 35 Fr., 36, 37,
  P. T. 29 and Buffalo C.G., mineral claims.

The costs of the above investigation are to be applied for 4 years assessment work on the Franklin No.4 Group and are as follows:

| *1) | Wages   | \$4,179.58 |            |
|-----|---|------------|------------|
| *2) | Camp costs - 191.7 man days at \$6.95/man/day | 1,332.52   |            |
| 3)  | Engineering expenses                          | 169.09     |            |
| 4)  | Equipment rental                              | 467.77     |            |
| 5)  | Roadwork - construction and trenching         | 2,001.77   | \$8,150.73 |

Expenditures incurred during the investigation of the <u>FRANKLIN NO.5 GROUP</u> of mineral claims which is comprised of the TOM Nos. 24, 26, 27, 28, 29, 30, 12 Fr., 16 Fr., 18 Fr., 31, 32, 33, 34, 35, 36, P.T. Nos. 11, 13, PAGE 33 Fr., and 41 Fr., mineral claims situated approximately 40 miles north of Grand Forks in the Greenwood Mining Division.

Work consisted of :

- Road construction on the Tom 29, 12 Fr., 16 Fr., 18 Fr., 31, 33, Page 33 Fr., and 41 Fr., mineral claims.
- Trenching on the Tom 29, 18 Fr., 31, Page 33 Fr., mineral claims.
- 3. Line cutting, geochemical, geological and geophysical surveys on the Tom 29, 18 Fr., Page 33 Fr., mineral claims.

The costs of the above investigations are to be applied for 3 years assessment work on the Franklin No.5 Group and are as follows:

| *1) | Wages   | \$2,977.95 |            |
|-----|---|------------|------------|
| *2) | Camp costs - 136.6 man days at \$6.95/man/day | 949.42     |            |
| 3)  | Engineering expenses                          | 120.48     |            |
| 4)  | Equipment rental                              | 333.29     |            |
| 5)  | Roadwork - construction and trenching         | 1,426.26   | \$5.807.40 |
|     |   |            | ,.,        |

\* See Appendix No.2, pages 1, 2 & 3.

<u>8</u>

Expenditures incurred during the investigation of the <u>FRANKLIN NO.6 GROUP</u> of mineral claims which is comprised of the TOM Nos.16, 17, 18, 19, 20, 21, 22, 23, 25, 7 Fr., 14 Fr., 13 Fr., PAGE 28, 30, 31 Fr., JIMMY, JIMMY Fr., RIO C.G., and BULLION C.G., mineral claims and which is situated approximately 40 miles north of Grand Forks in the Greenwood Mining Division.

Work consisted of :

- Road construction on the Tom, 23, 25, 7 Fr., 14 Fr., Page 28, Jimmy, Jimmy Fr., Rio C.G., Bullion C.G., mineral claims.
- Trenching on the Page 28, Jimmy, Jimmy Fr., Rio C.G., Bullion C.G., mineral claims.
- 3. Line cutting, geological, geochemical, and geophysical surveys on the Page no.28 mineral claim.

The costs of the above investigations are to be applied as assessment work for 3 years on the Franklin No.6 Group and are as follows:

| *1) | Wages   | \$2,977.95 |            |
|-----|---|------------|------------|
| *2) | Camp costs - 136.6 man days at \$6.95/man/day | 949.42     |            |
| 3)  | Engineering expenses                          | 120.48     |            |
| 4)  | Equipment rental                              | 333.29     |            |
| 5)  | Roadwork, - construction and trenching        | 1,426.26   | \$5 807 40 |
|     |   | <u> </u>   | 72,007.40  |

Expenditures incurred during the investigation of the FRANKLIN NO.7 GROUP of mineral claims which is comprised of the TOM 3 Fr., 4, 5, 6, 7, 8, 10 Fr., 11 Fr., 15 Fr., B.L.M. 41, 43, 44, 45 Fr., 46 Fr., YELLOW JACKET C.G., MUNSTER C.G., ANTELOPE Fr. C.G., WAVERLY C.G., NELLIE C.G., ECLIPSE C.G., mineral claims and situated approximately 40 miles north of Grand Forks in the Greenwood Mining Division.

Work consisted of :

- 1. Road construction on the Tom No.5, 6, 7, 8, 10 Fr. 15 Fr., Yellow Jacket C.G., Munster C.G., Antelope Fr., C.G., Waverly C.G., Nellie C.G., Eclipse C.G., mineral claims.
- 2. Trenching on the Tom No.6, 15 Fr., and Yellow Jacket C.G., mineral claims.
- 3. Line cutting, geological and geophysical surveys on the Yellow Jacket C.G., and Munster C.G., mineral claims.

