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A REPORT ON THE WIGGLE CREEK GOLD
PROPERTY OF RAYLLOYD MINES AND
EXPLORATIONS LTD., SAVANT LAKE AREA,
ONTARIO.

RECEIVED

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MINING LANDS SECTION

January 19, 1983

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TABLE OF CONTENTS

	<u>Page No.</u>
SUMMARY.....	(i)
INTRODUCTION.....	1
PROPERTY LOCATION, ACCESS.....	1
LAND TENURE, OWNERSHIP.....	3
HISTORY OF PROPERTY.....	4
GENERAL GEOLOGY.....	6
ECONOMIC GEOLOGY.....	8
GENERAL CONSIDERATIONS.....	8
THE WIGGLE CREEK GOLD PROSPECT.....	9
GEOPHYSICAL SURVEYS.....	10
ANOMALY INVESTIGATION.....	12
ANOMALY DRILLING.....	13
GEOCHEMICAL ASPECTS.....	15
INTERPRETIVE CONSIDERATIONS.....	16
EVALUATION, REQUIREMENTS.....	18
GENERAL CONSIDERATIONS.....	18
EVALUATION PROGRAM.....	18
ESTIMATED PROGRAM COST.....	21
CONCLUSIONS AND RECOMMENDATIONS.....	22
CERTIFICATE OF QUALIFICATION.....	23

Figures & Plans

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	<u>Following Page</u>
Figure 1- General Location Plan, Raylloyd Property.....	1
Figure 2- Claim Location Plan, Raylloyd Property...	3
Figure 3- General Geology of Savant Lake Area.....	6
Figure 4- Aeromagnetic Plan of Savant Lake Area....	7
Figure 5 - Plan of Wiggle Creek Prospect.....	9
Map No. 1- Geological Plan, Raylloyd Property.....	In Pocket
Map No. 2- Aerogeophysical Map, Raylloyd Property..	In Pocket
Map No. 3- Magnetic Contour Plan of the Raylloyd Property.....	In Pocket
Map No. 4- VLF-EM Survey, Raylloyd Property.....	In Pocket
Map No. 5- VLF-EM Contour Plan, South Grid Area, Raylloyd Property.....	In Pocket
Map No. 6- VLF-EM and Magnetic Contour Plan of the North Grid Area, Raylloyd Property.	In Pocket

TABLE OF CONTENTS (CONT.)

Appendices

- Appendix I - Listing of Some Sources of Information on the Raylloyd Property, and the Savant Lake Area.
- Appendix II - Listing of Data Relevant to the Raylloyd Anomaly Investigation Program.
- Appendix III- Assay Certificates For Samples From the Raylloyd Property.
- Appendix IV - Chemical Analyses of Rock Samples From the Wiggle Creek Area.

SUMMARY

This report on the Wiggle Creek gold property of Raylloyd Mines & Explorations Ltd. has been prepared by G.M. Hogg, P.Eng., at the request of that Company. The property lies in McCubbin Township of the District of Thunder Bay, Ontario, approximately 15 miles north of the town of Savant Lake on Highway 599.

The property consists of 29 unpatented mining claims located within the Savant-Kashaweogama metasedimentary basin. The Wiggle Creek gold prospect lies in the northern part of the property, within a siliceous and pyritic facies of iron formation which is variably metamorphosed. In this location gold is found closely associated with arsenopyrite in narrow quartz veining, and values ranging from 0.12 oz.Au/ton to 2.50 oz.Au/ton have been reported from grab samples of such material. This auriferous and stratabound mineralized zone has been observed to extend over a minimum strike length of 300 feet, and gold distribution within it appears to be controlled to some extent by minor folding. The prospect area has not been drill tested.

Major folding within the metasedimentary basin has caused repetition of the contained auriferous iron formation unit(s) in other parts of the property. This feature is confirmed by geophysical data and anomaly examination. Several geophysically-defined targets exist, particularly in the southern part of the property, and these warrant drill testing.

Gold in the area is stratabound, and believed of sedimentary origin. As such, strong gold concentrations related to original paleosurface depositional features may occur within favourable strata, which themselves extend over considerable distances within the greater metasedimentary basin. The Raylloyd property is particularly well located in the exploration sense, since structural conditions therein have produced repetition of this favourable depositional horizon several times within a relatively small area.

An initial program of evaluation for the Raylloyd property consisting mainly of drilling on the Wiggle Creek prospect and geophysically-defined targets has been recommended. The cost of this basic program is estimated at \$ 278,630. The initial program is considered minimal, however, so a provisional program for more detailed evaluation is suggested. If warranted, this provisional program will involve the expenditure of an additional \$ 175,560.

INTRODUCTION

This report on the Wiggle Creek gold property of Raylloyd Mines & Explorations Ltd. (Raylloyd) has been prepared by G.M. Hogg, P.Eng., at the request of Mr. R.G. Ramsay, vice-president and director of that Company. The Wiggle Creek property is located in the central part of McCubbin Township, Ontario, approximately 15 miles north of the town of Savant Lake.

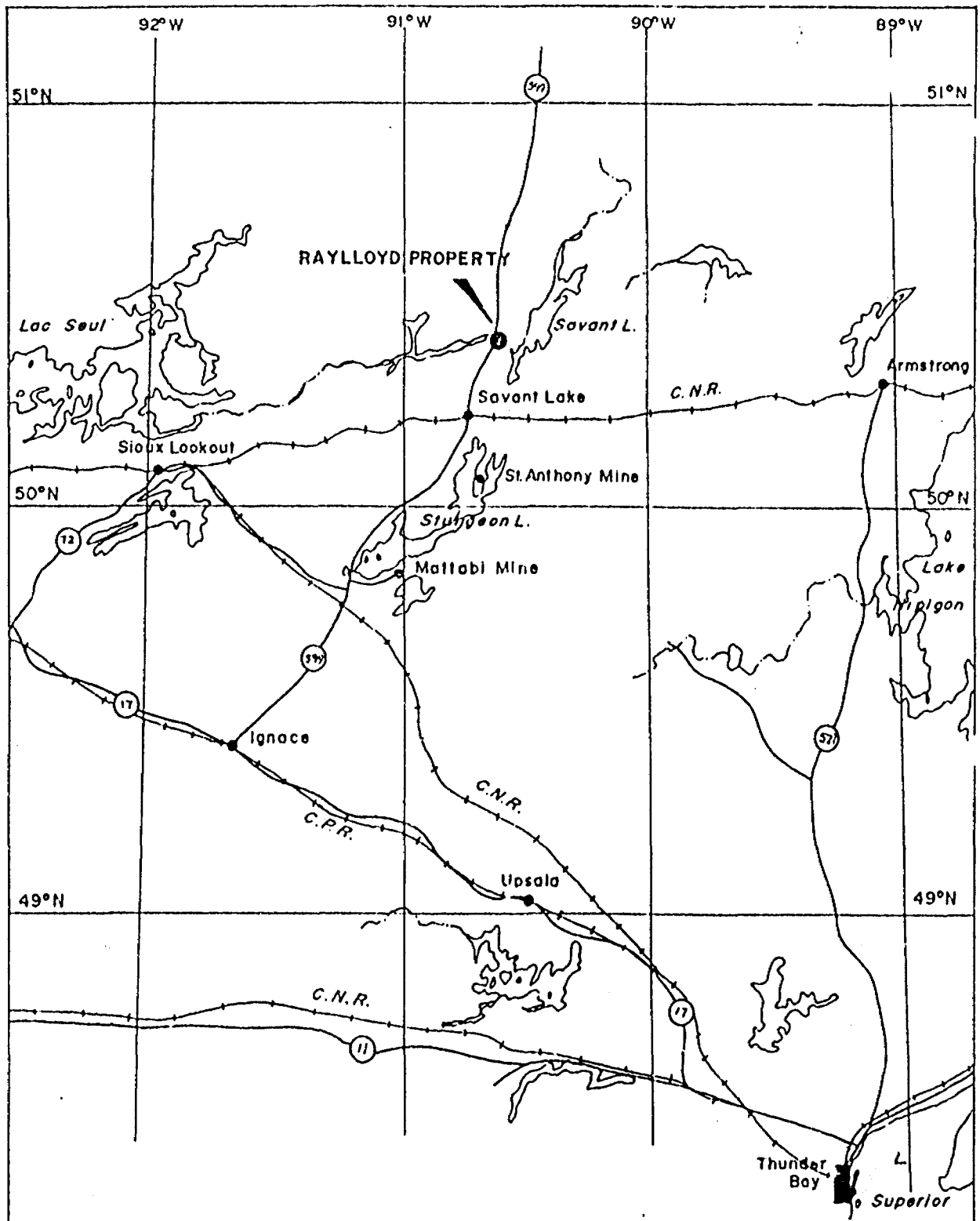
The purpose of this study is to provide an assessment of the economic potential of the property, and to recommend an appropriate program for its further evaluation.

Information available on the property includes that published by, and retained in the assessment files of the Ministry of Natural Resources of Ontario, that supplied by Raylloyd, and that acquired by the writer through personal observation. The property was last visited by the writer relevant to this study on January 4th and 5th, 1983.

The available data is considered of sufficient detail and accuracy to support the conclusions reached herein. The aid and cooperation of Raylloyd and the personnel of the Ministry of Natural Resources of Ontario in the performance of this study is gratefully acknowledged.

PROPERTY LOCATION, ACCESS

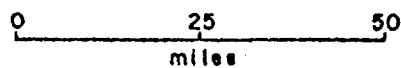
The Raylloyd property consists of twenty-nine unpatented mining claims located in the central portion of McCubbin Township, Ontario, within the Patricia Mining Division of the Administrative District of Thunder Bay. It lies between Savant Lake and Kashaweogama Lake, at the intersection of latitude $50^{\circ} 26' N$, and longitude $90^{\circ} 37' W$ (see Figure 1).



G.M. HOGG & ASSOCIATES LTD.

GENERAL LOCATION PLAN
 RAYLLOYD PROPERTY, SAVANT LAKE AREA, ONT.

Figure 1



Highway 599, connecting the communities of Ignace, Savant Lake and Pickle Lake passes through the central part of the property, and it is thus easily accessible by road at all times of the year. The trans-continental line of the Canadian National Railway passes through the town of Savant Lake, 15 miles south of the property.

Within the property area a gravel road extends westerly from Highway 599 to Kashaweogama Lake. An unimproved bush road also runs across the southeastern part of the property towards Grebe Lake. Otherwise access to the interior parts of the property is along trails and cut lines.

