

RP 390(A)

DESCRIPTION OF MINING PROPERTIES EXAMINED IN 1956 AND 1957 (EXCLUSIVE OF PRODUCING MINES). AN OUTLINE OF GEOLOGY AND EXPLORATION WORK

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PROVINCE OF QUEBEC, CANADA
DEPARTMENT OF MINES
HON. W. M. COTTINGHAM, MINISTER
MINERAL DEPOSITS BRANCH

DESCRIPTION OF
MINING PROPERTIES
EXAMINED IN 1956 AND 1957
(EXCLUSIVE OF PRODUCING MINES)
AN OUTLINE OF GEOLOGY AND EXPLORATION WORK
BY
OFFICERS OF THE QUEBEC DEPARTMENT OF MINES
(SEE ALSO P. R. NOS. 352 AND 388)



QUEBEC
1959

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DESCRIPTION OF MINING PROPERTIES

EXAMINED IN 1956 AND 1957

(Exclusive of Producing Mines)

AN OUTLINE OF GEOLOGY

and

EXPLORATION WORK

by

Officers of the Quebec Department of Mines

INTRODUCTION

The mining properties described in this report were examined during the years 1956 and 1957. The examinations were made by J. Béland, P.-E. Bourret, A. Deland, J. Dugas, J.-E. Gilbert, P.-E. Grenier, W.A. Hogg, W.N. Ingham, M. Latulippe, A.-F. Laurin, M. Morin and J. H. Remick. The initials of the author and the year in which the examination was made appear at the end of each property description.

Examinations of properties in the Chibougamau region made by J.R. Assad in 1956 and by G.M. Archibald in 1957 are not mentioned in this report. They are described respectively in P.R. No. 352 and P.R. No. 388 of the Quebec Department of Mines. Descriptions of some of the other properties examined during the 1956-57 period have been omitted, the reason in most cases being that they contain no information of general interest. However, reports of all examinations made by officers of the Department are kept in the files of the Mineral Deposits Branch of the Quebec Department of Mines.

Names of companies and descriptions of their holdings were correct at the date of the examination, but may have changed subsequently. The descriptions in this report are of properties that have not reached the production stage. Information concerning producing mines appears in "The Mining Industry of the Province of Quebec".

Published information, and company plans, drill logs and reports, have been consulted in the preparation of this report. Assay results, unless stated otherwise, have been obtained from company records. All samples taken by the authors were assayed in the laboratories of the Quebec Department of Mines.

The authors acknowledge with thanks the cooperation and assistance of officials of companies interested in the areas where the various properties are located, and of engineers, geologists and prospectors in charge of work at the properties.

AIGUEBELLE TOWNSHIP

Canalynda Copper Mines Ltd.

See Privat township.

Wesley Gold Mines Ltd.

Wesley Gold Mines Ltd. has explored a group of claims in Aiguebelle township covering lots 13 to 22, range IX and the adjoining 5 claims in Lois lake numbered C.93742, claims 1 to 5.

Most of the property is underlain by volcanic rocks striking almost east, with vertical or steep dips to the north. A band of agglomerate with interbedded andesite flows crops out in the northern part of the property. On the south shore of Lois lake trachyte is the main rock. A diorite body lies in the southwest corner of the property. The easterly-trending Lyndhurst break is thought to cross the lake.

In 1955-56, Wesley Gold Mines Ltd. drilled 9 diamond-drill holes, 3 of which failed to reach bedrock. Thicknesses of some 200 feet of overburden were recorded. All of the holes were drilled to test electromagnetic anomalies, which were found to be caused by graphite-rich bands. Two sections of massive pyrite 4 and 5 feet wide were cut in the western part of the property. No zones of intense shearing that could represent the main Lyndhurst break were intersected.

A.C. Lee was the consulting engineer. (J.D. - 56)

ALOIGNY TOWNSHIP

Atlin-Ruffner Mines (B.C.) Ltd.

See Montgolfier township.

BAIE-DE-GASPE-NORD TOWNSHIP

McDougall Property

Ref. : Que. Dept. Mines, Geol. Rept. 35, Map No. 663.

D. J. McDougall holds or holds control of the mining rights on lots 20 to 40, range I, Baie-de-Gaspé-Nord township.

The main prospect is located at about the centre of the north half of lot 30, 650 feet north of the assumed contact between the Grande Grève and the York River formations. Exploration work done on the property consists of a trench 150 feet long, 2 to 3 feet deep and 3 to 4 feet wide and some geochemical prospecting.

The trench uncovered a much altered, siliceous lime - stone identified as Grande Grève limestone known to be of Devonian age. Of the 4- to 5-foot section exposed, the first 2 feet are extremely altered, broken up and weathered. The lower part of the section is reasonably fresh. A distinct bedding is seen which strikes N.70°W. to N.80°W., about parallel to the regional structure, and dips 30° southwest. The limestone beds are crossed by a series of parallel fractures that strike N.10°E. to N. 15°E. and dip about vertically. Parallel to these fractures is a brecciated zone 2 to 4 feet thick. In 10 or 12 of the fractures, and in the brecciated zone, there are veins of carbonates disseminated with galena. The veins in the fractures are 1 to 2 inches thick. Those in the breccia are rather irregular and form a kind of matrix around the fragments.

The upper parts of the veins in the fractures are much altered and reduced to a brown, manganese-stained powder. Elsewhere the carbonate is mostly calcite, with some ferriferous and manganiferous varieties. The galena which is disseminated in the veins and in the breccia is coarsely crystalline and occurs in nests up to 1 inch across. Large chunks of galena 3 to 4 inches across, coated with whitish lead carbonate, were found in the broken material in the stripped upper part of the exposure. Estimates of the percentage of galena in the veins and the breccia are very difficult because of the extreme alteration of the rock. Obviously considerable leaching has taken place.

An examination of the mineralized veins and breccia with a Geiger counter failed to reveal any radioactivity. (J.B. - 56)

BARNSTON TOWNSHIP

Sawchuk Property

Ref.: Que. Dept. Mines, Geol. Rept. 69, Map No. 1073.

This property comprises lots 7 to 20, range IX, lots 8 to 20, and the south halves of lots 27 and 28, range X, and the north halves of lots 27 and 28, range XI, Barnston township. Mr. Sawchuk holds the mining rights for all minerals on that part of the property covered by Lyster lake and for gold and silver only on the remainder of the property.

The northwest two-thirds of the property is underlain by rocks of the St. Francis group cut by a few dykes of granite and porphyrite, and the remaining southeast third is underlain by granite. The

St. Francis group, which is believed to be probably Ordovician in age, is represented on the property by impure dark limestone with quartzite interbeds and quartzite with minor slate and limestone. The association of dark limestone with quartzite is found in the western part of the area of sedimentary rock and the other association of rocks is found in the eastern part. The granite, believed to be Devonian in age, is a medium grained light grey rock consisting mainly of quartz, feldspar and biotite. There are also on the property sills or dykes of a hard fine-grained pale greenish to light grey siliceous rock which will be referred to as porphyrite. The general strike of the sedimentary rocks varies from northeast to almost north, except near the granite body, where it more or less follows the contact. Most of the dips are northwest or west and vary from 35° to 90°.

Scheelite occurs on the property in the porphyrite, and in lesser amounts in narrow seams of altered rocks which look like sedimentary rocks, and possibly in the granite. The occurrences have been exposed in widely spaced trenches or stripped areas over a length of 2½ miles, but most of the work has been done in lots 14 to 16, range X, over a length of 3,100 feet. The scheelite is for the most part disseminated in porphyrite sills over widths up to 4 feet. (P.-E. G. - 57)

BARRAUTE TOWNSHIP

D'Aragon Property (East Group)

P. D'Aragon holds the north halves of lots 48 to 51, range VII, and lots 52 to 54, 60 and 61, the south halves of lots 48 to 51 and the north halves of lots 55 to 59, range VIII, Barraute township.

The west half of the property and a narrow strip along the northeastern part are underlain by acid tuffs and agglomerates with a few flows of dacite, trachyte, rhyolite and andesite. All of these rocks trend mostly east and dip steeply to the north. There are numerous graphitic horizons in the tuffs and agglomerates. The southeastern part of the property is underlain by part of an intrusive body of syenite, granodiorite and diorite. A small area in the southwest corner of the property is underlain by part of an intrusive body of granodiorite and diorite. The Laflamme River fault, which trends slightly east of north, crosses lots 52 to 54. The horizontal movement on this fault is about 1,000 feet, with the west side south.

In 1951, the eastern part of the property was held by Damascus Mines Ltd. A magnetometric survey and a diamond drill hole 400 feet deep were completed. The hole cut mostly graphitic tuffs with a few narrow bands of dacite flows. Pyrite and pyrrhotite were found disseminated and in narrow massive sections throughout most of the hole.

In 1955, East Sullivan Mines Ltd. made an electromagnetometric survey of the central part of the claim group and drilled 6 diamond-drill holes for a total of 4,841 feet. In 1957, they drilled 2 more holes totalling 992 feet. The drill holes cut mostly tuffs and agglomerates interbedded with narrow flows of andesite and dacite. Graphitic

horizons were numerous in the tuffaceous and agglomeratic rocks. Pyrite and pyrrhotite were found disseminated and in narrow massive bands in the pyroclastic rocks. Only a few grains of chalcopyrite were seen. The best assay gave 0.79 per cent copper across 5 feet.

The Damascus work was done under the supervision of G. Murray, and J. Lavallée supervised the East Sullivan exploration work. (M. L. - 57)

D'Aragon Property (West Group)

P. D'Aragon holds or has control of the mining rights on lots 16 to 21, 30 and 31 and the south halves of lots 22 to 29, range IX, Barraute township.

The claim group is underlain by Keewatin-type volcanic rocks. The south half is made up of acid tuffs and agglomerates interlayered with rhyolite, trachyte and dacite flows. The north half is made up mostly of andesite flows. These rocks strike N. 75°W. and dip 70° to 80° northeast. A diabase dyke cuts across lots 20 to 23 in a north-easterly direction.

In 1951, the west end of the property was held by Consolidated Lebel Oro Mines Ltd. A geophysical survey and 2,998 feet of diamond drilling in 5 holes were completed. The drill holes cut acid tuffs, agglomerates and rhyolite flows, some of which were brecciated. Numerous graphitic horizons were found in the tuffs and agglomerates. Pyrite and pyrrhotite were found disseminated and in massive form, particularly in the pyroclastic rocks. One 25-foot section was estimated to contain 40 per cent pyrite. Chalcopyrite was noted in small scattered grains.

In 1956, Rio Canadian Exploration Ltd. drilled 1 diamond drill hole to a depth of 485 feet. The rocks cut were tuffs and agglomerates with many graphitic horizons. Pyrite and pyrrhotite were found throughout, in disseminations and in narrow massive bands. Only a few scattered grains of chalcopyrite were seen. The best section assayed 0.4 per cent copper across 0.5 foot.

In 1957, East Sullivan Mines Ltd. drilled 3 diamond drill holes for a total of 1,531 feet. Most of the rocks cut were dacitic flows, acid tuffs and agglomerates with graphitic horizons and disseminated pyrite and pyrrhotite. Only a few grains of chalcopyrite were noted. The highest assay return was 0.15 per cent copper across 5 feet.

The work was supervised by G. Forbes for Consolidated Lebel Oro, C. Pegg for Rio Canadian and J. Lavallée for East Sullivan. (M. L. - 57)

BEAUCHASTEL TOWNSHIP

Barry Copper Mines Ltd.

See Montbray township.

Despina Gold Mines Ltd.

See Rouyn township.

Fontana Mines (1945) Ltd. and Pitt Gold Mining Company Ltd.

Fontana Mines (1945) Ltd. and Pitt Gold Mining Company Ltd. own conjointly 36 claims in the northeast quarter of Beauchastel township. The claims are numbered C. 2418, claims 1 to 4; C. 2419, claims 1 to 7; C. 2420, claims 1 to 5; C. 2421, claims 1 to 6; C. 2422, claims 1 to 4; C. 5826, claims 1, 2, 5 and 6; C. 5877, claims 1 to 4; and C. 101773, claims 1 and 2. Parts of the property were formerly held by Quebec Copper-Gold Mines Ltd., Viking Gold Mines Ltd. and Adnaron Copper Corporation Ltd.

The property is underlain mostly by granite, locally cut by intermediate dykes and by a diabase dyke which probably strikes northwest. The granite is commonly a hybrid rock and may be the result of granitization of volcanic rocks. Interpretation of a magnetometric survey indicates that a large part of the property may be underlain by volcanic rocks concealed by overburden. The property is located between the Beauchastel and Horne Creek faults, near the junction of the Beauchastel and Smoky Creek faults.

In 1942-43, Adnaron Copper Corporation Ltd. drilled approximately 5,000 feet of short diamond drill holes. Records of this drilling are not available but a low-grade copper deposit was reported. In 1946, a magnetometric survey was made and 9 deeper holes were drilled. Only low copper assays were reported. In 1956, 4 holes were drilled under a pronounced northwesterly-trending valley supposedly occupied by a diabase dyke and a magnetometric survey was made over the area not previously surveyed, followed by a combined spontaneous polarization and electromagnetometric survey.

Disseminated chalcopyrite occurs over considerable widths in the granitic rock, but it is generally not of ore grade. There is almost no pyrite.

T. Koulomzine was in charge of the exploration. (J. D. - 56)

Lake Dufault Mines Ltd.

See Dufresnoy township.

Leys (Wm.) Mining Corporation Ltd.

Ref.: Geol. Surv. Can., Paper 49-23. Que. Dept. Mines, P.R. No. 330, p.24.

Wm. Leys Mining Corporation Ltd. has a property in Beauchastel township covering lots 7 to 10 and the north halves of lots 2 to 6, range VIII, lots 2 to 5, range IX, and the southern parts of lots 1 to 3, range X. Parts of the property were formerly held by Golconda

Mines Ltd. and Caron Malartic Gold Mines Ltd.

Andesite flows striking east to slightly south of east are cut by a northwesterly-trending body of quartz diorite. A northerly-trending diabase dyke, offset by northeast faults, cuts the above formations. Mineralization in copper and nickel occurs at the east margin of the quartz diorite body, particularly in the southern part of range VIII.

Previous work done on the property, mostly in lots 1 to 4, range X, traced 2 mineralized shear zones, one of which was explored by 6 diamond-drill holes. Low tenors in gold were reported.

In 1956 the company concentrated its work on lot 7, range VIII. A self-potential survey was made and 6 diamond-drill holes were drilled in the south half of lot 7 and 3 in the north half of this lot. Large sections of mineralized quartz diorite, of the order of 100 feet, were cut in most of the holes. The mineralization consists of copper, nickel and platinum in small amounts.

Four holes were also drilled in the southern part of the lot to test the original discovery where a trench has been cut across mineralized, altered diorite for a length of 65 feet. The mineralization consists mostly of clusters of pyrite up to 1 inch across with some chalcopyrite fairly evenly disseminated. Quartz and calcite stringers are also present. A self-potential survey indicates an anomaly over an area 400 feet long by 300 feet wide.

In the northern part of lot 7 a few pits have been dug in diorite with irregular stringers of massive pyrite-pyrrhotite up to 3 inches across and some magnetite and chalcopyrite. The mineralization seems to be discontinuous. The diorite is coarse and locally porphyritic. Pinkish alteration is observed as well as epidote and quartz veinlets along the contact. The grade is of the order of 0.5 per cent combined copper and nickel over sections of about 30 feet separated by lean sections. One drill hole intersected a zone 5 feet wide containing 2.75 per cent copper, 2.97 per cent nickel and \$6.66 in platinum.

P.E. Dumont is the consulting engineer. (J.D. - 57)

Noranda Mines Ltd.

Ref.: Geol. Surv. Can., Paper 41-7.
Que. Bur. Mines, Min. Oper. 1928, p.71; Ann. Rept. 1933, Pt. A, p.93; 1934, p.72; 1936, p. 51;
Min. Ind. 1937, p. 52; 1938, p. 55; 1939, p. 50;
Geol. Rept. 7, p. 17.
Que. Dept. Mines, P.R. No. 205, Pt. I, p.3; P.R. No. 227, p. 10.

Noranda Mines Ltd. holds a group of claims (East group) covering lots 24 to 28 and the northern parts of lots 17 to 23 and 29 to 32, range VII, Beauchastel township. This group includes the property formerly held by Korby Gold Mines Ltd. and part of the property of Abenakis

Mines Ltd. The company has control of another group of claims (West group) numbered C.89887, claims 1 and 2; C.89888, claims 1 to 3; and C.90114, claims 1 and 2, which covers parts of lots 7 to 13, range VI. This group includes the property formerly held by Renown Mining Syndicate.

Rhyolite is the predominant rock in the west group. The east group is made up of andesite and minor rhyolite cut by a large body of diorite and by a later body of porphyritic syenite.

Noranda Mines Ltd. made geological and magnetometric surveys in 1954. In 1956, an electromagnetometric survey was made of both groups, followed by diamond drilling. Two holes were drilled in the west group across rhyolite mineralized with disseminated pyrite and pyrrhotite, and 5 holes in the east group. No mineralization of economic significance was intersected. (J. D. - 56)

Rainville Property

See Duprat township.

Valray Explorations Ltd.

Ref.: Que. Bur. Mines, Ann. Rept. 1930, Pt.A, p. 65.
Que. Dept. Mines, Min. Ind. 1941, p.35; 1945, p. 75.

Valray Explorations Ltd. holds lots 1 to 3 and 7 to 9, range I, and 1 to 9, range II, Beauchastel township.

Most of the property is underlain by Temiscamian-type graywackes which strike east and dip steeply either north or south. In the northern part of the property the graywackes are overlain by horizontal beds of Cobalt conglomerate.

A quartz vein 2 feet thick, known as No. 1 vein, containing irregular amounts of chalcopryrite, is exposed in lot 9, range I, for almost 300 feet. It strikes N. 10°E. and dips 75° northwest. The wall rocks are silicified and the mineralization extends in places to more than 5 feet. Another irregular, discontinuous vein (vein No.2) is exposed in a fracture 1,200 feet west of No. 1 vein. This vein strikes N. 35° E. Much trenching and stripping, done in former years, has uncovered a few other low-grade veins.

The property has been explored since 1930 by Albion Copper and Gold Mines Ltd., Chicadee Mines, Keniconda Mining Corporation Ltd. and Crangold Mines Ltd. The present company acquired the property in 1956 from Cran-Kor Metals Mines Ltd.

In 1930-31, at least 2 diamond-drill holes were drilled. In 1941 Chicadee Mines drilled 7 holes totalling 278 feet. In 1945, 3,827 feet were drilled by Keniconda Mining Corporation Ltd. No records of any of this drilling are available. In 1951, Crangold Mines Ltd. drilled 4,472 feet in 23 holes on No. 1 vein and conducted a

magnetometric survey. It was reported from the drilling that the vein averaged 3.45 per cent copper across 5.7 feet for a length of 230 feet. In 1952, 9 holes tested No. 2 vein and 2 more explored ground west of No. 1 vein; these holes totalled 2,833 feet. Most of the Crangold drilling has been to test No. 1 vein. Only 9 holes out of 23 were on No. 2 vein.

In 1957, a magnetometric survey with limited electromagnetic measurements was carried out on lots 1 to 3, ranges I and II. This area had not been covered in previous surveys. Fourteen diamond-drill holes were drilled for a total of 5,713 feet. Eleven of these holes explored No. 1 vein at depth.

- 57) T. Koulomzine was in charge of the exploration. (J.D.)

BEAUDET TOWNSHIP

Lyndvue Mines Ltd.

Lyndvue Mines Ltd. holds 2 groups of claims covering lots 52 to 59, range II, and 38 to 43, range III, Beaudet township.

The company has made magnetometric and radiometric surveys of lots 41 and 42, range III, and has dug a number of test pits and trenches in lots 41, 42 and 57, range III.

The trenches in lot 57 have exposed an irregular pegmatite dyke cutting grey granite gneiss. The dyke ranges in width up to 5 feet. It consists for the most part of coarsely crystalline pink feldspar and contains masses of ilmenite up to 6 inches in diameter.

Another similar occurrence is exposed in the trenches and test pits in lot 42, range III.

Crystals of rutile containing columbium are reported to have been discovered in a trench in range III on Lot-line 41-42. (P.-E. G. - 56)

BLONDEAU TOWNSHIP

Blondeau Nickel Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 201, Map 389A.

Blondeau Nickel Mines Ltd. holds a group of 62 claims in the southwest quarter of Blondeau township. The claim numbers are C.56934; C.56935; C.73274; C.75634; C.81420; C.81421; C.85705; C.86717; C.122599; and C.123723; claims 1 to 5 each; and C.85702; C.85719; and C.123724; claims 1 to 4 each.

The property is underlain by a complex of volcanic rocks which strike east and are intruded by small bodies of diorite or gabbro.

Part of a large granite batholith occupies the northern part of the property.

In 1956, Sapphire Petroleums Ltd. made a magnetometric survey of the northern part of the property and drilled 4 diamond-drill holes on the Roy zone 1,800 feet east of the northeast corner of Lac à la Vase.

In 1957, Blondeau Nickel Mines Ltd. carried out an airborne electromagnetometric survey followed by a ground magnetometric survey with electromagnetic check work and drilled 26 diamond-drill holes totalling 17,322 feet. Most of the holes were in the northeast corner of C.75634, claim 5, and the southeast corner of adjoining C.75634, claim 4. The mineralization consists of disseminated pyrrhotite and chalcopyrite in gabbro. The best intersections assayed 0.56 per cent copper and 0.62 per cent nickel over 34 feet and 0.33 per cent copper and 0.34 per cent nickel over 95 feet. (J.D. - 57)
Conrego Nickel Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 201, Map 389A.
Que. Bur. Mines, Ann. Rept. 1930, Pt. B, pp.82, 83, 84.
Que. Dept. Mines, P.R. No. 330, p.7.

This company holds 2 groups of claims in Blondeau township. The south group, centered around Kelly lake in the central part of the township, consists of C.46588-90; C.58205; C.65467-73; C.65597-98; C.82363-64; C.93600; C.93954; C.96017; C.97612; C.99934-35; and C.G.5324-25, claims 1 to 5 each. The north group is a little more than 1 mile northeast of the south group and consists of C.115302-06, claims 1 to 5 each, and C.121731, claim 5.

The property includes the claims formerly held by Jellicoe Mines (1939) Ltd. and part of those later held by Sapphire Petroleums Ltd. The north group was in part formerly held by Lamaque Gold Mines Ltd.

A large granite batholith outcrops in the north claim group. The batholith is in contact to the south with an easterly striking band of intermediate flows interbedded with thin rhyolite flows. Still farther to the south there are altered sedimentary rocks. A few irregular diorite or gabbro bodies intrude the volcanic rocks.

The main mineralized zone, which is situated in the northern part of C.46588, claim 4, is exposed over a width of 30 feet and consists of splashes of pyrite, chalcopyrite and pyrrhotite. It strikes east and is in a diorite or gabbro resembling anorthosite, in places, at the contact with rhyolite.

In 1953, after preliminary work by individuals, Jellicoe Mines (1939) Ltd. made a magnetometric survey and drilled 19 diamond-drill holes at 50-foot intervals across the mineralized zone. In 1956, Sapphire Petroleums Ltd. made another magnetometric survey and drilled 8 diamond-drill holes totalling 2,608 feet.

In 1956, Consolidated Regcourt Mines Ltd. carried out an airborne magnetometric survey followed by a ground magnetometric survey of the whole property with electromagnetic check work over magnetic anomalies. In addition, 55,000 feet of diamond drilling was completed up to the end of June 1957.

The mineralized zone is almost vertical and has a width of 35 feet. According to company reports the drilling has indicated 2,200,000 tons grading approximately 1.40 per cent copper-nickel, with copper and nickel in about the same proportions. (J. D. - 57)

Nealon Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 201, Map 389A.

Nealon Mines Ltd. owns a group of 30 claims in the southwestern part of Blondeau township. The claims are numbered C.119934-37, C.119943 and C.119945, claims 1 to 5 each.

The property is underlain to the north by a complex of volcanic rocks and to the south by sedimentary rocks consisting mostly of biotite gneiss and biotite-hornblende gneiss with much granitic matter.

The company has made a magnetometric survey of the entire property, with detailed electromagnetometric surveys over the areas of magnetic anomaly. Six diamond-drill holes totalling 3,011 feet were drilled to test anomalies. One narrow gabbro intersection contained a few specks of pyrrhotite. (J. D. - 57)

BOURLAMAQUE TOWNSHIP

Levine Property

Ref.: Que. Dept. Mines, P.R. No. 227, p. 28.

S. Levine holds a group of 25 claims in the northwest quarter of Bourlamaque township. The claims cover the former property of Glenlivet Gold Mines Ltd. and parts of the former holdings of North Sullivan Contact Mines Ltd. and Unigo Mines Ltd. The claims are numbered C.76489, claims 1 to 4; C.79101, claims 1 to 4; C.79102, claims 1, 2 and 4; C.79111, claims 1 to 4; and C.95699-700, claims 1 to 5.

Only one small outcrop of peridotite shows through the overburden. It lies on the southwest boundary of the Glenlivet claim group. Most of the property is underlain by granodiorite rocks of the Bourlamaque batholith. The south contact of this intrusive body lies 600 to 1,400 feet north of the south boundary of the property. The contact rocks are chiefly andesite, in places considerably brecciated and sheared. Minor bands of acidic to intermediate lava flows and a few beds of tuff are found in this rock. These have been invaded by broad sills and dykes of peridotite as well as a few narrow dykes of feldspar porphyry.

In 1946, the Glenlivet claims were explored by means of 13 diamond-drill holes. During the same year Unigo Mines Ltd. drilled 3 holes near the northwest shore of Langlade lake. These last 3 holes cut only granodiorite. In 1956, Enterprise Mining Company Ltd. drilled 3 diamond-drill holes on the property for a total of 2,354 feet. Only granodiorite with a few narrow feldspar porphyry and diorite dykes was cut.

The work was done under the supervision of N.J.S. Hoyles. (M. L. - 57)

New Bidlamaque Gold Mines Ltd.

Ref.: Geol. Surv. Can., Paper 43-2, pp.8, 12.
Que. Bur. Mines, Ann. Rept. 1934, Pt.B, p.57; P.R. No. 116, p.62.
Que. Dept. Mines, P.R. No. 227, p. 28.

New Bidlamaque Gold Mines Ltd. holds a group of 12 claims in the northwest quarter of Bourlamaque township. The claims are numbered A.42998-43007 and A.48639-40.

The claim group is underlain by Keewatin volcanic rocks intruded by sills and dykes of peridotite and diorite. Most of the volcanic rocks are trachytes, dacites, acid tuffs and acid agglomerates. In the southern part of the property there are 2 large converging sills of peridotite, one of which is up to 500 feet thick. These rocks strike northwest and dip 70° northeast. They are cut by numerous sills, dykes and irregular bodies of granodiorite, diorite and peridotite. A strong shear zone crosses the southern part of the property in a northwesterly direction along or near the north contact of the peridotite and trachyte.

A shaft has been sunk to a depth of 390 feet, with levels at 150, 250 and 375 feet, and 2,000 feet of lateral work has been done. From the surface the ground has been explored by 127 diamond-drill holes. Most of this work has been concentrated in claims A.42998 and A.42999 along the strike of the shear zone.

Two gold- and copper-bearing veins striking N. 65° W. were found to contain erratic gold mineralization. In 1956, East Sullivan Mines Ltd. drilled 15 diamond-drill holes and deepened one old hole for a total of 9,877 feet. The drilling confirmed the results of earlier work and showed the lenticular and irregular nature of the quartz veins with which the gold and copper are associated.

The work was supervised by J. Lavallee. (M. L. - 57)

Savard Property

Ref.: Que. Bur. Mines, Ann. Rept. 1931, Pt. B, p. 103; P.R. No. 116, p.65; P. R. No. 120, p. 20.
Que. Dept. Mines, P.R. No. 190, Pt. I, p. 28.

O. Savard has control of the mining rights on a group of 45 claims in the northeast corner of Bourlamaque township. The claims

are numbered C.110325-31 and C.118720-21, claims 1 to 5 each.

Forest fires have bared numerous outcrops. All of the property is underlain by granodiorite of the Bourlamaque batholith with some small quartz porphyry intrusions, andesite dykes and quartz veins. Most of the early exploration work, which consisted of trenching and diamond drilling, was concentrated on the quartz veins in the search for gold. Chalcopyrite is found in these quartz veins along with pyrite in blobs and streaks; gold tenors are low and erratic.

