RP 190-III(A)

MINING PROPERTIES AND DEVELOPMENT IN ABITIBI AND TEMISCAMINGUE COUNTIES DURING 1944, PART III

Documents complémentaires

Additional Files

Licence

License

Cette première page a été ajoutée au document et ne fait pas partie du rapport tel que soumis par les auteurs.

Énergie et Ressources naturelles Québec

Province of Quebec, Canada

DEPARTMENT OF MINES

Division of Mineral Deposits

MINING PROPERTIES AND DEVELOPMENT

IN ABITIBI AND TEMISCAMINGUE COUNTIES

DURING 1944

by

W.N. Ingham

QUEBEC
1945

P.R. No. 190
Part III (M to end)

M-1136

MINING PROPERTIES AND DEVELOPMENT

IN ABITIBI AND TEMISCAMINGUE COUNTIES

DURING 1944

Part III (M to end)

TABLE OF CONTENTS

TOWNSHIP MAPS

The township maps show the properties held by companies at the date indicated on the map.

MINING PROPERTIES AND DEVELOPMENT

IN ABITIBI AND TEMISCAMINGUE COUNTIES

DURING 1944

by W.N. Ingham

INTRODUCTION

During the field-season of 1944, the writer visited numerous mining properties in Abitibi and Témiscamingue counties. Although data were secured on developments at seventy properties, it was impossible to obtain the results at all of those actively engaged in exploration. The number of properties under active exploration during the year was the highest in the region's history. Attention was confined to prospects and properties which were in the early stages of exploration, no attempt being made to record new developments at producing mines. In each case, the location, size, means of access, geology, development work, and mineral deposits are briefly described. In many instances, diamond drilling was in progress at the time the property was inspected, and the information from holes completed subsequently remains to be compiled.

Published maps and reports of the Geological Survey of Canada and of the Quebec Department of Mines, as well as plans, drill-logs, and reports of the various mining companies, have been freely consulted in the preparation of the following descriptions. One or more specific references to published information are cited with the reports on those properties which have

been previously described. Frequently, these contain additional or more detailed information on earlier development work.

It is a pleasure to acknowledge the excellent work of Fernand Cloutier, who assisted the writer throughout most of the field-season. The whole-hearted co-operation of the geologists, engineers, and prospectors in charge of operations at the properties is gratefully acknowledged.

Appended to this report are twenty-seven township plans, dated July, 1945, showing the outlines of claim-groups held at that time by companies in each township. These plans have been compiled in the Mapping Division of the Quebec Department of Mines. It will be noted that in many instances there are discrepancies between the descriptions of the properties, as given in the report, and the outlines, as shown on the township plans. There is more than one possible explanation for these differences, quite apart from any errors that may have found their way into either the text or the drawings. In the first place, the company may have acquired or abandoned claims between the date of the preparation of the individual reports and July, 1945; secondly, it may happen that, in virtue of private agreements with the registered owners of claims, a company may be doing exploration work on claims which are not registered in its name; finally, the same company may be the registered owner of more than one claim-group, whereas the report may be limited to one of these.

All assays of samples taken by the writer were made in the Laboratories of the Quebec

Department of Mines. All gold values given are calculated on the basis of $35.00 per ounce.

In the descriptions, that follow, the properties have been grouped in alphabetical order in their townships, which in turn are alphabetically arranged.

For printing and distribution the report has been divided into three parts. The first part includes the townships beginning with the letters A to D, inclusive; the second part covers the group from E to L; and the third part covers the group from the letter M onwards.

MALARTIC TOWNSHIP

Citralam Malartic Mines, Ltd.

Twenty claims forming an east-west block astride the southern part of the Malartic-Vassan township line constitute the property of Citralam Malartic Mines. The claims cover lots 56 to 64, range II, Malartic township; and lots 1 to 7, range II, Vassan township. This ground lies two miles and a half north of the Rouyn-Val d'Or highway, five miles east of Malartic.

The property is almost completely drift-covered. Small outcrops on four of the lots expose Blake River volcanics, basic to intermediate, schistose to massive, flows. Drilling indicates that the volcanics are cut by diorite, syenite, and granodiorite dykes, the first and the last being of considerable width and locally mineralized.

A diamond-drilling programme was started in the spring of 1944, and was in progress in November when fourteen holes had been completed. These are distributed along a N.10°W. cross-section line extending for 4,900 feet from the south boundary of lot 63 almost to the north boundary of lot 62. According to Company records, this exploratory drilling has intersected several gold-bearing zones with the more important values and the host rocks as follows:

Hole No.	Location[x]	Core Length (feet)	Gold (ounces per ton)	Host Rock
1	300'N.	4.0	0.10	granodiorite
2	520'N.	3.9	0.08	granodiorite
4	1,220'N.	2.0	0.10	basic syenite
11	3,600'N.	0.5	0.14	quartz veinlet
11	3,680'N.	3.7	0.15	greenstone
12	4,020'N.	2.7	0.09	basic syenite

J.P. Norrie is consulting engineer for the Company and E. Goranson is geologist in charge of exploration of the property.

Hugh Malartic Mines, Limited

The ground under exploration by Hugh Malartic Mines consists of fifteen claims in the southeast quarter of Malartic township. The Malartic-Fournière township line forms the south boundary of the claim-group and it extends for two miles and a half north with a width of from

[x]Reference point is the south end of the cross-section line of drill holes at the range-line I-II, centre of lot 63.

two to five lots. The claims cover lots 52 to 55, range I; the south-half of lots 51 and 52, lots 53 to 55, and the north-half of lot 56, range II; and the south-half of lots 54 and 55, range III. A trail leads north for one mile to the southeast corner of the property from the Malartic-Val d'Or highway, four miles east of the former town.

The northern claims are underlain mainly by massive to schistose basic lavas of the Blake River group. Towards the south these are bordered by a series of tuffaceous formations 3,000 feet in width and intruded by numerous bodies of diorite: some wide; others narrows. These trend N.70°W., but are foliated in an east-west direction. Although no outcrops occur, projected contacts indicate the south end of the property is underlain by Kewagama greywacke. The volcanics are cut by dykes of peridotite, diorite, syenite, and feldspar porphyry. An assumed oblique fault zone strikes a few degrees south of west, directly south of range-line II-III.

Part of the property was formerly held by Ascot Gold Mines and, in 1936, this Company drilled a north-south cross-section of six holes which explored 2,100 feet of ground along the south part of lot-line 55-56, range II. The holes cut mainly andesite with some tuff bands, talc-carbonate shears, feldspar porphyry and diorite dykes. Low gold values were recorded. In the present drilling campaign, five holes had been completed early in November. These are collared along a north-south line extending for 1,600 feet south from range-line II-III in lot 55, 436 feet east of lot-post 54-55. No auriferous zones

of any importance were intersected until hole No. 10, drilled south from a collar six feet south of the range-line, cut through the zone of oblique faulting. Here a pyritized, acidic porphyry dyke in talc-chlorite schist yielded five feet of core assaying $10.00 in gold per ton.

J.C. Honsberger is consulting geologist for the Company.

Norbenite Malartic Mines, Limited

Norbenite Malartic Mines holds a group of sixteen claims straddling the south end of the Malartic-Vassan township line. The claims cover lots 1 to 5, range I, of Vassan township, and lots 56 to 64, range I, of Malartic township. The property lies one mile and a half north of the Val d'Or-Rouyn highway, five miles east of Malartic.

The property is largely covered with a heavy mantle of overburden, small outcrops occurring only at the north end of lots 2 and 3, range I, Vassan township, and in the southern part of lots 60 to 63, range I, Malartic township. Laterally projected contacts indicate the claims are underlain chiefly by Blake River volcanics, except possibly the extreme southwest corner where the north margin of a band of Kewagama greywacke may lie. The volcanics consist mainly of basic to intermediate flows, with the exception of about 2,500 feet at the top of the series where pyroclastics predominate. The latter are invaded by numerous dyke-like bodies of diorite and, less frequently, by dykes of peridotite, syenite, and albitite. Both the volcanics and dykes trend N.60°W. and dip to the north.

Drilling indicates that a mass of granodiorite about 800 feet wide extends diagonally across the centre of the property.

At one time, five diamond-drill holes were put down in the northeast corner of lot 2, but no records of these are available. The present Company began a drilling campaign in November, 1943, and this is still in progress, thirty-one holes totalling 15,424 feet having been completed to October, 1944.

The first thirteen holes cross-sectioned the property from a point 150 feet west of the southeast corner post of lot 64, in a direction N.19°W. for 4,150 feet to the centre of lot 63 at range-line I-II. In addition to several core-lengths of up to four feet carrying 0.09 ounces of gold per ton in the central part of the section, a gold-bearing area with more encouraging values and widths has been discovered in northern lots 63 and 64. Here, a zone thirty feet wide of shearing, alteration, and mineralization associated with dykes of basic syenite and diorite has yielded discontinuous gold values of up to 0.25 ounces per ton for 3.7 feet, and a continuous section of 23 feet assaying 0.10 ounces per ton. Five holes drilled into the northwest and southeast extension of the zone have established a strike-length of 1,600 feet and it is open at both ends.

A second auriferous zone, which is the continuation of that encountered at the north end of lots 3 and 4, range X, Dubuisson township, on the Marbenor Malartic property, has been traced by drilling along its strike (N.50°W.) by twelve holes distributed along 2,500 feet. The

combined width of the diorite dyke and invading albitite is about 30 feet, and they are followed by a quartz vein up to five feet wide. The dykes are sheared and they occur within a talc-carbonate shear in the volcanics. The distribution and grade of the gold mineralization are quite erratic, a few holes in the zone yielding no values, others ranging from 0.09 ounces per ton across five feet to 0.4 ounces per ton across half a foot, and one assay of 0.093 ounces per ton for 17.7 feet of core.

The geologist in charge of operations at the property is E. Goranson, and J.P. Norrie is consulting engineer.

West Shore Malartic Gold Mines, Limited

Ref.: Que. Bur. Mines, P.R. No. 161, 1941, p. 28.