The property is well wooded with pine, spruce and poplar, and the Great Lakes Paper Company carries on pulp cutting in the general area. Scattered outcrop occurs over most of the property, but the southwest portion is outcrop-poor (see Map No. 1, in pocket).

The property area lies approximately 1,300 feet above sea level, and exhibits a maximum local relief of about 50 feet. The area drains west through the Marchington River and Wiggle Creek into Kashaweogama Lake, and the eastern extremity of Kashaweogama Lake extends onto the property. Savant Lake lies four miles to the east.

No mining operations exist in the vicinity of the property, but gold and base metal prospects and substantial concentrations of magnetic iron formation are known throughout the general area. The St. Anthony gold mine, closed during the 1940's after many years of operation, lies approximately 25 miles to the south, and the Mattabi base metal mine 40 miles south. Both of these deposits lie within the Sturgeon Lake area.

Electrical power, labour, and supply points suitable for the support of a mining operation are readily available in the area.

LAND TENURE, OWNERSHIP

The Raylloyd property consists of twenty-nine unsurveyed and unpatented mining claims, comprising 1,160 acres, more or less. The claim locations are shown in Figure 2 herein.

Our examination of the claim records of January 5, 1983, shows the claims registered jointly to Raylloyd Mines & Explorations Ltd. and Ram Petroleum Ltd. Each hold a registered 50 percent ownership position in the lands. There are no other liens or claims against title to the lands noted.

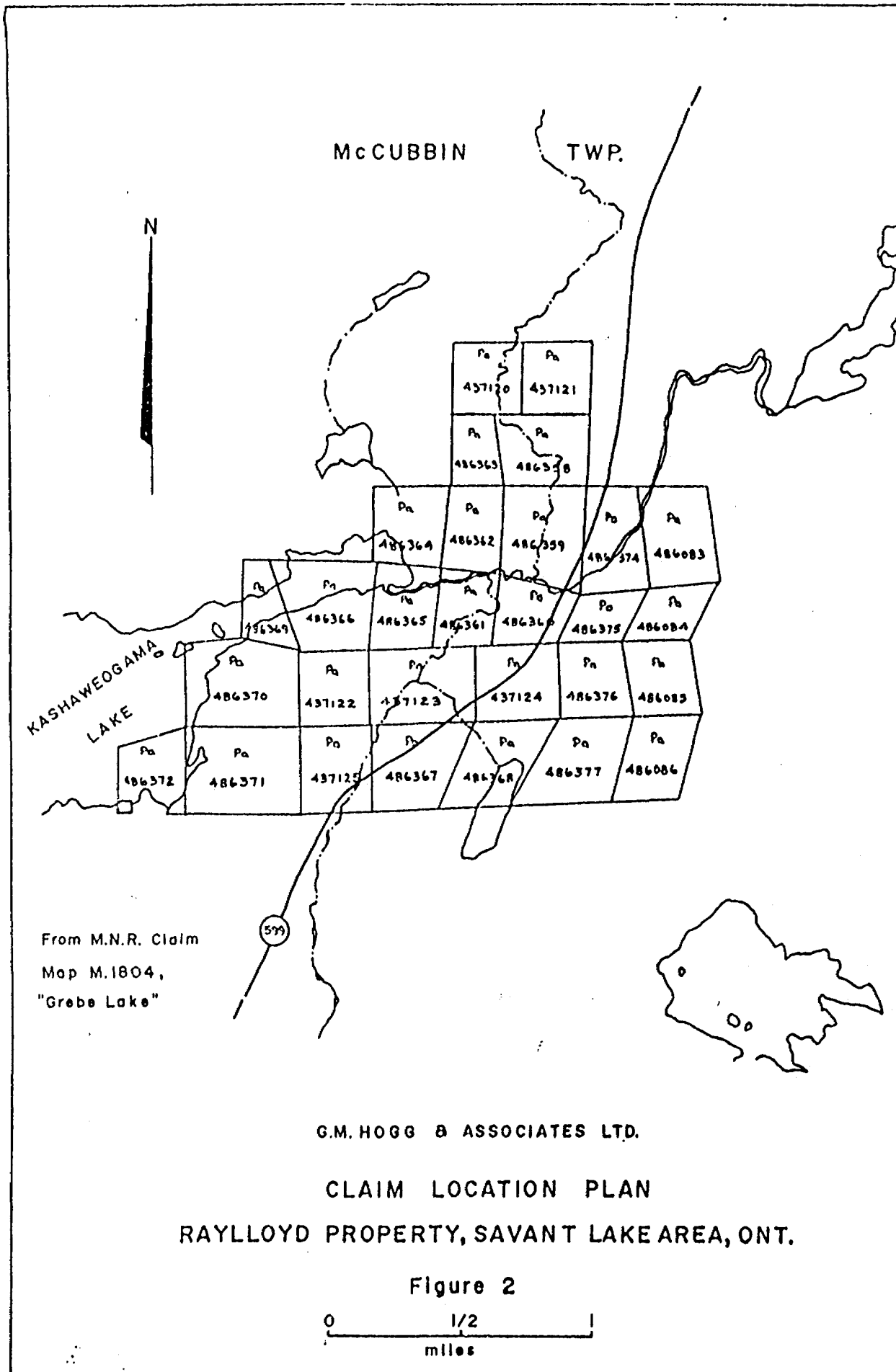
An existing agreement between Raylloyd and Ram Petroleum allows for the assignment of the Ram Petroleum position to Raylloyd on the expenditure of \$ 150,000 by Raylloyd on the property. On assignment Ram Petroleum will retain a 3 percent net smelter royalty on mineral production from the lands.

The claims are in good standing with the earliest date requiring additional assessment work submission in September, 1983. Additional creditable work has been performed on the claims by Raylloyd, but has not been submitted as yet.

The claims included in the property may be listed as follows:

<u>Claim No.</u>	<u>Township</u>	<u>Registered Owner</u>
Pa 437120	McCubbin	Raylloyd Mines 50%; Ram Petroleum 50%
Pa 437121	"	"
Pa 437122	"	"
Pa 437123	"	"
Pa 437124	"	"
Pa 437125	"	"

(continued)



(claim listing, continued)

<u>Claim No.</u>	<u>Township</u>	<u>Registered Owner</u>
Pa 486083	McCubbin	Raylloyd Mines 50%; Ram Petroleum 50%
Pa 486084	"	"
Pa 486085	"	"
Pa 486086	"	"
Pa 486358	"	"
Pa 486359	"	"
Pa 486360	"	"
Pa 486361	"	"
Pa 486362	"	"
Pa 486363	"	"
Pa 486364	"	"
Pa 486365	"	"
Pa 486366	"	"
Pa 486367	"	"
Pa 486368	"	"
Pa 486369	"	"
Pa 486370	"	"
Pa 486371	"	"
Pa 486372	"	"
Pa 486374	"	"
Pa 486375	"	"
Pa 486376	"	"
Pa 486377	"	"

HISTORY OF PROPERTY

The Savant Lake area was first prospected for gold during the early 1900's, as was the Sturgeon Lake area to the south. Such work was continued intermittently through the 1920's and 1940's, with trenching and some drilling completed in a few locations during the period. Reference to the area is found in the Ontario Department of Mines Annual Report Vol. 37, Pt. IV, 1928 (E.S. Moore), and the Ministry of Natural Resources (Ont.) Geoscience Report 160, 1977 (W.D. Bond). The date of discovery of gold associated with heavy arsenopyrite in the Wiggle Creek area is uncertain, but believed during the 1940's.

Prominent in gold exploration in this area during the 1940 period was Northern Canada Mines Ltd. Most of this company's work was centered in the Stillar Bay-One Pine Lake area of Poisson Township, to the east of the Raylloyd property. However, it is possible that they located the Wiggle Creek prospect at this time.

During the 1960's considerable evaluation work was carried out on the magnetite iron formations of the area. Algoma Steel Corporation and Pershland Gold Mines Ltd. were the chief operating entities at this time. The Kashaweogama magnetite deposits, lying about three miles west of the Raylloyd property, were located and tested during this period.

Through the late 1960's and the 1970's, prompted at one stage by the discovery of the Mattabi copper-zinc-silver deposit at Sturgeon Lake, considerable base metal exploration work was completed in the Savant-Kashaweogama area. Participants included the International Nickel Company (INCO), Noranda Exploration Co., Dome Exploration Ltd., Falconbridge Copper Corp., and Amalgamated Rare Earth Properties Ltd. Aerogeophysical surveying was done over the area, and some anomaly test holes were drilled by INCO in the southern part of the Raylloyd property at this time.

Recently, with renewed interest in gold, claims were acquired in the area by Raylloyd Mines & Explorations Ltd., Ram Petroleum Ltd., and Mr. R.G. Ramsay. Stargazer Resources Ltd. of Calgary has also acquired large claim areas, some of which adjoin the present Raylloyd property area in the Wiggle Creek area. In 1981 Raylloyd and Ram Petroleum, and Stargazer Resources completed aerogeophysical surveys over their property holdings, and Stargazer Resources completed biogeochemical surveying over their claim groups.

During 1982 Raylloyd completed ground geophysical surveying, trenching and sampling on the Wiggle Creek property. Also, in the vicinity, Stargazer Resources carried out some follow-up work on their geochemical survey results.

