CANADA DEPARTMENT OF MINES AND TECHNICAL SURVEYS

MINES BRANCH

THE MINING LAWS OF CANADA

A Digest of Dominion and Provincial Laws and Regulations Affecting Mining

(Fourth Edition)

PREPARED BY

Arthur Buisson



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PREFACE

The first edition of the "Mining Laws of Canada" was compiled by John McLeish and published in 1924. The second edition (1931), the third edition (1938), and the present edition were prepared by Arthur Buisson, Mines Branch.

With the purpose of securing greater uniformity, the report has been compiled based on the following main divisions:—

- I. Introductory.
- II. Synopsis of the Mining Laws at present in force.
- III. Summary of special Acts relating to mining, mine taxation, etc.
- IV. Lists of Acts, Amendments, and Regulations at present in force.
 - V. Royalties.
- VI. Bounties.
- VII. Schedule of Fees.
- VIII. Personnel.

The synopses of mining Laws and Regulations were prepared in collaboration with those officers of the several governments who are directly in charge of their administration. These synopses are intended merely as a general guide to the principles underlying the administration of the laws governing the mining industry in different parts of Canada.

The Mining Laws of most of the provinces and also the Regulations issued by the Federal Government are available in printed form. The reader is referred to the official sources regarding mining laws and regulations and their administration.

The Imperial Mineral Resources Bureau, London, England, has published a series of volumes dealing with the Mining Laws of the different parts of the Empire, and volumes dealing with the Mining Laws of Ontario, British Columbia, and of the Dominion of Canada have already been issued by this Branch. Somewhat similar volumes have also been issued by the United States Bureau of Mines, Department of the Interior, Washington, D.C.

C. S. PARSONS, Director, Mines Branch

OTTAWA, Canada, January 1950.

General Summary of The Mining Laws of Canada

In Canada, legal title to all public (Crown) lands within the provinces, except Indian reserves and National Parks, rests with the respective provincial Governments, which also have administrative control of all natural resources within the respective provinces. The Dominion Government owns and administers the National Parks, administers the Indian reserves, the Northwest Territories, and Yukon, and owns all public lands in the two Territories. The Indian reserves are administered by the Indian Affairs Branch, Department of Citizenship and Immigration, Ottawa; and Northwest Territories, Yukon, and the National Parks by the Northern Administration and Lands Branch of the Department of Resources and Development.

Dominion Lands

The Dominion lands which come under Federal Acts and Regulations controlling mineral resources are those comprising the Northwest Territories and Yukon, all the Indian reserves in Canada, and the National Parks.

With the repeal of the Dominion Lands Act and the enactment of the Territorial Lands Act, Chapter 19, Statutes of Canada, 1950, Dominion lands in the Northwest Territories and Yukon Territory take on the designation "Territorial Lands".

The title issued for Territorial Lands reserves to the Crown the minerals that may be found in or under such lands together with the right of operation. The disposal of minerals on Indian reserves is, with the exception of gold and silver, subject to the consent of the Indians living upon the reserve. The exception is made so that the precious metals might be more accessible for mining purposes, while the interest of the Indians remains fully protected.

Provincial Lands

In Newfoundland all minerals are the property of the Crown. The usual form of title given is a "grant in fee simple" or a "Crown grant".

In Nova Scotia all minerals are the property of the Crown with the exception of limestone, gypsum, and building materials, which are the property of the owners of the lands.

In New Brunswick, since 1805, all mines and minerals are regarded as property separate from the soil. Most of the grants previous to 1805

reserved only gold, silver, copper, lead, and coal.

In Quebec the Crown retains full mining rights: (a) on lands in townships granted subsequently to July 24, 1880; (b) in the case of gold and silver in lands granted previous to 1880; and (c) in seigniories, with a few exceptions.

In Ontario, since 1908, the minerals belong to the surface owner, unless

expressly withheld.

In Manitoba, since July 1930, the natural resources of the Province have been under its own administration. Claims and locations in Manitoba, Saskatchewan, and Alberta are granted under lease in the same way as for Dominion lands.

In Saskatchewan, the ownership and administration of the natural resources reverted to the Province in October 1930.

Alberta has administered its natural resources since September 1930. British Columbia also administers its own resources. Mineral claims are held on a yearly lease, until a Crown grant is issued.

Surface Rights

These are usually leased at an annual rental, which in some cases is 50 cents, and in others \$1 per acre.

Mining Rights

In the case of Territorial lands the lease conveys the mining rights only, but surface rights may be obtained by arbitration if already disposed of, or under lease from the Crown if vacant.

In Newfoundland, the holder of a mining claim is entitled to a "grant

in fee simple" or a Crown grant. A boring lease is for 10 years.

In Nova Scotia, a mining lease is granted for a period of 20 years on the payment of a fee of \$50 and an annual rental of 50 cents per acre.

In New Brunswick, the mining lease is for 20 years on the payment

of an annual rental of \$10 per claim of 40 acres.