The property of West Shore Malartic Mines consists of a group of claims on the east side of Malartic township immediately south of the centre line. The ground covered by the claim-group includes lots 50 to 54 and the south-half of lots 55 to 57 of range V; lots 54 to 60, and the south-half of lots 61 to 63 of range IV. From the southeast bay of Lac La Motte (Malartic), a bush road leads southeast for one mile and a half to the camp in lot 58 at range-line IV-V.

The property is favourably located on a fault zone trending N.60 -70 W., which is believed to be the northwest extension of the "K" zone fault at the Siscoe Mine six miles to the southeast. This 'break' cuts along the southern margin of a granodiorite body about one mile in width. The granodiorite intrudes flows of andesite

which is the chief rock underlying the claims. West and northwest of the granodiorite, the southeast continuation of a composite group of acidic, intermediate, and basic lavas with intercalated tuff bands and lensing sills of peridotite appears to be transected by the fault. Directly south of the granodiorite, the volcanics contain numerous dykes of syenite and feldspar porphyry, some accompanied by quartz veins.

Previous development work on the property, consisting of surface trenching in 1933, six drill holes in 1935, and further surface work following a geophysical survey in 1936, has been described in the reference cited and need not be repeated here. Early in 1943, Siscoe Gold Mines put down six diamond-drill holes in lots 51, 52, and 55, range V, and in lot 58, range IV. The present Company drilled two short holes in the fall of 1943: No. M.14 in lot 55, 280 feet north of range-line IV-V, and No. M.15 in lot 53, 740 feet north of the same line. Hole M.14 was directed into a trenched, mineralized shear, averaging two feet in width, containing a lensing quartz vein with some gold and striking N.45°W. It cut, massive to schisted, greenstone, quartz syenite and basic dykes, and a few low gold values. Hole M.15 explored a second shear-zone shown by surface trenching to be intruded by a hanging and a footwall quartz vein six inches to three feet wide. Gold values up to 0.02 ounces per ton were obtained.

Four holes, totalling 2,857 feet of the drilling programme started in 1944, had been completed early in November. These are located at the north end of lots 59 and 60, range IV. Holes 17, 18, and 19 were drilled south at 500-foot

intervals into the main fault, indicating that it is a zone of brecciation and shearing about 50 feet wide. It contains quartz veinlets about a foot in width with gold values up to 0.10 ounces per ton, and one hole cut a vein with a core-width of 11 feet, 0.6 foot of which assayed 0.05 ounces of gold per ton in association with pyrite, chalcopyrite, and galena mineralization. Hole No. 18 was directed S.70°E. parallel to the main fault and about 200 feet north of it to test the possibility of transverse fractures occurring in the granodiorite. Core-lengths of up to two feet with low values in gold were found.

E. Goranson is geologist in charge of exploration, and J.P. Norrie is consulting engineer.

MANNEVILLE TOWNSHIP

Nortyne Gold Mines, Limited

Ref.: Geol. Surv. Can., Sum. Rept. Part CI, 1923, pp. 105-7.
" " " Mem. 166, 1931, pp. 276-78.
" " " Mem. 233, 1941, p. 45.

The property of Nortyne Gold Mines consists of thirty-seven claims in the southwest quarter of Manneville township. The ground covered by the claim-group comprises the north-half of lots 18 to 20, 23 to 28, and lots 21 and 22 of range I; the south-half of lots 13 to 18, 22 to 29, and lots 19 to 21 of range II. The Kinojévis river flows west across the centre of the property and forms the boundary between the two ranges. The property may be reached from Noranda

by following the Macamic highway nine miles north, then turning east for 15 miles to the village of Mont-Brun on the Kinojévis river. A canoe may be used to go nine miles up the river to the first portage, from which point a trail leads southeast and east to the camp on the north shore in lot 23.

A considerable variety of rocks occur within the boundaries of the property. For the most part it is underlain by volcanics consisting chiefly of fine to coarse-grained andesite flows, with wide areas of rhyolite and several tuffaceous horizons. These formations dip north and trend about east-west, except where they have suffered local flexing as along lot-line 16-17, near the south margin of the property. The north contact of a series of sedimentary rocks (Kewagama Group) appears to trend across the southern edge of the claim-group exposures lying along the south bank of the Kinojévis river where it bends south. A small body of diorite outcrops in lots 22 to 25, serpentine intrudes acidic lavas along the south side of the river in lots 14 to 17, and dykes ranging in composition from granite to diabase cut the older rocks at various localities.

Of chief geologic and possible economic interest is a zone of faulting expressed in a band of intense alteration and shearing trending east-west across the centre of the property. This zone has been named the Manneville Fault and it appears to extend for miles on either side of the property. Where exposed on the Nortyne claims on a ridge in lots 17, 18, 23, 24, and 25, it consists of a width of about 400 feet of volcanics so highly replaced by carbonates that the

rock is referred to as dolomite. The ridge contains areas of less carbonatized material, has a greenish colour in places where fuchsite is developed, and is cut by numerous, irregular veinlets of quartz. Altered dykes of feldspar porphyry, aplite, and lamprophyre or diabase intrude the zone, and in lot 24, quartz veins up to 15 feet wide are associated with the former. The zone carries sparse pyrite and low values in gold are reported.

Part of the present property was known as the MacCormack claims in 1923, and in 1938 they were acquired by the Jomac Gold Syndicate and given an extensive programme of surface exploration, both the carbonatized ridge and a sulphide zone south of the river adjacent to the basic intrusive in lots 14 to 17 being trenched and sampled.

According to D.A. Giochino, who is in charge of exploration at the property, the current diamond-drilling programme began in September. Four holes had been completed early in October. Two of these are collared in the east 'dolomite' ridge in lot 24 and drilled south one below the other. Two hundred feet of carbonatized rock followed by talc-chlorite schist were intersected. The other two holes completed were drilled north and south from the carbonatized outcrop in lot 18. Both cut through the dolomitized rock which grades into massive volcanics followed by a wide section of talcose and sheared material. The drilling suggests that the fault consists of two major zones of shearing with the highly carbonatized volcanics lying between them. Considerable pyrite mineralization, abundant quartz veinlets, and some pyritized

dykes have been encountered, but as yet the core has yielded only low gold values.

C.O. Stee is consulting engineer for the Company.

PERSHING TOWNSHIP

Ansley Gold Mines, Limited

Ref.: Que. Bur. Mines, Ann. Rept., Part B, 1931.
" " " Unpublished report by S.H. Ross (Consolidated Mining & Smelting, Northwest Pershing).

Fifty-nine claims located in the northwest corner of Pershing township constitute the property of Ansley Gold Mines, Limited. The claim numbers are: C.7706, cl. 1-5; C.7708, cl. 1-5; C.7711-7719, cl. 1-5; C.7720, cl. 1-3; C.7721, cl. 1; C.7722, cl. 1-5. The easiest means of access is by plane from Senneterre for 20 miles to the north end of Vauquelin lake, thence northeast by a trail for one mile to the camp in C.7714, cl. 3. The property also may be reached from Senneterre by motor road for 17 miles to Fish lake, then by trail for two miles to Guéguen lake, followed by a canoe trip of nine miles, without portages, to the north end of Vauquelin lake. The southeastern part of the property was controlled by Consolidated Mining and Smelting during 1938-40, and three claims of the group of five claims, one with a 137-foot shaft, which this Company holds, extend into the eastern section.

Most of the property is underlain by Keewatin-type lavas with narrow bands of tuff and agglomerate. The north contact of a series of Temiscamian-type sediments strikes N.20°W. to east-west across the southern claims. A granitic batholith lies to the south of the sediments. The sediments consist of greywacke, conglomerate, and biotite, garnet, and staurolite paragneiss. A lens of iron formation up to half a mile wide occurs structurally at the top of the volcanics along the southwestern margin of the property. The greenstones and sediments are intruded by dykes and small masses of diorite, quartz diorite, quartz-feldspar porphyry, and aplite. Quartz veins, some bluish and mineralized, others white and barren, occur in association with the small intrusive masses, chiefly diorite.

Cross trenches made several years ago near the centre of C.7716, cl. 1, expose a wide shear-zone at intervals for 200 feet along the strike of N.70°W. The schisted greenstone is cut by quartz-tourmaline stringers across widths of up to ten feet. Little sulphide mineralization is apparent in the zone, but it is reported to contain free gold in places. The possible extension is exposed 900 feet to the west, and the zone appears to lie on the strike of the north vein at the Consolidated Mining and Smelting shaft, 6,400 feet to the east.

Recent trenching in the north part of C.7715, cl. 3, reveals a diorite dyke 45 feet wide, which may be the narrow, western continuation of the Croinor dyke, although it is 4½ miles to the location where the latter is known to contain the main auriferous veins. Fifteen feet

north of the south edge of the dyke, a quartz-tourmaline vein with sparse sulphides is one to three feet wide. Another vein, one foot wide, can be seen at the north contact of the dyke. No vein quartz is exposed in trenching 200 feet to the east along the strike.

Prospecting of the ground is in its early stages pending the completion of geological mapping and a magnetometer survey. J. P. Norrie is consulting engineer for the Company and H. Parliament with J. Fox is carrying out geological and geophysical surveys.

Croinor Pershing Mines, Limited

Ref.: Que. Bur. Mines, Ann. Rept., Part B, 1931.
" " " Unpublished report by S.H. Ross, (Consolidated Mining & Smelting, East Pershing).

Croinor Pershing Mines, Limited, holds a group of fifty-nine claims in the northwest quarter of Pershing township. The claim numbers are: A-44988-92; C.3469, cl. 1-5; C.3753, cl. 1-5; C.3754, cl. 1-5; C.5313, cl. 1-5; C.5495, cl. 3-4; C.5496, cl. 3-5; C.5497, cl. 3; C.5500, cl. 1-5; C.5502, cl. 1-5; C.5503, cl. 2-5; C.7707, cl. 1-5; C.7709, cl. 1-4. The west boundary of the property lies half a mile east of Garden Island lake, on the east shore of which a camp of four frame buildings is situated. Garden Island lake may be reached most readily by plane from Senneterre, a distance of 22 miles. An alternative means of access is by motor road from Senneterre for 17 miles southeast to Fish lake, thence by trail for two miles to Guèguen lake,

followed by a 15-mile canoe route with one 30-chain portage to Garden Island lake. A winter road, at present overgrown with small bush, extends from Fish lake to the Lacoma Gold Mines shaft in the southeast corner of Tavernier township. It passes three miles north of the main Croinor showing at a point 13 miles east of Fish lake.