The costs of the above investigations are to be applied for assessment work for 3 years on the Franklin No.7 Group and are as follows :

| *1) | Wages   | \$3,134.69 |            |
|-----|---|------------|------------|
| *2) | Camp costs - 143.8 man days at \$6.95/man/day | 999.39     |            |
| 3)  | Engineering expenses                          | 126.83     |            |
| 4)  | Equipment rental                              | 350.84     |            |
| 5)  | Roadwork - construction and trenching         | 1,501.33   | \$6,113.08 |
|     |   |            | ······     |

\* See Appendix No. 2, pages 1, 2 & 3. THIS PERTAINES TO APPENDIX \*2 (B. 1-10) Declared before me at the city of Mancaure , in the Columbia. this 10 Morriar Keele

day of February, 1965

(adeleine) 10

A Commissioner for taking A Brayin with Recover Columbia or A Notary Public in and for the Province of British Columbia.

, A.D.









SEE BUFFALD SHEET.

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| 275       | 8          | . 01   | 0.1    | . 98  |          |
| 276       | 1          | .01    | 0.8    | 7.88  | 2.12     |
| 277       | 8          | Ti     | TF     | .06   | 21583    |
| 278       | 5          | Tr     | Tr     | . 06  | 1. 2.    |
| 279       | 6          | Tr     | fr     | .09   | 13.74    |
| 15643     | 5          | T+     | Tr     | .09   | 122.14   |
| 15644     | 5          | Tr     | TA     | 1.12  | 1. 19    |
| 15645     | 5 -        | Th     | Tr     | 19    | 12/21    |
| 15646     | 5          | Tr     | Tr     | .10   |          |
| 15647     | 5          | Tr     | Tr     | .17   |          |
| 15648     | 5          | Tr     | Tr     | .13   | 12       |
| 15649     | 15         | Th.    | Tr     | 1997  | .002     |
| 15650     | 15         | Tr     | TH     | 1     | 1.001    |



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Department of Mines and Petroleum Resources ASSESSMENT REPORT

637

637 MAP 6 NO.\_\_\_\_

To Accompany Geological, be ophysical, Geochemical Report on Franklin Camp 1964. Page, Tom, Len, D.P., P.T., & B.L.M. Claim Groups. FRANKLIN MINES LTD. (N.AL.) Mognetometer Survey of Glouster Showings. Scale: 1 = 100 ft. Contour Interval - 400 gammas. Note: For corrected values, subtract 2000 gymmes for all shown readings.

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Dec 16, 1964.

-- W 76 - N 60 0 00 61 RAC: Pulaskite Porphyry Augite Syenite 133 E Shankinite Pyroxenite 1" 2 00 3 P 8 J F200 0 1 9840 1839 C 297 J295 I 1265 1: 283 2:283 3:284 1 2 98 1 2 98 3 3 00 9 837 9 837  $\begin{array}{c} 2.92 \\ 1 = 286 \\ 1 = 286 \\ 2.93 \\ 2.93 \\ 2 = 3$ Department of Mines and Petroleum Resources ASULLSMENT REPORT NO. 637 MAP. To Accompany Geological, Geophysical, Geochemical Report of Franklin Camp 1964. Page, Tom, Len, D.P., P.T., & B.L.M. Claim Groups. Franklin Mines Ltd. (N.P.L) Averill Geology 1"=100' 0 Now 3, 1964. R. P. Chitcott Nov 3, 1964. R. P. Chitcott Ho. 7.

| 5      | mple No.      | width (ft)  | (Aulog)    | Aglog) | Cu(20) | PH(0g)           |
|--------|---------------|---|------------|--------|--------|------------------|
| 15     | (214          | 15  |            | 1.81   | 5.2    | .002             |
| in the | 215           | 15  | 1 Barris   | Ph     |        | .001             |
| 51     | 216           | 15  | 2.11       | Sec.   |        | 002              |
| V Star | 217           | 1 5 P. P. ()  | TA         | 12     | .10    | Sec. 1           |
| 20     | 218           | 6   | Th         | 54     | .13    | 1. Se - 6        |
| 2      | 219           | 5   | 11<br>Th   | 12     | .13    | 1919             |
| 44     | 220           | 5   | T          | Th     | 10     | 100              |
| 13     | 221           | 3   | 01         | 5.     | 24     | il a se          |
| 1      | 222           | 2   | 0          | 51     | 41     | 11-1-1           |
|        | 224           | a contract  | Fr         | 14     | .10    | 1042             |
| 4      | 125           | 5   | . 02       | .5     | .15    | TE AL            |
|        | 326           | 12  |            | 233    | Sil    | .001             |
|        | 227           | 6   | Th         | Tr     | 12     | 100              |
|        | 220           | 2   | Tr         | Tr     | .05    | 9.18             |
|        | 208           | is  | 12.01      | 24.2   | 1.1.1  | Tr               |
|        | 202           | 6   | T.         | 1      | 10     |                  |
|        | 202           | 1   | 1          | 30     | ,09    |                  |
|        | *88           |   | 1.01       |        |        | and and an owned |
|        | 287           | 3   | 178        | m      | .06    |                  |
|        | 288           | 5   | 01         | Tr     | .09    | 1                |
|        | 292           | 15  | 1.         |        |        | .001             |
|        | 298           | 5   | Tr         | Th     | .07    |                  |
|        | 299           | 5   | T+         | Tr     | .10    | 322.015          |
|        | 300           | 5   | Tr         | 14     | .13    | 1.161            |
| 1 al   | 9827          | 1 1 1 1   | 1.02       | Tr     | 17     | 1.41.4           |
| in n   | 9829          | 5   | 1n         | Tr     | 06     |                  |
|        | 9837          | 4   | TA         | Te     | .09    | ac.              |
|        | 9836          | 19  | 1          | 1.30   | 100    | .002             |
|        | 9841          | 6   | .01        | .22    | .03    | .004             |
|        | 9842          | 15  | .005       | 31     | .10    | .002             |
|        | in the second | A CONTRACT OF A | The street |        | 1.1.2  |                  |