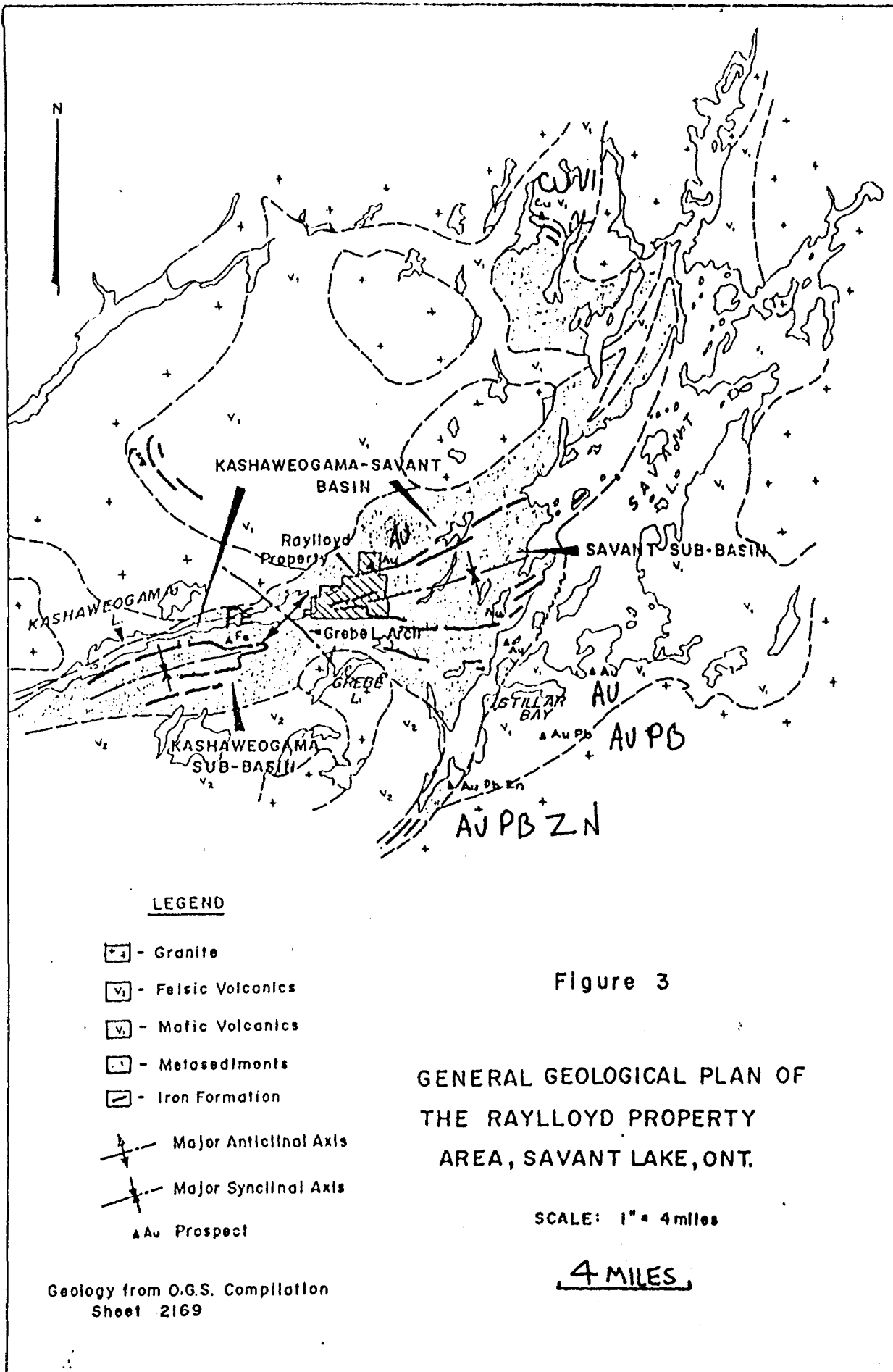
GENERAL GEOLOGY

As shown in Figure 3, the Raylloyd property is centrally located in what has been identified as the Savant-Kashaweogama metasedimentary basin. The contained metasediments are surrounded by granitic rocks and mafic to felsic volcanics. Within the metasedimentary basin area magnetite iron formation with associated iron formation facies, arenaceous and argillitic sediments, and mafic tuffaceous units predominate. All rocks of the area are considered Archean in age.

The metasediments and surrounding volcanics are interpreted to represent a deeply infolded remnant of an ancient paleosurface; a dominantly volcanic terrain on which sediments were deposited in a relatively shallow marine environment. Later orogenic activity involved the deep infolding of these rocks, and the extensive development of enclosing granites through both intrusion and recrystallization processes. There is tenuous continuity between the Savant-Kashaweogama basin and the Sturgeon Lake basin to the south, extending southwesterly through Stillar Bay, so these areas are likely closely related in age and genetic history.

Structural failure within the Savant-Kashaweogama basin rocks under orogenic action appears to be manifest chiefly in folding. However, both north-south and east-west trending faulting and shearing is in evidence in the area.

In respect to the Savant-Kashaweogama basin, as indicated in Figure 3, granitic intrusion in the vicinity of Grebe Lake and the east end of Kashaweogama Lake produced a northerly trending arch-like structure with resulting thinning of the basinal sedimentary rocks. Thus the gross



basinal structure may be divided into two lobes; the Savant sub-basin, and the Kashawegama sub-basin. This feature is clearly indicated by aeromagnetic data, which shows the iron formation units of the two sub-basin areas to be discontinuous. In Figure 4 the limits of the Savant sub-basin are shown, as defined by aeromagnetic response to the magnetic iron formations.

The Raylloyd property is located at the western extremity, or nose, of the Savant sub-basin, and is underlain mainly by strongly folded iron formation and arenaceous to argillitic metasediments. The metasediments are often highly tuffaceous, and possibly some mafic volcanic flow material is present.

The geology of the property area itself is shown in Map No. 1 (in pocket). Geological data has been taken largely from O.D.M. Preliminary Map P.722, and re-interpreted with the benefit of aerogeophysical data (Map No. 2, in pocket), and ground geophysical information.

As interpreted, the magnetite iron formation and associated iron formation facies occur in easterly-plunging folds, overlain by dominantly arenaceous sediments, and underlain by dominantly argillitic sediments. Mafic tuffaceous units are most common in proximity to iron formation.

In respect to the iron formation itself, banded cherty magnetite-rich material appears underlain by a siliceous, variably carbonated facies of iron formation which is normally pyritic and sometimes argillitic. However, observation opportunities have been limited by outcrop exposure, and this stratigraphic sequence may show local reversals. Where more strongly metamorphosed the siliceous and pyritic unit exists as a quartz-amphibole schist.

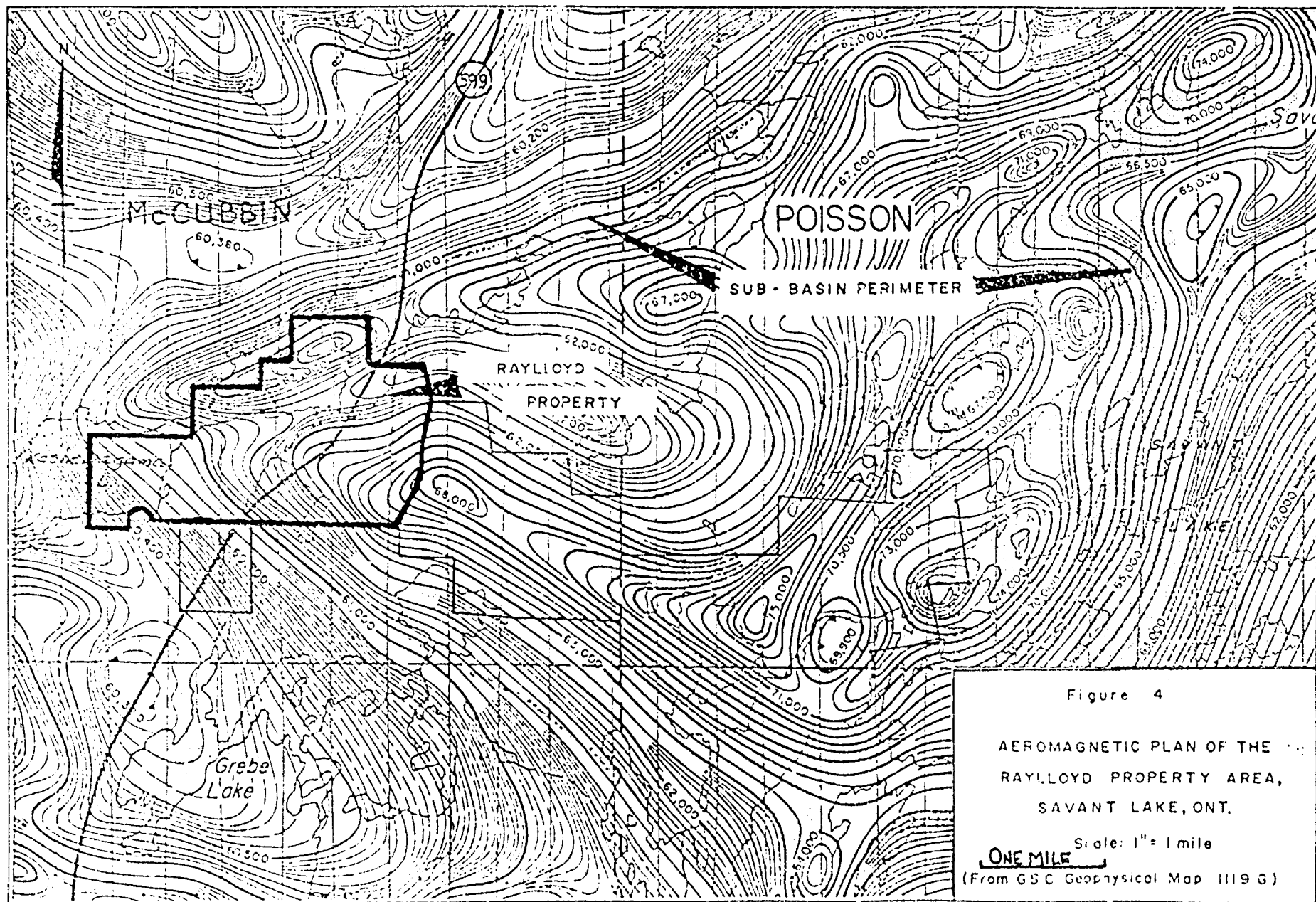


Figure 4

AEROMAGNETIC PLAN OF THE
RAYLOYD PROPERTY AREA,
SAVANT LAKE, ONT.

Scale: 1" = 1 mile

ONE MILE

(From GSC Geophysical Map III 9 G)

ECONOMIC GEOLOGY

GENERAL CONSIDERATIONS:

Iron, gold and base metal occurrences are known throughout the Savant-Kashaweogama basin area. The locations of some of these are shown in Figure 3.

In respect to iron, concentratable cherty magnetite iron formation is common in the area. A sizeable zone of such material occurs within the Kashaweogama sub-basin, about three miles west of the Raylloyd property, and is potentially of economic importance. However, within the Savant sub-basin known cherty magnetite iron formations are relatively thin and lean, and show little promise of economic viability. Interestingly, this feature suggests that somewhat different conditions of sedimentation existed within the two sub-basin areas.

Gold prospects are most common within the Savant sub-basin area, and are found associated with the iron formation, and within the underlying mafic volcanics in the Stillar Bay area (see Figure 3). In metasedimentary areas, gold, accompanied by more or less pyrite and arsenopyrite, occurs within the siliceous and somewhat carbonated facies of iron formation previously noted as underlying the cherty magnetite facies. This marked association indicates the gold to be stratabound in character, and probably of sedimentary origin.

