

HAROLD G. WAY PH.D
CONSULTING GEOLOGIST



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REPORT COVERING MINING PROPERTY
LOCATED IN THE CENTRAL PORTION OF
FOSTER TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO

SUMMARY & CONCLUSIONS

Widespread mineralization consisting of copper and other valuable metals has been located in a well defined fracture zone crossing the central portion of Lots 8 & 9, Concession III, Foster Township, Sudbury Mining Division, Ontario. There are infiltrations of quartz diorite containing excellent mineralization within the fracture zone. Other similar showings are reported on the property but, as yet, only a limited amount of surface exploration has been carried out along a half mile length of this zone of discovery. Exposed widths and the strike length of this zone are impressive and there is an excellent chance of locating commercial concentrations of ore.

The structure and geological assemblages of rocks within the property are ideal and there are already sufficient indications to warrant immediate investigation by diamond drilling and geophysical methods. The strength of the discovery zone is also displayed by the results of the Government airborne geomagnetic survey which shows a strong lineal anomaly extending across the property in an east-west direction in close proximity to the discovery zone. An expenditure of \$75,000.00 to prove or disprove the initial commercial possibilities of the known showings is fully justified and strongly recommended. Naturally, dependent upon the results of this exploration program, major financing may be required.

PROPERTY AND LOCATION

The property consists of twenty-six contiguous claims of approximately fifty acres each or about 1300 acres located in the central portion of Foster Township, Sudbury Mining Division, Province of Ontario. More specifically the mining claims are recorded with the Department of Mines as follows :

The South ½ of Lot 7, Concession IV, being Mining Claims 91955-91556
All of Lot 7, Concession II, being Mining Claims 91936-91937-91949-
91950-91951-91952-91953-91954.

All of Lot 8, Concession III, being Mining claims 89097-91315-89093-89094-91968-91967-91969-91966.

All of Lot 9, Concession III, being Mining claims 91313-89096,91314-89095-91972-91970-91973-91971.

The twenty-six mining claims have been certified as being in good standing and transfers are held according to standard practice.

ACCESSIBILITY, RESOURCES ETC.

The property herein described lies seven miles south-easterly from the Town of Espanola, Ontario. Espanola is forty-eight miles west of Sudbury on Highway No. 17 leading to Sault Ste-Marie. From Espanola, the property is reached over the main highway leading south to Manitoulin Island and thence eastward over the Panache Lake road which branches from the main highway immediately south of the town. The Panache Lake road traverses the entire east-west dimension of the property and is serviceable year-round.

The hydro-electric service line for the area, extending northeasterly to Sudbury, passes within one mile of the east boundary of the property and, if required, electric power for all mining and milling purposes should be available on short notice of need.

There is, within, the immediate area, an abundance of labor for all needs of surface or underground exploration. This reference is made to the generation who were raised on the doorstep of the "Sudbury Basin" and who, have lived with the mining development at such close range.

Equipment and supplies for all mining needs are available from the large supply houses in Sudbury or North Bay, and upon short notice, from Toronto.

HISTORICAL REVIEW

The recent rapid rise to nearly an all-time high for the price of copper, has led to a renewed investigation of copper showings that were originally explored when precious metals were the prime commodity. A summary of the old showings within the area are briefly described by H. S. Moore, 1930; Ont. Dept. of Mines, Vol. XXXVIII, Part VII, entitled -"Ore Deposits near the North Shore of Lake Huron". Page 48 and 49 of said report describe numerous showings in Foster Township of interest today but which were being explored for precious metal contents at that time. One reference is made to a sixty foot width of gossan at the edge of water along the shore of one of the

numerous lakes in the immediate vicinity of the property herein described quoted as follows :

"The most abundant sulphides are pyrite and pyrrhotite. There is also a little chalcopyrite."

The presence of metals, other than gold or silver, was unimportant at the time of the report of E.S. Moore in 1930. Recently the price and demand for a multitude of new metals has resulted in a renewed activity of the previously known mineral deposits. As a direct result of this renewed search new mines are being developed at a rapid rate within or close to the previously known so-called gold discoveries.