**34**W 8GW 88 W .90W PZW 94W 88N. 3745 \_<u>2</u>795 \_.2875 2620 2240 87N ---3**380** -.2595 2230 2180 8395 2115 86 N 3399 1915 2225 2605 2625 \_3475 3035 85N 3275 3225 3265 .3385 2745 2915 3135 \_3255 3525 2975 3975 1375 2675 1955 2455 2260 1280 2480 84N 3330 \_\_\_\_2670 3680 2795 2360 4820 4120 430 3880 \_375Q 5120 in race 1145 4275 1425 1355 1705 1100 83N 8675 2405 14 3675 7980 \_2/30 0850 214 \_362 2385 4905 2180 82N 5370 \_38/5 1390 0 V33478 2040 3480 2160 3235 2865 3075 2265 2975 3192 2540 BIN 2455 550 2800 7365 -545 80N 2630 2085 1630 1910 2170 79N 2280 2320 \_![15 3120 78N. 1005 Department of Mines and Petroleum Resources 3135 3655 40 370 (730 3675 2215 2005 2255 2375 1460 4230 2035 2725 2055 3705 2995 590 77N 010 1,70 ASSESSMENT REPORT NO. 637 MAP 10 6 aussale Tunnel .<del>30</del>40 2765 1175 855 386 485 875 485 3430 7GN 5435 \_,<u>336</u>0 1910 To Accompany Geological, Geophy. Geochemical, Report of Franklin Carp 1964. Page, Tom, Len, D.P. P.T., 195 195 - 395 -45 5030 1100 2890 7560 1660 75N 1380 .1100 405 1060 1610 4855 5335 1703 305 ZB.L.M. Claim Groups. 2335 1455 1205 20 FRANKLIN MINES LTD. (H.R.) Magnetometer Survey of. 410 , 1**5** a the share of the second of t Buffole Showings - **-**---... ٦, Scale: 1"= 100 ft. Contour Interval's 600 gammas. Notel for corrected volues subfract 2000 y from oll shown readings. Dec 15,1968. Som Kiele. No.10 !



5 h. 3 .

17H 1505 \_1175 13W. \_1635 1745 -. 1580 \_1475 1675 \_1745 \_\_\_\_\_\_ 1565 1795 12W \_1705 .... 1505 1775 1525 1730 .1905 1735 .1785 IIN 1755 . \_\_\_\_\_\_\_\_ \_\_\_\_\_ 1230 IOW. 1475 1850 1765 2110 1475 1545 1765 1860 1605 \_\_\_\_\_0 . 1910 1518 1605 SW. 1570 .1575 1545 1695 \_\_\_\_\_\_ 1490 0021 1795 BW 2000 \_\_\_\_/320 1615 1680 1700 2/20 ..[820 .1745 1610 7W .2070 2110 1050 1540 . 1960 1720 \_\_\_\_\_\_\_\_\_ 1440 -. 1915 --- 2000 EW .1905 2010 \_<u>Z//0</u> 1440 .1930 \_1075 <u>[590</u> 1560 5W 2000 . 1705 1530 1510 1825 1430 4W 7100 1910 .1650 1260 1400 3W To Accompany Geological, Geophysica Geochemical Report of Franklin Camp 1964. Pape, Tom, Lon, D.P., P.T., + B.L.I Claim Groups. Department of RANKLIN MINES LTD. (N.R.L.) Mines and Petroleum Resources Magnetometer Survey of ASSESSMENT REPORT Maple Leaf Showings. Scale : 1"=100 Ft. 637 MAP 12 Contour Interval - - 400 gommas. NOTE: For corrected rolues, subfract 2000 gommas from all readings. Some heale Dec16, 1964. No. 12.





BEN 0 0 0 0 0 0 84N BZN 0 0 0 0 0 0 BON (0) 0 78N 0 0 76 N O 0 0 0/0 0 0 72N 0 0 0 0 0 0  $\odot$  $\odot$  $\odot$   $\bigcirc$   $\odot$   $\odot$   $\odot$   $\odot$   $\odot$   $\odot$   $\circ$   $\circ$ O TON 0 0 0 0 0 0 68N 0 0) 0 0 0 0 O O O GEN

![](_page_65_Figure_1.jpeg)