The base metal potential of the area is difficult to assess on the basis of presently available information. A few lead-zinc occurrences have been reported, and disseminated sulphide zones containing very low values in copper, zinc and/or nickel are known to be present. Thus, although the area cannot be rated highly in respect to base metal potential, possibilities exist, and have not been well evaluated.

Sources of information on the Raylloyd property and the surrounding area utilized in this study are listed in Appendix I to this report. Of particular value for general reference is the Ontario Ministry of Natural Resources Geoscience Report 160, by W.D. Bond, 1977.

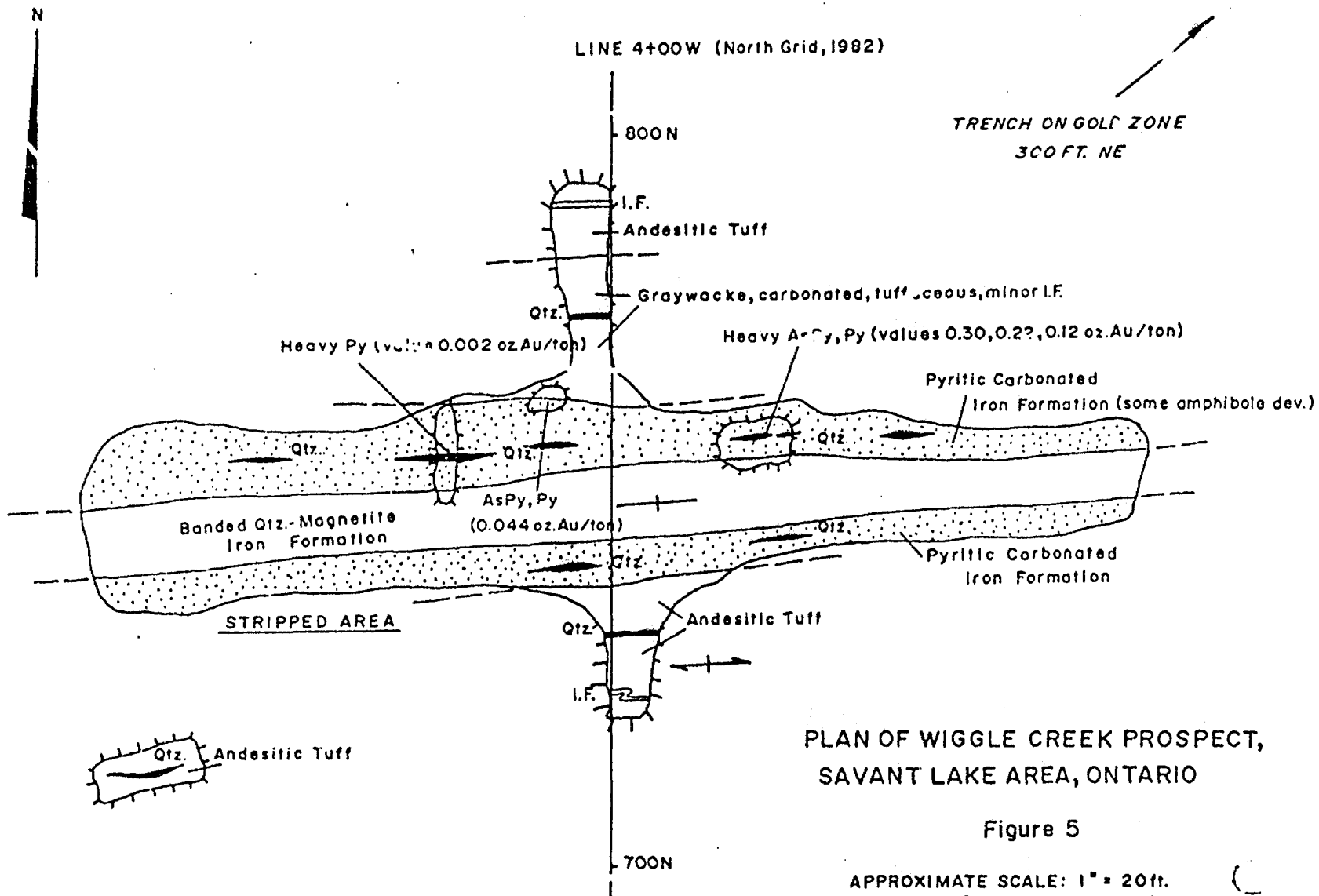
THE WIGGLE CREEK GOLD PROSPECT:

As indicated on Map No. 1 (in pocket) the Wiggle Creek gold prospect is located in the northern part of the Raylloyd property, on line 4W at 7+50N (North Grid). The trenched and stripped area containing the prospect is illustrated in Figure 5 of this report.

Exposed in the stripped area is an easterly striking, vertically dipping bed of cherty magnetite iron formation approximately 10 feet in thickness. Immediately north and south of this iron formation is a siliceous and somewhat carbonated and pyritized rock, considered by the writer to be a pyritic facies of iron formation. This material is from 5 to 10 feet in thickness, and is conformable. These rocks are enclosed in intermediate to mafic tuffaceous rocks, which are schistose, and observed to contain some minor iron formation bands.

Quartz veining is well-developed in the pyritic facies of iron formation, and often contains substantial pyrite and carbonate. Arsenopyrite is also present in places, and sampling has indicated gold to be closely associated with it. From an arsenopyrite-rich sample taken from this location by W.D. Bond (M.N.R. Geoscience Report 160, page 59) a value of 0.22 oz.Au/ton was reported. Similar samples taken by Raylloyd and the writer have yielded values from 0.12 to 0.30 oz.Au/ton. Only low values have been obtained from pyrite-rich mineralized material in which arsenopyrite is absent. No free gold was observed in the writer's examination of the prospect.

In the vicinity of strong quartz veining the development of amphibole is



PLAN OF WIGGLE CREEK PROSPECT,
SAVANT LAKE AREA, ONTARIO

Figure 5

APPROXIMATE SCALE: 1" = 20ft.

20FT

often noted. Locally then, depending on metamorphic conditions, the pyritic iron formation facies may derive to a quartz-amphibole schist.

Other old trenches exist in the vicinity of the prospect, and most have yet to be rehabilitated. However, one such trench lying 300 feet north and east of the prospect was observed to contain quartz veining and arsenopyrite in an environment similar to the main prospect (see Map No.1, 1W at 9+50N, North Grid). A grab sample of massive arsenopyrite taken by R.G. Ramsay of Raylloyd from this location yielded an assay value of 2.50 oz.Au/ton, and 0.31 oz.Ag/ton. Samples of arsenopyrite-bearing vein material taken by the writer in the same locale returned 0.20 oz.Au/ton and 0.04 oz.Ag/ton, and 0.17 oz.Au/ton and 0.05 oz.Ag/ton.

Vein widths in both the main prospect and this second location appear narrow, but bed rock exposure is limited. However, this sampling illustrates that (1) a very strong relationship exists between gold and arsenopyrite in the area, (2) that the pyritic facies of iron formation and/or derived quartz-amphibole schist is a favourable depositional medium for gold, and (3) that the occurrence of substantial gold values is widespread in this general location.

Geophysical survey results in this area will be discussed more fully in the subsequent section, but are illustrated on Map No. 6 (in pocket), and warrant comment at this point. Both magnetics and VLF-EM data show good formational continuity here, and strongly suggest the presence of folding in the vicinity of the gold prospects. This presents an ideal structural environment for the development of veining and the concentration of gold.

GEOPHYSICAL SURVEYS:

The available geophysical data are illustrated on Maps 2 to 6, inclusive (in pocket). The aerosurvey (see Map no. 2) was completed during 1981 by Geophysical Surveys Inc., using a Geonics EM-33 electromagnetic unit,

and a Geometrics Proton magnetometer. The survey was helicopter-borne, and flown on an approximate line spacing of 600 feet, and at an instrument elevation of 120 feet. Ground surveys were completed by R.G. Ramsay in 1982, using a Scintrex MF-2 Fluxgate magnetometer, and a Geonics EM-16 VLF-EM unit. More detailed coverage was completed in the North Grid area than in the South Grid area because of the known presence of gold prospects. The processing and interpretation of the ground geophysical survey data was carried out by the writer.

As noted, the availability of detailed geophysical information has made possible the re-interpretation of the geology of the Raylloyd property area. The property lies at the western extremity of the Savant sub-basin, in a location where the metasedimentary units are strongly folded in a series of series of easterly-plunging anticlines and synclines. The geological picture so derived is illustrated on Map No. 1 (in pocket). Key to this interpretation, of course, is the ground magnetic data (see Map No. 3) through which the distribution of the cherty magnetite iron formation is easily recognized. It appears to form a rather sharp synclinal fold structure in the North Grid area, and a more broad synclinal fold system in the South Grid area. These rocks thin out and disappear toward the west due to uplift along the Kashawegama Arch.

Maps No. 5 and No. 6 show the contoured VLF-EM data in the South and North Grid areas. Relatively strong conductive responses have been identified as anomalies J-1 to J-7, K-1 to K-11, and L-1 to L-10 in the South Grid area, and as anomalies A to H in the North Grid area. All of these anomalous responses appear to be of bed rock source.

In the South Grid area the K series of anomalies are associated with high magnetics, indicating their proximity to iron formation. The J anomaly series lies to the north, and the L series to the south, both in magnetically low environments. In the North Grid area anomalies A to F

are iron formation-associated, and anomalies G and H are not.

While high magnetic responses are clearly related to the presence of iron formation in the area, the source(s) of conductivity defined by VLF-EM surveying are less easily identified. Argillitic sediments containing more or less graphite and/or sulphide mineralization are believed a common cause, but intense shearing, or sulphide disseminations in siliceous rocks may also be detectable. Strong concentrations of magnetite are known to yield VLF-EM responses, but do not appear to do so in this case as conductivity is consistently peripheral to magnetite-rich iron formation where observed.

Of particular interpretive interest, of course, is the magnetic and VLF-EM anomaly association in the North Grid area where the known gold occurrences are located (see Map No. 6). Here the gold prospects are directly associated with strongly magnetic areas, and proximal to areas of high conductivity. Whatever the reason for this relationship, it provides a model on which to assess other anomalous areas within the property area.