In 1957, chalcopyrite and molybdenite mineralization was discovered in a quartz porphyry mass which intrudes the granodiorite. The nearest contact of the batholith with the volcanic rocks lies 6,000 feet to the east. The quartz porphyry presents a smooth fine-grained aplitic-like surface which weathers white to cream. The quartz appears as irregular grains, in small vermicular arrangements and in larger irregular veinlets. The rock has undergone silicification, sericitization and chloritization. Chalcopyrite, molybdenite and a small amount of pyrite are found in the quartz porphyry in discrete grains or in irregular veinlets disseminated throughout the mass. One veinlet of molybdenite 6 inches long and $\frac{1}{2}$ an inch wide was noted. (M. L. - 57)

Vankirk Mines Ltd.

Ref.: Que. Dept. Mines, P.R. No. 205, Pt. I, p. 27.

The Vankirk property is made up of 54 claims which are in the central part of Bourlamaque township. The claims are numbered A.63084-89, A.69330-44, A.70102, A.70104, A.72108-11, A.80669, A.81901-02, A.82096-98, A.86478-83, A.86566-68, A.86825-26, A.86995, A.87440-43, and A.87504-08.

The property is underlain by a large complex mass of intrusives and Keewatin-type volcanic rocks. The western three-quarters of the property are underlain by a large mass of diorite porphyry. This intrusive body is part of the centre post intrusive (also known as the East Sullivan plug) which underlies an area 6 miles long and 4 miles wide around the centre post of Bourlamaque township. The eastern quarter of the property is underlain by volcanic rocks intruded by numerous dykes and sills of diorite porphyry, granodiorite porphyry and syenite porphyry. A large westerly-trending quartz diorite dyke, up to 1,000 feet wide, crosses the southeastern part of the property. The volcanic rocks have been highly altered and particularly porphyritized. Gold-bearing quartz veins are numerous in most rock types. They are mostly very narrow, with an erratic distribution of gold. Some minor chalcopyrite was encountered near the contact of the main intrusive body and the acid volcanic rocks.

In 1939-41 Central Mining Corporation made a magnetometric survey of the property followed by a large amount of trenching over areas of shallow overburden, and drilled 4 diamond-drill holes to cut the large quartz diorite dyke in the southeastern part of the property.

Further diamond drilling was done by East Sullivan Mines Ltd. from 1943 to 1952. Forty-three holes were drilled for a total of 30,216 feet. Numerous quartz stringers and veinlets, with low tenors in gold, were cut in the quartz diorite zone.

In 1956, Vankirk Mines Ltd. undertook a programme of diamond drilling to test gravity anomalies. Ten holes for a total of 8,937 feet were drilled. The rocks intersected were altered and porphyritized acid to intermediate volcanic rocks cut by numerous porphyry dykes. The best assay was 2.49 per cent copper across 2 feet. An 8-foot section which includes the above 2 feet averaged 1.11 per cent copper.

The work done by Vankirk Mines Ltd. was supervised by W.G. Hainsworth. (M. L. - 57)

BRISTOL TOWNSHIP

Hilton Mines Ltd.

Ref.: Que. Dept. Mines, P. R. No. 307, p.7.

Hilton Mines Ltd., jointly owned by Stelco Mines Quebec Ltd. and Bristol Quebec Mining Company Ltd., holds a group of 28 claims in the southern part of Bristol township. The claims cover lot 22 and the north halves of lots 19, 20, 21 and 23, range I, and lots 20 to 23, range II.

The Canadian Pacific Railways is building a spur line from Wyman station, on its Ottawa-Waltham branch, to the company's holdings.

The claims are located in level open country and the sand and clay deposits covering bedrock range in thickness up to 15 feet. Most of the underlying bedrock consists of a medium-grained pink granite intruding crystalline limestones, dolomites, limy sandstones and slates. Its interest lies in the presence of iron-bearing minerals, mostly magnetite, with a little hematite and spots or small stringers of pyrite and pyrrhotite. The orebody is a replacement-type deposit in which the iron minerals have been substituted for the older lime-bearing formations, probably during the last stage of the granitic intrusion. Magnetite and a little hematite are present in fractures within the granite itself and in some of the pegmatite dykes that cut it. The strike of the formations into which the granite was intruded is in general N. 65° W. and the dips vary between 60° and 70° northeast. The iron orebody conforms to this attitude.

Iron ore is believed to have been discovered on the property by John Moore in 1870, and short lived attempts at exploitation of it were made as early as 1872. In 1884 the Bristol Iron Company started mining small pockets of high-grade ore. On account of the high sulphur content of the ore, kilns had to be used to roast it. About 12,000

tons of high-grade material was thus extracted at the rate of 125 tons per day until 1889 when operations were again suspended.

Trent River Iron Ltd. undertook a geophysical survey of the ground in 1951, followed by some 19,000 feet of diamond drilling which outlined substantial ore reserves. In March 1955, the Steel Company of Canada of Hamilton, Ontario, Pickands Mather and Company of Cleveland, Ohio, and Jones and Laughlin Steel Corporation of Pittsburg, Pennsylvania, announced their intention of further developing and bringing the deposit into production. Ore reserves, including some granitic material and other waste which could be removed before crushing, were calculated to be 43,590,000 tons averaging 15 to 20 per cent iron. From this ore the company calculates that it can produce 8,908,000 tons of pelletized concentrate containing 66.2 per cent iron, 3 per cent silica, 0.006 per cent phosphorus and 0.05 per cent sulphur.

Building sites are now cleared and stripping is being done over the orebody in preparation for open pit mining. Daily production will be 10,000 tons, from which it is expected 2,000 tons of magnetite will be recovered by magnetic concentration. (J.-E. G. - 56)

CADILLAC TOWNSHIP

O'Brien Gold Mines Ltd.

This company holds C.88123, claims 1 to 5, and C.G. 5616, claims 2 to 5, in the northwest quarter of Cadillac township.

Trenching and some diamond drilling were done in this area in 1947 by Cortez Explorations Ltd. Low assays in copper, below 0.1 per cent, were obtained.

O'Brien Gold Mines Ltd. has done some stripping and has drilled 10 short diamond-drill holes in an easterly-trending band of pyroclastic rocks which is in places heavily mineralized with pyrite and pyrrhotite. This band of rocks is underlain to the north by rhyolite and andesite flows and overlain to the south by graywacke.

R.W. Spence supervised the recent exploration work.
(J. D. - 57)

Orefield Mining Corporation

Ref.: Que. Bur. Mines, Ann. Rept. 1933, Pt.A, p. 109; 1934, Pt. A, p.101; 1936, Pt. A, p.65; P.R. No.116, pp.40, 41.

Orefield Mining Corporation holds 42 claims in the east central part of Cadillac township. The claims are numbered C.110589, claims 1 to 4; C.110593, claims 1 to 4; C.110594-96, claims 1 to 5; C.110597, claims 1 to 3; C.110638, claims 1 to 4; C.110639, claims 1 to 3; C.110640-41, claims 1 and 2; and C.129835, claims 1 to 5.

The property is entirely underlain by Temiscamian-type sedimentary rocks made up of graywacke, some conglomerate and bands of iron formation. A synclinal axis presumably runs across the property bending from east to southeast. A northeasterly-trending diabase dyke cuts the formations in the western part of the property. A right-hand displacement may be observed along sharp northerly-trending cross faults.

Parts of the property were explored for gold in the 1930's by Tonawanda Mines Ltd., Rubec Mines Ltd., Sladen-Malartic Mines Ltd. and Big Game Mines Ltd.

In 1957, Orefield Mining Corporation made geological and magnetometric surveys of the entire property and drilled 6 diamond-drill holes for a total of 3,488 feet. The drill holes intersected 3 bands of iron formation consisting of magnetite, jasper and some quartz. These bands have widths of 30 to 45 feet, 50 feet and 100 feet and indicated lengths of 3,000 feet, 4,000 feet and 5,000 feet respectively. Two of them outcrop at the surface. The grade is estimated by the company at 30 per cent iron. (J. D. - 57)

CARPENTIER TOWNSHIP

Bolduc Property

E. Bolduc holds lots 2 to 9, range IX, Carpentier township.

The property appears to be underlain mainly by Keewatin-type volcanic rocks of andesitic and rhyolitic composition. A quartz diorite body of unknown size occurs in the northeast corner of the property. The southwestern part of the property is underlain by sheared, carbonatized and graphitic pyroclastic rocks and siliceous lavas. An ultrabasic sill composed of serpentized peridotite, pyroxenite and gabbro lies in the southern parts of lots 2 to 4. In lot 2 it appears to be offset 600 feet to the north. This sill strikes N.60°W. and geomagnetic data indicate that its width varies from 200 to 900 feet.

An outcrop area of serpentized peridotite, pyroxenite and gabbro in lots 2 and 3 is 1,300 feet long by 600 feet wide and contains numerous veins of chrysotile asbestos fibre.

In 1952, Abitibi Ventures Ltd. completed a magnetometric survey and 4 diamond-drill holes totalling 960 feet. Consolidated Central Cadillac Mines Ltd. then drilled 18 more holes for a total of 4,511 feet. Nicolet Asbestos Mines Ltd. acquired the property in 1956 and carried out a magnetometric survey and drilled 11 diamond-drill holes for a total of 5,172 feet. Three separate but parallel zones of asbestos-bearing peridotite were roughly outlined by this work.

The north zone trends N. 55° W. and has a length of 250 feet. Two drill holes that cut across the width of the zone returned 1.15 per cent asbestos (by volume) across 44 feet and 1.23 per cent across 35 feet. Another hole drilled along the length of the zone gave

an intersection of 164 feet at 1.4 per cent asbestos.

The central zone strikes N. 80° W. and has a length of at least 900 feet. Fourteen holes were drilled here. The best intersections were 2.87 per cent asbestos over 45 feet, 1.75 per cent across 60 feet, 1.68 per cent across 125 feet, 1.41 per cent across 112 feet and 1.25 per cent across 115 feet.

The south zone strikes N. 70° W. and has a length of 900 feet. Asbestos-bearing outcrops can be seen along 300 feet of the zone at its east end. The best diamond-drill intersection gave a return of 1.33 per cent asbestos across 226 feet.

A sample sent to the laboratories of the Quebec Department of Mines by Abitibi Ventures Ltd. was tested with the Quebec Standard Testing Machine. The grade was reported to be 5D.

The Nicolet Asbestos drilling was supervised by R. Lavertu. (M. L. - 57)

CLARENDON TOWNSHIP

Dun Raven Mines Ltd.

Ref. : Que. Dept. Mines, P.R. No. 307, Prelim. Map No. 1066.

Dun Raven Mines Ltd. holds a group of 20 claims in Clarendon and Thorne townships. The claims in Clarendon township cover lots 8 to 10, range XII, and lot 8 and the northeast half of lot 7, range XIII. The claims in Thorne township cover lots 8 to 17, range I, and lots 9 and 10, range II.

The southern part of the property is relatively flat and open, whereas the northern part is more rugged and wooded. The area is underlain by rocks of the Grenville series made up mostly of crystalline limestone and various types of gneisses, in places injected by granite.

During the course of exploration work for radioactive minerals known to be present on the property, graphite was discovered in the fall of 1954 on the south flank of a small hill along the boundary of lots 7 and 8, in the north half on range XIII, Clarendon township. A series of trenches were dug on the side of the hill and a combined self-potential and magnetometric survey was carried out on the property to determine the extent of the graphitic mineralization. Two large and two smaller anomalies were outlined in the survey and 32 vertical diamond-drill holes, totalling 8,323 feet, were drilled on the two main anomalies called the 'A' and 'G' zones. According to company's figures, the 'A' zone is estimated to contain 630,000 tons averaging 4.72 per cent graphite and the 'G' zone, 3,350,000 tons averaging 4.0 per cent. A considerable tonnage of lower-grade material is also reported to have been outlined in the drilling. Only a relatively small extent of the anomalies has so far been explored. The tonnage estimates

refer only to the drilled portions.

The graphite is disseminated in a flat-lying zone of biotite-feldspar paragneiss interbedded with layers of crystalline limestone and injected by stringers of pegmatite. The thickness of the ore-bearing layer averages 61 feet in the 'A' zone and 77 feet in the 'G' zone. The graphite generally occurs in small flakes disseminated throughout the zone.

A series of metallurgical tests have been completed on the ore and, according to company officials, the graphite recovery is good.

A. Hurst was in charge of the work at the property at the time of the writer's visit. H. J. Bergman is consulting engineer for the company. (J.-E. G. - 56)

CLÉRICY TOWNSHIP

Alba Explorations Ltd.

Ref.: Geol. Surv. Can. Mem. 233, Map 635A.

The property of Alba Explorations Ltd. consists of 11 claims in Cléricy township, covering lots 23 to 30, range IX, and lots 22, 23 and the north half of 24, range X.

The property is underlain by northwesterly-trending sedimentary rocks, mainly graywacke in the southeast corner and volcanic rock in the northern part. A diorite body crops out in the southern parts of lots 28 and 29, range IX. A major fault, which is thought to be the eastern extension of the Porcupine-Destor fault, crosses the property along the strike of the formations.

In 1956, the company made magnetometric and electromagnetometric surveys of the property. This was followed by 3 diamond-drill holes. The rocks intersected were mainly chlorite schist and graywacke, with no mineralization of economic significance.

E.E. Campbell was in charge of the exploration. (J. D. - 57)

Broulan Reef Mines Ltd.

Ref.: Geol. Surv. Can. Mem. 233, Maps 634A, 635A.

Broulan Reef Mines Ltd. has explored a group of claims covering lots 30 to 46, range III, lots 27 to 47 and the south halves of lots 23 to 26, range IV, and lots 27 to 34, range V, Cléricy township.

Most of the property is underlain by volcanic rocks with minor intrusions of granite, diorite and younger diabase.

An electromagnetometric survey of the property has been made, with a detailed magnetometric survey in the northwestern part where an electromagnetic anomaly has been noted. At this place a ridge of dacitic flow rock is mineralized with patches of pyrrhotite. Six diamond-drill holes were drilled to test this anomaly. Sections up to 45 feet in width, with an average of 20 per cent pyrrhotite, were cut.

G. Perrault was in charge of the exploration work.

(J. D. - 57)

Cleranda Copper Mines Ltd.

Ref.: Que. Bur. Mines, Ann. Rept. 1936, Pt. A, p. 57.

This company holds, or has control of, claims covering lots 15 to 22 and the north halves of lots 23 to 26, range IV, and lots 18 to 26, range V, Cléricy township.

The property is underlain by volcanic rocks of intermediate composition which strike east to southeast. A northerly-trending diabase dyke crops out on lot 24, range V. The property has been covered by an electromagnetometric survey and by a magnetometric survey in the northern parts of lots 25 and 26, range V, where a conductor was found. There is also a magnetic anomaly here. The anomaly was explored by 3 diamond-drill holes, one of which traversed 25 feet of heavily mineralized volcanic rock. The mineralization consists of pyrrhotite and some pyrite.

In the southern part of lot 20, range V, an adit was driven south in 1931 and 1936 by Primrose Exploration Company Ltd. to reach a quartz vein which is exposed on surface 350 feet south of the portal. This vein has a maximum width of 2 feet and is exposed over a distance of 430 feet. It strikes N. 75° W. and dips 45° northeast and consists of milky quartz with occasional pyrite mineralization. Visible gold is reported to have been found in the vein. The adit failed to reach the vein, but a horizontal diamond-drill hole from the face is reported to have intersected gold mineralization. Another quartz vein is exposed in the adit. A sample taken from it by the writer assayed 0.02 ounce of silver per ton and no gold.

Cleranda Copper Mines Ltd. has drilled 2 diamond-drill holes this year, but no veins of appreciable width have been cut. The main rock is andesite.

G. Perrault and B. Middleton supervised the exploration work. (J. D. - 57)

The Coniagas Mines Ltd.

Ref.: Que. Bur. Mines, Min. Oper. 1928, p. 100.

This property covers the north halves of lots 1 to 4, and the north quarters of lots 5 to 7, range V, and the south halves of

lots 4 to 7 and the southern parts of lots 1 to 3, range VI, Cléricy township.

Part of a large granodiorite body outcrops in the southwest corner of the property. Elsewhere the bedrock consists of rhyolite, dacite, andesite and acid pyroclastic rocks. The volcanic rocks trend northwest. The axis of the Cléricy syncline passes through the northeastern part of the property. A possible fault, marked by a topographic depression, and apparent on a magnetometric survey, trends northeasterly in range V.

The company reports the presence of 3 mineralized zones on the property. The Windfall zone is in lot 2, range V. It is andesite mineralized with pyrite, pyrrhotite and chalcopyrite. Another zone in the eastern part of lot 4, range V, consists of a lens of highly pyritized diorite 400 feet long with a maximum width of 100 feet. The third zone is in lot 6, range VI. It contains a quartz vein which is mineralized with chalcopyrite. The vein strikes north and dips steeply west; it is exposed over a width of 3 feet.

The property was first explored by Windfall Rouyn Mining Company Ltd. in 1928. A shaft 60 feet deep was sunk in the Windfall zone and 8,000 feet of diamond drilling was done. Records of this drilling were probably lost. In 1951 some short holes were drilled on the north shore of Kinojevis river in claim R.33871. In 1954, Rotondo Rouyn Mines Ltd. made a magnetometric survey of the property, carried out detailed geological mapping around Windfall shaft, and drilled 3 short diamond-drill holes in the shaft area.

In 1955-56, The Coniagas Mines Ltd. carried out an electromagnetometric survey of the property and 12,123 feet of diamond drilling in 20 holes. The best intersection, obtained near the shaft, averaged 1.42 per cent copper and 6.22 per cent zinc over 3.2 feet.

A.C. Lee was the consulting engineer. (J. D. - 56)

Gaitwin Explorations Ltd.

Ref.: Geol. Surv. Can., Mem. 233, Map 635A.

This property covers lots 1 to 4, ranges VIII, and IX, Cléricy township, and lots 57 to 62, ranges VIII and IX, Dufresnoy township.

The property is underlain by volcanic flows striking southeast to east. The flows consist mostly of andesite and related pyroclastic rocks. They are cut by a northerly-trending body of diorite in the eastern part of the property. The latest intrusion is a body of pink syenite porphyry in the northeast corner of the property.

Sulphide mineralization is found on the property in lot 62, range VIII, 1,200 feet south of the range line and in the southern part of lot 62, range IX, Dufresnoy township, and in lot 1, range IX, Cléricy township.

Two diamond-drill holes were drilled in 1955 by the former owners of the property. Later in 1955 the present owners made an electromagnetometric survey of the whole property and magnetometric surveys of parts of it and drilled 8 diamond-drill holes for a total of 4,163 feet. Five of the holes, which were drilled in lot 2, range IX, Cléricy township, intersected mostly andesite and diorite cut by swarms of syenite porphyry dykes. Short sections of the core contained disseminated pyrite mineralization. In 1956, 2 holes were drilled to check magnetic anomalies in lots 61 and 62, range VIII, Dufresnoy township. One of these holes cut a mineralized zone 23 feet wide in graphitic tuff containing some pyrite and pyrrhotite. All assays were below 0.1 per cent copper.

W.W. Beaton was the consulting engineer in 1956. (J. D. - 56)

Kontiki Lead and Zinc Mines Ltd.

This company holds lots 26 to 37, range VI, Cléricy township.

A geological contact striking northwest between graywacke to the northeast and intermediate flows to the southwest divides the property into almost equal parts.

The company has made an electromagnetometric survey of the property and has drilled 4 diamond-drill holes for a total of 1,740 feet. No mineralization of economic importance was reported. (J. D. - 56)

Mallen Red Lake Gold Mines Ltd.

Ref.: Que. Bur. Mines, Min. Oper. 1926, p.132.

This company holds lots 7 and 10 to 14, and the southern parts of lots 8 and 9, range IV, Cléricy township.

The property is underlain by northwesterly-trending volcanic rocks and in the southwest corner by a body of granodiorite trending in the same direction.

The first work reported on the property is by Archean Mines Development Company Ltd. in 1925-26. A discovery of a lenticular zone containing chalcopyrite, sphalerite and pyrite was made near the centre of lot 9. A shaft, later known as Harvie No. 1 shaft, was sunk here to a depth of at least 125 feet and 600 feet of lateral work was done. In 1947, Herbert Mining Company Ltd. carried out magnetometric and self-potential surveys of part of the property.

In 1955-56, Mallen Red Lake Gold Mines Ltd. made an electromagnetometric survey and did some 3,000 feet of diamond drilling. Scattered copper mineralization was reported by the company but no ore bodies could be delimited. One 8-foot section was reported to have assayed 2.2 per cent copper.

G. Hammond supervised the exploration work. (J.D. - 56)

Maralgo Mines Ltd.

Maralgo Mines Ltd. holds lots 22 to 41, range VII, and lots 34 to 41, range VIII, Cléricy township.

The property is underlain by a northwesterly-trending band of sedimentary rocks more than 2 miles wide consisting mostly of graywacke. Northeast and southwest of these sedimentary rocks there are volcanic rocks, consisting mostly of andesite.

The company has made an electromagnetometric survey of lots 22 to 29, range VII, and lots 34 to 41, range VII, and had drilled 3 diamond-drill holes totalling 1,752 feet. All of the holes were in sedimentary rocks (graywacke and slate) cut in places by feldspar porphyry dykes. A few quartz veinlets, mineralized with pyrite, were intersected.

E. L. MacVeigh logged the core. (J. D. - 56)

New Delhi Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 166, p.229; Mem. 233, p.38.
Que. Dept. Mines, P. R. No. 256, p. 18.

This property comprises lots 8 to 12, the south halves of lots 3 and 4 and the south three-quarters of lots 5 to 7, range V, Cléricy township.

The property is underlain by intermediate flows which strike northeasterly. The axis of the Cléricy syncline runs through the northeast corner of the property and other fold axes were mapped in the southwestern part of the property.

The property has been held partially or wholly by Archean Mining Development Company Ltd., Harvie Mining Company Ltd., Aurel Mines Ltd., and Cross Fault Mines Ltd. The records of most of the early work done on the property have been lost. The Harvie No. 4 shaft was sunk to a depth of 100 feet in the southern part of lot 6, range V and 230 feet of lateral work was done. Cross Fault Mines Ltd. made geological and geophysical surveys of the property and did 1,830 feet of diamond drilling in 6 holes.

In 1956 New Delhi Mines Ltd. acquired the property and conducted an electromagnetometric survey and drilled 8 diamond-drill holes. A mineralized zone parallel to the strike of the flows and of the order of 200 feet wide and 1,500 feet long was intersected. Copper tenors in this zone are generally below 0.10 per cent. The best intersection was 3 feet at 0.55 per cent copper. The mineralization consists mostly of pyrite and some chalcopyrite; sphalerite and pyrrhotite may also be noted.

G. R. Forbes was in charge of the New Delhi explorations. (J. D. - 56)

Rio Canadian Exploration Ltd.

See Dufresnoy township.

Rowan Consolidated Mines Ltd.

Ref.,: Que. Bur. Mines, Min. Oper. 1927, p.125; 1928, p.98.

Rowan Consolidated Mines Ltd. holds a group of 4 claims which cover lots 3 to 6, range IV, Cléricy township.

Most of the southwestern part of the property is probably underlain by granodiorite. Outcrops, however, are very scarce in the granodiorite area. The northeastern part of the property is underlain by lava flows of intermediate composition which strike southeasterly and are cut by dykes or other bodies of diorite. In lots 4 and 5 pyrite, pyrrhotite and chalcopyrite mineralization occurs in the volcanic rocks and seems to be associated with quartz stringers. Thin seams of sulphides may also fill fracture planes.

Harvie Mining Company Ltd. did some exploration work in 1927-28. Later exploration work included magnetometric and self-potential surveys and diamond drilling. In 1956, the present owners made an electromagnetometric survey of the northeast part of the property and drilled 2 diamond-drill holes in lot 5. In all of the drilling to date no sections of ore grade were intersected; however, chalcopyrite occurs with pyrite and pyrrhotite in narrow stringers. (J. D. - 56)

CLERMONT TOWNSHIP

Augdome Exploration Ltd.

The property of Augdome Exploration Ltd. consists of lots 1 to 6, range VIII, Clermont township and the north halves of lots 57 to 61, range VIII, Desmeloizes township.

The property is shown on a company map to be underlain by dacite and pillowed andesite which strike a little south of east and dip steeply north. Outcrops are very scarce over the property. Diorite sills are exposed in the northeastern part of the property. A northeasterly-trending diabase dyke crops out in the northern part of lot 4, range VIII, Clermont township.

In 1952 The Mining Corporation of Canada Ltd. drilled 3 diamond-drill holes in lot 4, range VIII, Clermont township, east of the diabase dyke. In 1955, Augdome Exploration Ltd. made a magnetometric survey of the property followed, in 1956, by 4 diamond-drill holes. Only specks of chalcopyrite over short lengths were intersected.

C. Fox supervised the exploration work. (J. D. - 57)

CRANBOURNE TOWNSHIP

New Lafayette Asbestos Company Ltd.

Ref.: Geol. Surv. Can., Mem. 199, p. 20.

This company holds lots 17 to 26, range V, Cranbourne township.

The northwestern part of the property is underlain for the most part by quartzites of the Caldwell series and the southeastern part by rocks of the Beauceville series consisting of grey and black slates, impure quartzites, lavas and tuffs. At or near the contact between the Beauceville and Caldwell series there is a band of greenish black, schistose serpentine containing in places slip-fibre and cross-fibre asbestos. Pale green serpentine occurs locally.

A shaft is reported to have been sunk on the property upwards of 50 years ago to a depth of 55 feet and in 1949 some trenching and diamond drilling was done.

Exploration work done by the present company in zone A, in lots 24 and 25, during 1955, comprises an adit 223 feet in length, 14 diamond-drill holes with a total length of 5,000 feet, a trench 190 feet in length and a large number of test pits. In zone B, which occupies the eastern part of lot 23, 8 diamond-drill holes were drilled for a total of 2,500 feet. During the same year a magnetometric survey of lots 20 to 26 was made.

In 1956, an area 25 feet by 350 feet in zone B was stripped of 8 to 10 feet of overburden and a trench 5 feet wide, 5 feet deep and 350 feet long was excavated in the exposed outcrop.

The asbestos-bearing zone in the serpentine trends northeast and dips 60° northwest. It has an average width of 400 feet and has been traced for a distance of 1,200 feet. The asbestos fibres range in length from one-quarter to three-eighths of an inch.

Reserves are estimated by the company to be in excess of 10,500,000 tons having a tenor of 4 per cent asbestos or better.

G. Verreault is in charge of the work. (P.-E. G. -56)

DALET TOWNSHIP

Selco Exploration Company Ltd.

Ref.: Geol. Surv. Can., Map 554A.

Selco Exploration Company Ltd. holds lots 1 to 3, range IV, Dalet township.

The property is mostly underlain by volcanic rocks, mainly andesite, intruded by diorite. A small mineralized body of ultra-basic rock intrudes the volcanic rocks on Lot-line 1-2. The mineralization consists of disseminated chalcopyrite and pyrrhotite.

The company has carried out a dip needle survey and drilled 3 diamond-drill holes totalling 119 feet. One hole drilled vertically on the mineralized outcrop gave an average of 0.40 per cent copper and 0.73 per cent nickel for a length of 37 feet, the best sections being 0.26 per cent copper and 1.21 per cent nickel over 5 feet and 1.06 per cent copper and 0.77 per cent nickel also over 5 feet. No assays are reported from the other holes. (J. D. - 56)

DALQUIER TOWNSHIP

Bornite Copper Corporation Ltd.

The Bornite Copper Corporation Ltd. property consists of lots 46 to 53, range II, Dalquier township.

Most of the property is underlain by Keewatin-type volcanic rocks which strike N.75° W. and dip 85° northeast. The southern part of the property is underlain by highly altered acid volcanic rocks which are now carbonate-sericite schists. The northern part is underlain by intermediate to basic volcanic rocks. Part of a granitic stock cuts across the northeast corner of the property. A major shear zone crosses the property. It is the continuation eastward of the New Formaque mineralized zone which contains copper, zinc, silver and selenium.