In Quebec, Crown lands may be acquired as a mining concession by purchase, or be occupied and worked under a mining licence at an annual rental of 50 cents an acre. Underground concessions situated under the lands of private owners and belonging to the Crown may also be acquired by purchase. When the mining rights in a property belong to the surface owner, as in the case in the townships of lands granted prior to July 1880, the owner of these rights is not obliged to make use of them. However, in 1939 the following amendment to the law was passed:

"Any concession of land for exploitation of the ore to be found therein, for which letters patent were issued before the 1st of July 1911, and any concession of land containing ore made before the 24th of July 1880, the working of which has remained idle during the five years preceding the 1st of March 1939, may be revoked by the Governor in Council, upon recommendation of the Minister, and notwithstanding the

provisions of Division 11 of this Act."

A prospector is prohibited from entering upon a property to prospect

when the mining rights belong to the surface owner.

In Ontario, the settler owns the mineral and surface rights. The mining licensee may obtain a patent or a "grant in fee simple" to the surface rights of mining lands.

In Manitoba, Saskatchewan, and Alberta, in the case of lands granted for agriculture or any purpose other than mining, the mining rights are reserved to the Crown. The surface and mining rights are both leased at

an annual rental.

In British Columbia, the usual form of title given by the Crown is a "grant in fee simple" or "Crown grant", on a lode claim of 51 acres, upon the expenditure of \$500 in work, which amount may be spread over 5 years. The fee is \$25 for the Crown grant of mining rights and \$10 for the Crown grant of surface rights. Placer mining leases are granted for a period of 21 years, at an annual rental of \$5 for a lease of about 80 acres.

In the matter of mining rights, aliens enjoy the same privileges as do

Canadian citizens or British subjects.

Discovery of Ore

The insistence upon discovery of ore before staking is one of the most ancient in mining jurisprudence. It is well recognized, however, that many orebodies have no surface outcrop. The position of some of these may be determinable by diamond drilling, whereas for others underground work is necessary. It has been argued that if an unoccupied or unused

tract is desired for exploration, the necessary rights should be given regardless of whether there are any indications of valuable minerals on the surface.

None of the present mining laws in Canada stipulates that discovery of ore is necessary for the staking of a claim. Discovery of minerals was not required in Ontario until 1897, and was rescinded in 1922.

Extralateral Rights

The "apex rule" (extralateral rights), substantially culled from United States legislation, was in force in British Columbia up to 1892, when an amendment to the Mineral Act was introduced confirming the rights, as in all other parts of Canada, of the holder of a mineral claim to the minerals within the vertical boundaries of his claim. The rights of claim-owners who had located their claims under former Acts were preserved.

Right to Prospect

Any person 18 years of age or over is entitled, on payment of the fee, as prescribed, to prospect or explore on Crown lands, surveyed or unsurveyed, including the lands of private persons where the mining rights have been reserved to the Crown. The licence may be a "miner's licence", "miner's certificate", "prospecting licence", or "free miner's certificate", and the fee is either \$5 or \$10.

A "miner's licence" is required on Territorial Lands in the Northwest Territories, Indian reserves, and in Ontario and Saskatchewan (fee, \$5). No miner's licence is required on Territorial Lands in Yukon Territory.

A "miner's permit" is required in Newfoundland (fee, \$5).
A "miner's certificate" is required in Quebec (fee, \$10).

A "prospecting licence" is required in Nova Scotia and New Brunswick (fee, \$10), and in Manitoba and Alberta (fee, \$5).

A "free miner's certificate" is required in British Columbia (fee, \$5).

Right to Mine

The right to mine requires a "miner's licence" or lease on Territorial lands in the Northwest Territories, and in Nova Scotia, Manitoba, and Alberta. No licence is required to mine in Yukon Territory.

A "certificate of record" is required in Newfoundland.

A "mining licence" is required in New Brunswick and Ontario.

A "development licence" is required in Quebec.

Grants of mining lands are made in the form of a lease, usually for 21 years, on Territorial lands, and in Nova Scotia, New Brunswick, and the Prairie Provinces. The grant in Quebec is either in the form of a "mining concession" by purchase, or worked under a "mining lease". In Ontario patents for lands granted convey the mines and minerals. In British Columbia the usual form of title is a grant in fee simple, usually termed a "Crown grant".

Claims

The size of claims varies somewhat according to the mineral product and the jurisdiction. A lode claim covers 51.65 acres in Territorial lands and on lands in the Prairie Provinces and in British Columbia, whereas it consists of 40 acres in New Brunswick, Newfoundland, Quebec, and Ontario.

¹ Fees for incorporated companies vary in each province and are shown in the schedule of fees under each section.

Coal leases on Territorial lands and in Alberta cover 2,560 acres (4 square miles). In Saskatchewan they are limited to three locations of 640 acres each.

Petroleum and natural gas leases vary from 640 acres (1 square mile) in Ontario and British Columbia, to 1,920 acres (3 square miles) in Alberta, Saskatchewan, Yukon, and the Northwest Territories.

Quarry claims vary from 40 acres to 160 acres.

Placer claims are divided into creek, river, and inland claims, and their sizes vary from 250 feet by 1,000 feet, to 1,000 feet by 1,000 feet.