The southern part of the property was held by Brett-Trethewey Mines, Limited, in 1931. This Company carried out surface work mainly in C.7099, cl. 2, (Croinor) on carbonatized shear-zones with pyrite and vein quartz. In 1932, Ventures explored some of the northeast claims with five drill holes in A-44991, and several others in C.3753, cl. 1. From 1938 to 1941, Consolidated Mining and Smelting of Quebec, Limited, held the claims comprising the northwestern and southern parts of the present property, the Croinor vein being later discovered a few hundred feet north of the north boundary of the previous claims, in claim A-44989 of the former Bussières group.

The property is underlain chiefly by Keewatin-type volcanics consisting predominately of massive to pillowed basic flows, with rhyolite lavas occurring in places, and quite numerous pyroclastic horizons varying from fine, altered tuffs to coarse agglomerates. These are in contact with a band of Temiscamian-type sediments half a mile wide trending N.60°W. and lying just outside the southwestern boundary of the claim-group. The sediments form a northern rim on the margin of a granitic batholith. Diorite, in the form of sills, dykes, and small irregular masses, is the principal intrusive

rock on the property. Others include small masses and dykes of quartz and feldspar porphyry, aplite, and a dyke of quartz gabbro in C.7707, cl. 4. Little is known of the structure of the volcanics except that they have a general strike of N.65 E. and appear to dip 50°-60° north. Both the greenstones and the diorite are schisted in a direction usually parallel to the strike of the former, and carbonatization of these rocks is common. There is some evidence of northeast cross faulting in C.3753, cl. 4.

The work carried out on the southern part of the property when controlled by Consolidated Mining and Smelting consisted of numerous trenches and eight drill holes totalling 1,860 feet on their "A" claim-group. This group comprised the present claims numbered C.5500, cl. 1 to 5; C.5502, cl. 1 to 5; C.5503, cl. 2 to 4; C.5313, cl. 4 and 5; C.7100, cl. 1 to 4; C.3753, cl. 1 to 5. This exploration was directed mainly to test shearing and mineralization concentrated along the north and south contacts of a wide (500-800 feet) dyke-like body of diorite, which may be the faulted or folded eastern extension of the diorite containing the Croinor veins. Six of the drill holes, located in claims 1 and 2, C.3753, 2,000 feet southeast of the Croinor showing, were distributed along 900 feet to probe a zone of shearing with quartz veinlets, pyritization, and rock alteration at the north diorite-greenstone contact. These indicated a low gold content for the zone in general, and close drilling on each side of a hole with an assay of 1.27 ounces of gold per ton for 1.6 feet of core showed the intersection to be without lateral extent. Three other zones of shearing with quartz-tourmaline-carbonate veins

localized along the south diorite-volcanics contact were trenched and sampled and each proved to be low-grade.

A few claims on the west side of the property along the centre line of the township formerly were part of the Berthiaume group optioned to Consolidated Mining and Smelting during 1938-40. Trenching at that time along the east boundary of A-84104 (C.3754, cl. 2 Croinor) exposed diorite containing vein material and traces of gold. This exposure lies 4,000 feet to the northwest on the strike of the Croinor dyke and veins.

The current exploration programme is focused on a gold-bearing zone in claim A-44989. One main, persistent vein and other more discontinuous veins and lenses, lying nearby to the south or dip-branching from it, occur in sheared and highly altered diorite. The principal vein, as exposed in trenches, occurs a few feet south of the north margin of the diorite which is a dyke or sill 400 feet wide in this locality. In detail, the vein has an irregular trend, but the average strike is N.68°W. and drilling indicated a dip of 50° to 60° north, about parallel to the northern contact of the enclosing diorite. It contains up to 50 per cent of inclusions of diorite schist, the width of quartz and schist varying from three to sixteen feet on surface when adjacent, narrow lenses are not included. Mineralization consists of gold, often visible, moderate pyrite, sparse chalcopyrite and pyrrhotite in a gangue of fractured white to slightly bluish quartz, black tourmaline, and minor scattered carbonate. In two trenches, flat veins dipping 15° to 20° north and up to one foot wide were

observed adjacent to the main vein. Surface work has traced the zone for a length of 500 feet and drilling has extended this to 700 feet, with the eastern projection apparently terminated and the western extension open. Gold values from Company surface channel samples range from $5.28 per ton across 5.3 feet to $12.32 per ton across 27 feet.

It is probable that the diorite body extends completely across the property, widening to the southeast of the vein zone and narrowing to the northwest. Diorite with vein quartz is exposed on the strike of the explored section, 1,600 feet and 4,000 feet to the northwest. At the former location, four cross trenches distributed along 200 feet reveal the north diorite-greenstone contact, and in the two central trenches, 40 feet apart, sheared zones, up to four feet wide and containing vein quartz, tourmaline, and sulphides, occur. A grab sample of schist and quartz taken by the writer was found to assay $1.26 in gold per ton.

Eighteen drill holes, totalling 3,457 feet and distributed along 775 feet, have been completed to date (October 25th) on the gold-bearing zone in claim A-44989. The deepest intersection is at 125 feet down the dip of the zone. The data from most drill holes are diagnostic of two or more vein zones from 40 to 80 feet apart with a parallel dip. Gold values in the north, or main vein, range from low to high along core-lengths from five to twenty-five feet. The average gold content of the south zone is not high. It is believed that the small core from the light drill in use may not provide representative samples as the distribution of free

gold is known to be erratic. For example, the writer obtained a gold assay of $73.00 per ton from a sample of schist within vein quartz, whereas the adjoining quartz yielded only trace.

J.P. Norrie is consulting engineer, H. Parliament and J. Fox are resident geologists, and P. Croteau is in charge of surface operations.

Garden Pershing Mines, Limited

Ref.: Que. Bur. Mines, Ann. Rept., Part B, 1931.
" " " " " " " 1932
" " " Unpublished report by S.H. Ross, (Consolidated Mining & Smelting, East Pershing).

The property of Garden Pershing Mines, Limited, consists of fifty claims on the east side of Pershing township at the east-west centre line. The claim numbers are: C.7782, cl. 1-5; C.7784, cl. 1-5; C.7888-7895, cl. 1-5. The Assup River portage crosses the centre of the claim-group two miles northeast of the northeast end of Matchi-Manitou lake which may be reached by aircraft based at Senneterre, a distance of 24 miles. A motor road leads south for 17 miles from Senneterre terminating at Fish lake, from where a trail may be taken for two miles to Guéguen lake. A 25-mile canoe route then may be followed through Guéguen, Vauquelin, and Garden Island lakes to Matchi-Manitou lake. By canoe, up the Mégiscane and Assup rivers from the village of Mégiscane on the Canadian National railway seven miles southeast of Senneterre, one may

arrive at the north end of the Assup River portage less than a mile from the claims.

Rock outcrops are not numerous on the property, most of the southeastern portion being covered by sand deposits. A geological feature of interest is the presence of a contact between Temiscamian-type sediments and Keewatin-type volcanics, the vicinity of which is the locus of shearing, mineralization, and alteration. This contact trends southeast to east-west across the southern claims. The property lies from one to two miles east of a granitic batholith, and the volcanics underlying the central and northern claims are intruded by small masses and dykes of diorite, acidic porphyries, and pegmatite.

A small prospecting crew under H. Adams was active from August to October, but no zones of mineralization were discovered as most of the time was spent cutting out control lines in preparation for geological mapping.

Kenda Pershing Mines, Limited

Ref.: Que. Bur. Mines, Ann. Rept., Part B, 1931.
" " " Unpublished report by S.H. Ross, (Consolidated Mining and Smelting, Berthiaume claims).

The property of Kenda Pershing Mines, Limited, consists of fifty-eight claims adjacent to the north-south centre line in northern Pershing township. The numbers of the claims are: C.5316, cl. 3-4; C.5318, cl. 3-4; C.5501, cl. 1-5; C.5503, cl. 1; C.5494, cl. 1-5; C.5495, cl. 1, 2, 5; C.5496, cl. 1-2; C.5497, cl. 1-2,

4-5; C.5498, cl. 1-5; C.7101, cl. 1-5; C.7162, cl.1-5; C.7709, cl. 5; C.7710, cl. 1-5; C.7718, cl. 1-5; C.7720, cl. 4-5; C.7721, cl. 2-5; C.7721, cl.1-2. The majority of the claims lie in a block immediately west of the centre line and north of Garden Island lake, but six claims form a narrow projection east of the line and north of the Croinor group, and nine claims constitute a narrow group extending to the southeast along the Croinor southwestern boundary. Access to the property may be accomplished by plane from Senneterre southeast to Garden Island lake, a distance of 22 miles. It also may be reached by motor road from Senneterre for 17 miles to Fish lake, thence by trail for two miles to Guèguen lake, followed by a 15-mile canoe route to Garden Island lake.

The claims between Garden Island lake and the west boundary of Croinor were staked for McIntyre-Porcupine Mines in 1931. Trenching at that time on ground now covered by claim C.5498, cl. 2, revealed siliceous, carbonatized shear-zones in greenstone, numerous porphyry dykes, and quartz veins. The shears contain sparse chalcopyrite, pyrrhotite, and pyrite, and a massive stringer of the latter is reported to assay $400 in gold per ton. Two claims, C.7101, cl. 4 and 5, at the southeastern extremity of the group, formerly were held by Deane Cadillac Mining Corporation. The northwestern portion of the property comprised parts of the Berthiaume claims and Northwest Pershing, two groups controlled by Consolidated Mining and Smelting of Quebec during 1938-1941. This Company carried out considerable surface work and three diamond-drill holes totalling 818 feet.