In 1956, 5,158 feet of diamond drilling in 9 holes was completed. Seven of the holes were drilled in lot 46 to explore the eastern extension of the New Formaque shear zone. The rocks cut were carbonatized and sericitized acid volcanic rocks with varying amounts of pyrite. The best intersection assayed 3.00 per cent zinc, 0.92 per cent lead and 1.15 ounces of silver per ton over 10 feet.

In 1957, 2,059 feet of diamond drilling was completed in 4 holes. These holes intersected mostly carbonate-sericite schists derived from rhyolite and trachyte lava flows and acid tuffs and agglomerates. The drill core contained some pyrite and a few specks of chalcopyrite.

W.N. Ingham supervised the first exploration programme and J. Smeddle, the second. (M. L. - 57)

Caral Mining Company Ltd.

The Caral Mining Company Ltd. property consists of lots 25 to 27, range II, and lots 19 to 27, range III, Dalquier township.

This claim group is underlain by intermediate to acid volcanic rocks, mainly interbedded rhyolites, trachytes, dacites, andesites,

tuffs and agglomerates. They strike in a northwesterly direction with steep dips to the northeast. They have undergone severe to moderate alteration with carbonatization, sericitization, and chloritization. Disseminated pyrite and pyrrhotite are widespread. The east end of a granite plug cuts across the southwest corner of the property and a late gabbro dyke cuts diagonally in a northeasterly direction across the whole property.

During the spring of 1956 magnetometric and electrical resistivity surveys of the property were made. Following this work 9 diamond-drill holes, totalling 4,540 feet, were drilled to test the anomalies.

The holes were for the most part in intermediate to acid volcanic flow rocks with zones of disseminated pyrite. Some massive pyrite and pyrrhotite, with a few grains of chalcopyrite, were intersected.

The work was supervised by W.N. Ingham. (M. L. -56)

Martin Property

H. E. Martin owns the mining rights on lots 34 to 40, range II, Dalquier township.

This property is underlain by highly altered volcanic rocks and diorite sills which strike approximately N. 75° W. and dip 85° northeast. The northern part of the property is underlain by rhyolitic and trachytic volcanic rocks which have been altered to carbonate-sericite schists. The southern part is underlain by andesitic and dacitic volcanic rocks altered to chlorite schist. There are numerous diorite sills in the volcanic rocks.

There are 3 sulphide zones on the property. In the northwest corner of the property a pyrite zone has been followed by trenching for 1,700 feet. On Lot-line 36-37, in the centre of the range, a pyrite zone can be followed on high ground for a length of 500 feet. Another weak sulphide zone can be traced in outcrops at the north ends of lots 38 and 39.

During the autumn of 1956, a resistivity survey of the property was made and 5 diamond-drill holes totalling 3,000 feet were completed. Two of the holes intersected disseminated pyrite mineralization on the extension of the New Formaue mineralized zone.

The work was done under the supervision of J.D. McCannell. (M. L. - 57)

The Mining Corporation of Canada Ltd.

The mining Corporation of Canada Ltd. holds 2 groups of claims in Dalquier township. The east group covers lots 28 to 33, range III, lots 26 to 33 and 37 and the south halves of lots 34 to 36, range IV, lots 33 to 48, range V, and lots 39 and 42 to 46 and the south halves of lots 35 to 38, 40, 41, 47 and 48, range VI. The west group is

made up of lots A to D, range I, and lots 22 to 24, range II.

The east group is underlain by a series of steeply-dipping acid and intermediate volcanic rocks. These have been sericitized, chloritized and carbonatized. Strikes are slightly north of west with many local flexures. The axial plane of the Duvernay syncline passes through the claims in range IV. In range VI, there is a northwesterly-trending mass of granite 1 mile long and 2,000 feet wide. There are numerous narrow sills and dykes of granite, granodiorite and diorite and their related porphyries. A late gabbro dyke 200 to 300 feet wide crosses the property in a northeasterly direction. Outcrops are numerous in the east group.

The west group is almost completely covered by overburden. It is underlain by altered acid volcanic rocks and at its west end by the eastern nose of a granitic body. There are numerous quartz veins, which contain only a small amount of gold. These were thoroughly prospected on the surface exposures during the twenties and thirties. Sulphides are found in patches and lenses in altered and sheared zones in the volcanic rocks. These are made up mostly of pyrite and pyrrhotite. Only minor amounts of chalcopyrite and sphalerite were noted.

In 1956, a programme of geophysical surveying and diamond drilling was undertaken. Nineteen holes, totalling 5,678 feet, were completed. Disseminated pyrite and pyrrhotite, with minor amounts of chalcopyrite and sphalerite, were intersected in some of the holes.

The work was done under the supervision of A. Troop.

(M. L. - 57)

New Formaque Mines Ltd.

Ref. : Geol. Surv. Can., Map 327A.

Que. Bur. Mines, Min. Oper. 1915, p.27; 1916, p.32; 1925, p.122;
1926, p.141; 1927, p.152; 1928, p.129.

Que. Dept. Mines, P.R. No. 246, p.9.

The New Formaque property is made up of lots 41 to 45, 28 and 29, range II, and lots 34 to 43, range III, Dalquier township.

Copper was discovered here in 1913 by J. Tremblay. In 1916 the Campbell and Forbes syndicate sank a shaft to a depth of 54 feet in about the centre of lot 42, range II, and drove a 44-foot crosscut. In 1928, North Country Mines Ltd. sank a second shaft 100 feet north of the old shaft to a depth of 115 feet and did 150 feet of lateral work on the 100-foot level. In lot 44, range II, Jay Copper Gold Mines Ltd. sank a shaft to a depth of 525 feet and completed 2,932 feet of lateral work on 4 levels from 1926 to 1929. New Formaque acquired the property in 1950.

The claim group is underlain entirely by Keewatin-type Precambrian rocks. These are mostly highly altered lavas and pyroclastic rocks with narrow diorite dykes. The southwest corner and the northern part of the property are underlain by intermediate to basic volcanic flows. Most of the claims in range III are underlain by a band

of acid volcanic rocks 3,500 feet wide made up of rhyolites, trachytes, dacites, acid tuffs and acid agglomerates. These strike N. 70° W. and dip 85° northeast. They have undergone severe metamorphism and are now carbonatized and sericitized schists. Shearing and brecciation are pronounced in many places.

In about the centres of lots 42 to 45, range II, and within the wide band of acid volcanic rocks, there is a zone 600 feet wide and 2,600 feet long which contains numerous lenses of sulphide mineralization. It is strongly sheared and brecciated. The southern part of this zone, roughly 200 feet in width, contains numerous lenses of sulphide, mostly pyrite. The central part of the zone, also 200 feet in width, contains numerous lenses, blobs, pods and disseminations of sulphides, mostly chalcopyrite. Selenium is found locally in this part of the zone. The northern 200-foot band of the zone contains mostly lenses of sphalerite with some silver minerals and, locally, bismuth and selenium.

Thirteen veins or vein systems were outlined. Six of these are estimated to contain 440,000 tons grading 1.8 per cent copper and 0.43 ounce of silver per ton. A zinc-silver zone in lot 43 is estimated to contain 50,000 tons grading 3.14 per cent zinc and 21.09 ounces of silver per ton.

The No. 1 vein has a length of 225 feet and widths of 1 foot to 4 feet at surface. It is still strong on the 500-foot level of the Jay shaft and was intersected by 2 diamond-drill holes at 740 feet and 900 feet below the shaft collar.

New Formaque Mines Ltd. drilled 27 diamond-drill holes for a total of 11,570 feet in 1951 and 67 holes for a total of 33,089 feet in 1956-57. All of this drilling was in the mineralized zones in the centres of lots 42 to 44, range II. A head frame, a hoist and some mine buildings were brought from the Buffadison gold mine near Val d'Or and set up at the property in 1957. All work was stopped before the end of the year.

The drilling programme of 1951 was supervised by I. Christopher and that of 1956-57, by W.N. Ingham. (M. L. - 57)

DASSERAT TOWNSHIP

Barry Copper Mines Ltd.

See Montbray township.

Dasson Copper Corporation Ltd.

Ref.: Que. Bur. Mines, Min. Oper. 1928, p.66; Ann. Rept. 1930, Pt.A., p.61.
Que. Dept. Mines, Min. Ind. 1941, p.33.

This company holds a group of 95 claims in the south central part of Dasserat township. The claims are numbered C.93718-27,

C.93862-65, C.93907-09, and C.93980-81, claims 1 to 5 each.

The eastern and southern parts of the property are underlain by sedimentary rocks of Temiscamian-type. They consist mainly of biotite schist, quartzite and graywacke striking approximately east. The western and northern parts of the property are underlain by sedimentary rocks of the Cobalt series consisting of argillite, graywacke and conglomerate. These rocks overlie the older Temiscamian formations and are almost horizontal. The Temiscamian rocks are intruded by bodies of granite and syenite and a later northerly-trending diabase dyke in the centre of the property. The Horne Creek fault is thought to extend across the property to Kag lake. The Breen fault, which is parallel to it, cuts the Cobalt rocks a little to the north.

There are 2 prospects on the property. One is in lot 36, 100 feet south of the Noranda-Kirkland Lake Highway, on the west side of a Cobalt outlier. It consists of quartz stringers along a shear zone carrying patches and stringers of chalcopyrite. The shear zone is only 1 foot wide but mineralization extends as dissemination and along joints. This prospect was worked in 1927-28 by the Miljour Syndicate and the Brisco Syndicate and in 1930 by Ottawa Northern Prospecting and Mining Syndicate. A pit was sunk to a depth of 15 feet and 20 tons of sorted material was sent to the Noranda smelter. In 1941, Tundra Mines Ltd. drilled 3 short diamond-drill holes totalling 510 feet.

The other prospect is south of the railway crossing, on the north side of the highway. It is also in Temiscamian rocks and consists of a vertical shear filled with quartz carrying chalcopyrite. The zone is 6 inches wide. In 1949, 2 diamond-drill holes were drilled near this zone and, in 1955, Violamac Mines Ltd. drilled 5 holes. Narrow mineralized sections were reported. In 1957, Dason Gold Mines Ltd. carried out a geochemical survey in the south central part of the property. Seven holes were drilled to test anomalies. The best intersection was 0.25 per cent copper over 3 feet. (J. D. - 57)

O'Leary-Malartic Mines Ltd.

O'Leary-Malartic Mines Ltd. has control of C.100040, claims 1 to 5; C.100041, claims 1 to 4; C.100042-43, claims 1 to 5; and C.100044, claims 1 to 2, in the southeast quarter of Dasserat township.

The property is underlain in the northern part by Cobalt sedimentary rocks of nearly horizontal attitude and in the southern part by Temiscamian-type sedimentary rocks, mostly biotite gneiss, which strike east and dip fairly steeply to the north. A diabase dyke or sill 60 feet wide is the only intrusive rock.

A zone of quartz mineralized with coarse chalcopyrite and a little bornite occurs at the south contact of the diabase dyke with the biotite gneiss 25 feet south of post No. 3, C.100043, claim 1. It strikes east and is exposed for a length of 50 feet. The maximum width is 5 feet.

The company has drilled 11 diamond-drill holes for a total of 2,002 feet to explore the vein over a length of 600 feet. The best intersection obtained was 0.92 per cent copper over 12 feet. The company estimates indicated reserves of 30,000 tons at 1.25 per cent copper. (J. D. - 56)

Payrock Mines Ltd.

Ref.: Geol. Surv. Can., Paper 49-25
Que. Bur. Mines, Min. Oper. 1928, p.66.

Payrock Mines Ltd. owns lots 38 to 42, the north halves of lots 43 to 45 and the northern parts of lots 46 to 49, range IV, and lot 40 and the southern parts of lots 38, 39 and 41 to 47, range V, Dasserat township.

Most of the property is underlain by acidic and some intermediate lava flows. The lavas are intruded by a northeasterly-trending body of diorite and by smaller bodies of syenite and syenite porphyry. On the west lie the undisturbed Cobalt sediments made up of graywacke, conglomerate and argillite.

Part of the property was explored by the LaPierre-Dasserat Syndicate in 1928. Three pits 15 to 20 feet deep were sunk in a mineralized zone in rhyolite. In 1942, the Donhurd Prospecting Syndicate made a scheelite-gold discovery on the south shore of Dasserat lake a few hundred feet east of the mouth of Snake river. Upstream Gold Mines Ltd. acquired the property in 1944. In 1950-51 Violamac Mines Ltd. drilled 2,272 feet in 9 diamond-drill holes in lots 39 and 40, range IV. In 1956, the present company made electromagnetometric and magnetometric surveys of its property and stripped a few areas with a bulldozer. A zone mineralized with coarse pyrite mixed with, or surrounded by, fine chalcopyrite and magnetite in fractured diorite was uncovered at the west end of the diorite body in lot 39, range IV. Chalcopyrite may be seen for a length of some 30 feet and a maximum width of 4 feet along a fracture striking N. 15° E. The zone has been tested by short diamond-drill holes. A selected sample taken by the writer assayed 0.043 ounce of gold per ton, 0.198 ounce of silver per ton and 2.39 per cent copper.

The scheelite-gold zone mentioned above consists of almost massive, coarse pyrite in calcite. There are 3 main stringers over a width of 10 feet, each about 6 inches wide, striking N. 40° W. and turning sharply against a minor fracture. A selected sample taken by the writer assayed 0.628 ounce of gold per ton, 0.164 ounce of silver per ton and 0.03 per cent tungsten.

Diamond drilling done on the property to date totals 5,171 feet.

D. Hurd is supervising the work on the property.

(J. D. - 57)

DENAIN TOWNSHIP

Harrison Minerals Ltd.

Harrison Minerals Ltd. holds 16 claims near the northwest corner of Denain township. The claims are numbered C.91395, claims 1 to 5; C.91396, claims 1 to 3; C.G. 4917, claims 1 to 5; and C.G.4983, claims 1 to 3.

The claims are underlain by schists derived from graywacke, and some lava flows, intruded by granitic rocks. These strike east and dip north. The Cadillac fault zone crosses the property.

A small zone of copper mineralization was found in the south central part of C.G. 4917, claim 4, and from September, 1955, to February 1956, 13 diamond-drill holes totalling 5,031 feet were drilled to explore this zone. The rocks encountered were mostly altered and silicified lavas and graywacke cut by feldspar porphyries. The lava flows are the host rocks for the sulphide mineralization. The best intersections were 24 feet at 1.05 per cent copper, 16.5 feet at 1.40 per cent and 6 feet at 2.78 per cent.

The drilling was directed by A. Leclerc. (M. L. - 56)

DESMELOIZES TOWNSHIP

Alcourt Mines Ltd.

Ref.: Geol. Surv. Can., Map 284A.

Alcourt Mines Ltd. has control of a group of claims covering lots 30 to 39, range VIII, Desmeloizes township.

The property is underlain mostly by volcanic rocks, except in the southwestern part, where there are sedimentary rocks. The strike of the formations is southeast. A diabase dyke outcrops at the north of lot 38 and it presumably extends south through the property. Outcrops are very scarce and are confined to the eastern part of the property.

In 1956, a magnetometric survey of the property was made, followed by an electrical resistivity survey of the northern part of the property. Four diamond-drill holes were then drilled to test some of the anomalies. The holes were mostly in schistose volcanic rocks. One hole cut wide sections of gabbro. No mineralization of economic importance was reported.

H. Dowhaluk logged the core. (J. D. - 57)

Augdome Explorations Ltd.

See Clermont township.

Bouzan Mines Ltd.

Ref.: Geol. Surv. Can., Map 284A.

This company owns 20 claims which cover lots 27 to 46, range V, Desmeloizes township.

The property is underlain mostly by Keewatin-type volcanic flows and sedimentary rocks which strike northwest. This complex is cut by a large granite body which outcrops at the western limit of the property and by 2 diabase dykes which strike northeast.

In lot 39, 250 feet north of the range line, 3 pits have been dug in mineralized biotite gneiss along a shear zone which strikes N. 20° W. The mineralization is most intense across a width of 30 feet and consists mostly of pyrite with some sphalerite and specks of chalcopyrite and galena. According to a company report, large samples from one of the pits assayed 1.8 per cent zinc, 0.7 per cent lead and 0.05 per cent copper across 6 feet. The gossan area extends northeast of the pits for some 300 feet. Stripping has been done at many places on this outcrop.

Geochemical, resistivity and magnetometric surveys of the property were made in 1955 and 3 diamond-drill holes were drilled in 1956. All holes cut mostly graywacke with minor andesite. No intersections of economic importance were obtained. (J. D. - 56)

Consolidated Tungsten Mining Corporation of Canada Ltd.

Ref.: Geol. Surv. Can., Map 284A.

This company holds lots 14 to 19, range IV, Desmeloizes township.

Map 284A indicates the whole property as underlain by granite. In 1956, the company drilled 10 short diamond-drill holes. All were in granite except 4 holes in the centre of the property that were in rhyolite. (J. D. - 56)

Dencroft Mines Ltd.

Ref.: Geol. Surv. Can., Map 284A.

Dencroft Mines Ltd. holds lots 37 to 46, range VI, Desmeloizes township.

The property is underlain in the northeastern part by volcanic rocks and in the southwestern part by sedimentary rocks, all having a northwest strike and a steep northeast dip. Outcrops are very scarce on the property. From a magnetometric survey it is inferred that the Abana dyke extends southward across lot 47.

A magnetometric survey was made at the end of 1955, followed by 7 diamond-drill holes in 1956. All of the holes were in graywacke cut by narrow dykes of feldspar porphyry.

Exploration work was under the supervision of Koulomzine and Brossard Ltd. (J. D. - 56)

Duvan Copper Company Ltd.

Ref.: Geol. Surv. Can. Map 284A.

Que. Bur. Mines, Min. Oper. 1928, p.111; Ann. Rept. 1929, Pt.A, p.136.

Que. Dept. Mines, P.R. No. 374, p.11.

Duvan Copper Company Ltd. owns lots 22 to 29, range II, and the south halves of lots 22 to 29, range III, Desmeloizes township.

The property is underlain by basic to intermediate volcanic rocks with interbeds of tuffs and sedimentary rocks intruded by granite dykes. At the mine site intermediate volcanic rocks are in contact with graywacke, some of which is garnetiferous. The strike of the formation is N. 30° W. and the dip is very steep. Underground development indicates the presence of a sharp fault normal to the bedding. Most of the ore is concentrated in dark graywacke along the bedding on the north side of this fault. It consists of high grade shoots of chalcopyrite and bornite. The maximum length of these shoots is 120 feet and the average width, 1 foot. There are, however, parallel shoots. On the fourth level there are 6 parallel shoots for a maximum width of 60 feet. Below and above this level the ore zone is narrower. The shoots end abruptly and commonly change to pyrite with some pyrrhotite and magnetite devoid of copper minerals.

The property, formerly held by Rex Copper Mines Ltd. and Laval-Quebec Mines Ltd., was drilled by Desmeloizes Mining Corporation Ltd. in 1952. Duvan Copper Company Ltd. acquired the property in 1953 and did some diamond drilling in 1954-55. A shaft, started in 1955, was sunk to a depth of 950 feet, with 8 levels. In 1957, apart from underground exploration, surface diamond drilling was carried out totalling 1,705 feet in 3 holes.

All operations were suspended in October 1957. The ore reserves are estimated by the company at 113,103 tons grading 2.5 per cent copper, most of it above the fifth level.

A.C. Lee is the consulting engineer. (J.D. - 57)

Fleetwood Yellowknife Mines Ltd.

Ref.: Geol. Surv. Can., Map 284A.

This company owns lots 1 to 11 and the south halves of lots 12 and 13, range VII, Desmeloizes township.

Most of the property is occupied by cultivated land

and outcrops are very scarce. From the company geological map the southern part of the property is underlain by a granite body and the northern part by sedimentary rocks trending N. 80° W. and consisting mostly of graywacke and arkose. The contact zone is made up of hornblende and hybrid gneiss with sills of basic rocks, locally altered to talc schist.

Electrical resistivity and magnetometric surveys were conducted over the property and 9 diamond-drill holes totalling 4,463 feet were drilled near the contact zone where geophysical anomalies were found. Mineralized zones consisting of pyrite and pyrrhotite have been traced. Assays of 0.20 to 0.28 per cent nickel were obtained from samples of the basic to ultrabasic intrusive rock.

H. Dowhaluk was the field engineer. (J. D. - 56)

Vandoo Consolidated Explorations Ltd.

The property held by Vandoo Consolidated Explorations Ltd. covers the north halves of lots 27 to 31, range I, lots 30 to 33, range II, lots 30 to 35 and the north halves of lots 23 to 29, range III, and lots 23 to 31, range IV, Desmeloizes township. Another group of claims in the same township covers lots 42 to 49, range II.

The property is underlain by volcanic and sedimentary rocks striking northwest. Between the two groups of claims there is a granite body cut by a northeasterly-trending diabase dyke.

A magnetometric survey of the property was made by Vandoo Copper Mining Corporation in 1955 followed by 6 diamond-drill holes to test anomalies along the strike of the Duvan orebody, and another anomaly in the southern part of lot 25, range IV. In 1956, the present owners drilled 15 more holes. A few zones of talc schist with disseminated magnetite were cut and also a rock called garnetiferous andesite which contains fairly abundant magnetite.

The drilling was supervised by G. R. Forbes for Vandoo Copper Mining Corporation and by H. Parliment and D. Fox for Vandoo Consolidated Explorations Ltd. (J.D. - 56)

DESTOR TOWNSHIP

Beattie-Duquesne Mines Ltd.

Beattie-Duquesne Mines Ltd. has control of 2 groups of claims in Destor township.

The claims of the first group are numbered C.86611, claims 1 to 5; C.97375, claims 1 to 5; C.97425, claims 1 to 5; C.97426, claims 1 and 2; C.97546, claims 1 to 5; C.101764, claims 1 and 2; and C.G. 5256, claims 1 to 5. They are partly covered by Dufresnoy lake.

The Cléricy syncline is the main geological structure; its axis trends easterly to southeasterly toward the east. An anticlinal axis is parallel to the synclinal axis a few thousand feet south. The rocks are rhyolite, dacite, trachyte and pyroclastic rocks, cut by minor diorite dykes or other bodies.

An electromagnetometric survey of the property was made and conductors were tested by 2,125 feet of diamond drilling in 5 holes. No appreciable mineralization was found.

The other group of claims, known as the South-Richard group, is in the northwest corner of Destor township and consists of C.89933-35, claims 1 to 5.

This property is south of the Lyndhurst-Beattie break and is underlain by andesite, trachyte and rhyolite. These rocks strike northeast and dip and face south. They are intruded by a body of diorite and smaller bodies of gabbro and diabase. Two northeasterly-trending faults cross the property. Three diamond-drill holes were drilled on this property, for a total of 1,231 feet. (J. D. - 56)

Canalynda Copper Mines Ltd.

See Privat township.

Destor-O'Hara Mines Ltd.

Destor-O'Hara Mines Ltd. holds a group of 25 claims in the northwest quarter of Destor township. The claims are numbered C.93898-902, claims 1 to 5.

The property is underlain by andesitic flows striking slightly north of east. The flows are locally pillowed and show tops facing south. Two minor bodies of diorite intrude the volcanic rocks.

In 1956, a magnetometric survey was made covering the whole property and 5 diamond-drill holes were drilled. One of the holes cut a mineralized zone in pillowed andesite with a core length of 31 feet. The mineralization is in amygdules and around the pillow margins. The average grade is below 0.3 per cent copper and less zinc. Other holes in the vicinity did not intersect any appreciable mineralization.

The exploration was supervised by G. H. Soper. (J. D. - 56)

Richard Copper Corporation Ltd.

Richard Copper Corporation Ltd. owns 22 claims in the northwest corner of Destor township. The claims are numbered C.5076, claims 1 to 5; C.7437, claims 1 to 5; C.16571-72, claims 1 to 5; and C.25256, claims 3 and 4.

The property straddles the Lyndhurst break. The northern part of the property is underlain by the Palmarolle granite batholith,

which is in contact to the south with a series of lavas consisting mostly of rhyolite with andesite interflows. Along the Lyndhurst break the rocks are pyroclastic, mainly tuff. All of the volcanic rocks north of the break are intensely sheared. To the south of the break there are practically no outcrops.

The property was explored in 1926-27 by Makamic Mines Incorporated. A shaft was sunk to a depth of 30 feet near the southeast corner of C.7437, claim 2, in sheared rhyolite mineralized with pyrite and some chalcopryite and 2,000 feet of diamond drilling was done. There are a few other mineralized zones near and south of the shaft, along the schistosity, but no chalcopryite in significant quantities was noted. There are also 3 main quartz veins, which are apparently barren, cutting the formations at low angles. Near the township boundary a silicified zone 2 feet wide in rhyolite is mineralized but copper tenors are reported to be low. From 1946 to 1949, 17 diamond-drill holes were drilled, mostly in the shaft area. The best intersections, obtained in the shaft area, were 1.60 per cent copper over 1.5 feet, 1.40 per cent over 3.5 feet and 1.45 per cent over 5 feet.

In 1955-56, 5 diamond-drill holes were drilled in the shaft area and 11 others 1,000 feet east of the shaft in an area mostly covered by overburden. The best intersection, in a hole 1,000 feet east of the shaft, was 1.48 per cent copper over 6.1 feet. The chalcopryite occurs in siliceous rhyolite.

A.C. Lee was the consulting engineer. L.S. Trenholme logged the core. (J. D. - 56)

Roy Property

G. C. Roy holds a group of claims covering lots 24 to 30, range I, lots 20 to 25 and the south half of lot 26, range II, and the south half of lot 24, range III, Destor township.

Most of the property is underlain by rhyolite flows, with some andesite especially in the northern part of the property. A band of graywacke has been cut in drilling, in range I. Diorite intrudes the volcanic rocks and syenite has been cut in drilling. The Clé-ricy syncline axial line crosses the property in range I.

In 1951, a self-potential survey of part of the property was made. In 1956 N.A. Timmins (1938) Ltd. covered the whole property with an electromagnetometric survey and had selected areas in range I surveyed by magnetometer. Nine diamond drill holes, one of which did not reach the bedrock, were drilled in range I. Some sections of the core are mineralized with pyrite, and occasional specks of chalcopryite in quartz stringers were observed.

G.E. Moody was in charge of the exploration. (J. D. - 56)

DIEPPE TOWNSHIP

Conwest Exploration Company Ltd.

Conwest Exploration Company Ltd. holds a group of 9 claims in the northwest quarter of Dieppe township. The claims are numbered C.121129, claims 1 to 3; C.121130, claim 1; C.121131, claim 1; C.121134, claims 3 to 5; and C.123084, claim 5.

The ground is completely covered with unconsolidated deposits and, following a magnetometric survey of part of the property which was carried out in 1957 and in the course of which 2 interesting anomalies were discovered, 3 diamond-drill holes totalling 1,980 feet were put down in C.123084, claim 5, and C.121129, claim 3.

The holes penetrated through interbeds of iron formations and of fine-grained, thin grey sedimentary beds carrying carbonate metacrysts. The best intersections were 250 feet at 22.32 per cent iron in hole No. 1; 95 feet at 27.63 per cent iron, 90 feet at 30.83 per cent and 105 feet at 28.10 per cent in hole No. 2; and 80 feet at 17.62 per cent iron and 143 feet at 19.88 per cent in hole No. 3.

G. Griffiths was in charge of the exploration. (J. D. - 57)

DOLLARD TOWNSHIP

Tatara Property

M. Tatara holds or has control of claims covering lots 1 to 6, range II, lots 2 to 7, range III, and lots 1 to 6, range IV, Dollard township.

The property straddles part of the southwest contact of a large granite batholith, where it intrudes andesite and tuffs. The main prospect is in lot 4, range III, $1\frac{1}{2}$ miles south of the railway. It consists of a zone of mineralization in sheared andesite and tuff striking N. 25° W. and dipping steeply southwest. Trenches and shallow pits, excavated at intervals over a length of 900 feet, indicate that the zone is 10 to 20 feet wide.

Mineralization, where observed in a trench in the northern part of the zone, consists mainly of pyrrhotite and pyrite, but chalcopyrite also occurs along some of the shear planes and in scattered enriched pockets. Selected samples are reported to vary in grade from 0.22 to 2.52 per cent copper, with traces of gold and a little silver.

In January 1956 a diamond-drill hole was drilled to a depth of 150 feet under a trench in the northern part of the zone of mineralization. A section of core 13 feet in length carried considerable pyrrhotite and pyrite, but no chalcopyrite of importance could be seen. (W.N.I. - 56)

DUBUISSON TOWNSHIP

New Jersey Zinc Exploration Company (Canada) Ltd.