ANOMALY INVESTIGATION:

During the latter part of the 1982 field season R.G. Ramsay visited the various anomalously conductive locations as defined by anomaly number on Maps No. 5 and No. 6 (in pocket). This investigation was undertaken to establish the nature of the conducting medium in outcrop if possible, and to examine the geological character of each area. Rock samples were taken in 18 locations, and the samples were subsequently examined and categorized by the writer. These rock samples were then geochemically analyzed for gold and arsenic content, and in a few case metal analysis were requested. Later the writer visited the property to examine and resample some of the original locations examined by Mr. Ramsay.

The numbered sample locations are shown on Map No. 1 (in pocket), and the data concerning them are listed under these sample area numbers in Appendix II to this report. The relevant Certificate of Analysis sheets are included as Appendix III.

This investigation was, of course, limited by the extent of bed rock exposure, but proved highly effective. Twelve anomalous locations were examined in the North and South Grid areas, outcrop being exposed in the conductor vicinity in ten cases, and bed rock-related float in two others. Of ten conductive locations situated in magnetically active areas (iron formation-associated), five contained quartz-amphibole schist which has been noted as derived from the siliceous pyritic iron formation facies. Four of these occurrences were located in the South Grid area, where not previously recognized, and all proved anomalous in gold, arsenic or both.

In the course of this investigation the gold prospect situated in the Anomaly A area of the North Grid (at 1W 9+50N) was identified, from which grab sample values from 0.17 oz.Au/ton to 2.50 oz.Au/ton have been reported; and a sample returning 0.02 oz.Au/ton was taken in the Anomaly K-1 area of the South Grid (40W 6+70S). These locations were examined by the writer subsequent to Mr. Ramsay's sampling.

Most importantly, however, the widespread presence of quartz-amphibole schist in the South Grid area indicates that this auriferous formational unit extends over a large part of the property, repeated at or close to surface by folding action.

ANOMALY DRILLING:

During 1967 and 1968 INCO performed some anomaly test drilling in and around the present Raylloyd property area. These anomalous locations

were defined in the course of an aerogeophysical exploration program in the general area, and represent strongly conductive zones which were verified by ground electromagnetic survey prior to drilling.

Three of these holes are of relevance to the Raylloyd property, and the locations of two of them are indicated in the South Grid area as shown on Map No. 1 (in pocket). The third hole was drilled to the west of the southwestern property boundary in Kashaweogama Lake, but has bearing on the character of the L Anomaly series of the South Grid area (see Map No. 5, in pocket).

The results of this drilling, exclusive of assay values which are unavailable, may be summarized as follows:

INCO Hole 43497-0: (0+30E, 3+10S, South Grid; West end of Anom. K-8)

Drilled at Az. 180°, dip -50°, to a depth of 440 ft. Tuff and andesitic flow material reported. Dissem. pyrite over 36 ft. core length noted.

INCO Hole 43498-0: (15+40W, 20+50S, South Grid; West end of Anom. L-7)

Drilled at Az. 0°, dip -65°, to a depth of 272 ft. Schist and tuff intersected. Quartz and carbonate stringers noted. Pyrite present in massive and dissem. zones. Hole lost at 272 ft. depth after passing through 9 ft. of heavy disseminated pyrite.

INCO Hole 43500-0: (Approx. 76+00W, 15+00S, South Grid extension)

Drilled at Az. 167°, dip -55°, to a depth of 419 ft. Tuff and graphitic schist reported, with light dissem. pyrite.

The sulphide mineralization intersected in these holes was mainly pyritic, but reportedly contained traces of chalcopyrite and sphalerite. It is not known if this material was assayed for gold content. Hole 43500-0 was drilled on a multiple conductive system, and intersected graphitic material. These conductors appear to extend into the Raylloyd property

into the vicinity of the westernmost anomalies of the L series, and accordingly graphite may be the major conductive medium in this area.

GEOCHEMICAL ASPECTS:

During 1981 the writer collected some rock samples from the property vicinity to aid in initial evaluation of its economic potential. Mafic rocks were desired, specifically to determine if certain geochemical features related to base metal and gold deposition existed therein. Four samples were taken, these being from the only exposures of such rocks reported in the area. The descriptions of these samples and the analytical results are included in this report as Appendix IV.

Whole rock analysis results indicate the andesite/diorite material (samples 8048 and 8049) to be of calc-alkaline character, and distinctly komatiitic in nature. Such rocks are often found basal to gold-bearing paleosurface contacts. While the dioritic material is lower in sodium content than the "unaltered andesite", the calcium content is somewhat higher. If alteration related to base metal deposition took place within the diorite, both these constituents should show depletion.

The samples from Kashawogama Lake are both silica-rich, and are geochemically similar. Accordingly, they are both thought best described as schistose and tuffaceous graywacke.

Orientation biogeochemical surveying was carried out in the Wiggle Creek prospect area by Stargazer Resources early in the 1981 field season. This location was selected as it contained the only known gold occurrence in the geological environment selected for their regional geochemical survey program. It is understood that humic samples from the prospect area yielded values in the range of 50 to 60 parts per billion Au, against a background of from 0 to 5 parts per billion. Not surprisingly, arsenic values were also noted as high in the prospect vicinity.

The anomaly evaluation work undertaken by R.G. Ramsay of Raylloyd during 1982, previously described, cannot be construed as a geochemical survey progr. . Nonetheless, the results of geochemical analysis for gold and arsenic on the various rock samples collected at the time have certain important implications.

If, in considering the geochemical analysis results shown in Appendix II, an anomalous value for gold is taken as 0.20+ parts per million (0.006 oz.Au/ton), and for arsenic at 30+ parts per million (0.06% As), then nine of thirteen of the conductive locations examined yielded anomalous values in gold, arsenic, or both. Many of the sampled locations are considerably in excess of these levels, especially in the North Grid area.

The results are particularly significant in the South Grid area, however, where rocks from the vicinity of magnetically-associated conductive zones proved geochemically anomalous in six of eight sampled locations. These include VLF-EM conductors K-1, K-3, K-5, K-6, K-7 and K-8. Such results should not be considered as necessarily indicative of the presence of gold in economically important quantities in these locations, but are highly supportive of the concept that gold is essentially stratabound in the area, and that the most favourable metasedimentary unit occurs widely dispersed over the Raylloyd property.

INTERPRETIVE CONSIDERATIONS

As indicated on Map No. 1 (in pocket), the magnetite iron formation and associated iron formation facies of the area are interpreted to occur in a sharp synclinal fold structure in the North Grid location, and in a broad synclinal fold system in the South Grid area of the Raylloyd property. These folds appear to plunge to the east, thinning out to the west against the Kashaweogama Arch structure.

Gold mineralization at significant levels occurs associated with arsenopyrite and quartz veining in a pyritic facies of the iron formation in the North Grid area. Geological and geochemical evidence suggests that these same auriferous strata occur in the South Grid area, repeated by folding.

It is considered probable that this strongly auriferous, pyritic and somewhat carbonated horizon represents a depositional locus, formed in a shallow marine environment on an Archean paleosurface. Gold, with arsenic and iron, was likely concentrated by sedimentary and geochemical processes on this surface, to be infolded and preserved during the formation of the Savant-Kashawogama basin. This variably metamorphosed depositional horizon, deformed through orogenic activity, has been exposed fortuitously and with some frequency in the Raylloyd property area.

The trace of cherty magnetite iron formation, which is not highly auriferous, has been defined in the property area by magnetic survey. Peripheral zones of low to moderate conductivity have been defined by VLF-EM survey. The known gold occurrences, however, appear to lie between zones of high magnetics and stronger conductivity, the most favourable depositional strata apparently being neither magnetic, nor particularly conductive (see Figure 6, in pocket).

The reason for the presence of higher levels of conductivity peripheral to known areas of gold occurrence is not understood at this time. Indeed, this may not always be the case, but is a feature of the present model. Possibly such zones may represent more profound depositional areas in which carbonaceous or pyritic materials were concentrated on the original paleosurface, to remain effective during later deposition of gold.

Minor folding is also geophysically indicated in areas of known gold

occurrence in the North Grid area. Such deformation could well influence the formation of veining and local redistribution of gold and related materials.

EVALUATION REQUIREMENTS

GENERAL CONSIDERATIONS:

The Raylloyd property has been adequately explored by prospecting, geological and geophysical methods at this time. A gold-bearing structure over a minimum strike length of 300 feet, and several attractive geophysical targets have been identified within the North and South Grid areas.

It is our opinion that the property warrants mainly drill testing at this point. The program should be designed to evaluate the Wiggle Creek prospect area of the North Grid to shallow depths, and perform primary evaluation of specific targets within the South Grid area.

The initial test program will be developed on what is considered a minimal basis, with a suggested provisional program to allow for some ongoing evaluation of auriferous zones of promise which may be encountered. Should little or no encouragement result from the initial program, the total expenditure estimated for the provisional program would not be necessary.

EVALUATION PROGRAM:

The initial program recommended consists of a series of nine drill holes along the strike of the Wiggle Creek prospect in the North Grid area. Drill hole spacing for the preliminary program will be no less than 100 feet, and there is no provision for depth exploration. The holes should be no less than 400 feet in length at a dip of -45° in order to

traverse the entire zone of potential interest.

Also in the North Grid area test holes are recommended in the vicinity of the B and C VLF-EM anomalies.

In the South Grid area 11 test holes are recommended in separate anomaly locations. Most of these holes are on anomalies of the K series, since the major auriferous horizon of the area appears to be spatially associated with cherty magnetite iron formation. The J and L series of conductive anomalies show little magnetic association.

All of the test holes in the North and South Grid areas are designed to traverse the complete section between high magnetics and strong conductivity. This should ensure adequate testing of the entire zone of potential interest in each case.

The initial evaluation program allows for a total of 8,700 feet of drilling in 22 holes. The use of AQ wireline drilling equipment is thought satisfactory for the purpose.

The provisional program allows for an additional 5,000 feet of drilling, and an allotment is included for surface trenching and stripping. This work may be required to expose promising mineralized zones which may be encountered in the initial program. The drilling locations are not specified as they will clearly be dictated by the results of earlier work.

The suggested drill hole locations for the initial evaluation program recommended for the Raylloyd property are as follows:

Wiggle Creek Prospect Area:-

<u>Hole No.</u>	<u>Anomaly</u>	<u>Hole Location</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Approx. Depth</u>
1	A/D	North Grid 6W, 10+00N	180°	-45°	400 ft.
2	"	" 4W, 10+00N	"	"	450 ft.
3	"	" 3W, 10+00N	"	"	400 ft.
4	"	" 2W, 10+50N	"	"	400 ft.
5	"	" 1W, 10+50N	"	"	400 ft.
6	"	" 0, 10+50N	"	"	400 ft.
7	"	" 1E, 10+50N	"	"	400 ft.
8	"	" 2E, 10+50N	"	"	400 ft.
9	"	" 4E, 10+50N	"	"	400 ft.