Staking and Recording a Claim

The procedure for staking claims is explained in detail in handbooks

issued by the provincial Departments of Mines.

Mineral claims must be recorded in the Recorder's office, usually about 15 days from the date of location, and placer claims within one month. The holder of a claim must do a specified amount of development work each year, the amount of work and conditions varying with the province.

Coal mining rights, the property of the Crown, are usually leased at an annual rental of \$1 an acre for a period of 21 years, which is renewable for a further term of 21 years. The maximum area of a location is 2,560 acres. A greater area can be obtained only by assignment or transfer.

Petroleum and natural gas rights are usually leased at an annual rental of \$1 an acre for a period of 21 years, renewable for a further term of 21 years. The maximum location in Alberta is 1,920 acres, and the minimum 160 acres.

Railways

A railway is prohibited from locating its lines so as to affect any mine injuriously. The railway company is not entitled to the mines and minerals unless expressly conveyed. No one may operate for minerals within 40 yards of a railway unless by special lease.

Park Lands

Prospecting and mining are not allowed within the limits of Dominion or provincial parks. Certain exploratory and mining activities have been undertaken on a small scale in some of the National Parks, under the War Measures Act.

Water Rights

Water powers are usually reserved to the Crown and are not deemed part of a mining claim. Owners of claims or mining locations bounded by water courses or rivers have the use of these for working their property, subject to any provisions of the Acts concerned.

Timber Rights

Timber of all kinds is usually reserved to the Crown, upon lands sold as mining lands in a territory which is not under licence or a timber-limit. Licence for timber-limits is granted for the timber so reserved in favour of the Crown, upon such mining lands.

The owner or lessee of a mining claim is granted permission to cut and use timber for mining and fuel purposes either without payment or on such towns and conditions as the Minister may impose

such terms and conditions as the Minister may impose.

DOMINION LANDS¹

INTRODUCTORY

I.

The British North America Act, 1867, created the entity now known as the Dominion of Canada. At that time, however, the Dominion did not embrace the present wide territories. Up to 1868 Rupert's Land and the extensive and mainly unknown territories then referred to as the Northwestern Territory were either administered, by virtue of a charter granted by Charles II to certain merchant adventurers, by the Hudson Bay Company, or were not administered at all. The Rupert's Land Act of 1868 provided for the surrender of rights and privileges granted by the aforementioned charter. Rupert's Land and the Northwestern Territory were admitted to the Union in June 1870, under the name of Northwest Territories.

The Manitoba Act was passed in 1870 by which the Province of Manitoba was formed from part of the Northwest Territories. Yukon Territory was formed in 1897, Alberta and Saskatchewan in 1905, and the remainder of the territories continue to be known as the Northwest Territories.

In July 1930, the Dominion Government transferred to Alberta, Manitoba, and Saskatchewan the ownership and administration of their natural resources.

Newfoundland joined the Dominion of Canada as a province on March 31, 1949.

The Dominion lands which come under the Federal Acts and Regulations controlling mining are those in the Northwest Territories and Yukon, all Indian lands, and the National Parks.

From the beginning it was assumed that the lands and the prerogative rights in mines were in the Dominion.

The title issued for Territorial lands, the property of the Federal Government, in Yukon and the Northwest Territories, reserves to the Crown the mines and minerals that may be found on or under such lands, together with the right of the operation.

Minerals on vacant and certain other Dominion lands may be acquired by lease for a period usually of 21 years, renewable for further periods of like duration, on the terms and conditions specified in the various Acts and Regulations relating to Territorial lands.

¹ Prepared in collaboration with the Director, Northern Administration and Lands Branch, Department of Resources and Development, Ottawa.

REGULATIONS MADE UNDER THE TERRITORIAL LANDS ACT

QUARTZ MINING REGULATIONS

II. (Northwest Territories)

Persons 18 years of age or over, and any joint stock company incorporated or licensed to do business in Canada, shall be entitled to a "miner's licence" on payment of the fee as prescribed. Licences are obtainable from the Mining Recorders and Sub-Mining Recorders in the Territories and at Edmonton, or from the Director, Northern Administration and Lands Branch, Department of Resources and Development, Ottawa.

A licensee may stake six claims in his own name and six claims each for not more than two other licensees, or eighteen claims in all, in any one licence year, in any one mining division. Claims should not exceed 1,500 feet in length by 1,500 feet in breadth (51.65 acres) with boundary lines running as nearly as possible, north and south, and east and west, and marked on the ground with four legal posts, number one post to be placed on the northeast corner and lines to be blazed between each post.

Application for the grant of a claim must be made to the Mining Recorder for the district within 15 days of staking if the claim is within 10 miles of recorder's office, an extra day being allowed for each additional 10 miles or fraction thereof.

The Director of the Northern Administration and Lands Branch may grant a location for the mining of iron and mica, not exceeding 160 acres, provided that, should any licensee making any application purporting to be for the purpose of mining iron or mica, thus obtain possession of a valuable mineral deposit other than iron or mica, his right to such deposit shall be restricted to the area prescribed for other minerals, and the rest of the location in so far as such valuable deposit is concerned remains the property of the Crown. The grant issued for such location includes the right to the iron and mica only and does not include the surface (See Sect. 21 and 22 of the Act).