This company holds lots 41 and 50 and the north halves of lots 31 to 40 and 42 to 49, range II, and lots 29 to 45 and the south halves of lots 46 and 47, range III, Dubuissou township.

The property is underlain by Temiscamian-type sediments and tuffaceous volcanic rocks which trend in a southeasterly direction. They have a north dip with tops facing south. These are intruded by peridotite, gabbro, diorite, syenite and granite. All of these rocks are cut by a northeasterly-trending diabase dyke in the eastern part of the property. Most of the property is covered with a deep mantle of sand. Outcrops can be seen in only two places, in the centre of lots 43 and 44, range II, and in the south halves of lots 30 to 33, range III.

Sulphides containing zinc and copper were found in trenching operations and, in 1955, 10 diamond-drill holes were drilled, for a total of 3,828 feet, to test anomalies indicated by a ground geophysical survey. The holes cut mostly graywackes and tuffs intruded by some peridotite. Several intersections of 1 foot or less carried up to 1.7 per cent zinc. Low tenors in copper and nickel were also reported. The best intersection was 1.3 per cent zinc over a width of 4.1 feet.

The work was supervised by A.E. Goranson. (M.L. - 56)

DUFRESNOY TOWNSHIP

Brunhurst Mines Ltd.

The property held by Brunhurst Mines Ltd. consists of lots 36 to 41, range X, Dufresnoy township.

Most of the property is underlain by andesite flows striking northwest, parallel to the Cléricy synclinal axis, and dipping southwest. The southwest corner of the property is underlain by rhyolite. Outcrops are confined to lots 40 and 41, the shore of Dufresnoy lake, and the southern part of lot 36.

A resistivity survey of the property was made and 3 diamond-drill holes totalling 1,451 feet were drilled in the southern parts of lots 36 and 37 and one in the northern part of lot 36. Only disseminated sulphides with low tenors in copper were cut. (J.D. - 56)

Brunston Mining Company Ltd.

The property of Brunston Mining Company Ltd. covers lots 43 and 44 and the south half of lot 42, range X, Dufresnoy township.

The property is entirely in andesitic flows of the northeast limb of the Cléricy syncline, which strikes northwest. The dip

of the volcanic rocks is steep toward the axial line of the fold. North of the property there is a band of sedimentary rocks.

An electromagnetometric survey at the end of 1955 outlined 3 possible conductors in lot 43. These were tested by 5 diamond-drill holes totalling 2,213 feet. Sections of black argillite, locally graphitic, were intersected in drilling the northernmost conductor. Nothing could account for the other conductors.

W.W. Beaton was in charge of the drilling. (J. D. - 56)

Despina Gold Mines Ltd.

See Rouyn township.

Gaitwin Explorations Ltd.

See Cléricy township.

Lake Dufault Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 166, pp.109, 219; Mem. 229, pp.123, 136, 140, 141.

Que. Bur. Mines, Min. Oper. 1926, p.123; 1927, pp.117, 123, 124; 1928, pp.86, 96; Ann. Rept. 1929, Pt. A, p. 123; 1930, Pt.A, p.80; Min. Ind. 1938, p.62; 1939, p.60; 1940, p.45; P.R. No. 116, p.11; No. 135, p.17; No. 150, p.23; No.161, p. 14.

Que. Dept. Mines, Min. Ind. 1941, p.43; 1942, p.55; 1943, pp.84, 85; 1944, pp.66, 68; 1945, p.67; P.R. No. 205, Pt.II, pp.8, 13; No. 256, p.27; No. 330, p.34.

This company holds ground formerly held by Area Mines Ltd., Beaver Mountain Copper Mines Ltd., Corona Mines Ltd., Dufresnoy Mines Ltd., Lake Dufault Mines Ltd., Mining Projects of Canada Ltd., Newbec Mines Ltd. and Norbec Copper Mines Ltd. The property comprises claims R.17319-24, Beauchastel township; lots 14 to 16, range VI; lots 33 to 42, range East of Macamic Road; blocks 3 to 10, 51 to 55, 58, 59, 150, 151 and 169 to 172; D.L. 525d; claims A.1413, A.1415, A.1417, A.1677-78, A. 2181-82, A.12146-47, A.12150, A.33313-15, R.28338-51, R.28359-61, R.30042-45, R.30859-62, R.31567-70, R.33245-54, R.33315, R.33318-20, R.33323, T.351; C.1361, claims 3 to 5; C.7426, claims 1 and 2; C.115403, claims 1 to 3; C.126998-99, claims 1 to 4; C. 128491, claims 1 and 2 and C.G. 494, claims 1 to 4, Dufresnoy township; blocks 37, 38 and 120 to 123; claims R.32794-97; R.33025-26; R.33426-30; C.490, claims 1 to 7, C.8532, claims 1 to 4; and C.8534, claim 3, Duprat township; and R.41380-81 and T.1701-02, Rouyn township.

The central part of the property is occupied by a large body of granodiorite. North and south of this body are volcanic rocks, mostly andesite and some rhyolite, cut by diorite bodies. A northerly-trending diabase dyke cuts across the western part of the property. Another one is exposed north of Dufault lake. The volcanic rocks strike from north in the northern part of the property to northeast in the southern part and have a gentle dip toward the east. The rhyolite underlies the andesite.

A large amount of work has been done on the property by the present and former owners, including geophysical surveys and surface and underground diamond drilling.

On the Norbec property a shaft was started in 1928 and sunk to a depth of 375 feet with 4 levels to explore a steeply dipping fault zone in the "Newbec breccia", a rock consisting of fragments of diverse rock types in a siliceous matrix. Small lenses of ore grade were found.

On the Dupresnoy property some work was done on a horizontal vein in granodiorite in lots 50 to 52, range II, Duprat township. A shaft was sunk in 1926-27 to a depth of 120 feet in mineralized rhyolite in block 171.

Exploration on the Lake Dufault property prior to 1955 consisted of the extension of the 1,050-foot level of Waite-Amulet mine, underground diamond drilling therefrom, and some surface drilling. From 1937 to 1939 the portion of the Waite-Amulet "A" orebody within the property boundaries was delimited and subsequently sold to Amulet Dufault Mines Ltd. Drilling from the 1,050-foot level in 1945 delimited a small horizontal orebody estimated to contain 100,000 tons grading 9.8 per cent zinc with low tenors in copper and precious metals.

Lake Dufault Mines Ltd. carried out an electromagnetic survey in 1955 over the Norbec section and extensive diamond drilling during 1955-57 in the Dupresnoy section south of the Waite-Amulet boundary. In 1955 drilling in the northwest corner of block 169, west of the rhyolite nose, cut chalcopyrite in veinlets or fracture zones along a line trending N. 60° E. for a distance of nearly 800 feet. The veinlets dip 35° to 55° northwest. This zone is estimated by the company to contain 150,000 tons grading 1.41 per cent copper plus low tenors in gold and silver. In 1956, 38,700 feet of diamond drilling in 23 holes delimited a horizontal body 400 feet long by 100 feet wide and 2 to 40 feet thick consisting of massive sulphides, stringers or disseminations. Tenors range up to 7 per cent copper and 18 per cent zinc. The mineralization occurs within a hump of fine-grained quartz-feldspar porphyry intruded between andesite flows at a depth of 1,100 feet.

Additional drilling stations were provided in 1956-57 by drifting on the 1,650-foot level of Waite-Amulet mine into Lake Dufault property. Diamond drilling in 1957 totalled 17,810 feet underground and 22,497 feet on the surface. In lots 33 to 42, range east, magnetometric and electromagnetometric surveys were made and 1 diamond-drill hole was drilled 595 feet.

Most of the drilling on the property was done to test the favorable andesite-rhyolite contact. (J. D. - 57)

New Inesco Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 233, p.41+.
Que. Bur. Mines, P. R. No. 150, p.22.
Que. Dept. Mines, P. R. No. 227, p.56.

This property consists of 75 claims in the southern part of Dufresnoy township. The claim numbers are R.36539-43; R.37150-53; R.37979; R.38358-62; R.38435-39; R.38466-68; R.38523-24; R.38601-05; R.38611-16; R.38621-22; R.38624-29; R.38664-76; R.38718; R.38867; R.42923-25; C. 8084, claims 1 to 4; C.8533, claims 3 to 5; C.8534, claims 1 and 2; C.13191, claim 2; C.28150, claim 1; C.36459, claim 1; and C.75754, claim 1. About 75 per cent of the property is occupied by Dufault lake.

The property is underlain mostly by rhyolite and andesite flows intruded by diorite bodies and by a later diabase dyke which strikes north.

Exploration has been going on since 1934 on the property. A total of 181 diamond-drill holes have been drilled to date. Although chalcopyrite in streaks or disseminations has been found in some holes, no intersections of economic interest were obtained.

The drilling in 1955-56 was supervised by R.C. Edwards.

(J. D. - 56)

Red Bark Mines Ltd.

The property held by Red Bark Mines Ltd. in Dufresnoy township consists of lot 50 and the north halves of lots 47 to 49 and 51 to 54, range IV.

The property is underlain by andesite to the west and rhyolite to the east.

MacClare Mines Ltd. did 2,200 feet of diamond drilling in 4 holes in 1945, on the west side of Kinojevis river. An electromagnetic survey of the property, made in 1956, indicated a few conductors, one of which is interpreted as being the extension of the Héré Creek fault. Three diamond-drill holes were drilled, one of which did not reach the bedrock. Rhyolite and rhyolite breccia were intersected. A fracture zone is indicated along Kinojevis river, but no mineralization of economic importance was found.

D.J. Salt was in charge of the exploration. (J.D.-56)

Rio Canadian Exploration Ltd.

Ref.: Que. Bur. Mines, Min. Oper. 1928, p.95; P.R. No. 150, p.20.
Que. Dept. Mines, Min. Ind. 1945, p.67.

Rio Canadian Exploration Ltd. holds or controls the mining rights on a group of claims in Cléricy and Dufresnoy townships. The claims in Cléricy township cover lots 15 to 18, range V, lots 8 to 25, the northern parts of lots 1 to 3 and the north halves of lots 4 to 7, range VI, and lots 1 to 21, range VII. The part of the property in Dufresnoy township comprises lots 56 to 62, range VI, lots 47 to 62, range VII, lots 32 to 56, range VIII, lots 27 to 49 and the north half of lot 26, range IX, lots 23, 27, 31 to 35 and 45 to 48, range X, and claims R.90853-62 and R.91512-22.

Southeasterly-trending flows of rhyolite and andesite constitute the bedrock. The Cléricy syncline runs across the property.

Part of the property was explored by Copper Hill Mines Ltd. In 1928, this company did 4,152 feet of diamond drilling in 12 holes and sunk a shaft in lot 57, range VII, to a depth of 75 feet and did a small amount of lateral work on the 50-foot level. In 1945, they made a magnetometric survey and did 5,009 feet of diamond drilling mostly around the old shaft. In 1954, Stadacona Mines Ltd. made electromagnetometric and self-potential surveys of the property and drilled 4 diamond-drill holes. Lenses of massive sulphides were found in this exploration work but no orebody could be outlined.

At the end of 1955 Rio Canadian Exploration Ltd. did some diamond drilling to check electromagnetic and gravity anomalies in lots 52 and 53, ranges VII and VIII, Dufresnoy township. The first hole cut 120 feet of almost massive sulphides. Further drilling extended the zone to 1,000 feet, with an average width of 66 feet. The zone strikes slightly south of east. The mineralization consists of fine-grained pyrite with some sphalerite and chalcopyrite. The chalcopyrite fills fracture planes in pyrite or is associated with stringers or lenses of quartz. The body seems to taper at depth, and below 600 feet only disseminated sulphides were found. Tenors increase downward and outward within the sulphide body. It is estimated to contain 3,041,046 tons having an average tenor of 0.62 per cent copper, 2.32 per cent zinc, 0.052 ounce of gold per ton, 0.62 ounce of silver per ton and 37.15 per cent sulphur. Drilling of the orebody was discontinued in July but exploration was continued on the remainder of the property. Magnetometric, gravimetric, electromagnetometric and geologic surveys covering most of the property were made and drilling was done in selected areas.

C.W. Pegg was in charge of the exploration. (J.D. - 56)

South Dufault Mines Ltd.

See Rouyn township.

Stadacona Mines (1944) Ltd.

Stadacona Mines (1944) Ltd. holds lots 52 to 62, range I, and lots 54 to 62, range II, Dufresnoy township.

Most of the property is underlain by andesite and rhyolite flows which strike southeasterly. A diorite body crops out in the north central part of range II.

Part of the property was formerly held by Marillac Rouyn Mines Ltd. This company made a magnetometric survey of the claims it held at the time. In 1956, Stadacona Mines (1944) Ltd. made a resistivity survey of lots 52 to 60, range II, and drilled 3 diamond-drill holes in the northern part of lot 59, range II, and one in the central part of lot 53, range II, for a total of 1,504.5 feet. Only disseminated sulphides were encountered, with negligible chalcopyrite.

J. Mason was in charge of the exploration. (J.D. - 56)

Thompson Property

Ref.: Geol. Surv. Can., Map 281A.

W. Thompson holds lots 14 to 22, range X, Dufresnoy township.

The property is underlain entirely by volcanic rocks.

In 1956, Boymar Gold Mines Ltd. made an electromagnetic survey of the property and drilled 5 diamond-drill holes, totaling 2,730 feet, in the north halves of lots 19 and 20. Grey to greenish lava, probably dacite, was intersected in all of the holes. The lava is locally sheared and altered and is in places mineralized, mostly with pyrrhotite and minor sparsely disseminated chalcopyrite. (J.D. - 56)

DU GUESCLIN TOWNSHIP

Bordulac Mines Ltd.

Bordulac Mines Ltd. holds a group of claims in the northeast quarter of Du Guesclin township and the southeast quarter of Guercheville township. The claims in Du Guesclin township are numbered C.112761, claims 1 to 5; C.115639, claims 1 to 5; C.115771, claims 1 and 2; C.122081-82, claims 1 to 5; C.124041-45, claims 1 to 5; C.124046-48, claims 2 to 5; C.128577, claims 1 and 2; C.128694, claims 1 to 5; C.G. 5889, claims 1 to 5; C.G. 5892, claims 4 and 5; C.G. 6758, claims 1 to 5; and C.G. 6759, claims 1 to 4.

Exploration work done on the property includes airborne and ground geophysical surveys, a good deal of trenching and over 1,000 feet of diamond drilling.

Sulphides have been found over an area 800 feet by 1,200 feet in a large mass of highly schistose gabbro 1 mile south of mile-post VII on the north boundary of Du Guesclin township. Seven sulphide zones have been outlined. The sulphides occur as disseminations, fracture filling and veins within the gabbro. The main metallic minerals are magnetite, pyrite, pyrrhotite and chalcopyrite, the dominant sulphide being pyrrhotite.

The best assay reported by the company from channel samples in the trenches was 0.11 per cent copper and 0.18 per cent nickel across 5 feet. Several grab samples of average material from the trenches were taken by the writer. The best sample assayed 0.34 per cent copper and 0.07 per cent nickel. (J.H.R. - 57)

DUPARQUET TOWNSHIP

Dufresnoy Mines Ltd.

Dufresnoy Mines Ltd. holds a group of 100 claims in the southern part of Duparquet township. This group of claims is known as the Dragfold property. It comprises C.93511, C.93513, C.93605-18, and C.93621-24, claims 1 to 5 each.

The property is traversed by a syncline axial line. The trough of the syncline is occupied by pyroclastic rocks, tuffs and agglomerates intruded by extensive diorite bodies, and south of Dalem-berth river by a band of rhyolite flow breccia. North and south of these pyroclastic rocks are lava flows consisting of dacite and andesite. A pronounced drag fold lies in the centre of the property.

Some chalcopyrite was found by trenching in a band of agglomerate in the southwest corner of C.93614, claim 5. At the end of 1955, this occurrence was explored by 7 short diamond-drill holes and during the next year 13 deeper holes were drilled along the favorable zone which strikes east. Geological and electromagnetometric surveys of the property were also made. Some chalcopyrite was found in fractures and in patches, especially in a zone 300 feet long between C.93614, claim 5, and C.93616, claim 4.

R.V. Hopper was in charge of the exploration and J. Landry logged the core. (J.D. - 56)

Ex-Mother Lode Mines Ltd.

Ref.: Que. Dept. Mines, Geol. Rept. 61, Map No. 824.

This company holds the north halves of lots 37 to 60, range VII, and the south halves of lots 37 to 46, range VIII, Duparquet township.

The property is underlain by volcanic rocks, mostly trachyte and andesite, which strike east and face south. A narrow sill of older diabase and a dyke of later diabase are the only known intrusive bodies.

A magnetometric survey of the property was made in 1956 and 1 diamond-drill hole 678 feet deep was drilled in lot 40, range VIII, in 1957. Some pyrrhotite as threads and specks was intersected.

G. H. Dumont was in charge of the exploration. (J. D. - 57)

DUPRAT TOWNSHIP

Despina Gold Mines Ltd.

See Rouyn township.

Lake Dufault Mines Ltd.

See Dufresnoy township.

New West Amulet Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 229, pp.126, 139.
Que. Bur. Mines, Min. Oper. 1925, p.123; 1927, pp.114, 117; 1928,
p.88, P.R. No. 150, p.29.; Ann. Rept. 1929, Pt.A, p.117;
Min. Ind. 1938, p.63; 1939, p.60; 1944, p.66; 1945, p.67.

The property of New West Amulet Mines Ltd. is situated in the southeast corner of Duprat township. It comprises blocks 27 to 33, 39, 75 to 79, 97 to 105, 110, 124, 130 to 136, 140 and D to N and claims C.16, C.17 and C.8534, claims 4 and 5.

Flows of andesite and rhyolite are intruded by numerous dykes and masses of diorite. The southwestern part of the property is underlain by part of the Flavrian Lake granite batholith.

The property was first explored in 1925 by Duprat Mines Ltd. which was purchased, in 1928, by Rhyolite Rouyn Mines Ltd. Another part of the property was explored in 1927 by Bedford Mines Ltd. Prior to 1938 at least 10,000 feet of diamond drilling was done on the property and, in 1938-39, probably more than 10,000 feet of drilling was done by Rhyolite Rouyn Mines Ltd. In 1944, West Amulet Mines Ltd. took over the property and, in 1945-46, they completed over 5,000 feet of diamond drilling. In 1955, the company was reorganized under the name of New West Amulet Mines Ltd. and, in 1955-56, 22,339 feet of diamond drilling was done. An electromagnetic survey was also made of part of the property. Most of the drilling was on Bedford hill, where the best surface indications are exposed. This is a rhyolite zone in granite at the common corner of blocks 99, 100, 101 and 102.

The zone has been explored over a north-south length of 400 feet by east-west trenches. Chalcopyrite, pyrite and some sphalerite are found as replacements in the rhyolite breccia. The company reports that 108,000 tons grading 2 per cent copper is indicated to a depth of 300 feet, the average width being 11.5 feet.

A. Puppa was field engineer for the latest programme of drilling. (J.D. - 57)

Rainville Property

Ref.: Que. Dept. Mines, Geol. Rept. 13, p.16; P.R. No. 227, p.17; P.R. No. 283, p.6.

J. Rainville owns or has control of the mining rights on lots 11 to 17, range X, Beauchastel township and lot 9 and the south half of lot 13, range I, Duprat township.

The property is underlain by northeasterly-trending volcanic rocks, andesite and rhyolite, intruded by diorite, quartz-

feldspar porphyry and a northeasterly-trending diabase dyke. There are a few northeasterly-trending quartz veins, especially in lots 15 to 17, range X, Beauchastel township.

The eastern part of the property was explored by White Quartz Gold Mines Ltd. in 1938 and by Nordis Gold Mines Ltd. in 1946 and 1950. Low assays in gold and some molybdenite were reported by Nordis Gold Mines Ltd. in one of the quartz veins in lot 16, range X, Beauchastel township.

At the end of 1956, F. Groleau and L.S. Trenholme optioned the property and conducted a magnetometric survey around a mineralized zone in lot 9, range I, Duprat township, some 1,800 feet south of the range line. The zone is in quartz porphyry, or possibly porphyritic rhyolite, mineralized with pyrite, chalcopyrite and magnetite, near the contact of a diorite body. One vertical diamond-drill hole and 2 inclined holes were drilled. The vertical hole cut a zone of faint chalcopyrite mineralization, disseminated or in thin seams, 27 feet in width. The best intersections in this zone assayed 0.23 per cent copper over 7 feet. (J.D. - 56)

Wiltsey Property

Ref.: Que. Bur. Mines, Min. Oper. 1928, p.88.

W. J. Wiltsey holds or controls C.36390, claims 1 to 5; C.89863, claims 1 to 5; C.92104, claims 1 to 5; C.92105-06, claims 1 and 2; and C.99784, claims 1 and 2, in the eastern parts of ranges IV and V, Duprat township. The property is covered in part by Duprat lake.

Part of the property was explored in 1928 by Lake Duprat Mines Ltd., later known as Dumont Mines Ltd. An electric survey was made and 2,000 feet of diamond drilling was done to explore the bed of the lake. In 1945, Nyco Yellowknife Gold Mines Ltd. made a magnetometric survey of the part of the property within range IV. In 1953, Canadian Nickel Company Ltd. drilled 1 diamond-drill hole and, in 1956, Mespil Mines Ltd. made electromagnetometric and magnetometric surveys of the property and drilled 4 holes for a total of 3,153 feet. (J. D. - 56)

EGAN TOWNSHIP

Kvendbo Property

B. Kvendbo holds lots 56 to 59, range I, Egan township.

Grey granite gneiss and pegmatite are the two main types of rocks. The gneissic structure, as well as the pegmatite dykes, trend N. 10° E. Pegmatitic rocks were observed over a length of some 1,200 feet in a zone 24 feet wide. The pegmatites form branching veins and dykes that make up about one-third of the zone, the other two-thirds consisting of grey granite gneiss. The pegmatite dykes vary in width from 6 inches to 3 feet. The pegmatitic material is locally radioactive;

it gives Geiger counter readings up to 5 times background.

A pegmatite dyke 1 foot wide is exposed for a length of 50 feet in a trench in the bedrock in lot 58. Geiger counter readings of 20 times background were noted at two places in the trench 15 feet apart. It appears that the pegmatite contains a few crystals or crystal aggregates of a radioactive mineral such as uranothorite or uraninite.

Grab samples taken from the two localities of high radioactivity assayed 0.22 per cent U_3O_8 and 0.68 per cent ThO_2 and 0.25 per cent U_3O_8 and 0.57 per cent ThO_2 respectively. (A.D. - 57)

FABRE TOWNSHIP

Cobalt Consolidated Mining Corporation Ltd.

Ref.: Que. Dept. Mines, P.R. No. 274, Prelim. Map, No. 905.

Cobalt Consolidated Mining Corporation Ltd. has done some exploration work on lots 17 to 24, ranges VI N. and VII N., Fabre township.

Lot 17, where most of the work has been done, is underlain mostly by altered gabbro. This gabbro is fractured in various directions and some of the fracture zones are mineralized with chalcopryrite. Gneisses of Grenville type underlie the remainder of the area. A shaft and a few test pits have been dug many years ago. Around the shaft lie a few tons of rock containing a fair amount of chalcopryrite which occurs as streaks, mostly accompanying quartz, but also in the rock itself. A sample taken by the writer assayed 0.072 ounce of gold per ton, 0.568 ounce of silver per ton and 2.68 per cent copper. Down the ridge on the west side there is a quartz vein which strikes almost north. This vein is in places mineralized with pyrite and chalcopryrite. It widens to the north and spreads into swarms of parallel stringers, but the mineralization seems to disappear. A sample taken from the vein where it is 10 feet wide assayed 0.18 per cent copper, no gold and no silver.

Five diamond-drill holes were drilled near the shaft in 1956 for a total of 839 feet. Some chalcopryrite was found in thin quartz veinlets or in fractures, but no sections of ore grade were obtained. (J. D. - 57)

FIEDMONT TOWNSHIP

Dufresne Property

Ref.: Geol. Surv. Can., Mem. 253, p.88.
Que. Bur. Mines, Ann. Rept. 1929, Pt.A, p.147.

J. Dufresne holds or has control of the mining rights on lots 41 to 48, range IV, Fiedmont township.

The claim group is underlain by highly altered and amphibolitized basic volcanic rocks intruded by a plug of quartz diorite and amphibolite. There are numerous inclusions of amphibolitized volcanic rocks in the intrusive mass. About 600 feet north of Lot-post 41-42 there is an amphibolite mass 500 feet by 600 feet in the quartz diorite and altered volcanic rocks. There are many pegmatite-quartz veins in the southern and northeastern parts of this plug. These veins strike mostly north to N. 30° W. and dip 40° to 70° northeast. They are lenticular and irregular in shape and vary in width from a few inches up to 10 feet. They commonly occur along fractures and in shear zones.

In 1955, a programme of diamond drilling was undertaken to test molybdenite-bearing pegmatite quartz veins. Four holes, for a total of 1,820 feet, were drilled. They cut highly altered volcanic tuffs and flows intruded by diorite and amphibolite, and containing numerous veinlets of quartz pegmatite. The best intersection was 0.8 foot at 2.85 per cent molybdenite. (M. L. - 57)

Vallée Lithium Mining Corporation Ltd.

Vallée Lithium Mining Corporation Ltd. holds the north halves of lots 2 to 6, range VIII, and the south halves of lots 1 to 4, range IX, Fiedmont township.

The western and southwestern parts of the property are covered by a thick mantle of sand and gravel. The rest of the property consists of high ground with numerous rock outcrops. The rocks are highly amphibolitized Keewatin-type volcanic flows and pyroclastic rocks intruded by numerous sills and dykes of gabbro, peridotite and granite. These formations strike north in range IX and swing to an eastwest direction in range VIII. Dips are 40° to 80° east or north, depending on the strike. These rocks are part of a limb of a large anticlinal fold with superimposed cross folding and drag folding. The southern part of the property is underlain by granodiorite and pegmatite of the La Motte-Lacorne batholith.

In 1956, a diamond drilling programme, comprising 21 holes for a total of 13,759 feet, was completed. Four of these holes failed to reach bedrock. Numerous pegmatite dykes were intersected. These were mostly narrow and contained little spodumene. The best intersection, in a hole drilled in the southwest corner of lot 1, range IX, was 34 feet at 1.08 per cent lithia. A section within this zone assayed 1.38 per cent lithia across 16 feet.

This work was done under the supervision of D. Isbister.
(M. L. - 57)

FIGUERY TOWNSHIP

New Vinray Mines Ltd.

The New Vinray property covers lots 53 to 64, range III, Figuery township and lots 1 to 3, range III, Landrienne township.

The property is almost completely covered by overburden. The only group of outcrops is in the northern part of lot 64, range III, Figuery township. From drilling results at the south end of the property, the average depth of overburden is about 60 feet.

The claims are underlain by lava flows and bedded pyroclastic rocks. These rocks strike east and dip north. A shear zone in a graphitic layer of pyroclastic rocks cuts across the southern part of the property in an easterly direction.

In 1955, magnetometric and electromagnetometric surveys were conducted on the property and, in 1956, 5 diamond-drill holes were drilled for a total of 1,953 feet. The drilling intersected highly sheared and altered lavas with tuffs and some agglomerates. Graphitic tuffs are common in all of the holes. Pyrite and pyrrhotite are scattered as disseminations in the core.

The work was supervised by W.G. Fowler. (M.L. - 57)

GUERCHEVILLE TOWNSHIP

Bordulac Mines Ltd.

Bordulac Mines Ltd. holds C.124046-48, claim 1; C.G. 5892, claims 1 to 3; and C.G. 5893, claims 1 to 5, in the southeast quarter of Guercheville township.

Molybdenite mineralization has been found one-half mile northwest of Mile-post VII on the south boundary of the township. The mineralization is in a silicified and brecciated zone 18 inches wide in anorthosite. The zone strikes N. 80° E. and dips about vertical. It has been uncovered for 4 feet along the strike. The contact of the mineralized zone with the wall rock is sharp. The anorthosite wall rock consists of about 30 to 40 per cent feldspar and 60 to 70 per cent chlorite. Mineralization is lacking outside of the brecciated zone.