GENERAL GEOLOGY

The property is underlain largely by the Serpent quartzite formation and the Espanola greywacke which are usually designated as a part of the Bruce series of the Lower Huronian. These sediments have been intruded by sills and dykes by basic intrusives (quartz diorite and diabase) along the regional fracture pattern. These intrusives are Keeweenawan in age and, as in the Sudbury area, economically the most important source of ore. Practically all ore deposits containing copper, nickel and associated metals are found in this type of basic intrusions.

In the immediate area long strike of the discovery zone and the normal dip of the Serpent quartzite is steeply to the north and strike is normally north seventy degrees east. This attitude is borne out by the aeromagnetic survey of the Dominion Government.

Due to the depth of snow at the time of examination it was impossible to study other reported zones of mineralization within the property. However, all of the trenches and pits blasted along the discovery zone had been well cleaned out for examination.

Topography of the area suggests structural features which need detailed study. For instance, a worked depression extends easterly parallel to the discovery zone on the immediate south border of same. From the most westerly known exposure of this zone on the top of the hill on claim 89095 this depression can be sighted as a structural detail extending easterly for at least three miles. From this high point of elevation several parallel depressions can be noted which cross the property. Along the margins of two of these there are reported zones of similar mineralization but no work done to date. There are rare exposures of rock within the depressions and the fact that excellent mineralization is exposed along the bordering hillside would suggest excellent possibilities for locating mineral deposits

beneath the depression. This possibility can only be ascertained by means of diamond drilling or geophysical methods.

EXPLORATION TO DATE

Work last fall was concentrated on opening a series of rock trenches along approximately 2000 feet of what is described as the discovery zone of mineralization that crosses claims 89095 and 89093 parallel to the Panache Lake road about 400 feet south of same. The pits and trenches are at about fifty feet intervals and make it possible to study this zone of mineralization. As stated previously this zone corresponds with a portion of the strong anomaly shown on the aeromagnetic map of Foster Township by the Department of Mines, Province of Ontario. The actual anomaly may lie beneath the lineal depression described but the fact remains that excellent mineralization exists in the exposures of the pits and rock trenches.

Aside from limited prospecting of the property which has located other interesting mineralized area the work has been confined to the discovery zone.

The zone exposed in the series of pits and trenches a well-defined east-west striking fracture into which intrusives quartz diorite has been injected. The mineralization within the intrusives consists of disseminated chalcopyrite, pyrite, pyrrhotite, sphalerite, molbdenite and minerals associated with precious metal group usually associated with this type of mineralization in the Sudbury area. The contents of any individual metal cannot yet be ascertained or any average approximated but from visual examination of the outcrops of this material along the 2000 foot length exposed it appears a reasonable estimate that the copper content along is between two and three percent; there is an appreciable content of pyrrhotite that may nickeliferous; there are quartz phases on either contact of this zone of quartz diorite which delineate the zone. In these quartz phases and impregnated into either wall of the zone are disseminations of molbdenite and chalcopyrite. This type of mineralization adds evidence, in the opinion of the writer to the structural strength of the occurrence. Furthermore, a recent spectrographic analysis by the Toronto Testing Laboratory, January 10th, 1936 - Laboratory No. 3551 & 5154 shows the normal intrusive material, which contains disseminated mineralization, contains a high content of tungsten within the range of one to two percent. Assays of samples from numerous pits along strike of this zone show consistent copper content of between two to nine percent. From visual examination

of this zone, by the writer, it appears that the copper contact alone is between two and three percent. The molybdenite content cannot be discounted and is very prevalent. The pyrrhotite mineralization is the same that prevails throughout the Sudbury area and is probably nickeliferous but, to date, no assays have been made. The molybdenite content of the intrusive and wall rocks could be an important adjunct to the commercial possibilities of this zone. The tungsten content, as shown by spectographic analysis, should be thoroughly investigated. The zinc and precious metal contents are only indicated and only systematic sampling will determine such contents.