Claims may be held for a period of one year, and thence from year to year, without the necessity of re-recording, provided that development work to the value of \$100 is performed on the claim each year, and that the miner's licence of the recorded owner is kept renewed. Such claims, not exceeding 36 in number, may be grouped for the purpose of representation and work concentrated on one or more.

Every licensee has the right personally, but not through another except as provided for proxies, to enter, locate, prospect, and mine upon any vacant Territorial lands for the minerals defined in these Regulations, and upon all lands the right whereon so to enter, etc., is reserved to the Crown, and also to enter, etc., for gold and silver upon any lands the right whereon so to enter and mine gold and silver is reserved to the Crown. Permission must be obtained to enter upon lands occupied by buildings, under cultivation, land valuable for water-power purposes, National Parks, Indian reserves, etc. The Regulations do not provide for permission being granted for prospecting in National Parks, Indian reserves, etc.

All undrained or partly drained topographic basins in which natural deposits of soluble salts of sodium, potassium, and magnesium occur,

whether in a solid state or in solution, the property of the Crown, and including salt marshes, brine springs, and all other types of natural accumulations of soluble mineral salts are withdrawn from disposal under the provision of these regulations.

No person may enter upon private lands for mining purposes without

permission (See Sect. 15-17).

The recorded owner of the mineral claim is entitled to all the minerals as defined by the Regulations, but the surface rights either go with the claim, are granted by the Minister, or may be obtained by arbitration. Surface rights are especially excluded from the grant of mica and iron claims.

The Regulations contain provisions [See Sect. 71, (4)] for reserving any area containing limestone, granite, slate, marble, gypsum, marl, gravel, sand, clay, volcanic ash, or any building stone, and disposal of such materials may be made under permit at rates to be determined following inspection.

A lease is for a term of 21 years and is renewable. The rental is \$50 provided the claim does not exceed the maximum area of 51.65 acres. For each acre in excess of 51.65 the extra rental of \$5 is collected. (Quartz Mining Regulations, Sect. 96.) The fee for a renewal of a lease is \$200 for a further period of 21 years and for excess area at the rate of \$20 an acre.

In the case of a location for the mining of iron and mica, the rental is \$150 per claim (160 acres) for the first period of 21 years, and \$600 for a renewal period.

Treatment of Ores

All grants and leases are subject to the provision that all ores or minerals mined must be treated and refined within Canada, so as to yield refined metal or other product, suitable for direct use in the industry and the arts without further treatment. Iron ores produced in excess of smelter requirements from locations in any of the islands of Hudson Bay in the Northwest Territories may, however, be exported for treatment.

The lesseé of a mineral claim may obtain as a millsite a lease of a tract of available and unoccupied Crown land, not known to contain mineral of commercial value. Lands available for water-power purposes are not open to lease under these Regulations except by authority of the Governor in Council.

Royalties are payable annually on profits of a mine in excess of \$10,000 in any calendar year. (See Northwest Territories Quartz Mining Regulations P.C. 2318, May 1949.)

QUARTZ MINING ACT

(Yukon)

With a number of exceptions the Act for the disposal of quartz mining claims in Yukon is similar to that applying to the Northwest Territories.

Any person desiring to locate a mineral claim may, under the provisions of the Act, with respect to land located for this purpose, enter upon and locate a rectangular plot of ground not exceeding 1,500 feet in length

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by 1,500 feet in breadth (51.65 acres.) Every claim must be marked by two legal posts, one at each extremity of the location line. No mining licence is required.

Priority of location is deemed to convey priority of right to claims located. Priority of right is subject to the claims being recorded within 15 days after the location, if located within 10 miles of the recorder's office, and one additional day is allowed for each additional 10 miles.

No person is entitled during any period of 12 months to locate more than seven mineral claims within a distance of 10 miles of any other mineral claim, making a total of eight mineral claims.

Location may be granted for the mining of iron and mica, not exceeding 160 acres in area, and under similar conditions as for the Northwest Territories.

The rental fee for a mineral claim (51.65 acres) granted under lease for a term of 21 years is \$50, and the rental for a renewal term of 21 years is \$200.

The rental fee for an iron and mica claim (160 acres), for a term of 21 years is \$150, and the renewal fee is \$600.

The holder of a mineral claim may, in lieu of work required to be done each year, pay to the mining recorder \$100 a claim.

Payment may be made to the mining recorder of the sum of \$500 in lieu of work on a claim of the ordinary size, and in the case of a claim for iron and mica the payment is \$1,000.

The holder of a mineral claim by entry or lease located on vacant Territorial lands is entitled to all minerals within the meaning of the Act, found in veins, lodes, or rock in place, and whether such minerals are found separate or in combination with each other, together with the right to enter upon, use, and occupy the surface of the claim, including the right to the timber required for the working of the claim or such portion thereof as the Minister may consider necessary. (See Sect. 72.)

The surface rights may be leased under this Act at an annual rental of \$1 an acre, but only to the claim-owner.