The silicified mineralized zone contains 30 to 50 per cent schistose anorthosite, 50 to 70 per cent quartz and 3 to 4 per cent sulphide minerals. The sulphide minerals consist of about 3 per cent pyrite, 1 to 2 per cent molybdenite and small amounts of chalcopyrite. A grab sample from the mineralized zone assayed 2.24 per cent molybdenite, 0.04 per cent copper, a trace of silver, no nickel and no gold. (J.H.R. - 57)

GUERIN TOWNSHIP

The Consolidated Zinc Corporation of Canada Ltd.

This company has control of a group of 19 claims in the east central part of Guérin township. The claims are numbered C.86724, claims 1 to 4; C.86725-26, claims 1 to 5; C.G. 4865, claims 1 to 3 and C.G. 4866, claims 1 and 2.

The rock is a fine-grained green schist, probably of sedimentary origin, consisting of amphibole, mica, chlorite and talc. It strikes almost east and has a very steep dip to the south and is cut by masses of diorite and dykes of microgranite. A band of intensely drag folded iron formation up to 50 feet wide, consisting of quartz and some magnetite, lies parallel to the schist. The magnetite occurs in bands up to 3 inches wide. The iron formation is mineralized with sulphides, mostly pyrrhotite and pyrite, disseminated and in stringers. Some chalcopyrite and sphalerite have also been observed. The sulphides in places constitute up to 80 per cent of the material.

Some trenching has been done across the iron formation zone, and in 1956 magnetometric, electromagnetometric and gravimetric surveys were carried out and 2 diamond-drill holes were drilled.

R.C. Edwards was in charge of the exploration. (J. D. - 57)

GUILLET TOWNSHIP

Aubelle Mines Ltd.

Ref.: Que. Dept. Mines, Geol. Rept. 55, p.44; P.R. No. 190, Pt.II, p.8.

Aubelle Mines Ltd. holds 10 claims numbered R.20377-86 in the northwest quarter of Guillet township.

The property is underlain by easterly-striking andesite flows and minor beds of tuff intruded by bodies of quartz diorite, feldspar porphyry, and, south of the property, altered peridotite.

Between 1936 and 1946, 11,095 feet of surface diamond drilling was done and a shaft was sunk to a depth of 500 feet with 3,000 feet of lateral work on 3 levels. In 1957, a magnetometric survey of the property was made, mainly to outline the peridotite body which was thought favorable for nickel deposits. An electromagnetometric survey was made over this body and 2 diamond-drill holes, totalling 610 feet, were drilled across conductors. Asbestos, mostly as slip fibres, was intersected but no copper or nickel mineralization was found. (J. D. - 57)

GUYENNE TOWNSHIP

Chicobi Lake Mines Ltd.

Ref.: Geol. Surv. Can., Map 298A.

This company owns the north halves of lots 1 to 6, range VIII, and the south halves of lots 7 to 11, range IX, Guyenne township and the north halves of lots 54 to 62, range VIII, and the south halves of lots 56 to 62, range IX, Languedoc township.

The northern part of the property is underlain by volcanic rocks and the southern part by a large granite batholith. A diabase dyke cuts across the property in a north-south direction. Near the contact of the granite, graywacke and tuff are exposed.

The property was explored by Porcupine Crown Mines Ltd. in 1927 and Beattie Gold Mines (Quebec) Ltd. in 1942. Eighteen diamond-drill holes were drilled by Porcupine Crown Mines Ltd. No records of these holes could be found. In 1951, Chicobi Lake Mines Ltd. drilled 15 diamond-drill holes to explore a graphitic fault zone to which mineralization seems to be related. Fair assays in zinc and lead were obtained over narrow widths. The best intersection was 5.38 per cent zinc and 2.07 per cent lead over 5.5 feet. Two more holes were drilled in 1956. They were mostly in graywacke and failed to cut any mineralization of economic significance. (J. D. - 56)

HAINAUT TOWNSHIP

Lake Renzy Mines Ltd.

Ref.: Que. Bur. Mines, Ann. Rept. 1933, Pt.D., Map No. 301.
Que. Dept. Mines, P.R. No. 345, p.8.

Lake Renzy Mines Ltd. holds 80 claims in the east half of Hainaut township. The claims are numbered C.86523, C.90006, C.90030-31, C.90150, C.92101, C.93653-55, C.93657, C.93660-62, C.93699, C.93701 and C.93703, claims 1 to 5 each.

The area has a medium relief and sand and gravel hills are relatively abundant. Rock exposures are few. Most of the bedrock consists of gneiss, granite, gabbro and ultrabasic intrusive rocks. The district is included within the limits of the Grenville sub-province of the Canadian Shield.

Following the discovery of nickel and copper mineralization at De Renzy lake in May 1955, the Thompson Grubstake Syndicate did a little stripping and some dip needle work and drilled 7 shallow packsack diamond-drill holes. It was found that the mineralization consisted of chalcopyrite, pentlandite, pyrrhotite, pyrite and a little bornite in a fine to relatively coarse-grained peridotite rock.

In the fall of 1955, the property was turned over to Selco Exploration Company Ltd., a wholly owned subsidiary of Selection Trust Ltd. of London, England, and a new company, Lake Renzy Ltd., was formed to further explore it. Following a series of airborne and ground geophysical surveys, 216 diamond-drill holes totalling about 30,000 feet were drilled in 1956. A shallow "V"-shaped orebody containing an estimated 1,138,000 tons having a tenor of 0.68 per cent nickel, 0.67 per cent copper and 0.04 per cent cobalt was outlined. This orebody, located under and along the shore of De Renzy lake, is about 1,500 feet long and 130 feet wide at surface and extends to a depth of about 140 feet. It is easily amenable to open pit mining and the company is at the moment engaged in carrying out metallurgical tests to determine if a marketable concentrate can be produced.

T. Parks is exploration manager for Selco Exploration Company Ltd. and A. F. Warburton was in charge of the work at the property. (J.-E.G. - 56)

HARRINGTON TOWNSHIP

McTavish Property

Ref.: Geol. Surv. Can., Map 1680.
Que. Bur. Mines, Ann. Rept. 1936, Pt. C. Map No. 408.

R. McTavish holds lot 15b, range II, Harrington township.

The property is underlain by anorthosite of the Morin series.

In 1956, some stripping was done and a magnetometric survey was made. A band of magnetite was found in the south central part of the lot. The rocks adjacent to the magnetite include granular diorites, pyroxene diorite and anorthosite. A sample of the magnetite taken by the writer assayed 63.66 per cent iron, 11.51 per cent titanium dioxide, 0.82 per cent silica, 0.07 per cent phosphorus, 0.03 per cent sulphur, and 0.26 per cent manganese.

The magnetometric survey indicates that the magnetite occurs as small disconnected bodies. (W. A. H. - 56)

HOUDET TOWNSHIP

O'Leary-Malartic Mines Ltd.

Ref.: Que. Dept. Mines, P.R. No. 367, p.5.

This company took an option in the fall of 1956 on a large group of claims in Houdet township following a discovery of iron ore in the area. Forty claims are still held by interests related to this company.

Magnetite was discovered in the vicinity of Cuff lake in the fall of 1956. It occurs in a band of medium to coarse grained paragneisses which are in places garnetiferous. This band, which has a width of 500 to 1,000 feet, is bordered on either side by quartzose gneisses of the injection or orthogneiss type. Five zones of magnetite mineralization are distributed along the band of paragneiss over a length of $2\frac{1}{2}$ miles.

During the summer of 1957 Holannah Mines Ltd. made a magnetometric survey of the property and drilled 17 diamond-drill holes totalling 4,998 feet.

A selected sample from the zone south of Cuff lake assayed 42.00 per cent iron, 0.02 per cent titanium dioxide, 29.54 per cent silica and 0.003 per cent sulphur.

The drilling was directed by J. McLellan. (A.-F.L. -57)

LACORNE TOWNSHIP

Amos Lithium Corporation

The property of Amos Lithium Corporation consists of lot 6 and the north halves of lots 4, 5, 7 and 8, range II, and lots 2 to 6, 10 and 11 and the south halves of lots 7 and 8, range III, Lacorne township.

The property is underlain by sedimentary, volcanic and granitic rocks. These are highly altered and gneissic. The sedimentary rocks are now biotite schists, the volcanic rocks hornblende-biotite schists and the granitic rocks biotite gneisses. The strike of the formations varies from north to N. 40° E. with dips to the west. The above rocks have been intruded by pegmatite dykes which are related to the La Motte-Lacorne batholith. The rocks of this large intrusive body outcrop about a mile northeast of the property.

There are 3 main pegmatite dykes bearing spodumene and beryl. These are located in the south halves of lots 7 and 8, range III, at or near the southeast shore of Baillaigé lake.

The south dyke is on Lot-line 7-8, 800 feet north of the range line. It is exposed at intervals for approximately 400 feet. Its width varies between 5 and 12 feet. It strikes N. 45° W. and dips from 65° to 85° northeast. It is made up of feldspars, quartz, muscovite mica, spodumene and beryl. Spodumene makes up less than 5 per cent of the dyke. There are, however, some portions a few feet in diameter containing up to 20 per cent spodumene. Some of the spodumene is altered to a pseudomorphic muscovite mica. The wall rocks are gneissic granodiorite intruding sedimentary biotite schist.

In the fall of 1955 and the winter of 1956, 14 diamond-drill holes, for a footage of 3,280 feet, were drilled to explore this pegmatite dyke. It was drilled for a strike length of 400 feet and to

a depth of 320 feet. The drilling showed that the distribution of spodumene in the dyke was erratic and that the overall tenor of this mineral was low. The best assay was 2.48 per cent lithia across 7.5 feet.

The central dyke is approximately 750 feet north of the south dyke. An appreciable amount of stripping and trenching has been done to explore it. It can be followed for 800 feet and has widths varying from 10 to 45 feet. This dyke strikes N.50° W. and dips steeply northeast. It consists of feldspars, quartz, muscovite mica, spodumene, beryl and a few flakes of molybdenite. The spodumene, beryl and molybdenite are found in a quartz-rich portion of the dyke. Some spodumene crystals are up to 5 feet long. As a whole the pegmatite contains less than 5 per cent spodumene. The spodumene content decreases to the southeast. The beryl is also patchy and the grade very low. The wall rocks are gneissic granodiorite intruding sedimentary biotite schist.

The north dyke is 400 feet north of the central dyke. It strikes N. 30° W. and dips very steeply northeast. Its width varies between 5 and 15 feet. This pegmatite contains feldspars, quartz, muscovite mica, spodumene, beryl and columbite-tantalite. The spodumene and beryl are found in the quartz-rich portions of the dyke. The mineralization is coarse, with some spodumene crystals up to 3 feet long. One large columbite - tantalite crystal measuring 2 by 4 inches was noted. The spodumene content of the dyke is estimated at 3 to 7 per cent at the northwest end, less than 3 per cent in the central part and almost nothing at the southeast end. The wall rocks are gneissic granodiorite intruding sedimentary biotite schist.

Five diamond-drill holes were drilled on the shore of Baillaigé lake to explore this dyke. A total of 1,554 feet was drilled. The drilling confirmed the erratic nature of the spodumene and the low lithia content of the dyke as a whole.

The drilling was directed by A. Leclerc. (M. L. - 56)

LA MOTTE TOWNSHIP

Consolidated Negus Mines Ltd.

This property covers lots 59 to 62, range V, and the south halves of lots 57 to 60, range VI, La Motte township.

Sand and clay cover most of the property. Outcrops are scarce. The claim group is underlain by graywacke intruded by diorite, granodiorite and pegmatite. The graywacke strikes north at the south end of the property and swings to the northeast at the north end. A diabase dyke crosses the property in a northeasterly direction.

In 1956, a diamond-drill hole 1,000 feet deep was drilled in the northeast corner of lot 60, range V. The rocks cut were mica schists derived from graywacke and intruded by syenodiorite, containing numerous narrow pegmatite and aplite dykes and quartz veins. A

5-foot section of the core contained chalcopyrite disseminated in gray-wacke. It assayed 0.4 per cent copper. Crystals of chalcopyrite and beryl, and one of native bismuth, were noted in narrow pegmatite dykes.

The work was supervised by W.N. Ingham. (M. L. - 57)

La Corne Lithium Mines Ltd.

La Corne Lithium Mines Ltd. holds lots 57 to 61, 63 and 64 and the east half of lot 62, range X, La Motte township.

The property is underlain mostly by medium-grained, uniform-textured, gray granodiorite and some diorite. There are numerous remnants of biotite schist derived from highly altered sedimentary rocks. Pegmatite dykes, related to the granitic facies of the La Motte-Lacorne batholith, cut all of the above rocks.

During 1954 some trenching and sampling were done to explore some of the spodumene-bearing pegmatite dykes. In 1955-56, 16,952 feet of diamond drilling was completed in 67 holes. Three areas of spodumene-bearing dykes have been explored.

In the southern area there is a curved pegmatite dyke at the east end of lot 60 which runs into lot 63. The strike is east at the west end and northeast at the east end. This dyke has an indicated length of 1,200 feet, an average width of 20 feet and a dip which is vertical or steeply south. It has been explored by 20 diamond-drill holes and some trenching. One sample from this dyke assayed 1.29 per cent lithia across 45 feet. Samples of the drill core indicated a grade of 0.38 per cent lithia for the whole dyke. Also in the south area, just south of Lot-line 59-60 and to the west of the above dyke, a pegmatite dyke has been traced for 1,000 feet by 16 diamond-drill holes. It strikes east and has an average width of 5 feet. Assays range between 0.25 and 0.50 per cent lithia.

The north central area, at the east end of lot 61, has a series of spodumene-bearing pegmatite dykes. Most of them strike east and appear to be discontinuous. In the southern and north central areas the spodumene crystals are $\frac{1}{4}$ inch to 12 inches in length and are commonly pale green in colour.

In the northern area, in lots 61 and 62, there are at least 6 parallel spodumene-bearing pegmatite dykes. They strike north-east and dip vertical or steeply south. Widths vary from 20 to 85 feet and lengths up to 800 feet have been indicated by drilling, with both ends open. A trench sample across 30 feet assayed 1.19 per cent lithia. In the northern area the spodumene occurs in stringers and veins of grey quartz. These cut the pegmatite dykes and form networks along fractures which are predominantly parallel to the dyke. Spodumene makes up as much as 40 per cent of the vein material.

Apart from feldspars, quartz and spodumene, the minerals noted in these dykes are mica, hornblende, garnet (in aplitic facies), beryl, native bismuth, chalcopyrite, and a light to dark green

alteration product of spodumene.

Most of the work was done under the supervision of E.A. Hart. (M. L. - 57)

Peruvian Oils and Minerals Ltd.

Peruvian Oils and Minerals Ltd. has an option on lots 6 to 16, range V, La Motte township.

The property is underlain by peridotites, gabbros and amphibolites which are part of a large mass of ultrabasic rocks folded into a dome structure.

Sulphide mineralization had been discovered in serpentinized peridotite in the western part of lot 9, 1,600 feet north of the range line. Three small trenches in an area 60 feet long and 25 feet wide have exposed part of the mineralized zone, which appears to be triangular in shape, having a length of at least 60 feet and a width varying from 8 feet at one end to over 25 feet at the other end. The sulphides are fine grained and mostly disseminated in the rock. Pyrrhotite is the most abundant sulphide present. Chalcopyrite can be seen in small grains and narrow veinlets. The nickel mineral is probably pentlandite. A 10-foot channel sample is reported to have assayed 2.88 per cent nickel. (M. L. - 57)

LANDRIENNE TOWNSHIP

New Vinray Mines Ltd.

See Figuery township.

LANGUEDOC TOWNSHIP

Chicobi Lake Mines Ltd.

See Guyenne township.

LA REINE TOWNSHIP

De Ville Copper Mines Ltd.

Ref.: Geol. Surv. Can., Map 284A.

Lots 10 to 20, range X, La Reine township, are held by De Ville Copper Mines Ltd.

The property is in farming country and is occupied in part by fields. There are no outcrops on the property but from published maps it appears that the property is on the east margin of a granite body intruding sedimentary and volcanic rocks.

Electrical resistivity and magnetometric surveys of the property were made and interpretation of the surveys places the contact along lot 17. Three diamond-drill holes were drilled west in lot 20; they intersected mostly granite.

H. Dowhaluk was the field engineer. (J. D. - 56)

Norcopper and Metals Corporation

Ref.: Geol. Surv. Can. Map 284A.

This company holds a group of 4 claims which cover the north halves of lots 27 to 30, range X, La Reine township.

The property is underlain mostly by interbedded hornblende and hornblende-biotite gneiss, some being paragneiss and some orthogneiss. On Map 284A it is shown as being underlain by volcanic rocks. A northeasterly-trending diabase dyke crosses the property. On the south contact of this dyke, 750 feet south of the road, 2 pits have been dug across bedding which is at N. 55° W. The rocks are here mineralized mostly with pyrite and some pyrrhotite. Low gold and silver assays are reported from this zone.

Following electromagnetometric and magnetometric surveys of the property, the company drilled 8 diamond-drill holes. No mineralization of economic significance was encountered.

J. Hendricks is the engineer in charge of the exploration work. (J. D. - 56)

LA SARRE TOWNSHIP

Kerromac Mining Company Ltd.

Ref.: Geol. Surv. Can., Map 293A.

The property of Kerromac Mining Company Ltd. covers lots 1 to 10, range I, La Sarre township.

According to the geological map (reference above) the property is in the west contact zone of a large granite batholith known as the Palmarolle batholith. Two miles northwest of the property there is another granite batholith. A north to northwest diabase dyke cuts the formations in lots 6 and 7. In an outcrop in the centre of lot 7 there is a diabase dyke cutting intermediate volcanic rocks. The eastern part of the dyke is at this place mineralized with nickeliferous pyrrhotite and chalcopyrite. Assays of 1 per cent nickel and 1 per cent copper are reported.

In 1956, the company dug test pits along the diabase dyke and made a magnetometric survey of lots 5 to 9, followed by experimental spontaneous polarization measurements around the mineralized zone. At the end of the year 1 diamond-drill hole 300 feet deep was

drilled. (J. D. - 57)

LEEDS TOWNSHIP

Mogul Mining Corporation Ltd.

Ref.: Geol. Surv. Can., Rept. Prog. 1858, p.61; Geology of Canada (1863), p.724; Vol. IV (1888-89) p.42K.
Que. Dept. Coloniz'n, Mines and Fisheries, Mines Br., The Copper Deposits of the Eastern Townships of the Province of Quebec (1915), pp.30, 144.
Que. Dept. Mines, P. R. No. 374, p.32.

This company holds lots 16 to 18 and 20 to 22 and the north three-quarters of lot 15 and the east three-quarters of lot 19, range XV, and lots 16 and 21 to 25, range XVI, Leeds township.

Surface work done to date comprises 35 diamond-drill holes of an average depth of 400 feet. Underground work comprises 5,000 feet of diamond drilling and 2,100 feet of drifts and crosscuts. This work has revealed the presence of 3 parallel mineralized zones which are known as the A, B and C zones. Zones A and B have been explored over a length of 1,400 feet and to a depth of 1,100 feet down the dip and, in zone C, 575 feet of drifting has been done.

Reserves in zone A are estimated at 335,000 tons of mineral having an average tenor of 1.79 per cent copper and an average thickness of 10.5 feet and, in zone B, 435,000 tons with an average tenor of 1.9 per cent copper and an average thickness of 9.9 feet. (P.-E. G. - 56)

LIGNERIS TOWNSHIP

Atlas Chibougamau Mines Ltd.

Ref.: Geol. Surv. Can., Paper 50-30.
Que. Dept. Mines, P.R. No. 262, p.26.

This property consists of lots 15 to 25, range IV, lots 11 to 31, range V, and lots 16 to 31 and the south halves of lots 13 to 15, range VI, Ligneris township.

The property is within a sedimentary belt which trends across Ligneris township. The sedimentary rocks are mostly graywacke, argillite, arkose and some iron formation. A wide magnetic anomaly is shown on the map (reference above) and a few outcrops along Range-line V-VI confirm the presence of iron formations.

Dip needle and magnetometric surveys were made of lots 18 to 28, ranges V and VI and 5 diamond-drill holes were drilled. All of the holes cut iron formation made up of thin bands of magnetite with cherty quartz and jasper mixed with about 50 per cent non-magnetic rock.

The best intersections were a little over 100 feet in

length and the grade a little below 25 per cent iron. It seems from the magnetometric survey that the iron formations are either highly contorted or discontinuous.

J.E. Jerome supervised the exploration. (J. D. - 57)

LOUVICOURT TOWNSHIP

Alta Mines Ltd. and Nemrod Mining Company Ltd.

Ref.: Que. Dept. Mines, P.R. No. 190, Pt.II, p.46.

Alta Mines Ltd. and Nemrod Mining Company Ltd. jointly holds lots 60 and 61 and parts of lots 50 and 51, range V, and lot 61 and parts of lots 51 and 60, range VI, Louvicourt township.

The property is underlain mainly by acidic to intermediate tuff and agglomerate cut by dykes of dioritic feldspar porphyry. The volcanic rocks trend slightly north of east, and dip almost vertical. A zone of sulphide mineralization is exposed in old trenches for a length of 1,700 feet along Lot-line 60-61 1,000 feet east of the highway. Heavy pyrite mineralization, with some interesting tenors in copper, was found in diamond-drill holes drilled in 1944 in lot 51 and also in holes drilled previously under the trenches.

East Sullivan Mines Ltd. optioned the property and drilled 6 diamond-drill holes under the trenched area during the summer of 1955. Each hole cut several zones of mineralization, the deepest intersection being 300 feet vertically below surface. These zones vary in width from 5 to 75 feet, and line up roughly as 3 parallel bands. Numerous samples assayed in general less than 0.5 per cent copper, but several 5-foot sections ranged from 1.0 to 1.5 per cent copper. Gold and silver tenors were very low.

The drilling was directed by J. Lavallée. (W.N. I. - 56)

Cournor Mining Company Ltd.

Ref.: Que. Bur. Mines, Ann. Rept. 1931, Pt.B, pp.98, 110; 1932, Pt.B, pp.19, 32; P.R. No. 116, pp.65, 70; P.R. No. 120, p.23.

The Cournor Mining Company Ltd. property is made up of blocks 1 to 8 in the southwest corner of Pascalis township and blocks 1 to 10, 12 and 13 and claims A.33779, A.33784, A.33789, A.34043-44, A.34100, A.34175-76, A.34186-88, A.34639-53, A.34656-58, A.34873, A.34876-77, A.34880-82, A.35950 and A.62137 in the northwest corner of Louvicourt township.

The Pascalis township blocks numbered 1 to 8 and the Louvicourt township blocks numbered 1 to 8 were formerly the property of Beaufor Gold Mines Ltd. The other blocks and claims were part of the property of Bussièrès Mining Company Ltd. These companies were active

during the thirties and early forties, when 3 shafts were sunk and 2 mills built. Gold produced from 1933 to 1935 by Bussières Mining Company Ltd. and from 1937 to 1942 by Cournor Mining Company Ltd. was worth approximately 3 million dollars.

Most of the claims now held by Cournor Mining Company Ltd. are underlain by granodiorite rocks of the Bourlamaque batholith.

In 1951 Quebec Asbestos Corporation Ltd. optioned 5 claims, A.34649-50 and A.34656-58, which are underlain by a small body of asbestos-bearing peridotite. This ultrabasic mass outcrops on the Perron road 8,000 feet south of the Pascalis-Louvicourt township line. It is 2,600 feet long and has an average width of 600 feet. It strikes N.60° E. and probably dips to the south. It lies on the contact between granodiorite and volcanic rocks.

The peridotite is serpentized and is fractured in many directions, with asbestos veinlets filling many of the fractures. Both slip fibres and cross fibres occur, with cross fibres predominating. Cross fibres up to 1 inch long were noted. Some of the veinlets contain iron-bearing carbonates, in which case the fibres appear to be of poor quality. Magnetite has formed along the planes of the asbestos veinlets.

In 1951 Quebec Asbestos Corporation Ltd. drilled 31 diamond-drill holes for a total of 4,047 feet and in 1956 Cournor Mining Company Ltd. drilled 31 additional holes after the lapse of the Quebec Asbestos option. The drilling delimited 3 asbestos-bearing zones. The east zone is 600 feet long by 230 feet wide and extends to a depth of 160 feet. It is estimated to contain 2,250,000 tons of asbestos-bearing rock valued at \$4.20 per ton (1956 prices). The west zone is 500 feet long by 225 feet wide and extends to a depth of 140 feet. It is estimated to contain 1,580,000 tons of asbestos-bearing rock valued at \$3.53 per ton. The centre zone, which lies between the other two, is only partially drilled. It contains an estimated 325,000 tons valued at \$4.39 per ton. In many of the holes the granodiorite was found to underlie the peridotite body. This limits the depth possibilities of the deposits.

The work was supervised by R.J. Merrill for Quebec Asbestos Corporation Ltd. and J. Lavallée for Cournor Mining Company Ltd. (M. L. - 57)

LYTTON TOWNSHIP

Baskatong Uranium Mining Syndicate

This company holds lots 25 to 34, 37, 40 to 43, 45 and 46 and parts of lots 35 and 36, range II, lots 25 to 28, 31 to 37, 41 to 43, 45 and 46, the west halves of lots 38 and 39 and the east half of lot 40, range III, and lots 35 to 37 and 39 to 42, range IV, Lytton township.

A northeasterly-trending pegmatite dyke some 500 feet

long and 20 feet wide is very well exposed in lot 33, range II. In places along this dyke Geiger counter readings were 4 to 6 times background. It appears that the pegmatite contains disseminated crystals of uraninite or uranothorite. At one place in the pegmatite a pit 4 feet in diameter and 3 feet deep has been dug. Readings of 10 times background count were recorded in the pit.

A grab sample taken from the pit assayed 0.01 per cent U_3O_8 and 0.03 per cent ThO_2 . (A. D. - 57)

MANN TOWNSHIP

Busteed Property

Ref.: Geol. Surv. Can., Mem. 183, p.128; Econ. Geol. Series No. 8, p.107;
No. 16, p. 154.
Que. Dept. Mines, P.R. No. 371, p.24.

A mineralized zone occurs in lot 2, range I, Ristigouche, Mann township, on the property of W.B. Busteed.

A trench 50 feet long and 15 feet wide has been excavated in porphyritic andesite. One of the walls of the trench has a maximum height of 25 feet. The mineralized zone has a maximum width of 12 inches and can be traced for a distance of 35 feet. It consists of veins of massive argentiferous galena associated in places with pitchblende, sphalerite, quartz and carbonates. The zone trends N.17° E. and dips 55° southeast. Geiger counter observations indicate that the pitchblende is confined to the zone of galena mineralization. (P.-E. B. - 57)

MONTBEILLARD TOWNSHIP

Morin Prospect

Ref.: Que. Bur. Mines, P.R. No. 161, p.27.

L. Morin is interested in a group of claims which cover lots 51 to 55, ranges IX and X, Montbeillard township. This includes the property formerly held by Cook Copper and Fluorite Corporation Ltd., which was explored in 1939-40.

The main mineralization is in lot 52, range X, 400 feet southeast of the south end of Beauchastel lake. The main rock in the area is a poorly bedded biotite gneiss cut by innumerable stringers and veinlets of quartz. A wide diabase dyke runs along the east shore of Beauchastel lake. Most of the quartz veins trend slightly west of north. One vein, which strikes N. 15° W., is 10 feet wide and persists for more than 400 feet. This vein as a whole is not mineralized. A pit has been dug in the northern part of the vein and stringers of purple fluorite 1/8 inch wide may be seen on the rock dump. Another vein, exposed over 200 feet, strikes N. 35° E. and dips vertically. This vein is mineralized

with coarse chalcopyrite and some pyrite. The average width is approximately 1 foot, though at some places the mineralization extends into the wall rock or in parallel stringers. In 1957 a few more pits were sunk along this vein and 7 short diamond-drill holes were drilled. The vein was found to have a total length of 350 feet. The best assay obtained from the drilling was 4.86 per cent copper over 3 feet. High grade sections were found at places in the trenches.

A.C. Lee was supervising the drilling programme. (J. D. - 57)

MONTBRAY TOWNSHIP

Barry Copper Mines Ltd.

Ref.: Que. Bur. Mines, P. R. No. 150, p.38.
Que. Dept. Mines, P.R. No. 227. p.111.

This property, formerly known as the Four Corners property, covers the northern part of lot 1, range X, Beauchastel township, the north halves of lots 60 and 61, range X, Dasserat township, and lots 61 and 62, range I, Montbray township.