Total of 9 holes for 3650 ft.

North Grid Anomaly Drilling:-

<u>Hole No.</u>	<u>Anomaly</u>	<u>Hole Location</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Approx. Depth</u>
10	B	North Grid 0, 7+00N	180°	-45°	300 ft.
11	C	" 2W, 4+25N	"	"	350 ft.

Total of 2 holes for 650 ft.

South Grid Anomaly Drilling:-

<u>Hole No.</u>	<u>Anomaly</u>	<u>Hole Location</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Approx. Depth</u>
12	K-1	South Grid 40W, 5+50S	180°	-45°	350 ft.
13	K-2	" 24W, 1+50S	"	"	350 ft.
14	K-3	" 8W, 3+50N	"	"	350 ft.
15	K-3 ext.	" 8E, 7+50N	"	"	450 ft.
16	K-4	" 0, 10+00N	"	"	400 ft.
17	K-5	" 32E, 11+00N	"	"	400 ft.
18	K-7	" 36E, 2+00N	"	"	400 ft.
19	K-8	" 8E, 1+50S	"	"	450 ft.
20	K-9	" 20E, 7+50S	"	"	400 ft.
21	L-7	" 4W, 18+00S	"	"	450 ft.
22	J-6	" 20E, 22+00N	"	"	400 ft.

Total of 11 holes for 4400 ft.

Total Program Includes 22 holes for 8700 ft.

ESTIMATED PROGRAM COST:Initial Program:

Diamond Drilling, 8700' @ \$25/ft.	\$ 217,500
Mobilization Cost.....	3,000
Analysis, Shipping Cost.....	5,500
Supervision, Core Logging.....	5,000
Core Handling, Facilities.....	3,800
Administration, Consulting Services.....	9,000
Accommodation, Travel.....	9,500
	<hr/>
Subtotal.....	\$ 253,300
Contingencies (10%)..	25,330
	<hr/>

Total Estimated Cost, Initial Program...\$ 278,630

Provisional Program:

Drilling, 5000' @ \$25/ft.	\$ 125,000
Analysis, Shipping.....	4,700
Supervision, Core Logging.....	5,000
Core Handling.....	1,000
Trenching, Stripping.....	10,000
Mapping, Sampling.....	3,000
Administration, Consulting Services.....	5,500
Accommodation, Travel.....	5,400
	<hr/>
Subtotal.....	\$ 159,600
Contingencies (10%)...	15,960
	<hr/>

Total Estimated Cost, Prov. Program....\$ 175,560

Total Estimated Cost of the Initial and
Provisional Evaluation Programs.....\$ 454,190


CONCLUSIONS AND RECOMMENDATIONS


The McCubbin Township property of Raylloyd Mines & Explorations Ltd. contains an attractive gold prospect in the vicinity of Wiggle Creek. This prospect contains gold closely associated with arsenopyrite in a variably metamorphosed pyritic iron formation. The mineralized zone is probably fold-controlled, is at least 300 feet in strike length, and is presently known only through limited surface exposure and geophysical data. Other target areas exist in the immediate vicinity.

To the south of the prospect area another large area underlain by iron formation is known within the property. Surface work has indicated the gold of the area to be stratabound, and there are indications that gold-bearing metasedimentary units similar to those in the northern part of the property occur here. Several conductive anomalies, often with magnetic association have been defined in this area, and some of these warrant further testing.

A program of evaluation for the property consisting of two stages is recommended. The first, or initial phase will consist almost entirely of drilling. Both the preliminary evaluation of the Wiggle Creek prospect and other anomalous locations in the property area can be completed at an estimated cost of \$ 278,630. It is probable that a second, provisional phase of drilling and trenching will be required for more thorough evaluation of the property. The cost of this provisional program is estimated at an additional \$ 175,560.

Respectfully Submitted,


G.M. HOGG
G.M. Hogg, P. Eng.



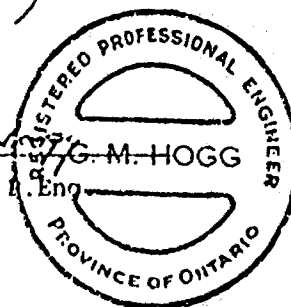
CERTIFICATE OF QUALIFICATION

I, Glen M. Hogg of the City of Toronto, County of York, in the Province of Ontario, Canada, do hereby certify that:

1. I am a Consulting Engineer, principal of the firm of G.M. Hogg & Associates Ltd., with an office located at 28 Thompson Avenue, Toronto, Ontario.
2. I am a member of the Association of Professional Engineers of Ontario, a registered Consulting Engineer with that organization, and designated as a Specialist in the Field of Geological Engineering, Classes of Exploration and Development, as per Regulation 59/73 of the Professional Engineers Act, R.S.O. 1970.
3. I am a graduate of Queen's University of Kingston, Ontario, having received the degree of Master of Science in Geological Sciences from the Faculty of Applied Science in 1952. I have since practised professionally in the field of mineral exploration and development.
4. I have knowledge of, and experience in the region in which the property of Raylloyd Mines and Explorations Ltd. is located.
5. In addition to my personal knowledge of the area, I have made use of the records of the Ministry of Natural Resources of Ontario, and Raylloyd Mines & Explorations Ltd. in the preparation of this report. I last examined the property on January 5th, 1983, relevant to this study.
6. I have no interest, direct or indirect, in the property on which this report is written, nor do I expect to receive any.

Dated this 19th day of January, 1983.


G.M. Hogg, P. Eng.



APPENDIX I

Listing of Some Sources of Information
on the Raylloyd Property Area.

Appendix IListing of Some Sources of Information on the Savant
Lake Area, and the Raylloyd Mines Property

- | | |
|--|---|
| O.D.M. Vol. 37, Pt.IV, 1928 | - Lake Savant Area, District of Thunder Bay; E.S. Moore. |
| O.D.M.-G.S.C. Geophysical Map 1119G, 1961 | - Kashaweogama Aeromagnetic Sheet. |
| G.S.C. Economic Geology Report No. 22, 1965 | - Geology of Iron Deposits in Canada, Vol. 1; G.A. Gross. |
| O.D.M. Geol. Map 2196, 1970 | - Geological Compilation Series, Sioux Lookout-Armstrong Sheet; J.C. Davies et al |
| M.N.R. Ont. Geoscience Report 160, 1977 | - Geol. of McCubbin, Poisson, and McGillis Townships (Savant Lake Area), District of Thunder Bay; W.D. Bond. |
| O.D.M. Preliminary Map P.722, 1972 | - McCubbin Township, District of Thunder Bay; W.D. Bond. |
| Northern Miner Press, Northern Miner Issues, 1940-41 | - References to Exploration Activities in the Savant Lake Area.

Sept. 5, 1940 Issue, Pg. 1
Sept. 19, 1940 Issue, Pg. 1
Sept. 26, 1940 Issue, Pg. 6
Oct. 3, 1940 Issue, Pg. 1
Oct. 31, 1940 Issue, Pg. 1
Nov. 21, 1940 Issue, Pg. 1
Dec. 12, 1940 Issue, Pg. 7
Mar. 20, 1941 Issue, Pg. 19 |
| Private Report, April, 1980 | - Report on Geophysical Surveys, One Pine Lake Area; Paterson, Grant Watson Ltd., for Ram Petroleums Ltd. |
| P.D.A. Recorder, July, 1981 | - Stargazer Resources Exploration Program, Savant Lake Area, 1981. |
| Private Report, April, 1981 | - Savant Lake Airborne Geophysical Survey for Ram Petroleums Ltd.; Geophysical Surveys Inc. (available in MNR Assessment Files). |

- Private Report, April, 1981 - Savant Lake Airborne Geophysical Survey for Stargazer Resources Ltd.,; Geophysical Surveys Inc. (available in MNR Assessment Files).
- Private Report, Nov. 30, 1981 - A Report on the Raylloyd-Ram Petroleums Gold Property, Savant Lake, Ontario; G.M. Hogg & Associates Ltd.
- Private Report, Aug. 6, 1982 - A Report on Geophysical Surveys on the Raylloyd-Ram Petroleums Property, Savant Lake, Ontario; G.M. Hogg & Associates Ltd.
- Private Report, Oct. 27, 1982 - Summary Report on Geochemical Sampling of the Raylloyd Property, McCubbin Township, Ontario; G.M. Hogg & Associates Ltd.
- M.N.R. Ont. Claim Map, Jan.1983 - Grebe Lake; Map M.1804.

APPENDIX II

Listing of Data Relevant to the Raylloyd
Anomaly Investigation Program

Location 9 (Cont.)

Geochem. Sample-

8062 Rusty I.F., low Pyrite	Au < 0.01 ppm; As 5 ppm
8067 I.F., Pyrite in fractures	Au 0.01 ppm; As 3 ppm
8087 I.F., Amphibole, Pyrite	Au 0.01 ppm; As 2 ppm
8092 I.F., dissem. Pyrite	Au < 0.01 ppm; As 4 ppm

Analyses-

	Au oz.	Ag oz.	%Cu	%Zn
5173 Iron Fm., Amphibole, Pyrite	0.003	0.14	0.014	0.002

Location 10: Anomaly J-6 Area, South Grid (20E 25+00N)

Gray schistose graywacke. No mineralization.

Geochem. Sample-

8082 Schistose graywacke	Au 0.01 ppm; As 6 ppm
--------------------------	-----------------------

Location 11: Anomaly K-5, South Grid (32E 10+20N, 40'E)

Medium grained mafic volcanic or gabbro. Non-magnetic. Noted as possible float.

Geochem. Sample-

8069 Mafic volc. or gabbro	Au 0.48 ppm; As 1 ppm
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Location 12: Anomaly K-7 Area, South Grid (40E 1+00N)

Arenite carrying 5% Py and possible AsPy. Amphibole clots, so rock is probably quartz-amphibole schist. Noted as possible float.

Geochem. Sample-

8080 Min. quartz-amph. schist	Au 0.21 ppm; As 320 ppm
8093 " , less sulphide	Au < 0.01 ppm; As 4 ppm

Location 13: Anomaly K-6 Area, South Grid (50E.7+20N, 50'E)

Sheared graywacke. Siliceous and non-magnetic. No mineralization noted.