For the most part, the property is underlain by Keewatin-type volcanics consisting of basic flows with intercalated pyroclastic horizons trending N.70°W. The northern contact of a narrow belt of Temiscamian-type sediments strikes N.60°-70°W. for four miles along the southern margin of the claim-group. The older formations are intruded by chloritized and frequently carbonatized diorite dykes and by acidic porphyry dykes particularly near the volcanic-sedimentary contact. A narrow dyke of quartz gabbro trends east-west in C.5501, cl. 5.

Consolidated Mining and Smelting carried out trenching and put down one drill hole to test a vein 2.5 feet wide in C.5497, cl. 2. In addition to other areas of trenching, this Company investigated a mineralized zone in C.5494, cl. 2. In this claim, a chloritic shear-zone, striking N.75°W. and dipping steeply north, is associated with carbonatized diorite and contains lenses and veinlets of quartz up to 2.5 feet across carrying 0.10 ounces of gold per ton. Two drill holes into the zone intersected no supporting gold values. The diorite may be the northwestern extension of the Croinor ore-bearing dyke. Among other old trenches in the vicinity, one in C.7718, cl. 5, exposes, across 150 feet, carbonatized, sericitic, fissile schist constituting a strong zone of shearing with an east-west strike and vertical attitude.

Current development work on the property is in the early stages and consists of establishing control picket lines, geological mapping, and the excavation of a few trenches. One of these, in C.5495, cl. 2, exposes diorite and vein quartz lying on the strike of the Croinor

intrusive, but, according to Company sampling, carrying no gold values.

J.P. Norrie is consulting engineer, and H. Parliament is mapping the property geologically.

Lochland Pershing Mines, Limited

This Company holds a group of thirty contiguous claims in the northeast quarter of Pershing township. The west boundary of the property is the north-south centre line of the township and the claims are numbered: C.9144 to 9149, cl. 1 to 5. A good trail leads northeast for one mile and a half from Garden Island lake to the tent camp beside a small lake in C.9146, cl. 1. Garden Island lake may be reached by flying 22 miles southeast from Senneterre; or by taking a motor road for 17 miles from Senneterre to Fish lake, then a trail for two miles to Guéguen lake, and then a canoe route for 15 miles.

In general, the claims are underlain principally by Keewatin-type greenstones consisting mainly of basic lavas, but with minor bands of tuff and agglomerate. These strike N.60°-80°W. and for the most part dip steeply north. The volcanics are intruded by dykes and small masses of diorite, and one late Precambrian quartz gabbro dyke occurs in C.9145, cl. 2.

Cutting of control lines and surface prospecting began on the claim-group in August. A group of trenches in C.9146, cl. 1, 800 feet east of the township centre line, expose basic flows and fragmental rocks cut by diorite and a narrow diabase dyke. In one trench, banded,

schisted, and silicified tuff is mineralized with pyrite across two to six feet, and another contains a small pocket of vein quartz. A quartz-tourmaline vein striking N.72°W. and dipping 45°N. occurs in association with sheared and altered diorite 2,000 feet east of the centre line in C.9146, cl. 2. The vein contains sparse pyrite and carbonate, and is up to two feet wide. It is exposed in two trenches along the strike 60 feet apart. A third area of stripping and shallow trenching is located 2,900 feet east of the centre line, close to the west boundary of C.9146, cl. 3. Here, a sheared zone striking N.80°W. and dipping steeply north to vertical contains lenses, pockets, and stringers of vein quartz up to 3.5 feet across. The walls of the shear are pyritized with 1/8-inch cubes, and the quartz is cut by veinlets of white carbonate and tourmaline. About 70 feet to the northeast, another vein six to ten inches wide dips 40° south. These three occurrences of shearing and mineralization lie approximately along one line and may be portions of a single general zone of schisting trending N.75°W. across the southern claims. As yet, Company channel samples have yielded no gold values of importance.

The consulting enginner is A.W. Johnston and J.C. Finnan is in charge of operations at the property.

Peribec Gold Mines, Limited

Peribec Gold Mines, Limited, holds a group of twenty claims in the northwestern part of the southeast quarter of Pershing township. The claims are numbered C.8239, cl. 1 to 5; C.9472, cl. 1 to 5; C.9468, cl. 1 to 5; and C.9477,

cl. 1 to 5. They extend eastward from the northeast arm of Matchi-Manitou lake, and are crossed near the east boundary by the Assup River portage. Lake Matchi-Manitou may be reached by planes based at Senneterre, a distance of 24 miles.

The claim-group is underlain almost entirely by Temiscamian-type sediments. The eastern margin of a granitic batholith may lie along a narrow section of the western claims in Matchi-Manitou lake. Keewatin-type volcanics occur from half a mile to one mile to the northeast.

A small amount of trenching and stripping was carried out during the summer at the north edge of C.9472, cl. 3. This exposes thin-bedded greywacke metamorphosed to garnet, staurolite, and biotite paragneiss and trending N.20°W. Thin, short lenses of barren-looking quartz are showing along a few feet of one of the trenches, and sparse grains of pyrite occur in the contiguous greywacke.

Scout Pershing Mines, Limited

A group of twenty-eight claims on the northwest quarter of Pershing township comprises the property of Scout Pershing Mines, Limited. The claims are tied to the north-south centre line of the township, and are numbered C.8308 to 11, cl. 1 to 5; C.8312, cl. 1 to 4; and C.8313, cl. 1 to 4. The present means of access is by plane to Garden Island lake, 22 miles southeast of Senneterre. A trail leads northwest from the north end of the lake for one mile and a quarter to a log-cabin camp at the shaft on Consolidated Mining and Smelting ground. This camp is not on the property itself, but it is being used to accommodate the prospecting crew.

The property is underlain predominantly by greenstones consisting of basic to intermediate lavas and minor pyroclastics. These are cut by small masses of diorite. The north contact between a band of Temiscamian-type sediments and the Keewatin-type volcanics trends northwest about a mile to the south of the property.

When the writer visited the township in October, a crew of men were just moving into the camp before starting to establish control lines and carry out prospecting activities. J.P. Norrie is consulting engineer for the Company and W. Croteau is in charge of operations at the property.

ROUYN TOWNSHIP

Donalda Mines, Limited

Donalda Mines controls a group of twenty-four claims, fractions and blocks adjacent to the west side of the north-south centre line at the north end of Rouyn township. The northern part of the property formerly was held by Waite Amulet and part of the southern portion by Wiltsey-Coghlan Mines. The claims are numbered: C.3290, cl. 1 to 5; C.3289, cl. 1 to 5; C.3250, cl. 1 to 5; R-39260, T-5504-07; Bl.152-53; and Bl.192-93. The camp, located on the northeast shore of Osisko lake, is half a mile east of the Noranda Golf Club house.

The property is underlain chiefly by rhyolite, rhyolite breccia, and trachyte. In part, these are amygdaloidal or porphyritic, contain minor tuffaceous bands, and a few more

basic flows. A pebble-bearing lamprophyre dyke trends southeast across the northern claims, and small bodies of diorite are found. The rocks are broken by several faults and shears, including the extension of the Horne Creek fault across the southern margin of the property.

Diamond drilling by the present Company began early in 1944. In October, thirty-three holes aggregating 18,482 feet had been completed. Two of these are collared near the boundary between T-5506-07 to locate the Horne Creek fault. Most of the remainder are vertical holes near the south end of claim-line T-5504-05. A branch fault trends northeast from the Horne Creek fault producing a west-pointing wedge-shaped area within which gold-bearing quartz veins are localized in flat-lying fractures. The vein quartz averages about two feet thick and in high-grade; but lower values in the contiguous rhyolite decrease the average grade to about $7.00 in gold per ton and increase the average auriferous width to four or five feet. The white cataclastic quartz is mineralized with small amounts of pyrite, chalcopyrite, galena, and sphalerite. In the fall of 1944, the zone had been traced by drilling for 850 feet down the gentle southward dip along one section and up to 1,000 feet in an east-west direction.

H. Butterfield is consulting geologist for the Company. S. Troop and J. Campbell are the engineers in charge of operations.

Donrand Mines, Limited

This Company holds a group of five claims in north Rouyn township just east of the centre

line. They cover lots 34, 35, and 36 of range X North, and lots 35 and 36 of range X South. No outcrops occur in the south part of the property. The northern portion is underlain mainly by rhyolite and rhyolite breccia striking southeast and containing bands of more basic lavas. The flows are intruded by bodies and numerous dykes of diabase and quartz diabase, and are transected by several northeast trending faults and shears.

In October, five diamond-drill holes totalling 3,500 feet had been completed. Four of these provide a staggered cross-section of most of lot 35, range X South, and the fifth is drilled north from the southeast corner of lot 36, range X South. Hole No. 4 in southern lot 35 intersected a silicified shear-zone from which a core-length of 3.5 feet assayed 0.11 ounces of gold per ton.

Exploration is under the direction of Wiltsey-Coghlan Mines, Limited, and B.C. Fillingham is in charge of operations at the property.

Eldona Gold Mines, Limited

Ref.: Geol. Surv. Can., Mem. 233, 1941, pp. 52-3.

Eldona Gold Mines holds a group of twenty claims partly adjacent to the centre line in the northeast quarter of Rouyn township. The numbers of the claims are: T-289-291; T-1940-1942; T-2806-2809; C.6500, cl. 1-6; C.7482, cl. 1-4. The camp at the north end of lot 33, range IX South, may be reached by a mile trail from the northeast end of Osisko lake. Early development work by previous owners consisted of trenching, pitting, and a prospect shaft 20 feet

deep in claim T-2806. In 1939, Mining Corporation put down thirteen diamond-drill holes totalling about 10,000 feet.

Blake River volcanics are the chief rocks underlying the property. These consist mainly of rhyolite and rhyolite breccia. A well-bedded horizon of tuff and breccia strikes south in the central part of the property. It is up to 400 feet wide. Numerous dykes and masses of diabase and gabbro occur, and one dyke of younger diabase is exposed. The Horne Creek fault trends south of east across the southern part of the property and, north of it, several northeast trending faults and shears are recognized. The tuff horizon terminates against the Horne Creek fault and is believed to be correlative with a similar band south of the fault at the Horne mine more than two miles to the west. The fractured rocks, north of the Horne Creek fault and west of the tuff band on the Eldona claims in range IX South, are widely impregnated with disseminated pyrite.