The property was explored by Coniagas Mines Ltd. more than 30 years ago, by Consolidated Mining and Smelting Company of Quebec Ltd. in 1939 and by Noranda Mines Ltd. in 1945. The property is underlain by rhyolite and andesite cut by dykes and masses of diorite and by later diabase. The mineralization is on the east side of a northwesterly-trending valley which may represent a fault zone.

There are 3 main mineralized zones exposed on the property. One is along a shear zone striking N. 35° W. in rhyolite breccia. Coniagas Mines Ltd. did some trenching along this zone, which was later drilled by Consolidated Mining and Smelting Company of Quebec Ltd. The zone has been traced on surface for 160 feet. It has an average width of 10 feet. The mineralization consists of pyrite with chalcopyrite and some bornite and sphalerite.

The second zone lies along a valley and has a direction of N. 20° E. The mineralization seems to be fairly continuous from the old shaft northward to the site of the 1945 Noranda drilling, a total length of 1,300 feet, with a possible average width of 30 feet. The zone is exposed mostly on the west side of the valley and the actual width is difficult to determine. The mineralization is in a rhyolite breccia and consists mostly of pyrite carrying, in places, a fair amount of chalcopyrite. The sulphides are of the replacement type and are in part massive.

A third zone, 1,000 feet northwest of the first, outcrops parallel to the andesite-dacite contact. It is a quartz vein 1 foot wide with walls mineralized with magnetite, pyrite and chalcopyrite.

The present owners of the property drilled 17 diamond-

drill holes for a total length of 7,773 feet in 1956. Fair copper mineralization was found in rhyolite, the best intersection being 3.9 per cent copper over 4 feet. Self-potential, electromagnetometric and magnetometric surveys have been made over selected areas. Other surveys were made by previous owners.

J. E. Jerome was in charge of the exploration. (J. D. - 56)

Inmont Copper Mines Ltd.

Ref.: Que. Bur. Mines, Min. Oper. 1925, p.122; 1927, p.111; 1928, p.85; Ann. Rept. 1934, Pt. A, p.86.

This company owns lots 55 to 62 and parts of lots 48 to 54, range II, Montbray township.

Most of the property is underlain by rhyolite or rhyolite breccia. The rhyolite is highly siliceous, generally non-porphyrific and commonly pinkish. Lots 48 to 50, in the extreme western part of the property, and 58 to 62 in the eastern part, are mostly underlain by andesite. The formations strike southeasterly. Southeasterly-trending intrusive bodies cut the volcanic rocks. They consist of diorite, one body of serpentized gabbro, and a later diabase dyke along the east boundary of the property. The Hunter Creek fault runs across the southeast corner of the property. The rhyolite is mineralized, particularly around the diorite body in lots 55 and 56. Three main mineralized zones are exposed on surfaces: one west of the shaft, one 500 feet southeast and one in the northern part of lot 56. The 3 zones have been extensively drilled. The mineralization consists of disseminated and locally massive pyrite, pyrrhotite and chalcopyrite. It extends over large areas but the ore zones are restricted to short lenses.

Nipissing Mining Company Ltd. optioned the property in 1925 and did some trenching and diamond drilling. The company started shaft sinking in May, 1927. Robb-Montbray Mines Ltd., which was incorporated in December, 1927, to acquire the property, completed the shaft to a depth of 525 feet and did upwards of 5,000 feet of lateral work on 6 levels. In the course of the underground development a few small pockets of high-grade ore were found in the upper levels. In 1934-35, 1,220 tons of ore grading 6.5 per cent copper, 0.5 ounce of gold and 0.24 ounce of silver per ton were mined and shipped to the Noranda smelter. In 1952 Inmont Copper Mines Ltd. started a new diamond drilling programme. Up to October, 1957, a total of 26 holes were drilled.

Geophysical Engineering and Surveys Ltd. supervised the 1956-57 drilling. (J. D. - 57)

Ormsby Mines Ltd.

This company holds lots 1 to 12, ranges VIII and IX, Montbray township.

The property was acquired to explore a nickel-copper discovery northwest of Després lake. A geological reconnaissance map

made by the company shows the property to be underlain by volcanic rocks, mostly andesite, cut by a diorite-gabbro dyke striking N. 60° E. A north-westerly-trending fault west of Després lake presumably displaces the dyke almost half a mile. The movement is left-handed.

On the northwest side of the dyke a mineralized zone is exposed along a ridge in lot 13, range VIII. The diorite is irregular in grain size and contains disseminated pockets of pyrite and pyrrhotite, locally enclosing chalcopyrite. The pockets average $\frac{1}{4}$ inch but a few are 2 inches across. Trenches have been dug alongside the outcrop for a distance of 150 feet. The total width of the mineralization is at least 40 feet. There are a few inclusions of silicified volcanic rock mineralized with barren pyrite. Packsack diamond drilling totalling 880 feet in 9 holes was done during the field season. Low tenors, generally below 0.5 per cent combined copper-nickel, were obtained over wide sections. (J. D. - 57)

MONTGOLFIER TOWNSHIP

Atlin-Ruffner Mines (B.C.) Ltd.

This company holds a large group of claims in Aloigny, Montgolfier and Orvilliers townships. The claims in Aloigny township are numbered C.109794, claim 1; C.109795, claims 1 to 5; C.109796-97, claims 4 and 5; and C. 109798, claims 1 to 5. The claims in Montgolfier township are numbered C.87343-45, claims 1 to 5; C.87349-50, claims 1 to 5; C.87351, claims 2 to 5; C.87352-53, claims 1 to 5; C.87354, claims 1, 2 and 4; C.87356, claims 1 to 5; C.87357, claims 1 to 3; C.87358, claims 1 to 4; C.87360, claim 1; C.87362, claims 3 to 5; C.87363, claims 1 to 5; C.87366, claims 1 to 5; C.87368, claim 5; C.87369-72, claims 1 to 5; C.87373, claims 3 to 5; C.87374, claims 1, 2 and 5; C.87376, claims 1 to 5; C.87430, claims 1 to 4; C.87437, claims 1 and 2; C.101013-18, claims 1 to 5; C.107950, claims 1 to 5; C.107952-53, claims 1 to 5; C.107954-56, claims 1 to 4; C.108012-13, claims 1 to 5; C.109794, claims 2 to 5; C.109796-97, claims 1 to 3; C.109798, claims 1 and 2; C.113439-43, claims 1 to 5; C.113444, claims 1 and 2; C. 113446, claims 3 to 5; C.113447-53, claims 1 to 5; C.120894, claim 3; C.123324, claims 2 to 5; C.123349, claim 1; and C.123350, claims 4 and 5. The claims in Orvilliers township are numbered C.113444, claims 3 to 5; C.113445, claims 1 to 5; C.113446, claims 1 and 2; C.120890-91, claims 1 to 5; C.120893, claims 3 to 5; C.120894, claims 1 and 2; C.123322, claims 4 and 5; and C.123324, claim 1.

The area is flat and mostly covered by swamps. Rock outcrops are very scarce. A low easterly-trending ridge between Montgolfier and Orvilliers townships and a few knobs in the southern part of the property are the only clues to the geology. The general trend of the formations west of the Harricana river is east to slightly south of east, the dip being vertical or very steep to the north. The northern part of the property is probably underlain entirely by sedimentary rocks. These rocks are made up mostly of banded iron formation (which constitutes the iron deposit), graywacke, argillite and arkose, all of which are very fine grained. From information obtained by drilling it seems that

these rocks are interlayered with sills of gneissic intrusive rocks such as diorite, biotite and hornblende lamprophyre. In the southern part of the property volcanic rocks of dacitic composition are exposed, cut by minor intrusions of diorite and feldspar porphyry. The latest intrusion is diabase. A northeasterly-trending dyke 250 feet wide cuts across the sedimentary rocks 3 miles west of the Harricana river. Another dyke at least 40 feet wide, which strikes north, outcrops on the east side of the river, at the base of the rapids, just south of the Montgolfier-Bapst township line.

The first work done on the property was in 1951. An airborne magnetometric survey, made in 1952, indicated high magnetic intensity over an area 15 miles long and approaching 1 mile in width. In 1954, 3 pack-sack diamond-drill holes were drilled in the iron formation west of the river. Assays averaged 25 per cent iron. The present owners acquired the property in 1957 and made ground magnetometric surveys of large parts of the property and started diamond drilling. During the year 38 holes, totalling 31,655 feet, were drilled to test 4 main anomalies, two on each side of the river. The best intersection averaged 26.17 per cent iron over a true width of 1,015 feet.

The iron formations are very fine grained. They contain bands of magnetite with some specular hematite and jasper, with barren or lean bands of argillite, tuff and biotite, chlorite, or sericite schist. Quartz is not abundant. Probable reserves are estimated by the company at 1,594,000 tons per vertical foot with an average tenor of 25 per cent iron.

R.K. Mudford was the engineer in charge of the property. (J. D. - 57)

ORVILLIERS TOWNSHIP

Atlin-Ruffner Mines (B.C.) Ltd.

See Montgolfier township.

PALMAROLLE TOWNSHIP

Noranda Mines Ltd.

Noranda Mines Ltd. holds or controls the mining rights on lots 47 to 62, range VII, lots 38 to 62, range VIII, lots 37 to 62, range IX, and lots 60 to 62, range X, Palmarolle township, and lots 1 to 4, range IX, and lots 1 to 8, range X, Poularies township.

The geology of the property is very complex. Most of the area is underlain by sedimentary rocks of graywacke type, probably interbedded with volcanic flows and intruded by bodies of granite, and quartz diorite grading to granodiorite and numerous dykes of granite and feldspar porphyry. A large granite batholith crops out in range X. The general strike of the formations is slightly east of north and the dip is steep toward the west.

Chalcopyrite mineralization occurs in lots 57 and 58, range VIII, Palmarolle township. In lot 58, a shear zone in graywacke, striking N. 10° E. and dipping 75° northwest, carries stringers and pockets of chalcopyrite along the planes of schistosity. The largest pocket observed was 6 inches across. There is also weak mineralization in fracture planes striking N. 65° W. The maximum width of the mineralization is 5 feet and the exposed length is 40 feet.

In 1956, 9 diamond-drill holes were drilled in the vicinity of the copper mineralization and, in 1957, a reconnaissance geological survey and an airborne electromagnetometric survey of the property were made. (J. D. - 57)

PASCALIS TOWNSHIP

Cournor Mining Company Ltd.

See Louvicourt township.

Geoffroy Property

P. Geoffroy holds lots 51 to 63, range I, and lots 51 and 62, range II, Pascalis township.

The claim group is underlain by Keewatin-type volcanic rocks made up of acid to intermediate tuffs and agglomerates, dacites and andesites. These strike east and dip steeply to the north. They have been intruded by quartz porphyries and diorites in the form of sills and dykes. A large shear zone cutting across the centre of the property in an easterly direction has considerably altered the rocks, which are in places chlorite-sericite schists. Sulphides such as pyrite and pyrrhotite along with some chalcopyrite and sphalerite are found in this shear zone, particularly in the tuffaceous and agglomerate portions. A large diabase dyke, up to 300 feet wide, crosses the property in a northerly direction.

In 1953, a programme of diamond drilling was undertaken by Cyprus Exploration Corporation Ltd. to test the shear zone on both sides of the diabase dyke. Eleven holes, for a total of 5,741 feet, were drilled. Many zones of sulphides were intersected but most of these were made up of pyrite and pyrrhotite with only a few specks of chalcopyrite and sphalerite. The best intersection assayed 0.93 per cent copper and 0.37 per cent zinc across 1 foot.

In 1956, 6 additional holes were drilled for a total of 2,768 feet. The best intersection assayed 9.75 per cent copper and 2.81 ounces of silver per ton over a width of 2.1 feet.

The work was supervised by P.R. Geoffroy. (M.L. -57)

PERRON TOWNSHIP

Norcopper and Metals Corporation

Ref.: Geol. Surv. Can., Map 483A; Sum. Rept. 1928, Pt.C, p.81C.
Que. Bur. Mines, Min. Oper. 1928, p.108.

Norcopper and Metals Corporation holds lots 26 to 33, ranges V and VI, and lots 25 to 32, range VII, Perron township.

The property is underlain by andesite with interbeds of chlorite schist and some graywacke in the northern part of the property. Bands of iron formation occur between two granite batholiths whose margins are in the southwest and northeast corners of the property. A body of diorite intrudes the volcanic and sedimentary rocks along the west boundary of the property. A northeasterly-trending later diabase dyke cuts all of the above-mentioned rocks.

A shaft 43 feet deep was sunk in 1928 by Altura Mines Ltd. in mineralized garnetiferous amphibolite near the contact with granite in lot 27, range V, and 12 diamond-drill holes, totalling 5,400 feet, were drilled. Records of this drilling are not available.

Magnetometric and electromagnetometric surveys of the entire property were made in 1956 by Norcopper and Metals Corporation. Following this, 23,632 feet of diamond drilling was done up to the end of 1957. A few holes were drilled in the area of the Altura shaft. The mineralization around the shaft consists mostly of pyrrhotite and some pyrite in a dark, fine-grained, highly garnetiferous amphibolite.

A quartz vein containing chalcopyrite was discovered in lot 30, range VII, 1,500 feet north of the range line. The vein lies along a narrow shear which strikes N.10°E. to N.15°E. and is exposed for 700 feet on the west side of the diabase dyke. The vein itself and the mineralization are, however, not continuous. A pit 15 feet deep has been dug in the vein. At this place the vein is 2 to 2½ feet wide and is well mineralized with coarse chalcopyrite. A diamond-drill hole drilled under the pit intersected a mineralized zone 1 foot wide which assayed 2.30 per cent copper.

J. L. Hendricks and W.W. Beaton were alternately in charge of the work on the property. (J. D. - 57)

PONSONBY TOWNSHIP

Rousseau-Sauvageau Property

C. Rousseau, L. Sauvageau and R. Sauvageau hold lots 41 to 43, range VI, and lots 41 and 42, range VII, Ponsonby township.

The area is underlain by crystalline limestone of the Grenville series in contact with intrusive rocks of the Morin series. The prospect, which is in lot 42, range VII, consists of an outcrop of crystalline limestone in contact with a pegmatitic granite. The contact is highly irregular, and, over a distance of 70 feet, changes from an easterly direction at the south end to a northerly direction near the north end. The limestone marble is to the northwest of the contact. Near the contact large books of biotite have formed, and fractures are common. The limestone is medium to coarsely crystalline with a high content of serpentine. In a few places serpentine accounts for more than 50 per cent of the rock, and in these places stringers of asbestos up to $\frac{1}{4}$ inch thick occur. The amount of asbestos appears to be much less than 5 per cent of the rock.

Nine diamond-drill blast holes have been bored in an area 10 feet by 15 feet. All the holes are inclined and pointing towards an apex about 15 feet below the surface. The amount of asbestos seen in the 110 feet of core is of the order of 1 per cent. (A.D. - 57)

PORTLAND TOWNSHIP

Eastern Asbestos Company Ltd.

Ref.: Geol. Surv. Can., Map 1691.

Que. Dept. Mines, Min. Ind. 1953, p.43; 1954, p.40.

Eastern Asbestos Company Ltd. owns a group of claims in the west central part of Portland township. The claims cover lots 14 to 18, range V W., and lots 13 to 16, range VI W.

The property is located in an area of moderate to high relief, but differences in elevation within its limits do not exceed 350 feet. Most of the area is farm land. The region is underlain by crystalline limestone, quartzites and gneisses of the Grenville series intruded by generally acidic rocks of the Buckingham group and by a series of easterly-trending late Precambrian diabase dykes. Detailed geological mapping done by the company shows that gneisses outcrop in the eastern part of the property and granitic rocks, along its west boundary. The intervening 2,500 feet is made up of crystalline limestone intruded in lot 17, range V W., by a stock of granitic material 1,000 feet in diameter. Three diabase dykes outcrop in range V W. and granitic and pegmatite injections are common almost everywhere.

Three zones of serpentized are well exposed in lots 15 and 16, range V W. One of these is on the west flank of a hill in the north half of lot 15 and the other two are farther up the hill, 150 feet and 700 feet to the east. It seems evident that the presence of serpentine in the limestone is related to the granitic and pegmatite intrusions which are themselves probably associated with the large mass of granite that outcrops west of the property and possibly underlies it at depth.

The main zone, in which most of the exploration has so far been done, strikes north and is exposed for a length of some 2,000 feet; the average width is close to 250 feet. It contains a series of cross-fibre chrysotile asbestos veins generally disposed in zones parallel to the side of the hill and dipping eastward at a low angle. The fibres are strong and flexible, and range in length up to $\frac{3}{4}$ of an inch. Their iron content is usually very low, averaging about 0.6 per cent.

Old exploration work visible on the property includes a 30-foot inclined shaft in lot 16, range V W. Eastern Asbestos Company Ltd. acquired the ground in 1952 and 1953 and undertook a programme of trenching, sampling, and diamond drilling. Eleven holes totalling 2,973 feet were drilled in lot 16, range V W., in 1954, followed by 11,715 feet in 1955. At the same time a 350-foot adit was driven eastward from the flank of the hill, followed by 2,000 feet of drifting and crosscutting and some underground diamond drilling. The discovery of 5 asbestos-bearing zones was reported by the company early in 1956 and these were stated to contain an estimated 1,500,000 tons of material averaging \$18 per ton (1956 price).

M.B. Laliberté supervised the work on the property.

(J.-E. G. - 56)

POTTON TOWNSHIP

Leadville Silver Mining Corporation

Ref.: Geol. Surv. Can., Geology of Canada (1863) p.691; Mem.257, Map 994A.

Leadville Silver Mining Corporation owns the mining rights for gold and silver on lot 9, range X, and lots 4 to 8 and the east half of lot 3, range XI, Potton township.

The property is underlain mainly by black slate with some interbedded quartzite, volcanic rocks, and some granite.

Many years ago an inclined shaft was sunk in lot 7 in a quartz vein with silver and lead mineralization. Recently a large oval-shaped open pit was dug into the side hill in lot 7, 50 feet west of the shore of Memphremagog lake and about 35 feet above the water level of the lake. The pit is approximately 25 feet by 60 feet and the bank at its highest point is 60 feet high. A part of the old inclined shaft, 50 feet below the original shaft collar, is exposed in the south-east wall of the pit.

The pit has exposed a bulbous quartz vein intruded into sheared slate containing irregular stringers of quartz and some carbonate. The strike of the slate is irregular in the pit, but in general it is N. 25° E. with a 75° dip to the northwest.

The quartz vein strikes approximately N. 10° W. and dips 45° northeast. It can be seen on the walls of the pit, but not on

the floor, where it is covered by broken rock. On the south wall it extends from the top to the floor of the pit, giving an exposed face 60 feet long. The width varies from 2.5 to 4 feet. On the north wall there is some bulging of the vein near the floor of the pit, and the mass of quartz is 14 feet wide, but it narrows down to 2.5 feet farther up in the wall.

Pyrite and galena are erratically distributed in the quartz vein and a few chunks of massive galena were seen in the dump. Graphite was seen at the contact of the quartz vein with the slate, and cubes of pyrite are visible here and there in the slate. (P.-E. G. - 57)

POULARIES TOWNSHIP

Lyndhurst Mining Company Ltd.

This company holds lots 39 to 51 and the south halves of lots 35 to 38, range I, and lots 35 to 42, range II, Poularies township.

In the fall of 1956 the company explored an asbestos deposit in the southern parts of lots 38 to 40, range II. The asbestos occurs in a southeasterly-trending oval-shaped body of peridotite at the south margin of the Palmarolle granite batholith. Asbestos fibres are visible on surface and in a few pits that have been dug. Very few seams are more than 1/8 inch and most are under 1/16 inch. Two asbestos-bearing zones have been delimited, one about 1,600 feet by 120 feet and the other 800 feet by 200 feet. A total of 6,782 feet of diamond drilling was done. The best intersection was 2.10 per cent asbestos fibres across 108.5 feet.

A.C. Lee directed the exploration work. (J.D. - 57)

Noranda Mines Ltd.

See Palmarolle township.

PREISSAC TOWNSHIP

Canadian Malartic Gold Mines Ltd.

Canadian Malartic Gold Mines Ltd. holds a group of claims covering lots 46 to 51 and the north halves of lots 43 to 45, range VIII, Preissac township.

The property is on the south margin of a granite batholith. To the south is a peridotite body and in between is a series of sedimentary rocks metamorphosed into amphibolite, hornblende gneiss and biotite gneiss. Near the contact with peridotite, between lots 47 and 48, there is a gossan area and the rock is mineralized with pyrite and pyrrhotite. The company drilled 3 diamond-drill holes for a total

of 1,097 feet. Scattered or streaky mineralization of pyrite and pyrrhotite was encountered in the drilling. (J. D. - 56)

Preissac Molybdenite Mines Ltd.

Ref.: Que. Dept. Mines, Min. Ind. 1942, p.64; 1943, p.95; 1944, p.68.

Preissac Molybdenite Mines Ltd. holds the north halves of lots 2 and 3, range III, lots 1 to 16, range IV, lot 9 and the south halves of lots 10 to 12 and blocks A, B and C, range V, and C.87948, claims 1 to 5; C.87949, claim 5; C.87950, claim 3; and C.89545, claim 1, Preissac township.

The property was formerly held by Indian Molybdenum Ltd. and was in production for a short period in 1943-44.

The southern part of the property is entirely underlain by a granite batholith. The granite is in contact to the north with biotite-hornblende schist. Intrusive rocks include peroditite near the shore of Fontbonne lake and northeasterly-trending later diabase dykes on both sides of the property.

The company has been doing intensive diamond drilling on this property in 1956-57, mostly in lots 9 to 11, range V, along the contact between granite and hornblende schist. The contact trends southeast and dips 40° northeast. Along this contact a schist zone lying in a depression separates biotite granite on the northeast side and muscovite granite on the southwest side. This zone has quartz veins carrying molybdenite. It is irregular in width but may be from 30 to 40 feet. There is also disseminated molybdenite in the muscovite granite along this zone. The drilling has explored the contact zone for a length of approximately 2,000 feet.

Two main veins 3 to 20 feet wide have been delimited. Ore reserves east of the shaft are estimated at 1,000,000 tons containing 0.3 to 0.4 per cent molybdenite. Rich lenses were found beneath the old workings of Indian Molybdenum Ltd. In one of the holes 2 intersections assayed 1.4 per cent molybdenite over widths of 20 and 23 feet respectively. Drilling to further explore this lens is now proceeding.

Apart from the contact zone, a series of parallel veins carrying molybdenite are exposed in the granite.

B. Joyal is supervising the exploration. (J.D. - 57)

Presmac Copper Mines Ltd.

This company owns lots 6 to 10, range VI, and lots 6 to 11, range VII, Preissac township.

The main prospect is in the south half of lot 9, range VII. On a low ridge in cultivated land a few pits have been sunk into highly rusted rock. The mineralized outcrop area is 200 feet square.

The main rock is biotite-hornblende schist. The mineralization consists mostly of pyrite, with pyrrhotite, magnetite and minor amounts of chalcopyrite and bornite. The writer did not see any chalcopyrite in place. The metallic minerals are in places massive and around the test pits constitute up to 50 per cent of the rock. The pyrite seems to follow the lineation of the host rock and commonly appears as stringers striking northeast and dipping 20° northwest. A regional diabase dyke runs across the property in a northeast direction.

In 1956, 7 diamond-drill holes were drilled and magnetometric and electromagnetometric surveys of the property were made. Grey granite was cut in the drilling. Pyrite and pyrrhotite are abundant, and in places massive, throughout the core. The best assay reported was 0.16 per cent copper and 0.30 ounce of silver per ton over 5 feet. (J.D. - 56)

PRIVAT TOWNSHIP

Canalynda Copper Mines Ltd.

This company controls 74 claims in Aiguebelle, Destor and Privat townships. They cover the north halves of lots 1 to 12, range IX, Aiguebelle township, C.91066, claims 1 and 2, and C.91067, claims 1 to 5, Destor township and lots 1 to 18, range 1, and lots 5 to 18 and the south halves of lots 1 to 4, range II, Privat township.

Geologically, the property is made up of a complex of rhyolite, dacite, trachyte and andesite with pyroclastic rocks. Andesite predominates. The formations have a general easterly trend, tops facing south. The volcanic rocks are intruded by dykes and masses of diorite. The Beattie-Lyndhurst break, if extended, would be in the southern part of the property.

Canada Radium Corporation Ltd., Pacemaker Mines and Oils Ltd. and Starlight Mines Ltd. explored the property in 1955-56. Canalynda Copper Mines Ltd. acquired the property in July, 1956. A geological survey of the whole property and resistivity and electromagnetometric surveys of parts of the property were made and approximately 9,500 feet of diamond drilling was done in 21 holes. One of the holes intersected a zone of almost massive pyrite with graphite for a length of 200 feet.

H. Dowhaluk was the field engineer and J.D. McCannell, the consultant geologist. (J. D. - 57)

Juno Metals Corporation

Ref.: Geol. Surv. Can., Map 285A.
Que. Bur. Mines, P.R. No. 120, p.7.

Juno Metals Corporation holds lots 54 to 56 and the north halves of lots 52, 53 and 57 to 62, range II, and the south halves of lots 52 to 55, range III, Privat township.

The property is underlain to the extreme southwest by a band of tuff and elsewhere by volcanic flow rocks. A shear zone intruded by gold-bearing quartz veins extends southeasterly from the Trojan property in range IV. Trenching started in 1937 across the shear and exposed a few quartz veins with low tenors in gold. In 1950, Bolgo Gold Mines Ltd. drilled 5 diamond-drill holes, for a total of 2,032 feet, testing the shear for a length of 500 feet in lots 52 and 53, ranges II and III. A few intersections gave good assays, the best being 1.04 ounces of gold per ton over 3 feet. The main rock intersected was chlorite schist.

In 1956, Juno Metals Corporation drilled 3 diamond-drill holes totalling 699 feet. No assays are reported. All holes were in andesite.

A.L. Barry was in charge of the work. (J. D. - 57)

ROUYN TOWNSHIP

Despina Gold Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 229; Paper 41-7.
Que. Bur. Mines, Min. Oper. 1927, p.107; 1928, p.80; Ann. Rept. 1935, Pt.A, p.47; P.R. No. 116, p.22; No. 135, p.20; No. 150, p.40.
Que. Dept. Mines, P.R. No. 227, p.13; No. 330, p.80.

The property of Despina Gold Mines Ltd. consists of 13 claims at the junction of Duprat, Dufresnoy, Beauchastel and Rouyn townships. The claims are R.22429-30 in Beauchastel township, R.24681-85 in Dufresnoy township, R. 25206-07 in Duprat township and R.22431-34 in Rouyn township.

The property was explored by Vickers-Porcupine Mines Ltd. in 1926-27, Vickers Mines Ltd. in 1928, Ceres Explorations Ltd. in 1935, Eclipse Gold Mining Company Ltd. in 1936-37, and Frobisher Ltd. in 1945.

The greater part of the property is underlain by andesite. This andesite is supposedly underlain at depth by rhyolite. At Waite-Amulet the main concentrations of ore are localized at this contact. In the southeast corner of the property there is another body of rhyolite. Minor intrusions of quartz-feldspar porphyry and diorite cut these volcanic formations which have a northeast strike and a gentle southeast dip.

A series of 10 quartz veins fills fractures in the andesite; the veins trend northeasterly to almost easterly. These veins and the wall rock are generally mineralized with pyrite and chalcopyrite. Most of them have been tested in former drilling programmes. The tenors in gold and copper are generally irregular and the shoots short.

At the end of 1955, a new programme of diamond drilling was initiated and, up to July 1956, 30 holes totalling 17,216 feet were put down. Vein No. 8, which is situated 1,300 feet north of the junction of the 4 townships, was explored to a depth of 700 feet. For a length of 600 feet it has an average tenor of 1.52 per cent copper over an average width of 3.3 feet. Vein No. 5, some 1,300 feet south of the junction of the townships, was explored to a depth of 450 feet. A lens 200 feet long averages 1.81 per cent copper over 4.8 feet. Isolated intersections of 3.5 feet at 2.31 per cent copper and 1.3 feet at 4.07 per cent copper, 0.07 ounce of gold per ton and 0.94 ounce of silver per ton were reported.

T. Koulomzine was in charge of the exploration. (J. D. - 56)

Duffree Rouyn Gold Mines Ltd.

Ref.: Geol. Surv. Can., Paper 43-7.