Geochem. Sample-

8081 Schistose graywacke	Au 0.19 ppm; As 33 ppm
--------------------------	------------------------

Location 14: Anomaly K-10 Area, South Grid (56E 8+80S, 30'W)

Gray schistose graywacke. No mineralization noted

Geochem. Sample-

8086 Graywacke, schistose Au 0.03 ppm; As 14 ppm

Location 15: Anomaly A Area, North Grid (1W 9+50N)

Old trench location. Mineralized quartz veining (AsPy, Py), lean iron formation, quartz amphibole schist, sheared mafic schist.

Geochem. Sample-

8074 Mafic schist, qtz., Py, AsPy	Au 11.1 ppm; As 2600 ppm
8075 Lean I.F., minor Py, Carb.	Au 0.17 ppm; As 58 ppm
8078 Mafic schist, weathered.	Au 0.13 ppm; As 10 ppm
8079 Qtz., Carb., heavy AsPy	Au 29.3 ppm; As >4000 ppm
8094 Qtz.-Amph. schist, low Py	Au 4.73 ppm; As >4000 ppm
5179 Vein mat'l., AsPy, Py	Au 3.79 ppm; As >2000 ppm
5180 Brecc. Amphib., qtz.	Au 0.17 ppm; As 41 ppm
5181 Qtz. Chlor. schist, Py	Au 1.71 ppm; As 237 ppm
5182 Chlor. Schist, qtz., Py	Au 1.29 ppm; As >2000 ppm

Analyses-

	Au oz.	Ag oz.
5176 Near Mass. AsPy, Qtz.	2.50	0.31
5178 Vein mat'l, AsPy, Py	0.17	0.05
5187 Vein mat'l, rusty, AsPy, Py	0.20	0.04

Location 16: Anomaly B Area, North Grid (2E 6+00N)

Quartz and carbonate in schistose graywacke. This location is noted as old trench.

Geochem. Sample-

8090 Qtz., carb. in graywacke Au 0.02 ppm; As 120 ppm

Location 17: Anomaly B Area, North Grid (2W 6+70N)

Sheared graywacke. Rock carbonated with low pyrite. Non-magnetic.

Geochem. Sample-

8077 Sheared graywacke, low Py. Au 0.08 ppm; As 13 ppm

APPENDIX II

Listing of Data Relevant to the Raylloyd
Anomaly Investigation Program

(Sampling locations are shown on Map No. 1, in pocket)

Location 1: Anomaly K-1, South Grid (40W 6+70S)

Samples include quartz-amphibole schist, carbonated, and containing variable pyrite, pyrrhotite and possibly AsPy up to 10%. Also mafic schist. Similar to Au prosp. ar

Geochem. Samples-

8063 Qtz. Amph. Schist, sulphides.	Au 0.01 ppm; As 2 ppm
8084 Mafic Schist, sulphides.	Au 0.09 ppm; As 14 ppm
8068 Lean IF, Amph. No min.	Au 0.10 ppm; As <1 ppm

Analyses--

	Au oz.	Ag oz.	%Cu	%Zn
5174 Qtz. Amph. Schist, Sulphides.	0.004	0.03	0.025	0.004
5177 " , Sulph. to 10%	0.020	0.53	-	-

Location 2: Anomaly K-1 Area, South Grid (36W 5+00S)

Quartz-amphibole schist, rusty. No mineralization noted.

Geochem. Sample-

8070 Qtz. Amph. Schist as noted.	Au 0.01 ppm; As 16 ppm
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Location 3: Anomaly K-2, South Grid (32W 3+60S)

Sample north of anomaly. Rock is gray sericitic schist. Non-magnetic, no mineralization.

Geochem. Sample-

8091 Gray schist	Au <0.01 ppm; As 6 ppm
------------------	------------------------

Location 4: Anomaly K-3 Area, South Grid (11W 4+00N)

Sample north of anomaly. Rock is gray sericitic schist. Minor quartz veining, no mineralization.

Geochem. Sample-

8083 Gray schist	Au <0.01 ppm; As <1 ppm
------------------	-------------------------

Location 5: Anomaly J-4 Area, South Grid (8W 13+00N)

Typical schistose graywacke. Weakly magnetic, no min.

Geochem. Sample-

8073 Gray schist, no min. Au 0.03 ppm; As 6 ppm

Location 6: Anomaly K-3, South Grid (8E 6+20N)

Quartzose rock with minor amphibole in bands, minor vein quartz and pyrite, possibly carbonate. Some rock is rusty amphibolite schist.

Geochem. Sample-

8065 Qtz.-Amph. wi. Pyrite. Au 0.21 ppm; As 62 ppm
8071 Amph. schist, rusty. Au <0.01 ppm; As 30 ppm

Location 7: Anomaly K-8, South Grid (17E 3+00S)

Chloritic amphibole schist, some quartz and carbonate with very minor pyrite. Weakly magnetic.

Geochem. Sample-

8064 Amph. schist. Qtz., pyrite Au 0.04 ppm; As 1 ppm
8085 " , more qtz. Au <0.01 ppm; As 2 ppm
8088 Quartz mainly. Au <0.01 ppm; As 3 ppm
8089 Mafic schist. Au <0.01 ppm; As 7 ppm
5185 Amph. Schist, Quartz, Py. Au 0.09 ppm; As 4 ppm

Analyses-

5175 Amph. Schist, Qtz., Py. Au oz. Ag oz. %Cu %Zn
0.002 0.17 0.003 0.005

Location 8: Anomaly K-8 Area, South Grid (17E 4+00S)

Schistose argillite, minor carbonate. No mineralization.

Geochem. Sample-

8066 Schistose argillite Au 0.03 ppm; As 32 ppm
5186 " Au 0.42 ppm; As 3 ppm

Location 9: Anomaly J-6 Area, South Grid (17E 24+50N)

Lean rusty magnetite iron formation; amphibole and quartz, banded. Low pyrite. Noted as possible float.

(continued next page)

Location 18: Anomaly A Area, North Grid (4W 7+50N)

Sample of siliceous, carbonated iron formation facies with low pyrite. Fome north side of main prospect trench.

Geochem. Sample-

8076 Siliceous carb I.F., low Py Au 0.06 ppm; As 108 ppm

Misc. Location:

Siliceous quartz-amphibole schist. Sample from directly west of South Grid area close to McCubbin-Poisson Township line. Low pyrite mineralization present. Sample taken for comparative purposes.

Geochem. Sample-

8072 Sil. qtz.-amph. schist, Py Au 0.08 ppm; As 10 ppm

Misc. Location:

Magnetite iron formation and siliceous schist from cut on Highway about 1000 feet east of 10+00 N on line 12E of the North Grid. Location is on Stargazer property close to trenched area. Sample taken for comparative purposes.

Geochem. Sample-

5183 Sil. schist, no min.

Au 0.07 ppm; As 22 ppm

5184 Iron Formation

Au 0.13 ppm; As 12 ppm

APPENDIX III

Assay Certificates For Samples From
The Raylloyd Property



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M0Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. MI-164/ #1866

Date: October 19, 1982

Received _____ 3 Samples of Rock

Submitted by G.M. Hogg & Associates

Sample No.	Au oz/ton	Ag oz/ton	Cu %	Zn %
5173	.003	.14	.014	.002
5174	.004	.03	.025	.004
5175	.002	.17	.003	.005

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. MI-165 / #1874

Date: October 22, 1982

Received 33 Samples of Rock Chips

Submitted by G.M. Hogg & Associates

Sample No.	Au ppm	As ppm	Sample No.	Au ppm	As ppm
8062	<.01	5	8078	.13	10
8063	.01	2	8079	29.3	>4,000
8064	.04	1	8080	.21	320
8065	.21	62	8081	.19	33
8066	.03	32	8082	.01	6
8067	.01	3	8083	<.01	< 1
8068	.10	<1	8084	.09	14
8069	.48	1	8085	<.01	2
8070	.01	16	8086	.03	14
8071	<.01	30	8087	.01	2
8072	.08	10	8088	<.01	3
8073	.03	6	8089	<.01	7
8074*	11.1	2,600	8090	.02	120
8075	.17	58	8091	<.01	6
8076	.06	108	8092	<.01	4
8077	.08	13	8093	<.01	4
			8094	4.73	>4,000

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 1Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. MI - 166 / # 1879

Date: October 26, 1982

Received 2 Samples of Rock

Submitted by G.M. Hogg & Associates Ltd.

Sample No.	Au oz/ton	Ag oz/ton
5176	2.50	0.31
5177	0.020	0.53

ASSAYERS (ONTARIO) LIMITED

Per [Signature]



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. MI-197A/ #1975

Date: January 10, 1983

Received _____ 2 Samples of Rock Chips

Submitted by Mr. G.M. Hogg & Associates

Sample No.	Au oz/ton	Ag oz/ton
5178	.17	.05
5187	.20	.04

ASSAYERS (ONTARIO) LIMITED

Per _____



ASSAYERS (ONTARIO) LIMITED

33 CHAUNCEY AVENUE TORONTO, ONTARIO M8Z 2Z2 · TELEPHONE (416) 239-3527

Certificate of Analysis

Certificate No. MI-197B/ #1975

Date: January 10, 1983

Received _____ 8 Samples of Rock Chips - Geochem

Submitted by G.M. Hogg & Associates

Sample No.	Au ppm	As ppm
5179	3.97	>2000
5180	.17	< 1
5181	1.71	237
5182	1.29	>2000
5183	.07	22
5184	.13	12
5185	.09	4
5186	.42	3

ASSAYERS (ONTARIO) LIMITED

Per _____

TECHNICAL SERVICE LABORATORIES

DIVISION OF BURGHEER TECHNICAL SERVICES LIMITED

1301 FEWSTER DRIVE, MISSISSAUGA, ONT. L4W 1A

TELEPHONE: (416) 5-154

TELEX 06-96021

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM G.M. Hogg & Assoc. Ltd.,
 28 Thompson Ave.,
 Toronto, Ontario.
 M8Z 3T3

REPORT No.
 T - 7903

Inv. #17782

SAMPLE(S) OF

MAJOR OXIDES - %

	<u>SiO₂</u>	<u>Al₂O₃</u>	<u>Fe₂O₃</u>	<u>CaO</u>	<u>MgO</u>	<u>Na₂O</u>	<u>K₂O</u>	<u>TiO₂</u>	<u>MnO</u>	<u>P₂O₅</u>	<u>BaO</u>	<u>LOI</u>	<u>Total</u>
8048	51.39	15.77	11.92	4.42	5.38	4.56	0.23	1.48	0.13	0.21	0.05	5.05	100.59
8049	49.13	16.52	12.02	8.21	6.30	3.00	0.13	0.96	0.17	0.10	0.00	4.03	100.59
8050	63.91	15.52	5.59	3.21	2.51	3.10	1.81	0.45	0.08	0.27	0.11	4.09	100.59
8051	60.27	13.82	5.15	8.43	2.08	3.72	0.55	0.66	0.10	0.14	0.05	5.36	100.33

No. 8048 - Andesite. Taken from outcrop north of the property on old road. Chosen as representative of mafic volcanic material from the area, away from mineralized or anomalous areas.