PLACER MINING REGULATIONS

(Northwest Territories)

Claims may be staked out and acquired by any person 18 years of age or over. Claims must be as nearly as possible rectangular in form and marked by two legal posts, one at each end, and the line adjoining them marked. Placer claims are designated as "Creek claims", "River claims", and "Inland claims".

"Creek claims" must not exceed 500 feet in length measured along the base line of the creek, and the rear boundaries extend 1,000 feet on each side of the base line. A "River claim" must be situated on one side of the river only and must not exceed 1,000 feet in length measured in the general direction of the river. The rear boundary extends 1,000 feet from the lowwater mark of the river in width.

"Inland claims", that is claims situated elsewhere than on a creek or a river, must not exceed 1,000 feet in length by 1,000 feet in width.

A grant to a located claim for one year is obtainable on the payment of a fee of \$10 and is renewable at the annual rate of \$10, on the expenditure in development of \$100

in development of \$100.

Adjoining claims, not exceeding ten in number, may be grouped together for the performance of work. Adjoining claims exceeding ten in number, or any number of claims, some of which do not adjoin, may be grouped together for the performance of work under certain circumstances and with the approval of the Director.

Every claim-owner is entitled to the seepage water on his claim and to the use of so much of the water naturally flowing through or past his claim and not already appropriated as is deemed necessary for the proper working of the claim, and is entitled to drain his own claim free of charge.

The mining recorder may, with the approval of the Director, approve the granting for mining purposes and for a term not exceeding 5 years, or in special cases for longer periods, of the right to divert, take, use, or sell the water from any stream or lake, and the right-of-way through any mining property for the purpose of constructing and maintaining ditches or flumes to convey such water.

A royalty at the rate of 14 per cent of the value is levied on all gold recovered from claims in the Northwest Territories. Gold upon which royalty is payable is gold dust as mined or gold in the form of bars. (See Regulation governing Placer mining in the Northwest Territories, P.C. 2323,

May 1949.)

YUKON PLACER MINING ACT

This Act is very similar to the regulations applicable to the Northwest Territories. However, there are a few differences. For instance, a grant to a located claim is obtainable for a period of 1 or 5 years and the required annual expenditure in development is \$200 as against \$100 in the Northwest Territories. River and inland claims are only half the size of creek claims in Yukon. The royalty levied on all gold recovered is at the rate of $2\frac{1}{2}$ per cent of the value in Yukon, compared with $1\frac{1}{4}$ per cent in the Northwest Territories. Gold is given an arbitrary value of \$15 an ounce for royalty purposes under the Yukon Placer Mining Act.

DREDGING REGULATIONS

(Northwest Territories and Yukon)

A dredging lease conveys the exclusive right to subaqueous mining and dredging in not over 10 miles of a river bed in Yukon and the Northwest Territories. The term of the lease is for 15 years. The lessee is required to install a dredge within 3 years from date of the lease.

The lessee must pay for the first year a rental of \$100 for each mile of river leased and for each subsequent year a rental of \$10 for each mile, in advance. The cost for an application for a lease is \$5 and for the assignment of a lease it is \$3.

Royalty paid upon gold mined under a dredging lease is the same as is paid upon gold obtained from placer operations. (See Dredging Regulations for Northwest Territories and Yukon P.C. 2319, May 1949.)

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COAL MINING REGULATIONS

(Northwest Territories and Yukon)

The coal mining rights, the property of the Crown in the Northwest Territories and Yukon may be leased at an annual rental of \$1 an acre, payable yearly in advance. These Regulations, which were made under the Territorial Lands Act, do not apply to school, park, or other reserved lands.

The lease is for 21 years, renewable for a further term of 21 years.

A fee of \$5 must accompany each application for a lease.

The maximum area that may be granted under lease to one applicant is 2,560 acres, and the length of the location must not exceed four times its breadth. In unsurveyed territory the location must be staked by the applicant personally, and personal application must be made to the mining recorder for a lease. Such location must be marked on the ground by two legal posts, one at each end of the longest dimension, and a line must be marked out joining the posts. In surveyed territory personal application only is necessary.

The lease conveys the coal mining rights only, but surface rights may be obtained by arbitration if already disposed of, or under lease from the Crown if vacant. There is no limit to the area that may be

acquired by assignment.

Indians or Eskimos in isolated localities may be granted permission to mine small quantities of coal for their own use or for sale to others in

their locality.

The rental fee is \$1 an acre per annum. In addition to the rent, there is a royalty per short ton (2,000 lbs.) at a rate to be set by Order in Council. (Regulation for disposal of coal mining rights in Yukon and Northwest Territories, P.C. 2321, May 1949.)

REGULATIONS FOR ISSUE OF PERMITS TO MINE COAL FOR DOMESTIC PURPOSES

(Northwest Territories and Yukon)

Coal mining rights, the property of the Crown, in the Northwest Territories and Yukon may be acquired by any person under permit, at an annual rental of \$5. These provisions do not apply to school and park lands or other reserves. The permit does not convey the right to sell any of the coal mined from the location.