Duffree Rouyn Gold Mines Ltd. owns lots 16 to 19, range I, and the south halves of lots 20 to 24, range II, Rouyn township.

The property is underlain by sedimentary rocks, mostly graywackes of Temiscamian-type, striking east to northeast and dipping steeply. A thin band of andesite crops out along the south shore of the Kekeko river. A northerly-trending diabase dyke probably cuts across lot 23 on the property. A body of peridotite underlying Beauchastel lake probably extends east along Kekeko river. Some peridotite has been intersected in drill holes.

Outcrops of pillowed andesite are mineralized with disseminated pyrite and pyrrhotite south of Kekeko river, on lots 21 and 22, along a weak shear zone. This shear zone was explored in 1950-51 by 4 diamond-drill holes. Mineralization of pyrite and pyrrhotite was fairly abundant in the drill cores, with a few sections of massive iron sulphides.

In 1957, Orofino Mines Ltd. optioned the property and made geochemical and dip needle surveys of the part of the property along Kekeko river in lots 22 to 25, and drilled 2 diamond-drill holes, totalling 1,260 feet, in lot 23. Both holes were in graywacke.

R.B. Graham was in charge of the exploration. (J. D. - 57)

Lake Dufault Mines Ltd.

See Dufresnoy township.

South Dufault Mines Ltd.

The South Dufault Mines Ltd. property consists of the south halves of lots 39 and 40, range I, Dufresnoy township, and lots 38 to 46, range IX N., lots 38 to 49 and A to F and C.4099, claim 4, range

X S., and lots 38 to 48, range X N., Rouyn township.

The property is underlain by a series of interbedded flows with a definite strike a little west of north and with tops facing east. The flows are cut by diorite dykes striking in about the same direction. A diabase dyke cuts these flows at right angles. The flows consist of rhyolite and andesite in the western part of the property and mostly acidic tuff and agglomerate in the eastern part. The rhyolite is commonly dark with quartz eyes. The andesite may be pillowed or brecciated. A series of valleys parallel to the diabase dyke may well represent fault zones. One such fault would be the continuation of the Donald Fault No. 1. Displacements were noted along some of these valleys.

Parts of this property were held previously by Valley Mining Syndicate Ltd. in 1929, Routhier Cadillac Gold Mines Ltd. in 1936, and Consolidated Mining and Smelting Company of Quebec Ltd. in 1941. The present company acquired its ground in 1945. An extensive programme of diamond drilling was carried out in 1946-47. Most of the 36 holes then drilled were concentrated in the western part of the property. More drilling was done in 1948 and 1951.

In 1956, following an electromagnetometric survey, 24 diamond-drill holes were drilled for a total of 18,554 feet. The best intersections were 2.00 per cent copper over 1.3 feet, 1.41 per cent over 5 feet and 1.26 per cent over 7.2 feet. The chalcopryite occurs in seams and patches or as scattered grains in andesite or pyroclastic rocks. No continuous bodies could be delimited.

A. C. Lee was the consulting engineer. (J. D. - 56)

Templor Mines Ltd.

Ref.: Quebec Bur. Mines, Ann. Rept. 1933, Pt.A, p.103; 1934, Pt.A, p.83; Min. Ind. 1937, p.59.

Templor Mines Ltd. holds a large property in the northeast corner of Rouyn township consisting of blocks 45 to 50 and claims R.11458-61; C.6788-89, claims 1 to 5; C.6822, claims 1 to 3; C.7463, claims 1 and 2; C.7464, claims 1 to 5; C.7477, claims 1 to 4; C.7478, claim 4; and C.7494, claim 1.

The property is underlain by volcanic rocks, mostly tuff and agglomerate, with some trachyte, andesite and rhyolite. A regional northeast diabase dyke about 300 feet wide crosses the property and crops out a few feet north of Routhier lake. There are a few outcrops of diorite and pyroxenite in block 45, south of Mud lake. There are no outcrops in the northern part of the property.

In 1932, a gold discovery was made in quartz stringers on claim R.11459. The zone was explored in 1933-37 by Seguin Rouyn Mines Ltd. The present owners acquired the property in 1945 and carried out 8,173 feet of diamond drilling in 14 holes in 1945-46, mostly in the southern part of the property. Magnetometric and electromagnetometric

surveys were followed, in 1956, by another drilling programme consisting of 7 holes totalling 3,961 feet. Some sheared and altered zones were intersected, but they contained no mineralization.

The exploration was supervised by C. Fox. (J. D. - 56)

Wiltsey-Coghlan Mines Ltd.

Ref.: Geol. Surv. Can., Mem. 233, p.60.

Que. Bur. Mines, Ann. Rept. 1934, Pt.A, p.85.

Que. Dept. Mines, P.R. No. 190, Pt.III, p.35; P.R. No.205, Pt.III, p.31.

This company holds blocks 30 to 33, 84, 149 to 151, 155, 156, 160 to 163, 190, 194 and 195 in the central part of Rouyn township.

At present 3 diamond-drills are in operation on the property probing an andesite-rhyolite agglomerate contact southeast of Osisko lake. A zone 200 feet long in the rhyolite carries pyrite and chalcopryrite mineralization. In 3 drill holes tenors of 1.8 per cent copper over 3 feet have been reported. There is also a sparse dissemination of chalcopryrite over widths of more than 100 feet. In the northern part of the property a hole drilled from an island has cut a gold-bearing quartz vein 3 feet wide containing 0.85 ounce of gold per ton.

T. Koulomzine is in charge of the exploration. (J. D. - 57)

SENNETERRE TOWNSHIP

Bilodeau Prospect

The Bilodeau prospect comprises lots 35 to 41, range VII, and lot 39, range VIII, Senneterre township. The mineral rights are held by R. Dargis, R. Forget and R. Thomas.

The main contact between a large mass of granite to the east and volcanic rocks to the west traverses the property in a northerly direction in lots 39 and 40. The granite at the contact is a hornblende-rich, more basic border facies of the main batholith. The volcanic rocks are basic flows and tuffs, sheared in a north-south direction parallel to the contact. They dip west at 70°.

The main mineralization is close to Range-line VII-VIII, lot 39. It consists of a quartz vein in volcanic rocks 20 feet west of their contact with the main granite body. The vein has been exposed at intervals by trenching and stripping for a length of 100 feet. The strike averages N. 15° W. and the dip 70° southwest. The vein is irregular, varying in width from 1 to 4 feet. It is mineralized with scattered streaks, blobs and small patches of molybdenite, chalcopryrite, pyrrhotite and pyrite. The mineralization is erratic, some parts of the vein being nearly barren, whereas other short lengths contain numerous pockets of molybdenite and sparse chalcopryrite. The presence

of tiny flakes of a pale red mineral suspected to be native copper was also noted.

A second mineralized zone is located 600 feet north-east of the above vein. Here a narrow band of biotite schist that appears to be an inclusion in the surrounding granite is exposed in a pit. The schist contains a few veinlets of quartz 8 inches wide which are mineralized with a small amount of molybdenite. Stringers and lenses of vein quartz a few inches wide, scattered in the granite between the two prospects, also contain a little molybdenite.

The western two-thirds of the property, which appears to be underlain by volcanic rocks, is drift-covered and has not been explored. (W.N. I. - 56)

Senneterre Metals Mines Ltd.

Ref.: Que. Dept. Mines, P.R. No. 330, p.81.

This property consists of lots 9 to 25, range VI, and lots 23 to 25 and the south halves of lots 14 to 22, range VII, Senneterre township.

The part of the property which covers the south half of the range VI is underlain by granitic rocks. These are part of a plug which occupies an area of 10 square miles to the south. The north half is underlain by Keewatin-type lava flows and pyroclastic rocks which have been intruded by numerous dykes, sills and other bodies of granite and diorite and their related porphyries. The volcanic rocks, because of their proximity to intrusive bodies, have been highly altered. The tuffs are biotitic, chloritic, and in places garnetiferous. Many of the flows have been recrystallized and now resemble diorites and syenites. Magnetite appears to have been formed at the time of recrystallization. Strikes are generally east, except at the east end of the property, where they tend to be southeast. Dips are vertical to steeply north.

In 1955 a magnetometric survey and a diamond drilling programme were undertaken. Eighteen holes were drilled for a total of 7,636 feet. The holes intersected highly altered intermediate to basic garnetiferous tuffs and some andesite flows cut by numerous granitic and dioritic dykes. Some of the andesites are recrystallized to medium to coarse grained diorite. A few sulphide zones were encountered. One 20-foot section contained pyrite, pyrrhotite and magnetite with a few specks of chalcopyrite. This material assayed 25.3 per cent iron.

The work was directed by A. Vachon, the president of the company. (M. L. - 57)

Tud Cobalt Mines Ltd.

This property covers the north halves of lots 2 to 5, range V, and lots 1 to 8, range VI, Senneterre township.

The property is underlain by Keewatin-type tuffs and agglomerates. The southeast corner contains the western nose of a plug of biotite-hornblende granite. The volcanic rocks are highly sheared and altered and have been intruded by numerous dykes and sills of diorite and granite and their related porphyries. These volcanic rocks strike southeasterly at the northwest end of the property and swing into an easterly direction at the contact of the granitic plug at the south end of the property. There is a strong easterly-trending shear zone at the south end of lots 6 and 7, range VI.

In 1956, 2 diamond-drill holes were drilled for a total of 1,276 feet. The holes intersected mostly sheared intermediate to basic graphitic tuffs intruded by granitic and diorite dykes. The tuffs commonly contain garnet, in places up to 30 per cent of this mineral. Disseminated pyrite and pyrrhotite, with a few narrow massive sections, were encountered in both holes.

The work was done under the supervision of G. Dumont.

(M. L. - 57)

THORNE TOWNSHIP

Dun Raven Mines Ltd.

See Clarendon township.

TRÉCESSON TOWNSHIP

Mallich Property

J. Mallich holds the north halves of lots 43 to 50, range VI, and lots 39 to 43, 46 and the west halves of lots 47 to 50, range VII, Trécession township.

The main mineralization is on the line between lots 49 and 50, range VII. The host rock is rhyolite and rhyolite breccia with patches of altered chloritic rock. The strike of the formations is approximately east and the dip is very steep. Sets of joints from northwest to north and northeast were observed. The mineralization occurs mainly in the chloritic rock and in the rhyolite, and consists of pyrite, pyrrhotite, chalcopyrite, sphalerite and sparse galena. The sulphides are disseminated, in patches or stringers. Though mineralization extends for a length of 300 feet, concentrations of chalcopyrite or sphalerite are rather spotty.

At the end of 1955, New Jersey Zinc Exploration Company (Canada) Ltd. made geological, magnetometric and electromagnetometric surveys of the property and did some stripping and trenching, followed in 1956 by diamond drilling. Five holes totalling 2,026 feet were drilled across the mineralized zone in the southern parts of lots 49 and 50, range VII.

Later in the same year, 14 holes, for a total of 2,955 feet, were drilled under the supervision of P. Gilmour. Sections of 50 and 60 feet carrying disseminated sphalerite and chalcopryrite were cut. One intersection of 3.5 feet assayed 4.28 per cent zinc. (J.D. - 57)

VAUQUELIN TOWNSHIP

Cournor Mining Company Ltd.

Ref.: Que. Dept. Mines, P.R. No. 227, p. 148.

This company holds 10 claims numbered A.37523-32 in the southwest quarter of Vauquelin township.

The north half of the property is underlain by tuffs, agglomerates and andesitic lava flows and the south half by graywackes and probably some conglomerates. These rocks strike slightly south of east and dip steeply north. The Cadillac fault zone passes just south of the property.

In 1956 a magnetometric survey of the property was made and 5 diamond-drill holes were drilled for a total of 3,247 feet. The holes cut mostly tuffs, agglomerates and andesitic flows. Some short sections contained up to 5 per cent magnetite.

The work was supervised by J. Lavallée. (M.L. - 57)

TOWNSHIP NO. 344

The Bersimis Mining Company

The Bersimis Mining Company owns a group of 23 claims near Lise lake in the southwest quarter of township No. 344. The claims are numbered C.80116, claims 1 to 3; C.80117, claims 1 to 4; C.80118, claims 1 to 5; C.80124, claims 1 to 4; C.111913, claims 1 and 2; and C.111914, claims 1 to 5.

Ilmenite occurs on this property near the centre of a batholithic mass of andesine anorthosite of a pinkish mauve colour. The gneissic structure of the anorthosite strikes N.25°W. and dips 35° to 50° northeast near the main deposit. The deposits of ilmenite are elongated parallel to the gneissic structure. On the east side the contact is indicated by the presence of a variety of coarse-grained anorthosite which seems to have been hydrothermally altered. This pegmatitic facies commonly has a red colour and contains in places spots of epidote and chlorite with thin irregular bands of ilmenite. The deposits are in many places accompanied by a zone of a material made up essentially of ilmenite and apatite (nelsonite). Diamond drilling indicates that the ilmenite is present in 3 lenticular masses which plunge toward the east. One hole intersected mainly ilmenite and a few thin bands of anorthositic pegmatite over a width of 100 feet.

In the main orebodies the ilmenite is medium grained, the size of the grains being 2mm. to 3mm. The ore is slightly magnetic in places and apparently especially so along the footwall of the bodies. The ore is made of ilmenite-hematite with a few grains of plagioclase, spinel, pyrite and ferromagnesian minerals. The hematite occurs as plates in the ilmenite in a characteristic fashion.

P.J. Goldsmith is the geologist in charge of the exploration work. (M. M. - 56)

LAC DES DEUX-MONTAGNES SEIGNEURY

Bouscadillac Gold Mines Ltd.

Ref.: Que. Dept. Mines, P.R. No. 351, P.11.

Bouscadillac Gold Mines Ltd. has explored 2 groups of claims in Lac des Deux-Montagnes seigneurie. The "A" or northern group includes lots 71 to 74, St. Benoit parish, and lot 303, L'Annonciation parish. The "B" group covers lots 135 to 138, concession du Petit St. Joseph, St. Joseph du Lac parish.

The claims have a relatively subdued topography and are covered by a considerable thickness of unconsolidated material, especially the northern group on which over 300 feet of overburden has been encountered in diamond-drill holes.

A few rock exposures and 5 diamond-drill holes show that the "B" group is probably almost completely underlain by acidic members of the Morin series: quartz monzonite, quartz diorite, pegmatite and aplite. A small area in the northwest corner is possibly underlain by Grenville limestone. The northern or "A" group of claims does not show any rock exposures, and diamond drill holes have been drilled only near its south boundary, where the underlying bedrock is Grenville limestone. The contact between these formations and the anorthosite, gabbro and diorite of the Morin series probably runs across the north half of the group.

Following magnetometric and radiometric surveys, some 8,000 feet of diamond drilling was done between 1954 and 1956 on the two groups of claims. A zone 250 feet thick containing interesting amounts of columbium oxide mineralization was intersected near the south boundary of the "A" group. The zone appears to trend northeast and, according to company officials, contains approximately 3,800,000 tons of material grading 0.11 to 0.99 per cent columbium oxide for its drilled length of 1,200 feet.

Metallurgical tests are being conducted on the material for selecting the most economical means of beneficiation.

H. J. Bergmann is consulting geologist for the company.
(J.E.G. - 56)

Columbium Mining Products Ltd.

Ref.: Geol. Surv. Can., Paper 54-22.
Que. Dept. Mines, P.R. No. 351, p.10.

Columbium Mining Products Ltd., a subsidiary company formed in July, 1956, by Headway Red Lake Gold Mines Ltd. and Coulee Lead and Zinc Mines Ltd., holds a group of claims in the eastern part of L'Annonciation parish, Lac des Deux-Montagnes seigneurie. The claims cover the northwest half of lot 158, lots 159 and 160, the northwest part of lot 161, lots 181 to 190, and the northeast three-quarters of lot 195.

The northwestern claims are somewhat higher and contain more rock exposures than the rest, which have a flat topography and are covered with a thick layer of unconsolidated material. The eastern part of the property is underlain by Grenville limestone intruded by plugs and dykes of Monteregean rocks such as okaite and lamprophyres. In the western part of the property a large mass of quartz monzonite, quartz diorite, pegmatite and aplite of the Morin series cuts through the Grenville limestone. Two small late Precambrian diabase dykes outcrop in the formations of the Morin series on lot 195.

The ground was jointly acquired by Coulee Lead and Zinc Mines Ltd. and Headway Red Lake Gold Mines Ltd. in 1953 following the discovery early in that year of occurrences of columbium, tantalum, rare earths and radioactive minerals in the adjacent parish of St-Joseph du Lac. Following a series of magnetometric and radiometric surveys, a diamond drilling programme was undertaken late in 1954 in the northeast corner of the property where the largest geophysical anomalies had been found. A total of 15,766 feet of drilling was done in 1954-55. The drilling indicated some 15,000,000 tons of material grading 0.39 per cent columbium oxide and 0.02 per cent uranium oxide to a depth of 500 feet. The deposit occurs in a nearly vertical northerly-trending zone near the east boundary of the property. It has a possible width of 750 feet. The host rock is altered Grenville limestone abundantly injected and intruded by okaite and associated facies.

Work was resumed on the property in March, 1956, and 14,982 feet of drilling was done to test the southern extension of the zone and to explore it at greater depth. At the end of September reserves were estimated at 40,000,000 tons grading 0.3 per cent columbium oxide and 0.002 per cent uranium oxide.

Research work on the beneficiation of this material has shown that a concentrate containing 20 per cent columbium oxide can be produced by a combination of gravity separation and flotation, with a recovery averaging 80 per cent.

J.E. McDonough is consulting engineer and M. Lauzon is field geologist for the company. (J.-E.G. - 56)

Main Oka Mining Corporation

Ref.: Que. Dept. Mines, P.R. No. 351, Prelim. Map No. 1179.

This company owns a group of claims and parts of claims located on lots 321 to 331, L'Annonciation parish, Lac des Deux-Montagnes seigneurie.

The property is located on open farm lands and is completely covered by a thick layer of overburden. A seismic investigation showed that the average thickness of the overburden is 100 feet in the southwestern part of the property and 230 feet in the northeastern part.

A magnetometric survey, completed in the early months of 1955, showed anomalies over most of the property. Diamond drilling totalling 20,125 feet in 28 holes has indicated mineralization of columbium, thorium and rare earths. The mineralization is disseminated in the Grenville crystalline limestone but appears to be more abundant near the contacts of the Monteregian intrusives.

C. Carbonneau is in charge of the exploration. (A. D. - 57)

Oka Uranium and Metals Ltd.

Ref.: Que. Dept. Mines, P.R. No. 351, Prelim. Map No. 1179.

Oka Uranium and Metals Ltd. holds 40 contiguous claims in L'Annonciation parish, Lac des Deux-Montagnes seigneurie. The claims are numbered C.74787, claims 1 and 2; C.77160, claims 2, 3 and 5; C.77161, claims 4 and 5; C.77162, claims 3, 4 and 5; and C.77164-69, claims 1 to 5. The property was formerly held by Grand Manitou Mines Ltd. It lies partly on the peninsula south of La Grande Baie and partly offshore in Two Mountains lake. The land area is completely covered with overburden.

An airborne magnetometric and radiometric survey showed anomalies over most of the property. The anomalies have been investigated by diamond drilling. Prior to March 1957, 17 radiating holes were drilled southward under the lake. The cores consist mostly of coarsely crystalline limestone of the Grenville series intruded by rocks of the Monteregian series. The latter includes nepheline syenite, ijolite, alnoite and okaite. The limestone contains the following columbium-bearing minerals: pyrochlore, perovskite, betafite, nickalite and magnetite. To date, 9,195 feet of diamond drilling has been completed.

Indicated reserves are estimated at 13,960,000 tons grading 0.4 to 0.5 per cent columbium oxide, 0.20 to 0.50 per cent total rare-earth oxides and 0.06 per cent thorium oxide to a depth of 400 feet. The mineralization is disseminated in the limestone.

C. Carbonneau is the consulting geologist. (A.D. - 57)

Quebec Columbium Ltd.

Ref.: Geol. Surv. Can., Paper 54-22.
Que. Dept. Mines, P.R. No. 351 p.9.

Quebec Columbium Ltd. holds a group of claims straddling

the boundary between L'Annonciation and St-Joseph du Lac parishes, Lac des Deux-Montagnes seigneurie. The claims cover lots 210 to 223, 253 to 255, 304 to 320, 333 and parts of lots 321 to 324, L'Annonciation parish, and lots 139 to 162 and the southwestern parts of lots 163 to 172, St-Joseph du Lac parish.

The property is located in the hilly part of the district and lies in a narrow valley between two summits to the northeast and southwest. A smaller rocky hill is also present along its northwest boundary. Although rock exposures are not abundant, the overburden is generally much thinner than is usually the case elsewhere in the district.

About 80 per cent of the property is underlain by granular, yellowish or greyish white Grenville-type crystalline limestone intruded and injected by Monteregean alkaline rocks. These consist for the most part of okaite, forming what is called the Husereau mass along the northwest boundary of the property, and of ijolite and lamprophyres, occurring mostly as dykes throughout the rest of the property. The border phases of two bodies of quartz monzonite and quartz diorite belonging to the Morin series outcrop along the southwest boundary; these rocks were also intersected in diamond drill holes in the southeast corner of the property. A small area in the extreme northwest corner of the property is probably underlain by anorthosite, the main facies of that series.

Discoveries of columbium, tantalum, rare earths and radioactive minerals were made on the property early in 1953 and a large group of claims was staked. An option on 8,000 acres of this area was taken during the same year by Molybdenum Corporation of America which immediately undertook a programme of geophysical surveys, trenching and sampling. Four diamond-drill holes totalling 2,015 feet were drilled in early 1954, followed by more geophysical work. It was soon discovered that the columbium-tantalum-rare earth minerals were generally associated with magnetite and radioactive minerals and that two main zones of mineralization were present on the property. These were extensively explored in 1955 and early 1956 by 31,665 feet of diamond drilling. Following this work, the company announced that it had outlined an estimated 55,000,000 tons of columbium and tantalum-bearing material to a depth of 500 feet. The "Bond" or southwest zone, located in lot 216, L'Annonciation parish, and adjacent lots, is reported to contain 30,000,000 tons averaging 0.6 per cent columbium oxide and the "Manny" or northeast orebody, in lots 311 to 315, also in L'Annonciation parish, contains an estimated 25,000,000 tons grading 0.35 per cent columbium oxide. Some tantalum, rare earths and radioactive minerals are also associated with the columbium.

In 1956, Kennecott Copper Corporation acquired a 51 per cent interest in the property and the two parent companies then incorporated a new company, Quebec Columbium Ltd., to which they sold the most promising part of the property.

Research work on the most economic method of beneficiation and processing, and the search for outlets for the company's future output, are at present being actively pursued.

S. B. Bond is manager of the property. (J.-E. G. - 56)

St. Lawrence River Mines Ltd.

Ref.: Que. Dept. Mines, P.R. No. 351, p.10.

St. Lawrence River Mines Ltd. holds lots 176 to 180, 330 and 332 and parts of lots 164 to 168, 170 and 175, L'Annonciation parish, Lac des Deux-Montagnes seigneurie.

Most of the property is open farm lands and bedrock exposures are rare. It is nearly completely underlain by crystalline limestone of the Grenville series and intrusions of nepheline syenite, ijolite and lamprophyres related chemically to the Monteregian intrusives. The limestone exposed on the surface is highly fractured and deeply weathered. An airborne radiometric survey shows that readings of 5 times background are found over nearly all of the property. Magnetic anomalies also occur throughout the property. Diamond drilling has indicated that columbium mineralization is widespread in the crystalline limestone. The minerals present in the limestone are calcite, pyroxene, biotite, forsterite, pyrochlore, magnetite, apatite, perovskite, betafite and niokalite. The columbium-bearing minerals are pyrochlore, perovskite, betafite, niokalite and magnetite. The mineralization is disseminated throughout the limestone, but is more intense near the contacts of the Monteregian intrusives, especially where small intrusive bodies are most abundant.

The exploration work done on the property consists of a radiometric ground survey, a magnetometric and radiometric airborne survey and 38,980 feet of diamond drilling in 64 holes. Indicated reserves down to a depth of 400 feet are estimated at 34,214,000 tons grading 0.3 to 0.5 per cent columbium oxide, 0.2 to 0.5 per cent total rare earth oxides and 0.03 per cent thorium oxide.

A portion of these reserves, estimated at upwards of 3,000,000 tons, has a tenor of 0.7 per cent columbium oxide or better.

The company is now conducting research work to find methods of treating its ore.

C. Carbonneau is the consulting geologist for the company. (A. D. - 57)

MILLE ILES SEIGNEURY (AUGMENTATION)

Norvex Mining Company Ltd.

Ref.: Les Minerais de Fer de la Province de Québec (1915), p.36.

This company holds lots 445 to 464, North range, Rivière du Nord, St. Jérôme Rivière du Nord municipality, Mille Iles seigneurie (Augmentation).

An easterly-trending fault zone having a maximum width of 15 feet traverses the gneiss in lots 461 and 462. This zone has been explored by trenches, test pits and diamond-drill holes for a length of 1,100 feet. A magnetometric survey made in 1942 indicates that it has a length of 2,300 feet. A radiometric survey of the area in the immediate vicinity of the deposit was made in 1956. No radioactive anomalies were noted.