RECOMMENDATIONS

It suffices to say that the presently exposed discovery zone on this property is available for examination for a length of at least 2000 feet. There appears a reasonable chance that other parallel zones will be located as work progresses. The mineralization is such that exploration by diamond drilling along the discovery zone is well warranted. Any amount of surface sampling could be done to ascertain metal content across exposed widths upto at least twenty-five feet. It is recommended that a base line be established along the strike of the discovery zone and a grid of diamond drill holes be laid out and drilled from north to south as specified to evaluate the commercial possibilities. The cost of initial diamond drilling and geophysical survey will require an expenditure of \$75,000.00. On the basis of the ore to be seen in the pits along the discovery zone this expenditure is fully warranted.

Respectfully submitted,

Harold G. Way, Ph. D
Consulting Geologist

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CERTIFICATION

TO WHOM IT MAY CONCERN

I, Harold G. Way, residing at 31 Attic Street, Lennoxville, Quebec, do hereby certify as follows :

1. THAT I am a geologist residing as above.
2. That I hold the following degrees in geology :
Bachelor of Science, University of Manitoba, 1931
Master of Arts, University of Toronto, 1933.
Doctor of Philosophy, University of Toronto, 1936.
That I have been practising my profession as a Geologist for over twenty years. I am present employed as consultant for several mining organisations and do private consulting work in areas throughout Canada. I am a member of Canadian Institute of Mining & Metallurgy; a fellow of the Canadian Geological Association; and participate with the American Geological Institute.
3. THAT I have only an indirect interest in the mining properties referred to in the Foster Township report accompanying as a participant in the staking, examination of the workings, and preparation of this report.
4. That the accompanying report was written by me in Espanola, Ontario and was based upon the personal examination of January, 1956.

Dated at Espanola, Ontario, this 31st day of January, 1956.

Harold G. Way, Ph.D
Consulting Geologist.

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REPORT COVERING MINING PROPERTY

LOCATED IN THE CENTRAL PORTION OF

FOSTER TOWNSHIP, SUDBURY MINING DIVISION, ONTARIO

SUMMARY & CONCLUSIONS:

Widespread mineralization consisting of copper and other valuable metals has been located in a well defined fracture zone crossing the central portion of Lots 2 & 9, Concession III, Foster Township, Sudbury Mining Division, Ontario. There are infiltrations of quartz diorite containing excellent mineralization within the fracture zone. Other similar showings are reported on the property but, as yet, only a limited amount of surface exploration has been carried out along a half mile length of this zone of discovery. Exposed widths and the strike length of this zone are impressive and there is an excellent chance of locating commercial concentrations of ore.

The structure and geological assemblages of rocks within the property are ideal and there are already sufficient indications to warrant immediate investigation by diamond drilling and geophysical methods. The strength of the discovery zone is also displayed by the results of the Government airborne geognostic survey which shows a strong linear anomaly extending across the property in an east-west direction in close proximity to the discovery zone. An expenditure of \$75,000.00 to prove or disprove the initial commercial possibilities of the known showings is fully justified and strongly recommended. Naturally, dependent upon the results of this exploration program, major financing may be required.

PROPERTY & LOCATION:

The property consists of twenty-six contiguous claims of approximately fifty acres each or about 1300 acres located in the central portion of Foster Township, Sudbury Mining Division, Province of Ontario. More specifically the mining claims are recorded with the Department of Mines, Ontario as follows:

The South $\frac{1}{2}$ of lot 7, Concession IV, being Mining Claims 91955-91956.

All of lot 7, Concession III, being Mining Claims 91956-91957-91949-91950-91951-91952-91953-91954.

All of lot 8, Concession III, being Mining Claims 89097-91315-89095-89094-91968-91957-91969-91966.

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All of Lot 9, Concession III, being Mining Claims 91313-89096-91314-89095-91972-91970-91973-91971.

The twenty-six mining claims have been certified as being in good standing and transfers are held according to standard practice.

ACCESSIBILITY, MANITOWAN, ETC.