The current drilling programme is designed to test geophysical anomalies in the northern part of the property in range IX North. Twelve holes aggregating 8,400 feet had been completed in October, 1944. Five of these have intersected a northeast-branching fault zone at the south end of lot 33. A few low values in gold have been obtained from the core, and some of the sludge from one hole, from which 10 feet core was not recovered, assayed 0.29 ounces of gold per ton. Four of the holes form a north-south cross-section of range IX North along lot-line 35-36. A zone of vein quartz, 11 feet wide, was intersected south of the diabase dyke in a

hole drilled south from a collar in the middle of lot 36. Two holes in northern lot 35 cut mainly rhyolite and basic tuff.

Exploration of the property is under the direction of H. Butterfield, S. Troop and J. Campbell.

Rouyn Merger Gold Mines, Limited

Ref.: Que. Bur. Mines, Ann. Rept., Part C, 1933, 63-71.
" " " P.R. No. 135, 1938, p. 26.
" " " " " No. 150, 1939, p. 40.
" " " " " No. 161, 1940, p. 19.
Geol. Surv. Can., Mem. 231, 1941, p. 88.
" " " Prel. Map 43-7C, 1943.

This Company holds fifty-four claims forming a group along the east-west centre lines of Rouyn and Joannès townships. The numbers of the claims are: R-10829-33; R-10940-1; R-10943-50; R-10954-55; R-10996-11005; R-13226; C.5062, cl. 1-5; C.5103, cl. 1-4; C.5831, cl. 1-3; C.5885, cl. 1; C.5889, cl. 1-4; C.6225, cl. 1-4; C.6226, cl. 2-3; C.7122, cl. 1-5; C.8404, cl. 1-2. Seventeen of the claims in Rouyn township formerly were known as East Rouyn (Quebec), Limited; eleven of the claims in Joannès township comprised O'Neil Thompson Gold Mines, Limited, and most of the remainder were part of the Hosking-Cockeram Prospecting Syndicate. The Rouyn-Val d'Or highway crosses the claims in Rouyn township, six miles east of Rouyn, and continues to the east about half a mile south of the Joannès township group.

The geology of the property is complicated by the important Cadillac-Bouzan Lake and Davidson Creek faults which intersect at the Kinojévis river in lot 8, range VI. East of the Davidson Creek fault and north of the Cadillac 'Break' the low ground appears to be underlain by greywacke of the Cadillac group, and, south of the latter, severely drag-folded Temiscamian(?) conglomerate outcrops. West of the Davidson Creek fault and north of the Cadillac zone of movement andesites and dacites of the Blake River group occur and, south of the fault, sediments and volcanics of the McWatters group are exposed. Small bodies of diorite intrude the volcanics beside the Kinojévis river in lot 5, and the greywacke in lots 8 to 10; and a late Precambrian gabbro dyke occurs in lot 3.

In claims R-10833 and R-10948 (S. lots 60-62) of the East Rouyn portion of the merger, extensive diamond drilling was carried out in 1939. This outlined two auriferous ore shoots in R-10948, lying one above the other and separated and adjoined on each side by lower grade mineralization. The ore occurs near the contact between sediments and volcanics of the McWatters group in a section where the contact curves sharply northeast. It lies 700 feet south of the Cadillac fault, and 8,500 feet east of similar ore occurrences at the McWatters mine. The upper ore shoot is up to 28 feet wide and 100 feet long, and extends to a depth of approximately 250 feet. The average grade is calculated to be about $5.75 in gold per ton. Below this, for nearly 500 feet, erratic values occur, some low or nil and some high. The lower zone is some 600 feet in length at the 1,000-foot horizon, with, according to Company records, an ore shoot

in the middle of the section grading $9.50 in gold per ton along 250 feet. Approximately 150,000 tons of ore are estimated, in addition to considerable material with values too erratic to establish grade and tonnage by drilling, but quite possibly of mineable character. During the current drilling campaign at the property ten holes totalling 6,328 feet have been put down to explore further this zone and the Cadillac 'break' to the north.

During 1932-33, Noranda Mines carried out surface work and about 3,000 feet of drilling on the former O'Neil Thompson claims between the Kinojévis river and the township line. Development from 1934 to 1936 by the O'Neil Thompson Company consisted of a 175-foot shaft, with approximately 1,000 feet of lateral workings on two levels. Low-grade, discontinuous, quartz-ankerite-tourmaline veins and replacement bodies carrying some visible gold, pyrite, pyrrhotite, and scheelite were explored. A 35-ton test-mill was in operation for a short time during 1936. A detailed description of the deposits is given on p. 88 of Memoir 231 of the Geological Survey of Canada.

Fifteen hundred feet east of the shaft, in claim R-11004 (lot 6), gold-bearing replacement deposits occur in a small mass of highly altered quartz diorite. The principal body is 170 feet long and has a maximum width of 35 feet. Other small veins and replacements occur in the vicinity. The zones are heavily impregnated with pyrite and arsenopyrite. Reported gold values in channel samples are from $4.00 to $6.00 in gold per ton across widths of from 7 to 35 feet. Three holes drilled below the main zone indicated it had almost lensed out at a depth of 60 feet.

A third showing on the property occurs in lot 10 about 140 feet south of the railway. A vein 10 to 20 feet wide is exposed in several prospect pits along the strike of N.80°E. for 300 feet. In 1940, Hollinger Consolidated Mines explored the vein at depth with 1,257 feet of drilling in five holes distributed along 500 feet.

The present Company completed eleven drill holes aggregating 5,226 feet in claims R-10998, R-11005, and R-11003. These are directed to explore the sedimentary-volcanics contact extending from the ore localized near it, 2,000 feet west in A-10948. Three thousand feet of the contact have been probed by holes at 300-foot intervals. No gold-bearing zones of significance were encountered west of the shaft which is in lot 3, but, east of it, a southward curve in the contact has been established and gold values ranging up to 0.50 ounce per ton have been reported from core-lengths of three feet.

Other recent drilling on the property includes six holes directed into the Davidson Creek fault zone. One of these is drilled southeast for 1,100 feet from the west side of the Kinojévis river near lot-line 6-7, and a second is drilled in the opposite direction for 2,000 feet from a collar in lot 8 a few feet south of the railway. The two holes provide a cross-section of the faults and indicate the zone of shearing is 600 feet wide. A third hole, located at the north end of the island in the river in lot 7, was drilled vertically for 407 feet without entering bed-rock, showing that the fault zone lies in a deep valley. One of three holes, collared 50 feet apart, 675 feet south of range-

line VI-VII in lot 9, entered the fault zone at depth; while the other two re-entered overburden after proceeding 90 and 130 feet, respectively, through greywacke. A seventh hole is drilled southeast from a point 450 feet north of the railway and 140 feet east of lot-line 9-10, and an eighth is directed southwest from 725 feet north of the railway in eastern lot 11. The former cut a 75-foot shear-zone which may be a subsidiary of the Cadillac fault. A group of six holes at 500-foot intervals along an east-west line 2,000 feet south of range-line VI-VII are planned to explore the Cadillac 'break'. The first of these at the west end of the group 100 feet west of lot-line 12-13 had been completed in September. It intersected the main fault, as evidenced by a 250-foot width of highly schistose and altered rocks.

To date (September 26th) 18,755 feet of drilling in thirty-two holes has been completed under the direction of W.J. Hosking and R.V. Hopper.

Wiltsey-Coghlan Mines, Limited

Ref.: Que. Bur. Mines, Ann. Rept., Part A, 1933, p. 104.
" " " Ann. Rept., Part A, 1934, p. 85.
Geol. Surv. Can., Mem. 233, 1941, pp.60-61.

This Company holds a group of seventeen claim-blocks partly astride the north-south centre line of Rouyn township between Osisko and Rouyn lakes. The blocks are numbered 30-33, 149-151, 155-156, 160-163, 184, 190, and 194-195.

A trail leads west 1,500 feet from the east side of Osisko lake to the camp in block 149 beside Osisko creek. Previous development work up to 1934 consisted of trenching, test pitting, drilling, and sinking of two prospect shafts to depths of 84 and 101 feet with small amounts of lateral work. No work was done between 1934 and the current diamond-drilling programme which began in March, 1944.

The property is underlain mainly by Blake River volcanic rocks varying from acid to basic flows and related pyroclastics. The western end of a syncline of Cadillac sediments occurs on the southern claims. The only intrusives exposed are small dykes of diorite and diabase. The Horne Creek fault extends across block 31 at the north end of the property; the andesite fault trends south of east partly along Osisko creek; and several other faults and shears are known. The structure of the volcanics is complex.

The mineralization outlined by previous exploration is described in the references cited. In the drilling campaign started in 1944, eleven holes had been completed in September. Five of these are distributed along 1,200 feet near the block-line 32-33 and drilled south. Several sheared and silicified zones were intersected which contain quartz-carbonate stringers and up to ten per cent of sulphides, chiefly pyrite, with minor pyrrhotite, chalcopyrite, and sphalerite. One hole is drilled north and another south under the bay in Osisko lake extending eastward into block 32. These are directed to explore a small gold showing on the south shore of the bay, but no values were found at depth. Four holes are collared in the central part of

block 31. Two of these cut several zones of faulting which probably represent the Horne Creek break. The fractured and schisted rocks are silicified, carbonatized, pyritized and contain quartz-carbonate veins up to one foot wide. A hole drilled north in south central block 149 entered talc-sericite schist of the andesite fault zone.

B.C. Fillingham is in charge of operations at the property, and G.F. Flaherty is consultant for the Company.

VASSAN TOWNSHIP

Camp Bird Mines, Limited

Ref.: Que. Bur. Mines, P.R. No. 116, 1937, p. 54.
" " " " " No. 120, 1938, p. 13.
" " " " " No. 135, 1939, p. 39.

This property, formerly known as Dorval-Siscoe Mines, Limited, consists of forty-six claims in south-central Vassan township. It adjoins Siscoe Gold Mines on the north and west. Except for lot 39, the north-half of lots 40 to 47, range II, and four small islands, the property is covered by the water of Dubuisson lake. Previous development work including diamond drilling and the sinking of two shafts with 3,000 feet of lateral workings is described in the above references.