No. 8049 - Diorite. Taken from outcrop close to the south property boundary, within the widely conductive area defined by the aerosurvey. Though medium grained, such material may well represent a more coarsely crystalline phase of mafic volcanic material rather than an unrelated intrusive body.

No. 8050 - Schistose and somewhat sericitized green rock, fine grained. Taken from outcrop on shore of Kashawogama Lake. Both gray-wacke and andesite had been mapped in this area. Approx. 46W, 5400S on South Grid.

No. 8051 - Similar to sample 8050. Taken from same outcrop area, but further to the south. Classified as andesite in mapping.

Samples, Pulps and Rejects discarded after two months

DATE October 22nd 1981

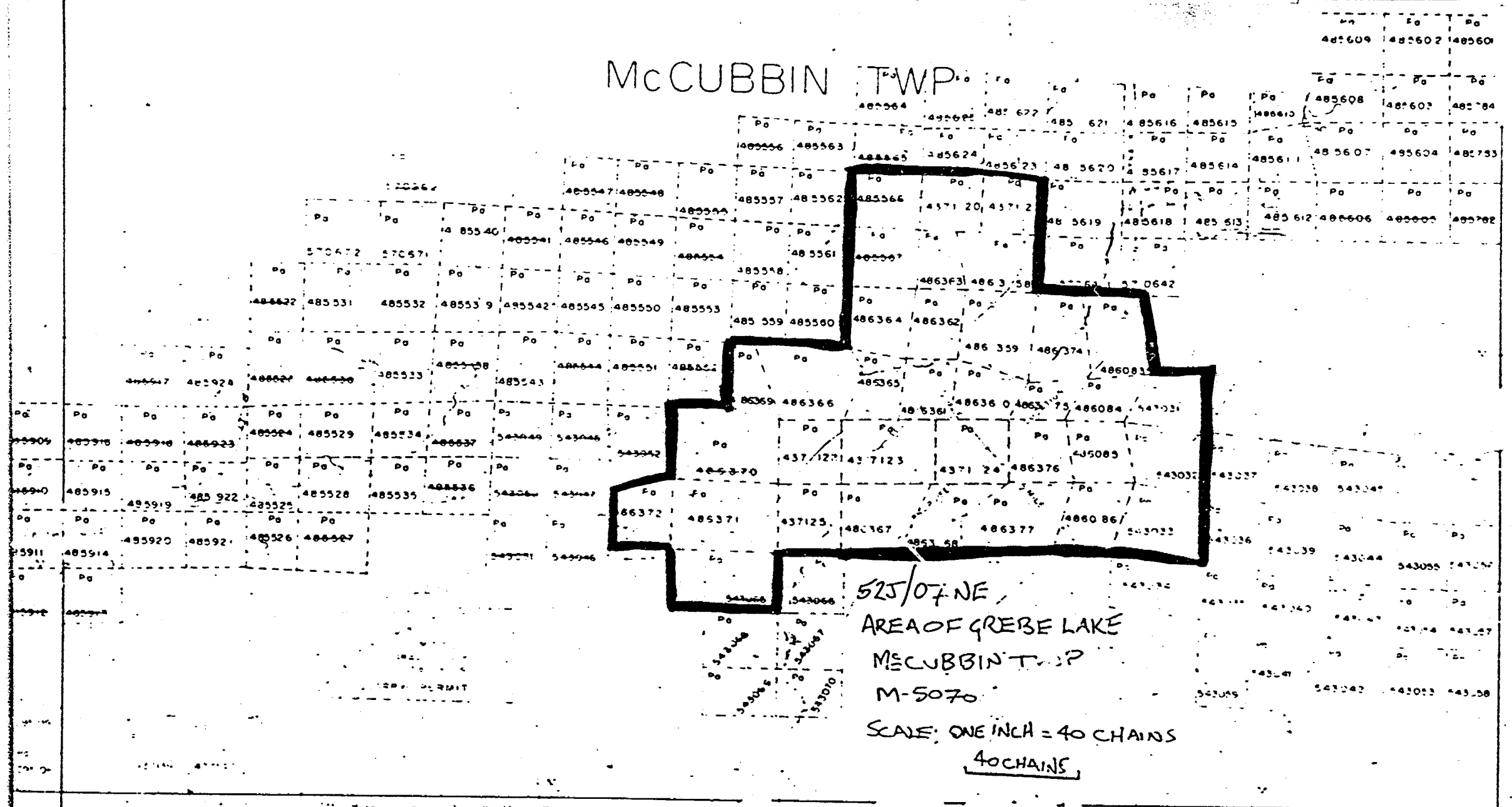
SIGNED Paul E. Berger

McCUBBIN TWP



900

POISSON TWP



525/07 NE
AREA OF GREBE LAKE
McCUBBIN TWP
M-5070
SCALE: ONE INCH = 40 CHAINS
40 CHAINS

Grebe

Lake

CONANT TWP

JUTTEN TWP

3010
3015

F.W.M.

Grebe Lake i. McCubbin Township



Report of Work
(Geophysical, Geological,
Geochemical and Expenditures)

M-1804

Instructions

Note - Only days credits calculated in the "Expenditures" section may be entered in the "Expend. Days Cr." columns - Do not use shaded areas below

83-22

2.5565

The Mining Act

Mining Lands

Type of Survey(s) EXPENDITURES, SECTION 77-19		Township or Area MCCUBBIN	
Claim Holder(s) RAYLOYD MINES & EXPLORATIONS LTD		Prospector's Licence No. T 72	
Address 109 BAYFIELD ST. BARRIE ONT L4M 3A9			
Survey Company		Date of Survey (from & to)	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report)		Day Mo. Yr.	Day Mo. Yr.
G.M. HOGG 28 THOMPSON AVE. TORONTO ONT.			

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
For each additional grid survey: using the same grid: Enter 20 days (for each)	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Geophysical	Days per Claim
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
PA	486083	23			
	486084	23			
	486085	23			
	486086	23			
	486361	23			
	486362	23			
	486363	23			
	486364	23			
	486365	23			
	486366	23			
	486369	23			
	486370	23			
	486371	22			
	486372	22			
	486374	22			

Expenditures (excludes power stripping)

Type of Work Performed Section 77-19 GEOLOGICAL STUDIES
Performed on Claim(s) PA. 437120-25 incl. 486358-72 incl. 486374-77 incl. 486083-86 incl.
Calculation of Expenditure Days Credits
Total Expenditures \$ 5,132.98 + Total Days Credits 15 = 342

Instructions
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

Date APRIL 6/83	Recorded Holder or Agent (Signature) R.L. Ramsay
---------------------------	--

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Postal Address of Person Certifying R.G. RAMSAY 109 BAYFIELD ST. BARRIE ONT.	Date Certified	Certified by (Signature)
---	----------------	--------------------------

RECEIVED
MAY 10 1983
MINING LANDS SECTION

PATRICIA MINING DIV.
RECEIVED
APR - 8 1983
A.M. 11:18 P.M. 10:11

Pa. 486083

Total number of mining claims covered by this report of work. **15**

For Office Use Only		Mining Recorder
Total Days Cr. Recorded 342	Date Recorded April 8, 1983	[Signature]
	Date Approved as Recorded July 28/83	[Signature]



Ministry of
Natural
Resources

Geotechnical
Report
Approval

File
2.5565

June 13/83

Mining Lands Comments

To: Geophysics

Comments

Approved

Wish to see again with corrections

Date

Signature

To: Geology - Expenditures

Mr. Kustra.

Comments

Approved

Wish to see again with corrections

Date

June 13/83

Signature

C. Kustra

To: Geochemistry

Comments

Approved

Wish to see again with corrections

Date

Signature

To: Mining Lands Section, Room 6462, Whitney Block.

(Tel: 5-1380)

G. M. HOGG & ASSOCIATES LTD.

28 THOMPSON AVENUE.
TORONTO, CANADA M8Z 3T3

TELEPHONE:
(416) 233 3255

Invoice 882

January 19, 1983

Raylloyd Mines & Explorations Ltd.,
109 Bayfield St.,
Barrie, Ontario
L4M 3A9

Attention: Mr. R.G. Ramsay

STATEMENT OF ACCOUNT

Re: Preparation of Report on the Wiggle Creek Property of Raylloyd
Mines & Explorations, Savant Lake area, Ontario. Jan.4-19, 1983.

Professional Fee:


Jan.4-6 incl.- Property examination, Savant Lake, 3 days @ \$ 300.00/day.....	\$ 900.00
Jan.7-19 incl.- Preparation of Report, 10 days @ \$ 300.00/day.....	3,000.00

Disbursements: (see attached receipts)

D. O'Shannessy Drafting Services.....	\$ 1,079.75
Etobicoke Blueprints, prints of maps for report.....	80.33
Xerox Copies (504 @ \$0.10 ea.)	50.40
Report Binders, Map Envelopes (10 @ \$ 2.24 ea.).....	22.40

Total Due.....\$ 5,132.88

Respectfully Submitted,


G.M. Hogg, P.Eng.

Paid in full. May 24/83
G.M. Hogg

#83-22

2.5565

1983 06 01

Mr. Albert Hanson
Mining Recorder
Ministry of Natural Resources
P.O. Box 669
Stouffville, Ontario
POV 2T0

Dear Sir:

We have received data for assaying submitted under Section 77(19) of the Mining Act R.S.O. 1980 submitted on mining claim PA 486083 in the Township of McCubbin.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly,

E. F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

A. Barr:dj

cc: Raylloyd Mines & Explorations Ltd
109 Bayfield St.
Barrie, Ontario
L4M 3A9

Att: Mr. R. G. Ramsay

FOR ADDITIONAL

INFORMATION

SEE MAPS:

52J/07NE-0028 # 1-6