The property herein described lies seven miles south-easterly from the Town of Espanola, Ontario. Espanola is forty-eight miles west of Sudbury on Highway No. 17 leading to Sault Ste. Marie. From Espanola the property is reached over the main highway leading south to Manitowish Island and thence eastward over the Panora Lake road which branches from the main highway immediately south of the Town. The Panora Lake road traverses the entire east-west direction of the property and is serviceable year-around.

The hydro-electric service line for the area, extending northeasterly to Sudbury, passes within one mile of the east boundary of the property and, if required, electric power for all mining and milling purposes should be available on short notice of need.

There is, within the immediate area, an abundance of labor for all needs of surface or underground exploration. This reference is made to the generation who were reared on the doorstep of the "Sudbury Basin" and, who, have lived with the mining developments at such close range.

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The recent rapid rise to nearly an all-time high, for the price of copper, has led to a renewed investigation of copper showings that were originally explored when precious metals were the prime commodity. A summary of the old showings within the area are briefly described by E. S. Moore, 1930; Ont. Dept. of Mines; Vol. XVIII, Part VII; entitled - "Ore Deposits near the North Shore of Lake Huron". Pages 48 & 49 of said report describe numerous showings in Foster Township of interest today but which were being explored for precious metal contents at that time. The reference is made to a sixty foot width of

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"The most abundant sulphides are pyrite and pyrrhotite. There is also a little chalcopyrite."

The presence of metals, other than gold or silver, was unimportant at the time of the report of E. G. Moore in 1920. Recently the price and demand for a multitude of new metals has resulted in a renewed activity of the previously known mineral deposits. As a direct result of this renewed search new mines are being developed at a rapid rate within or close to the previously known so-called gold discoveries.

GENERAL GEOLOGY:

The property is underlain largely by the upper quartzite formation and the Niagara graywacke which are usually designated as a part of the base section of the Lower Huronian. These sediments have been intruded by dikes and dykes by basic intrusives (quartz diorite and diabase) along the regional fracture pattern. These intrusives are Keweenawian in age and, as in the Sudbury area, economically the most important source of ore. Practically all ore deposits containing copper, nickel and cobalt which are found in this type of basic intrusive.

In the immediate area along strike of the discovery zone the normal dip of the upper quartzite is steeply to the west and strike is normally north seventy degrees east. This attitude is borne out by the aeromagnetic survey of the Dominion Government.

Due to the state of things at the time of examination it was impossible to study other reported areas of mineralization within the property. However, all of the trenches and pits located along the discovery zone had been well cleaned out for examination.

Topography of the area suggests structural features which need detailed study. For instance, a marked depression extends easterly parallel to the discovery zone on the immediate south border of same. From the most westerly known exposure of this zone on the top of the hill on claim 89055 this depression can be sighted as a structural detail extending easterly for at least three miles. From this high point of elevation several parallel depressions can be noted which cross the property. Along the margins of two of these there are reported zones of similar mineralization but no work done to date. There are

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rare exposures of rock within the depressions and the fact that excellent mineralization is exposed along the bordering hillside would suggest excellent possibilities for locating mineral deposits beneath the depressions. This possibility can only be ascertained by means of diamond drilling or geophysical methods.

EXPLORATION TO DATE

Work last fall was concentrated on opening a series of rock trenches along approximately 2000 feet of what is described as the discovery zone of mineralization that crosses claims 8993 and 8995 parallel to the Panama Lake road about 400 feet south of same. The pits and trenches are at about fifty foot intervals and make it possible to study this zone of mineralization. As stated previously this zone corresponds with a portion of the strong anomaly shown on the aeromagnetic map of Foster Township by the Department of Mines, Province of Ontario. The actual anomaly may lie beneath the linear depression described but the fact remains that excellent mineralization exists in the exposures of the pits and rock trenches.

Aside from limited prospecting of the property which has located other interesting mineralized areas the work has been confined to the discovery zone.