Following a magnetometer survey during the winter of 1941, which covered the western claims of the property and indicated the presence of the north and east contacts of an

intrusive stock, diamond drilling was started in December, 1942, and continued until April, 1943. Seventeen holes aggregating 11,463 feet were drilled. Two of the holes did not reach bedrock. Most of the holes are located in claims A-43272-73-75 in the northeast portion of the stock and the invaded volcanics. The main intrusive body is granodiorite and it is cut by dykes of granodiorite porphyry and by andesite dykes. Numerous low gold values occur both in the altered granodiorite and in vein material. The latter is frequently associated with sheared basic dykes and contains pyrite and sparse galena in a gangue of quartz, tourmaline, and carbonate. Several wide (up to 70 feet), auriferous intersections were obtained which contain narrow (0.5 feet), high-grade sections.

Some of the scattered gold values reported are as follows:

Hole No.	Core Length	Gold Value per Ton
62A ...	9.0 feet	$ 6.01 (includes 6 in. at $95.62)
64 ...	1.5 "	16.34
65A ..	(1.3 "	26.14
	(1.9 "	12.42
66 ...	2.0 "	39.00 (specks of free gold)
69 ...	10.3 "	7.00 (average)
71 ...	(5.0 "	3.24
	(9.0 "	13.06

This exploration programme was under the direction of T.H. Koulomzine assisted by L.K. Smith and L. Brossard. Mr. Koulomzine supplied the diamond-drilling data appearing in this report.

Citralam Malartic Mines, Limited

(See Malartic township, page 3)

Norbenite Malartic Mines, Limited

(See Malartic township, page 6)

VAUQUELIN TOWNSHIP

Rayon d'Or Mines, Limited

The property of Rayon d'Or Mines is situated in the southeast corner of the northwest quarter of Vauquelin township. The ground held by the Company consists of seventy claims. A four-building camp is located on claim C.7202, cl. 3, adjacent to the shore of Guéguen lake. The property may be reached from the Louvicourt River bridge of the Mont Laurier-Senneterre highway, 20 miles east of Val d'Or, by a canoe trip of ten miles with two portages. Another means of access is by aircraft from the Louvicourt bridge or Senneterre. Part of the claim-group were staked in 1936 by H. Bush and optioned in 1937 by Consolidated Mining and Smelting, when two drill holes were put down.

The eastern portion of the claim-group is underlain by part of a large intrusive mass extending west from Pershing township. Here it consists of diorite porphyry which may be a marginal phase of the main granitic body or a separate stock. The only known outcrop on the claims is in claim C.7202, cl. 3, on the shore of the lake and a small adjacent island. This consists of diorite porphyry intruding andesite and the

latter is thought to underlie the western part of the property. Quartz vein float, reported to carry as much as $25.00 in gold per ton, has been found along the shore of the lake.

The two shallow holes, drilled in 1937 by Consolidated Mining and Smelting in C.7202, cl. 3, cut four vein zones, one of which assayed $3.50 in gold per ton for 3.5 feet of core. At the time of writing (July), two holes totalling 800 feet had been completed by the present Company. These are collared in claim C.7202, cl. 3, and have intersected massive, porphyritic, amygdaloidal, and brecciated andesite; diorite porphyry, feldspar porphyry, and mineralized quartz feldspar porphyry; but no prominent quartz veins or sulphide-bearing zones. The core from a third hole in process of drilling shows short interesting sulphide-bearing sections in the first 90 feet.

TOWNSHIP NO. 81

Consolidated Mining and Smelting Company of Quebec, Limited, (Group 'A' Claims)

Ref.: Que. Bur. Mines, Ann. Rept., 1934, Part C, pp. 29-31.
Que. Bur. Mines, Ann. Rept., 1935, Part B, pp. 76-77.

This Company holds a group of fifteen claims in township No. 81 adjacent to the Guillet-No. 81 township line north of Travers lake. The claims are numbered: C.3563, cl. 1 to 5; C.3564, cl. 1 to 5; and C.4114, cl. 1 to 5. The property may be reached from the village of Mud Lake by a

canoe route with four long portages between the Guillet river and Loken lake which covers part of the claims. The claims were originally staked by W. Loken in 1933, and the first reported discovery of gold in the Belleterre district was made on them in a narrow quartz vein.

The property is underlain by a complex of lavas, pyroclastics, sediments, intrusives, and hybrid rocks of uncertain origin. Volcanics predominate in the western half and much of the eastern part is intruded by an irregular stock of quartz-albite porphyry. Feldspar porphyry, syenite, quartz diorite, and lamprophyre dykes occur on the claims.

The principal mineralized zone lies in C.4114, cl. 3, immediately northeast of the dam at the northwest outlet of Travers lake. It is a quartz vein up to 16 feet wide, striking N.5°E. with an almost vertical attitude. The vein occurs in a narrow band of schisted tuff enclosed between andesite on the west and a wide porphyry dyke on the east. The zone is mineralized with pyrite, chalcopyrite, pyrrhotite, and sparse galena, but the highest gold value, found from Company sampling of ten trenches distributed along 300 feet, is 0.04 ounces per ton.

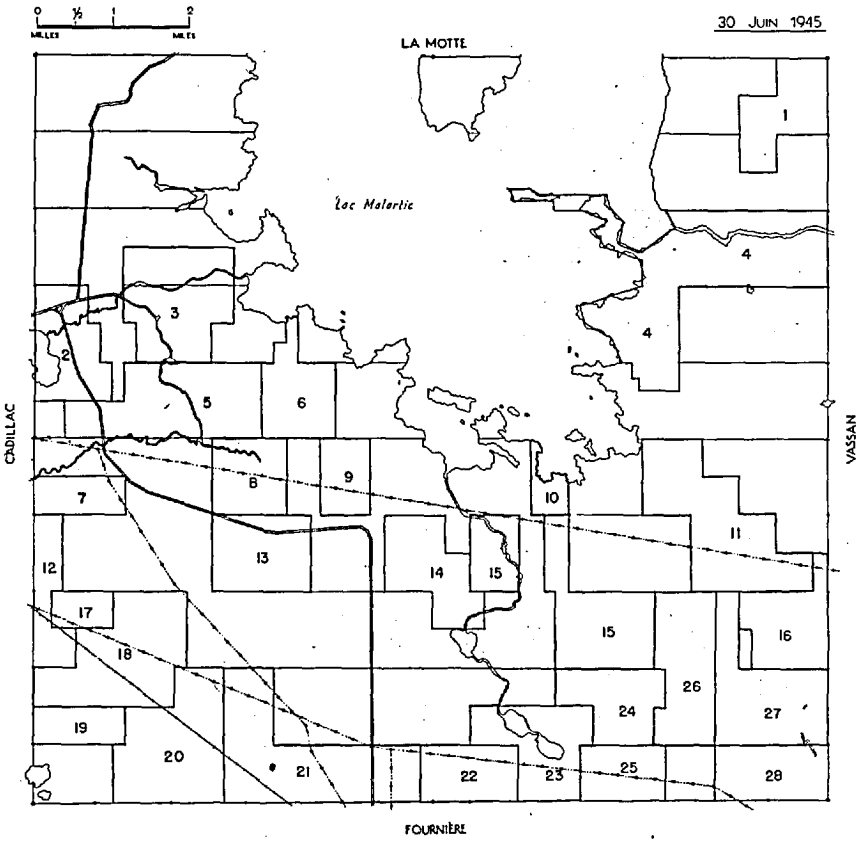
In the spring of 1944, Consolidated Smelters explored the vein at depth with 2,835 feet of drilling in eleven holes distributed along 400 feet. Ten of these intersected the zone, but gold values were disappointingly low, the best secured being 0.02 ounces per ton.

Another vein occurs on the porperty at the south end of Loken lake, 400 feet northwest

of the one described above. It lies in sheared, carbonatized andesite paralleling a N.5°E, schistosity. The vein is ten inches wide; contains scattered sulphides; and, according to reports, a high-grade pocket of free gold was found at its south end. This was the initial gold discovery in the district.

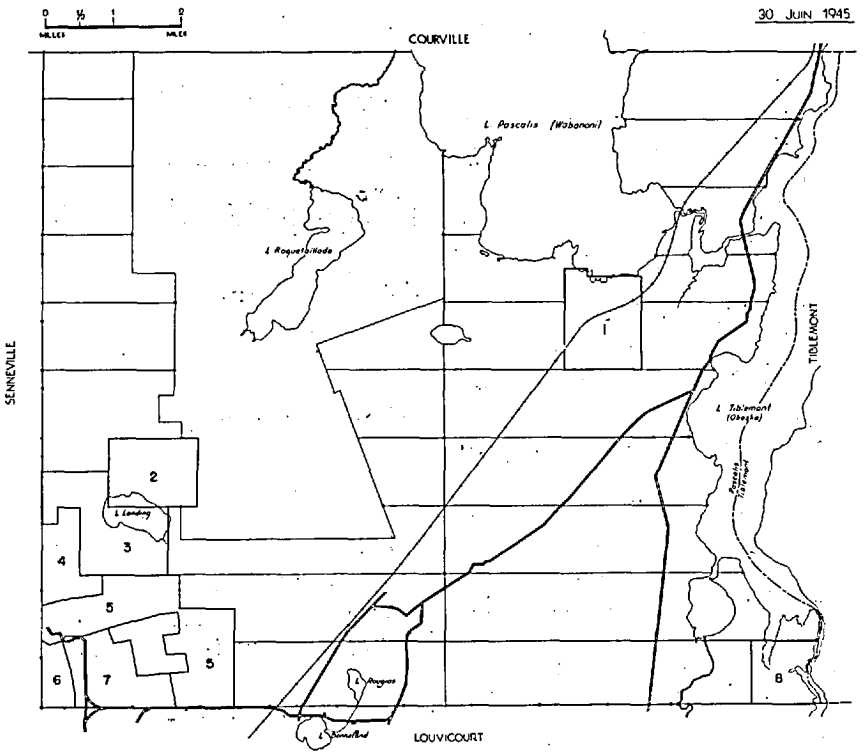
The above information on surface work and diamond drilling was supplied by W. Deane of the Noranda staff of Consolidated Mining and Smelting.