The maximum area of a coal mining location that may be acquired is limited to one acre, and no person may hold more than one permit. The coal mining location must not exceed 3 chains in width and 5 chains

In addition to the rental, a royalty at the rate of 25 cents per short ton is levied on the merchantable output of the mines.

In isolated positions in both Territories, Indians and Eskimos are

granted the same privileges free of charge.

(See Regulations re Permits to Mine Coal for Domestic Purposes in the Northwest Territories and Yukon, P.C. 2320, May 1949.)

REGULATIONS FOR DISPOSAL OF PETROLEUM AND NATURAL GAS RIGHTS

(Northwest Territories and Yukon)

The Minister may issue to any person a permit conveying the exclusive right to explore for petroleum and natural gas on Crown lands in the Northwest Territories and Yukon.

The maximum area that may be held under one permit is 64,000 acres, and the minimum area, 32,000 acres. Every such area must be rectangular in form, the length being not greater than three times its breadth, and may be staked in any direction, except under special conditions such as the proximity of navigable rivers.

No person may at any one time hold more than eight permits. A permit is valid for a period of 3 years and is renewable for a similar period. The location must be personally staked and applied for in the same manner as for coal.

The fee for a permit is \$250. This amount must be accompanied by a deposit equivalent to the value of 5 cents for each acre included in the application, to cover the first 18-month period of the permit, and at the expiration of this period the permittee must make a deposit of 25 cents for each acre included in the permit. For a renewal, the applicant must make a deposit to the value of 30 cents, 40 cents, and 50 cents for the 4th, 5th, and 6th year for each acre included in the permit. The deposit is returnable on proof of work being furnished.

The permittee may acquire leases to an area not exceeding 35 per cent of the area originally held, provided that the total area acquired under lease by any one person does not exceed 128,000 acres. Nevertheless, a person can hold more than 128,000 acres under lease if the excess is obtained by assignment.

The lessee must pay a rental of 50 cents an acre for the first year, and \$1 an acre for each succeeding year. The lease is for 21 years and is renewable.

The area of a petroleum and natural gas "leasehold" must not exceed 2,560 acres and the minimum area is 1,280 acres. A fee of \$5 must accompany each application for a lease.

The lessee must, within one year from the date of the lease, have upon the property machinery and equipment suitable for carrying on drilling operations, and he must commence drilling operations within 15 months of the date of his lease and continue such drilling operations with reasonable diligence, with a view to the discovery of petroleum or natural gas.

A lessee who has acquired more than one lease may consolidate his operations and expenditures and install machinery and equipment on one or more of the locations, but the maximum area included in one consolidation must not exceed 30,720 acres, nor must the location be separated one from the other by more than 2 miles. The lessee must, before beginning drilling operations, notify the supervisory engineer.

Royalty

The products obtained from any location, not including natural gas and natural gasoline, are subject to the payment of a royalty. For the first 5 years from the date that commercial exploitation has commenced, the rate is $7\frac{1}{2}$ per cent of the products; for the second 5 years, 10 per cent; and thereafter, $12\frac{1}{2}$ per cent.

Natural gas and natural gasoline recovered and not used by the lessee are subject to such royalty as may be determined.

(See Regulations for Disposal of Petroleum and Natural Gas Rights in the Northwest Territories and Yukon. P.C. 2322, May 1949.)

QUARRYING REGULATIONS

(Northwest Territories)

Territorial lands containing limestone, granite, slate, marble, gypsum, marl, gravel, sand, clay, volcanic ash, or building stone, may be leased at an annual rental of \$1 an acre. The lease is for a period of 21 years and is renewable. The maximum area to one applicant is 40 acres. It must not exceed one-half mile in its greatest dimension, nor must the length exceed twice its breadth. A railway company or municipality requiring material for construction or maintenance of railway or municipal works may acquire more than one location. The location must be staked out if situated in unsurveyed territory.

A fee of \$5 must accompany each application for a lease, and the rental is \$1 a year an acre.

(See "The Quarrying Regulations", P.C. 2324, May 1949.)

REGULATIONS AFFECTING SAND AND GRAVEL PERMITS

(Northwest Territories)

Permits are granted for one year and convey the right to remove a specified number of cubic yards of sand, stone, and gravel from a portion of a bed of a river, or lake, to be described in the permit. A fee of \$1 is charged with dues at the rate of one cent per cubic yard for the quantity of material in excess of 1,000 cubic yards included in any one permit.

(See "The Northwest Territories Sand, Stone, and Gravel Regulations", P.C. 2325, May 1949.)

MISCELLANEOUS ACTS

III.

ORDINANCE TO REGULATE THE SALE OF UNWROUGHT METALS

An Ordinance cited as "The Unwrought Metals Sales Ordinance" was assented to by the Commissioner of the Northwest Territories, on February 17, 1949.

Unwrought metal means gold, silver, platinum, or other precious metal in (a) bars, ingots, buttons, beads, sheets, rods or wire; and (b) concentrates, nuggets, or residues obtained in the smelting, refining or other

treatment of substances containing any of such metals, and includes ores of such metals where the value of the ore is in excess of 25 cents per pound avoirdupois weight.