The zone contains vertical or nearly vertical lenses of massive magnetite, up to 4 feet thick, of various lengths. Five representative samples of the magnetite averaged 60.71 per cent iron and 0.56 per cent titanium dioxide. No appreciable quantity of columbium is present. (P.-E. B. - 57)

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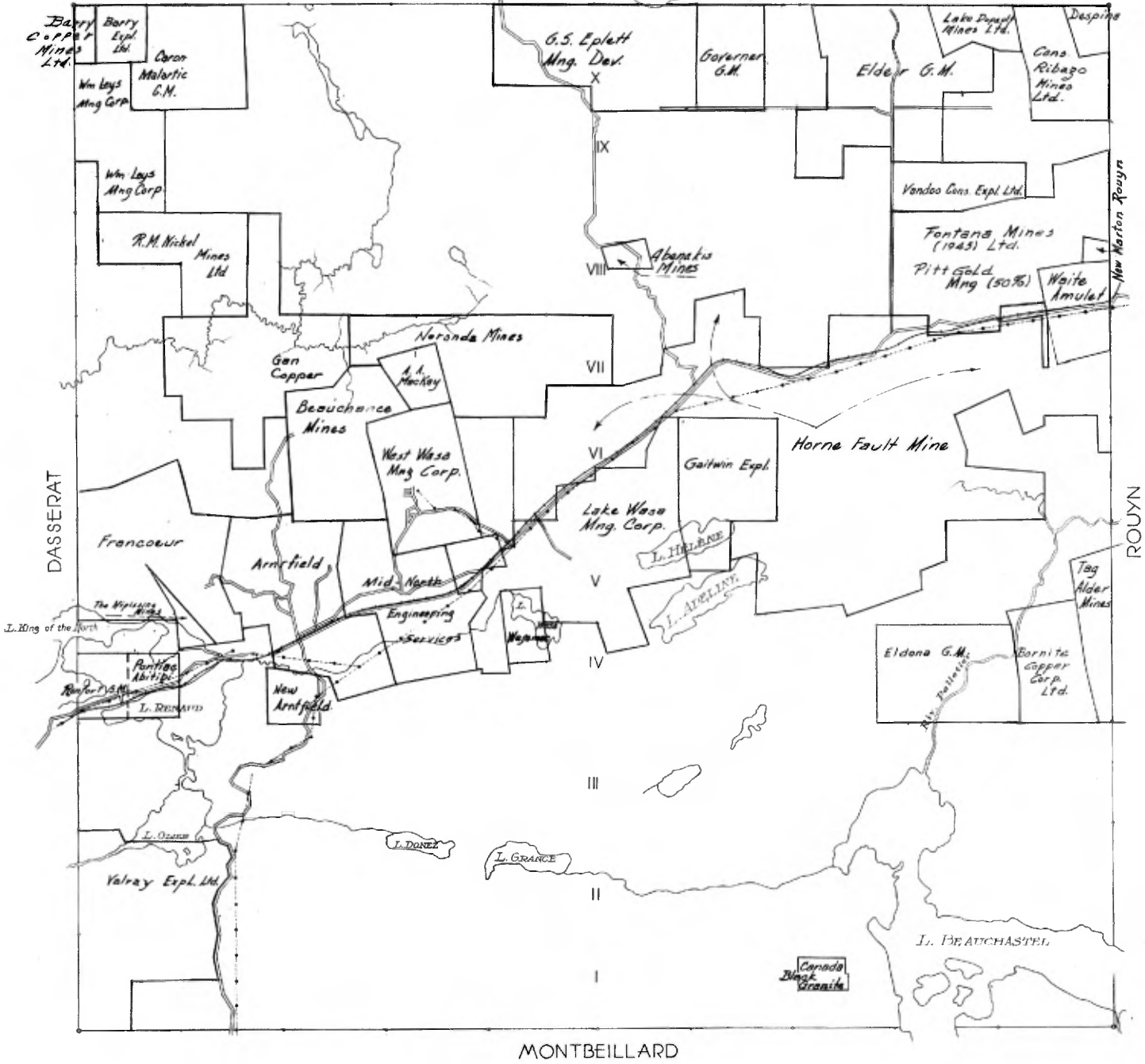
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COMTÉ DE ROUYN-NORANDA

DATE: 30-2-59
MINISTÈRE DES MINES



DUPRAT



BOURLAMAQUE

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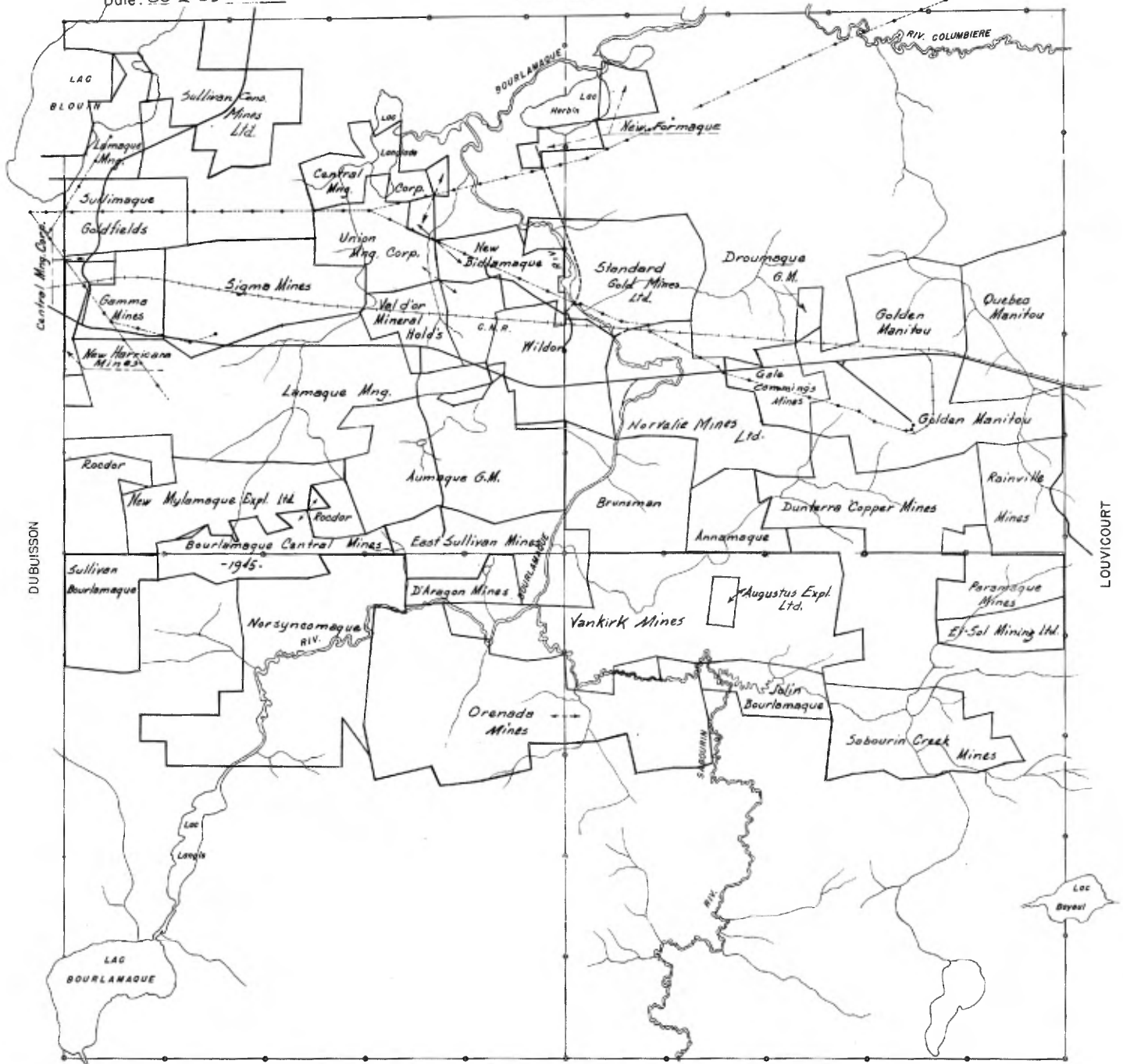


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MINISTÈRE DES MINES

Date: 30-2-59

SENNEVILLE



SABOURIN



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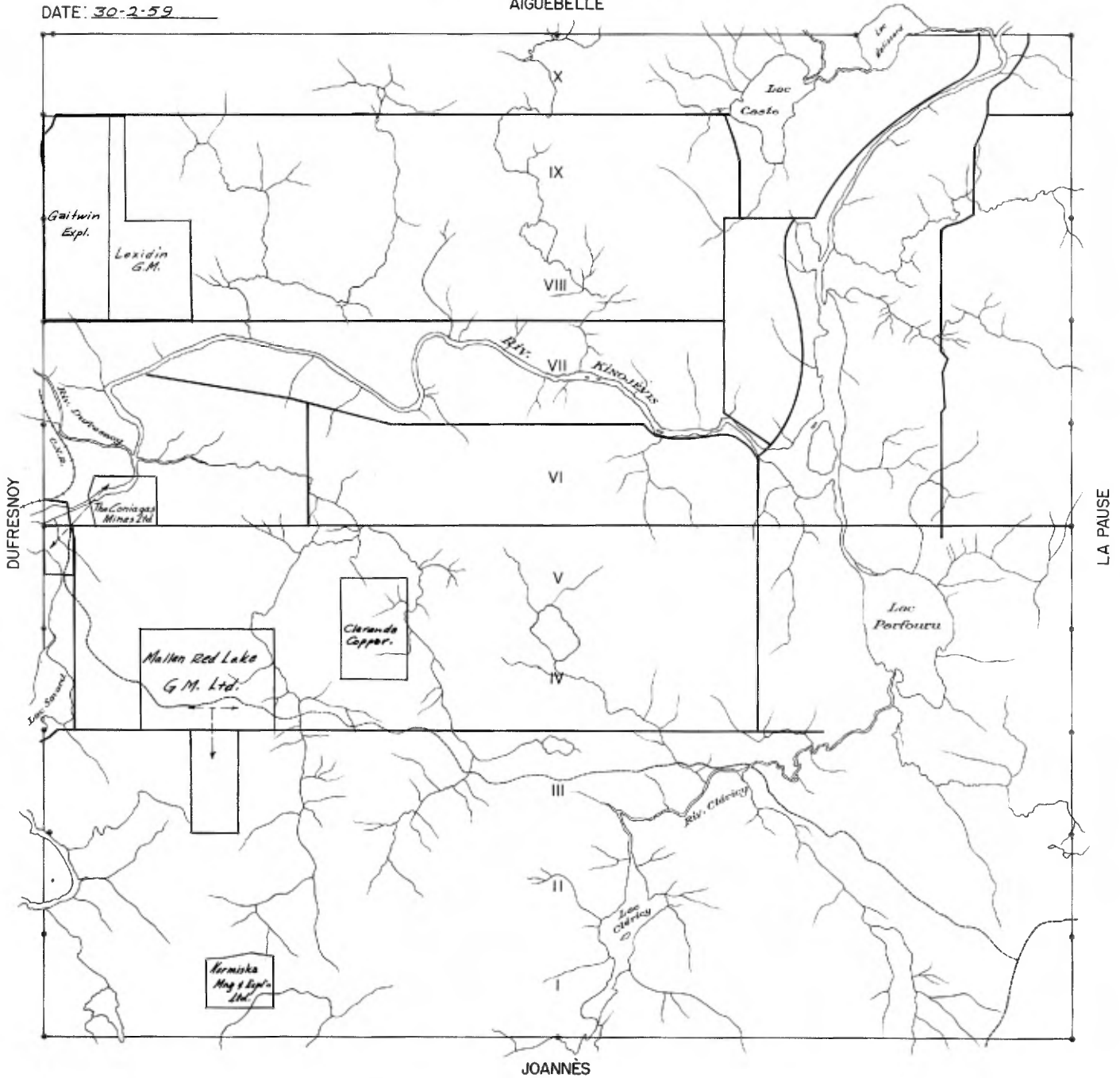
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DALQUIER

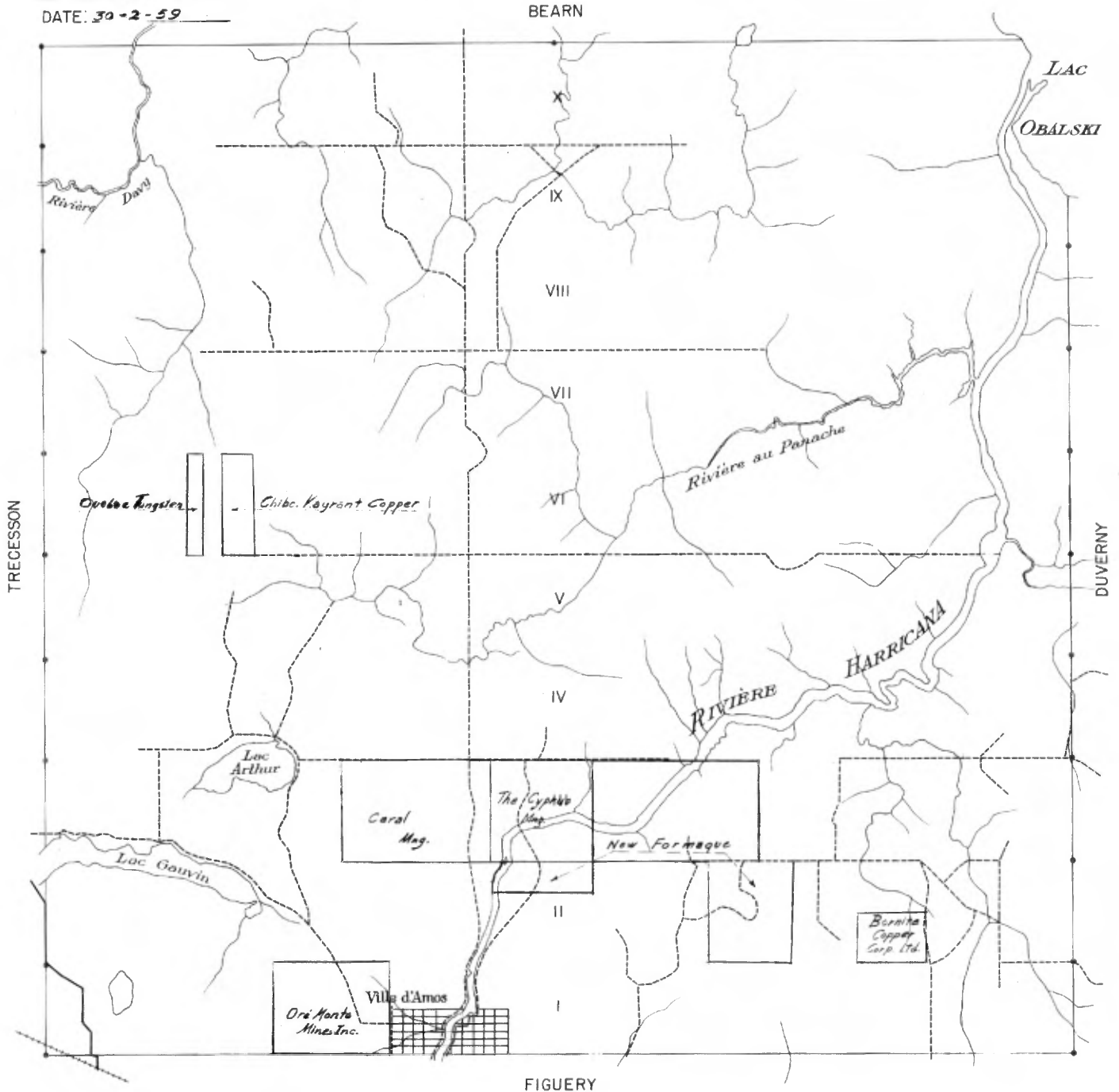
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MINISTÈRE DES MINES

DATE: 30-2-59



FIGUERY

DASSERAT

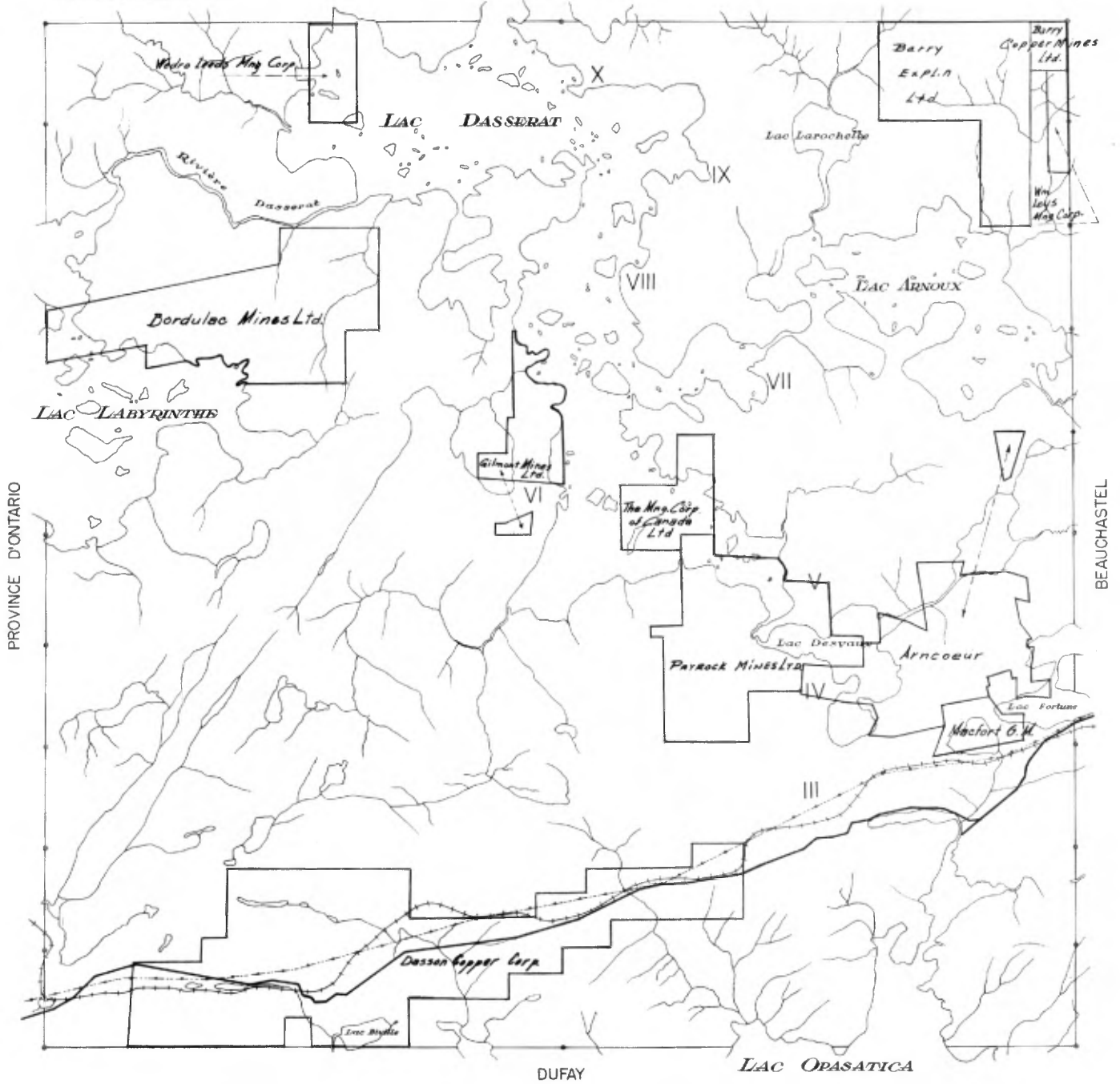
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DATE: 30-2-59

Miles 0 1/2 1 2

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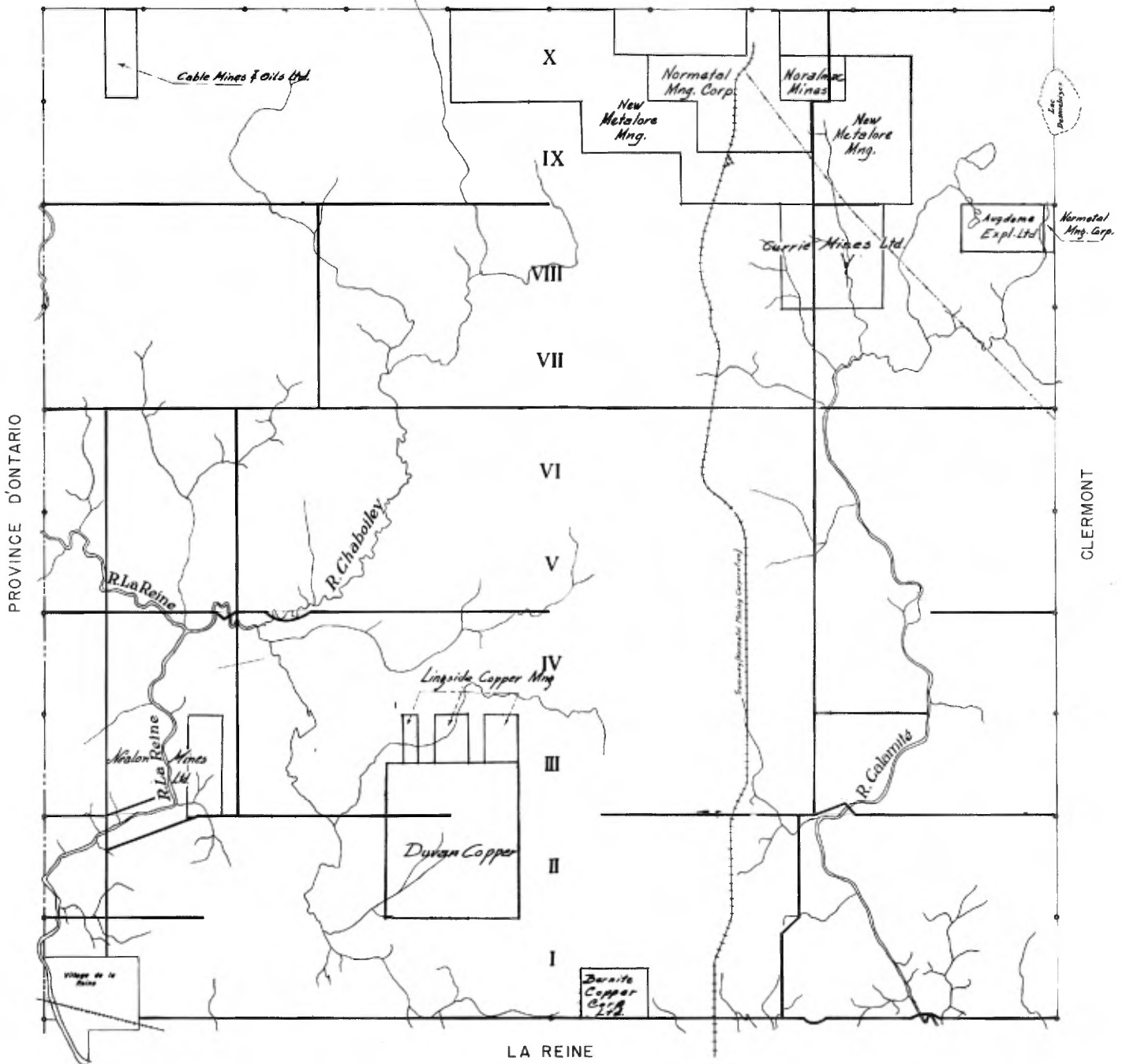
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MINISTÈRE DES MINES

Miles Miles

DATE: 30-2-59

PERRON



DESTOR

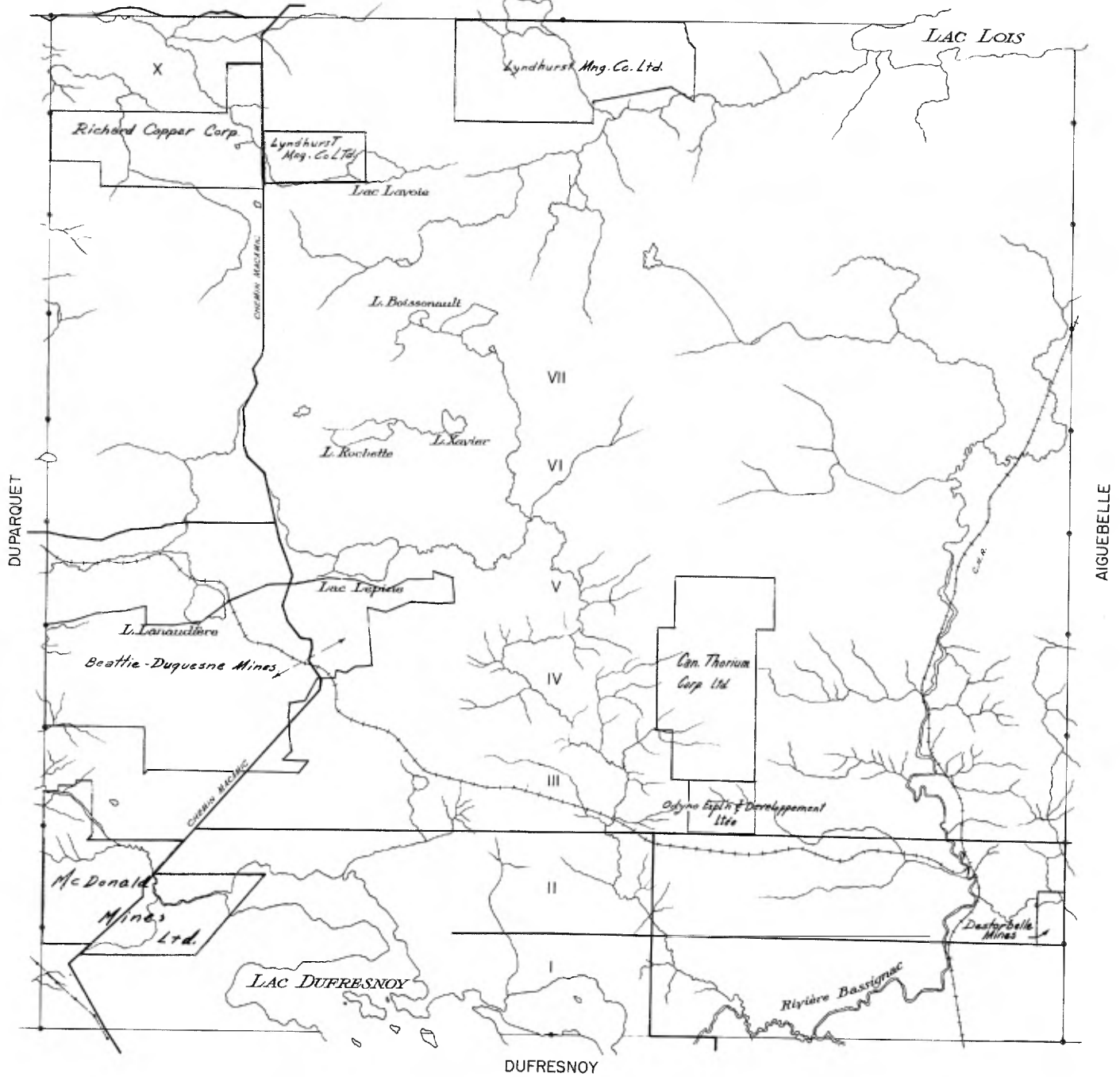
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MINISTÈRE DES MINES

DATE: 30-2-59

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POULARIÈS



DUFRESNOY

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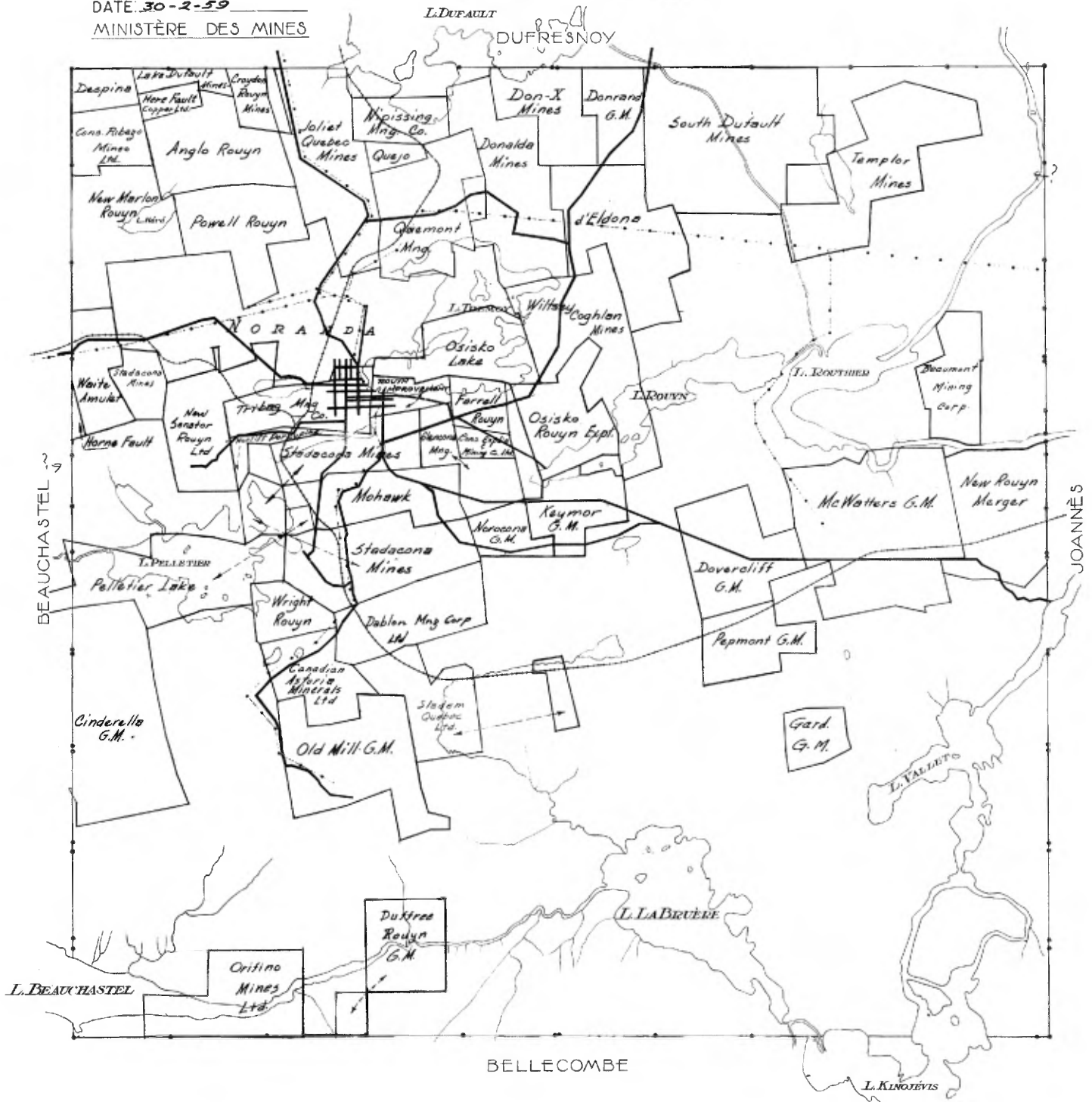
ROUYN

COMTÉ DE ROUYN-NORANDA



DATE: 30-2-59
MINISTÈRE DES MINES

Miles 0 1/2 1 2



BELLECOMBE

L. KINOVEVIS

L. BEAUHASTEL

BEAUHASTEL

JOANNÉS