MALARTIC


0 ½ 1 2
MILES MILES
30 JUIN 1945
LA MOTTE
Lac Malartic
CADILLAC
VASSAN
FOURNIÈRE
1
2
3
4
4
5
6
7
8
9
10
11
12
13
14
15
15
16
17
18
19
20
21
22
23
24
25
26
27
28

MALARTIC

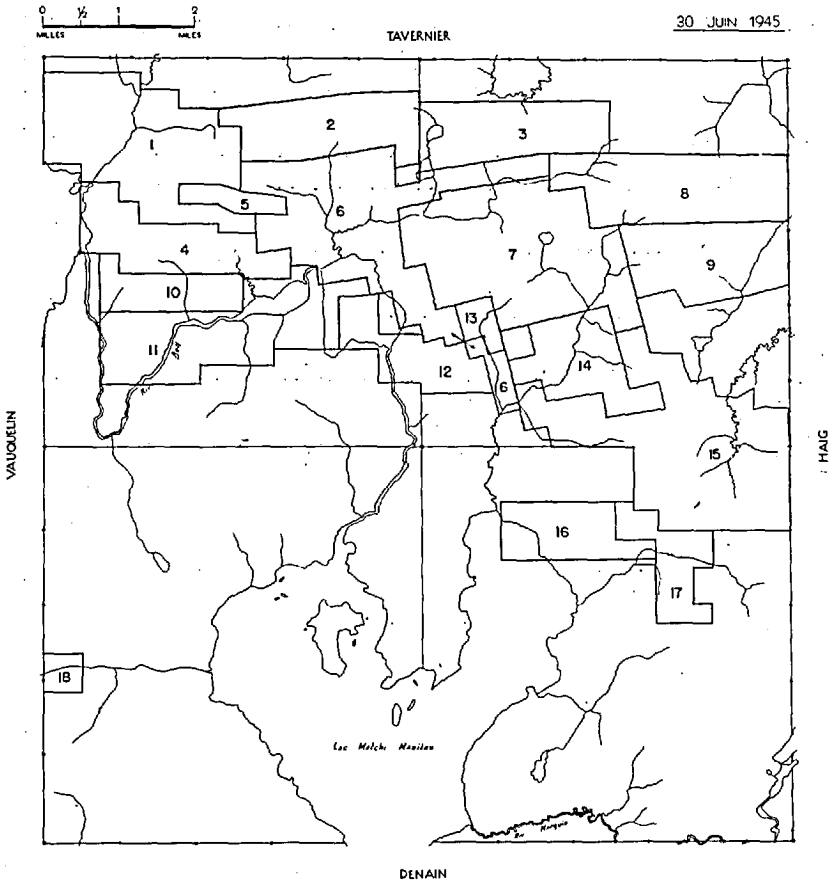
PASCALIS


0 ½ 1 2
MILES
30 JUIN 1945
COURVILLE
L. Pascalis (Wabanoni)
L. Roquetbinode
SENNEVILLE
TIBLEMONT
L. Tiblemont (Obeshe)
L. Lendry
1
2
3
4
5
5
6
7
8
L. Angus
L. Simard
LOUVICOURT

PASCALIS

Cournor	6
Kalbrook	8
Pascalis	7
Perron	5
Ray-Lac	1
Senore	4
Transcan Investors	2
Vanacor	3

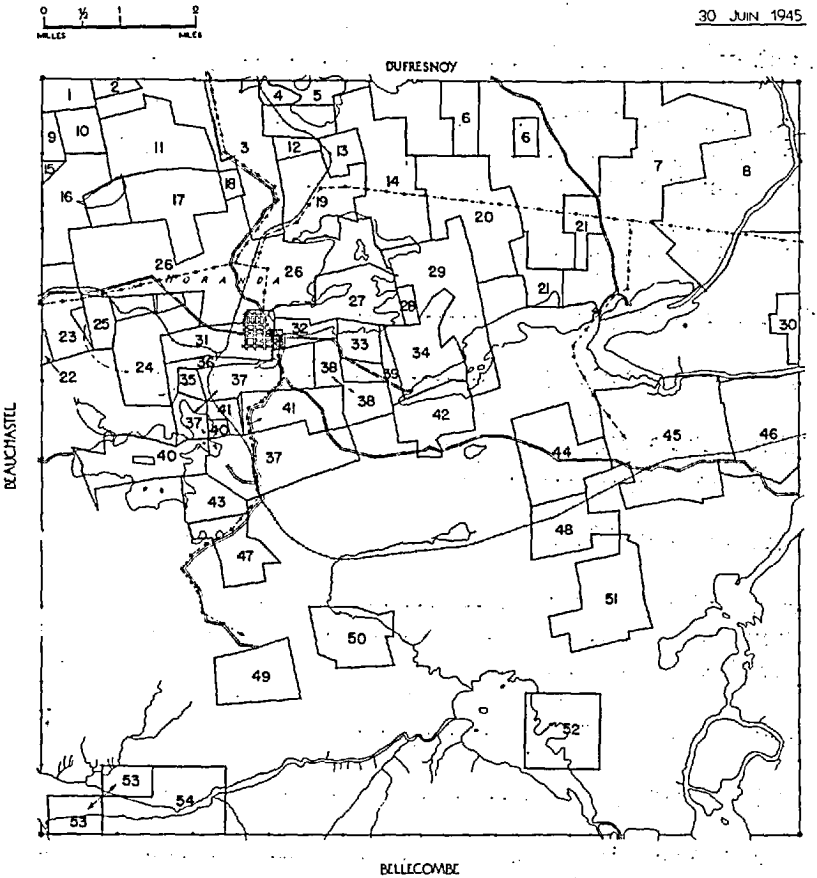
PERSHING


0 ½ 1 2
MILES MILES
30 JUIN 1945
TAVERNIER
VAUQUELIN
HAIG
DENAIN
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
Lac Malchi Manitou

PERSHING

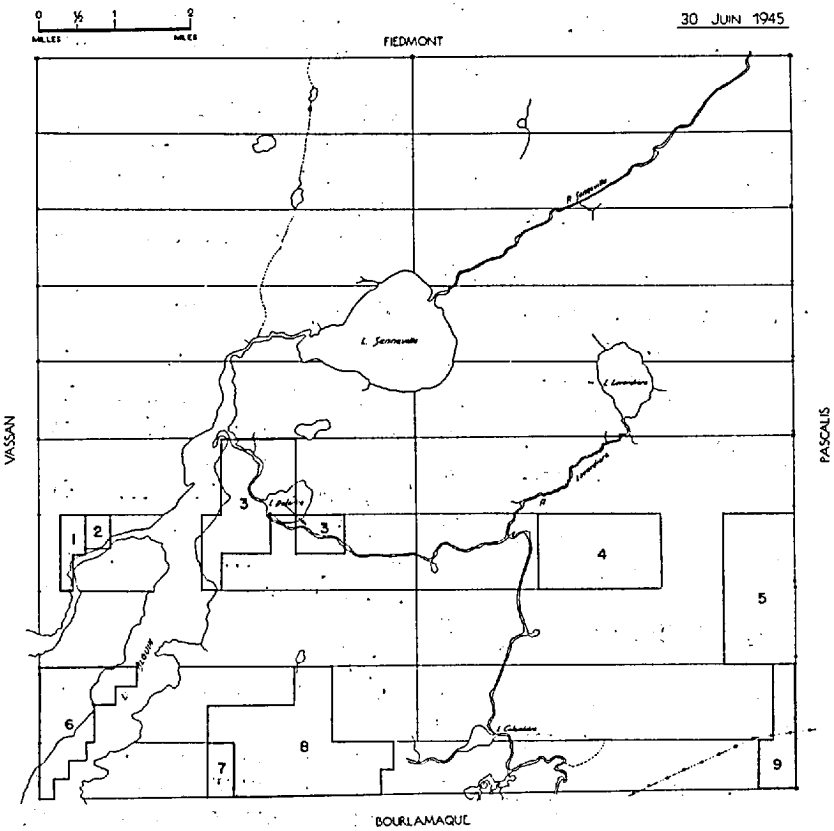
Ansley	1
Canadian G. & Metal	11
Cons. Mng. & Smelt.	5, 14
Croinor Pershing	7
Garden	15
Kenda Pershing	6
Lochland Pershing	3
Mitto Pershing	4
Murbell	10
Norford Pershing	9
Packard Pershing	17
Peribec	16
Pershon	13
Quebec Mng. Corp.	12
Rayon d'Or	18
Scout Pershing	2
Vine Pershing	8