Licences are issued to such persons as may comply with the prescribed conditions to buy, sell, etc., unwrought metal. The fee for a licence is \$2 and is renewable annually.

No licence is required by: (a) any person purchasing unwrought metal from a licence holder in a form suitable for use in any art, profession, science, or industry; nor (b) any person selling gold, silver, platinum, or other precious metal not exceeding a total quantity of three troy ounces in any calendar year.

The Commissioner in council has made regulations regarding the licences, fees, or other related matters.

The Ordinance does not apply to any assay office carried on and operated in the Northwest Territories by the Dominion Department of Resources and Development, and the Commissioner may exempt any mining company or the proprietor or operator of any mine, or any museum, university, or other educational institution, or any department of the government of a province of Canada from the provisions of this Ordinance.

LIST OF ACTS AND REGULATIONS

IV.

Acts

The Territorial Lands Act. Yukon Placer Mining Act. Yukon Quartz Mining Act.

Regulations		olicable to
Dredging Regulations	\mathbf{Y} ukon	and N.W.T.
Petroleum and Natural Gas Regulations	"	"
Coal Mining Regulations	. "	"
Domestic Coal Permits	u	"
Placer Mining Regulations	Northwe	est Territories
Quarrying Regulations	"	u
Quartz Mining Regulations	"	"
Permits to Remove Sand, Stone, and Gravel		
from the beds of rivers	•••	••

ROYALTIES

V.

Coal. Twenty-five cents per ton, under the Domestic Coal regulations. At such rate as may be prescribed under the Coal Mining regulations.

Petroleum and Gas. May be charged, varying from $7\frac{1}{2}$ to $12\frac{1}{2}$ per cent of the value of the product.

Placer. Two and one-half $(2\frac{1}{2})$ per cent on gold shipped from Yukon territory, and $1\frac{1}{2}$ per cent for the Northwest Territories, with gold valued arbitrarily at \$15 an ounce for royalty purposes.

BOUNTIES

VI.

VII.

Coal. Payment out of Consolidated Revenue Fund of 49½ cents per ton of bituminous coal mined in Canada and converted to coke used in the manufacture of iron and steel.

SCHEDULE OF FEES

Applications for all leases	5.00
Rentals—	
Quartz (N.W.T. and Yukon) for first period of 21 years	50.00
For renewal of period	200.00
Surface leases, per acre, per annum	1.00
Coal and Quarrying leases, per acre, per annum	1.00
Petroleum and Gas permits in Northwest Territories and Petroleum and	
Gas leases, 50 cents per acre for first year and \$1 per acre for subsequent	
years.	

Petroleum and Gas Permits, 25 cents per acre with cash bond at rate of 30 cents per acre.

Dredging, \$100 per mile first year, and \$10 per mile subsequent years.

The quartz Mining Regulations, Yukon Quartz Mining Act, Placer Mining and Yukon Placer Mining Act contain a full tariff of various charges authorized under them and are as follows:

Placer Mining in Yukon—(Schedule D)

For grant of a claim for one year	10.00
For grant of a claim for five years	50.00
For renewal of grant of a claim for one year	10.00
For a grouping certificate—	
Ten claims or under	5.00
Over ten claims	5.00
For each claim over ten	1. 0 0
For grant of water—	
Of 50 inches or less	10.00
From 50 to 200 inches	25.00
From 200 to 1,000 inches	50.00
For each additional 1,000 inches or fraction thereof	50.00

Quartz Mining in Yukon—

·	
Recording mineral claim\$	
For a substitutional record	10.00
Application for a lease and issue of same	10.00
Recording every certificate of work	5.00
For a certificate of improvements	5.00
For a grouping certificate	5.00
For a certificate of partnership	5.00
Recording assignments, abandonments, affidavits, or any other document	2.50
If document affects more than one claim, for each additional claim	1.00
For granting period of six months within which to record	4.00
For an abstract of the record of a claim,	
For the first entry	4.00
For each additional entry	.50
For copies of any documents recorded where same do not exceed three	
folios	4.00
(Where such copies exceed three folios, 30 cents per folio for every	
folio over three).	4.00
For recording a power of attorney to stake from one person	4.00
For recording a power of attorney to stake from two persons	8.00
For recording an assignment of a quartz mining lease	3.00
Rental, whole or fractional mineral claim granted under lease for term	
of 21 years	50.00
Rental for renewal term of 21 years	200.00
Rental iron and mica claim as defined by Section 18	150.00
Rental for renewal term of 21 years iron and mica claim	600.00
TTT1	

When powers of attorney to stake and permission to record within six months relate to placer mining claims also, the fees prescribed by the Placer Mining Act and Regulations shall be collected in addition to the fee prescribed by these regulations.