The zone exposed in the series of pits and trenches is a well-defined east-west striking fracture into which intrusive quartz diorite has been injected. The mineralization within the intrusive consists of disseminated chalcocopyrite, pyrite, pyrrhotite, sphalerite, molybdenite and minerals associated with the precious metal group usually associated with this type of mineralization in the Sudbury area. The contents of any individual metal cannot yet be ascertained or any average approximated but from visual examination of the outcrops of this material along the 2000 foot length exposed it appears a reasonable estimate that the copper content alone is between two and three percent; there is an appreciable content of pyrrhotite that may be nickeliferous; there are quartz phases on either contact of this zone of quartz diorite which delineate the zone. In these quartz phases and impregnated into either wall of the zone are disseminations of molybdenite and chalcocopyrite. This type of mineralization adds evidence, in the opinion of the writer, to the structural strength of the occurrence. Furthermore, a recent spectrographic analysis by the Toronto Testing Laboratory, January 10th, 1956 - Laboratory No. 3591 & 5154, shows the normal intrusive material, which contains disseminated mineralization, contains a high content of tungsten within the range of one to ten percent. Assays of samples from numerous pits along strike of this zone show consistent copper content of between two to nine percent. From visual examination of this zone, by the writer, it appears that the copper content alone is between two and three percent. The molybdenite content cannot

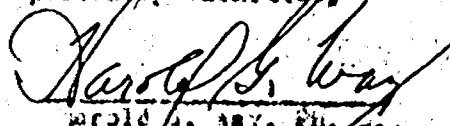
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PHOENIX, ARIZONA

be discounted and is very prevalent. The pyrrhotite mineralization is the same that prevails throughout the Sudbury area and is probably nickeliferous but, to date, no assays have been made. The polydenite content of the intrusive and wall rocks could be an important adjunct to the commercial possibilities of this zone. The tungsten content, as shown by spectrographic analysis, should be thoroughly investigated. The zinc and precious metal contents are only indicated and only systematic sampling will determine such contents.

RECOMMENDATIONS:

It suffices to say that the presently exposed discovery zone on this property is available for examination for a length of at least 2000 feet. There appears a reasonable chance that other parallel zones will be located as work progresses. The mineralization is such that exploration by diamond drilling along the discovery zone is well warranted. Any amount of surface sampling could be done to ascertain metal contents across exposed widths up to at least twenty-five feet. It is recommended that a base line be established along the strike of the discovery zone and a grid of diamond drill holes be laid out and drilled from north to south as specified to evaluate the commercial possibilities. The cost of initial diamond drilling and geophysical survey will require an expenditure of \$75,000.00. On the basis of the ore to be seen in the pits along the discovery zone, this expenditure is fully warranted.

Respectfully submitted,



Harold G. Way, Ph.D.
Consulting Geologist

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LENNOXVILLE, P.Q.
PHONE LORRAINE 7-4080

CERTIFICATION

TO WHOM IT MAY CONCERN:

I, Harold G. Way, residing at 51 Atto Street, Lennoxville, Quebec do hereby certify as follows:

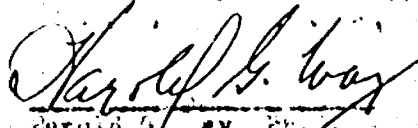
1. THAT I am a geologist residing as above.
2. THAT I hold the following degrees in Geology:
Bachelor of Science-University of Michigan-1951
Master of Arts-University of Toronto-1955
Doctor of Philosophy-University of Toronto-1956.

That I have been practicing my profession as a Geologist for over twenty years. I am presently employed as consultant for several mining organizations and do private consulting work in areas throughout Canada. I am a member of the Canadian Institute of Mining & Metallurgy; a fellow of the Canadian Geological Association; and participate with the American Geological Institute.

3. THAT I have only an indirect interest in the mining properties referred to in the Foster Township report accompanying me as participant in the staking, examination of the workings, and preparation of this report.

4. THAT the accompanying report was written by me in Espanola, Ontario and was based upon the personal examinations of January, 1956.

Dated at Espanola, Ontario this 1st day of January, 1956.


HAROLD G. WAY, PH.D.
Consulting Geologist.

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