ROUYN


0 ½ 1 2
MILLES
MILES
30 JUIN 1945
DUFRESNOY
BEAUCHASTEL
JOANNÈS
BELLECOMBE

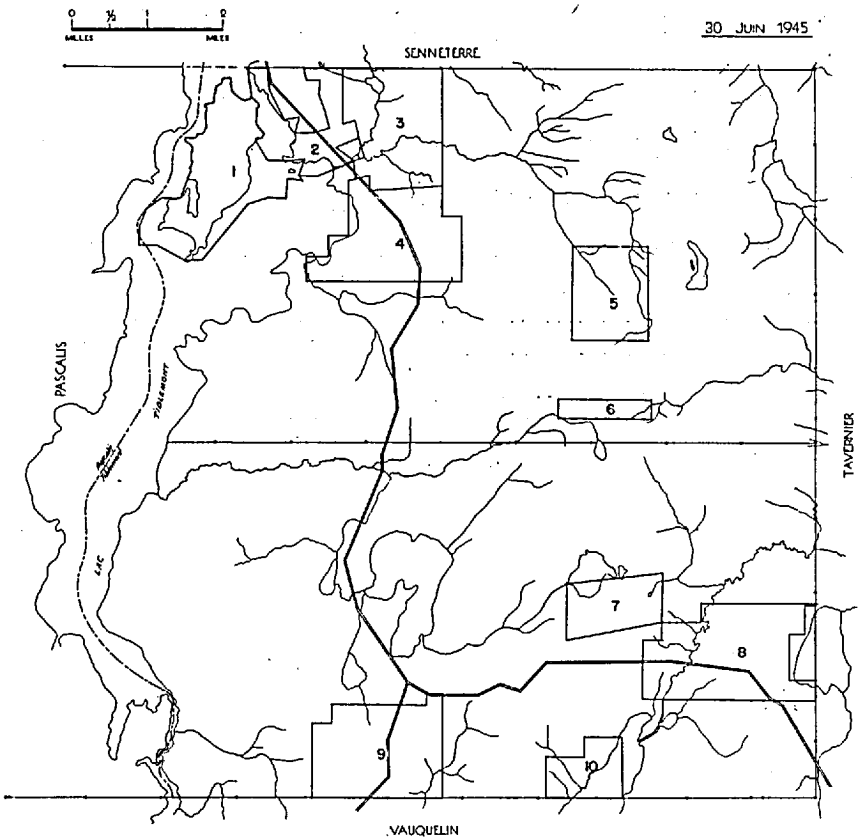
ROUYN

SENNEVILLE


0 ½ 1 2
MILLES MILES
30 JUIN 1945
FIEDMONT
VASSAN
PASCALIS
BOURLAMAQUE
1
2
3
3
4
5
6
7
8
9

SENNEVILLE

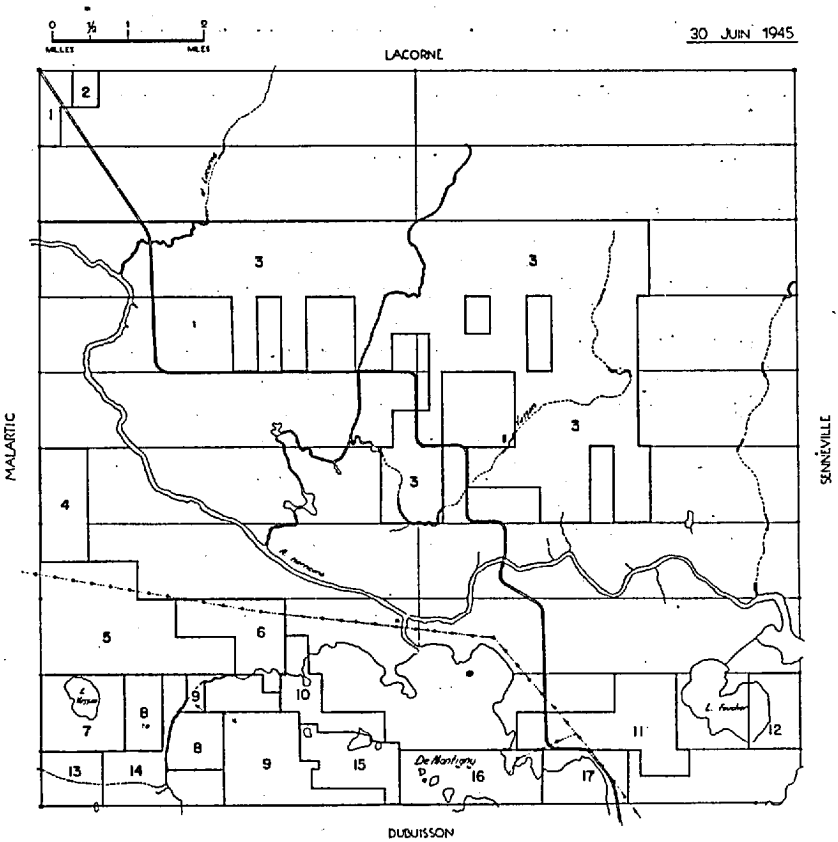
TIBLEMONT


0 ½ 1 0
MILLES MILES
30 JUIN 1945
SENNETERRE
PASCALIS
TAVERNIER
VAUQUELIN
TIBLEMONT
LAC
1
2
3
4
5
6
7
8
9
10

TIBLEMONT

Albontec Dev't.	6
Blairdon	7
Harwell Mng. & Expl.	5
Molybdenite	10
Realore	8
Smith Tiblemont	2
Tiblemont Cons.	1
Tiblemont Goldfields	3
Titanic	9
Vianor Malartic	4

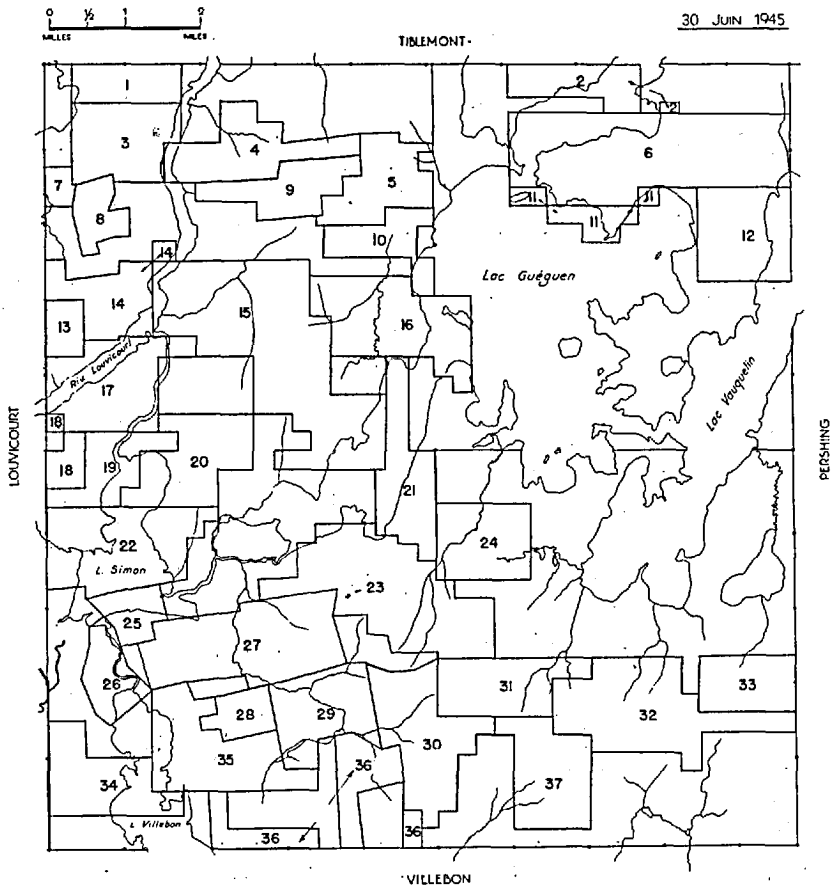
VASSAN


0 ½ 1 2
MILLES MILES
30 JUIN 1945
LACORNE
MALARTIC
SENNEVILLE
DUBUISSON
De Montigny
L. Fauchet
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

VASSAN

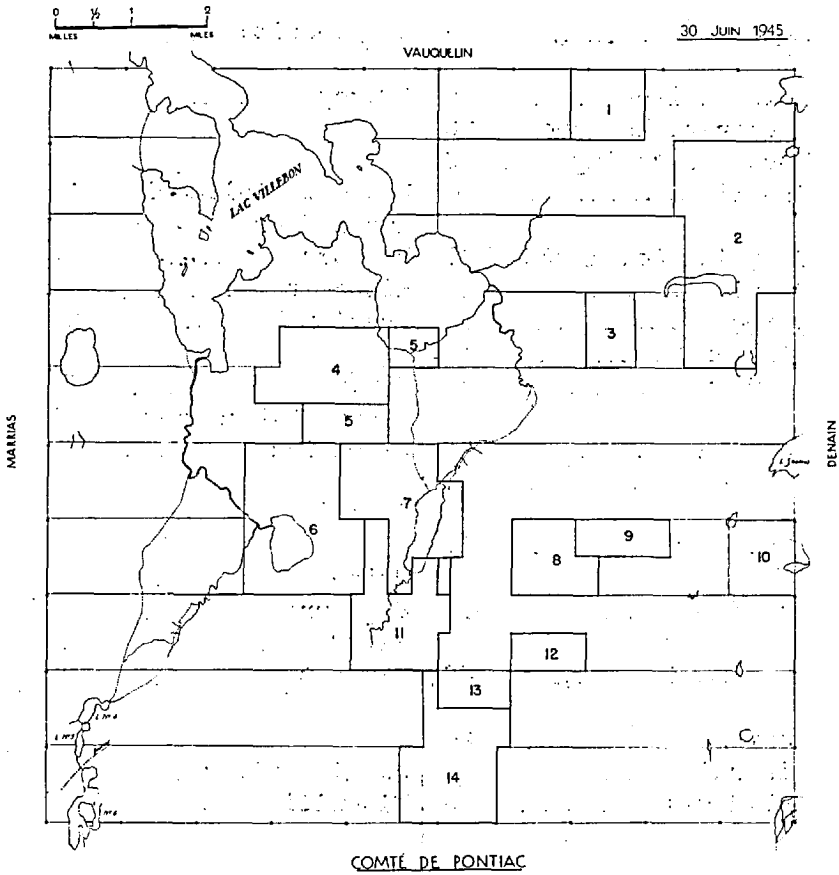
Amlartic	14
Citralam Malartic	7
Dome Expl.	5
Gilbert	12
Hegginson	11
K. Zone Fault	6
Molybdenite	1
Norbenite Malartic	13
North Siscoe	17
Rolac	4
Sennevar	10
Siscoe	16
Snowshoe	9
Varsan	8
Vincent Mng.	3
Wartime Metals	2
Western Quebec	15

VAUQUELIN


0 ½ 1 2
MILLES
MILES
30 JUIN 1945
TIBLEMONT
LOUVICOURT
PERSHING
VILLEBON
Lac Guéguen
Lac Vauquelin
Riv. Louvicourt
L. Simon
L. Villebon
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

VAUQUELIN

VILLEBON


0 ½ 1 2
MILLES MILES
30 JUIN 1945
VAUQUELIN
LAC VILLEBON
MARRIAS
DENAIN
1
2
3
4
5
5
6
7
8
9
10
11
12
13
14
COMTÉ DE PONTIAC

VILLEBON

INDEX TO PROPERTIES