Placer Mining in Northwest Territories—(Schedule D)

For grant of a claim for one year\$	10.00
For renewal of grant of a claim	10.00
Recording an abandonment	2.00
Registration of any document	3.00
If it affects more than one claim, for each additional claim	.50
For filing any document	1.00
Extension of time	5.00
For grant of water—	
Of 50 inches or less	5.00
From 50 to 200 inches	10.00
From 200 to 1,000 inches	20.00
For each additional 1,000 inches or fraction thereof	20.00

Quartz Mining in Northwest Territories

For a miner's licence or renewal thereof for an individual\$	5.00
For an individual miner's licence issued on or after the 1st October in any year.	3.00
For renewal of a miner's licence of a mining partnership having not more than two partners	5.00
For renewal of a miner's licence of a mining partnership having more than two but not more than five partners	10.00
For renewal of a miner's licence of a mining partnership having more than five partners	20.00

The fee for a miner's licence or renewal thereof for an incorporated company shall be based on the total value of all authorized shares of the company according to the following scale, provided, however, that in no case shall the value of any share having a par value be considered to be less than its par value, nor shall the value of any no-par value share be considered to be less than one dollar (\$1):

(a) Where the total value of all authorized shares of the company does	
not exceed \$40,000, the fee shall be\$	25.00
(b) Where the total value of all authorized shares of the company	
exceeds \$40,000 but does not exceed \$100,000, the fee shall be	50.00
(c) Where the total value of all authorized shares of the company	
exceeds \$100,000 but does not exceed \$500,000, the fee shall be	75.00
(d) Where the total value of all authorized shares of the company exceeds	
\$500,000 but does not exceed \$1,000,000, the fee shall be	100.00
(e) Where the total value of all authorized shares exceeds \$1,000,000 but	
does not exceed \$10,000,000, for each million dollars value, or fraction	
thereof, the fee shall be	100.00
(f) Where the total value of all authorized shares exceeds \$10,000,000,	
the fee shall be1,	00.00

Provided that in cases where the licence fee, as calculated above, would be in excess of one hundred dollars (\$100) and it is by affidavit of the president or secretary of the company proved to the satisfaction of the Minister that a part of the capital of the company is being used in other business enterprises and not in mining on Dominion lands in the Northwest Territories, such part may be deducted from such total value for the purpose of fixing the fee but not so as to reduce the fee for licence or renewal thereof below \$100. Full information must be supplied in the affidavit of the president or secretary with regard to the name, nature and location of, and the amount of capital in each of the other enterprises referred to in this paragraph for which a deduction is claimed.

If the market value of a par value share of a company exceeds its par value, or if the market value of a no-par value share exceeds one dollar (\$1), the market value of all the shares of a company exceeding par value in the case of par value shares, or one dollar (\$1) in the case of no-par value shares at the time of application for a licence or renewal thereof, shall be considered as the value of those shares in ascertaining the total value of the authorized shares of the company for the purpose of fixing the fee for licence or renewal thereof.

Whenever a miner's licence for a company is issued on or after the 1st October in any year, the fee shall be only one-half the amount above specified.

For recording each claim, located by a licensee on his own licence\$	5.00
For recording each claim by a licensee on behalf of another licensee.	10.00
For application for a certificate of work	2.50
For recording with the mining recorder a transfer, agreement of sale, option,	
power of attorney, revocation of a power of attorney, copy of a writ	
of execution, discharge of execution or any other instrument affecting	
any recorded claim, right or interest, for each claim	2.00
For a substitutional miner's licence	1.00
For a special renewal licence under Section 68 to save forfeiture, twice the prescribed licence fee.	
For filing report of work under Section 68 to save forfeiture	10.00
For application for a lease of surface or mineral rights	10.00
For recording a certificate of revocation of agent and appointment of a	
new agent for a mining partnership	1.00

For a grouping certificate	5.00
Rental of a claim, for the first period of twenty-one years	50.00
Rental of excess area, for first period, per acre	5.00
Rental for renewal period	200.00
Rental of excess area for renewal period, per acre	20.00
Rental for fractional claim	25.00
Rental for surface lease, for each acre, per annum	1.00
Registration of an assignment of a lease	3.00
For a substitutional record of entry	10.00
For application for a certificate of improvements	2.50

REPRESENTATIVES VIII.
Minister
MINING RECORDERS: G. M. Webster. Yellowknife, N.W.T. G. M. Webster. Fort Smith, " W. G. Brown. Dawson, Yukon. J. D. Dines. Mayo, " G. A. McIntyre. Whitehorse, " W. M. Emery.

For copies of any of the above regulations apply to the Director, Northern Administration and Lands Branch, Department of Resources and Development, Ottawa.

MINING LAWS AND REGULATIONS PERTAINING TO INDIAN RESERVES

(Administered by the Dominion Government¹)

INTRODUCTORY

I.

Disposal of minerals on an Indian reserve is authorized under Section No. 50 of the Indian Act subject to the condition that the consent of the Indian band occupying the reserve must first be obtained.

To some extent the mining laws of the province in which the Indian reserve is situate are operative, but the manner of such disposal is governed by two sets of regulations established by Federal authority and administered by the Indian Affairs Branch of the Department of Citizenship and Immigration. These regulations deal respectively with the disposal of (a) Petroleum and Natural Gas, and (b) the metallic and non-metallic minerals. It should be noted that in all cases the consent and approval of the Indian band is the first requisite.

A summary of such regulations is as follows:

PETROLEUM AND NATURAL GAS

II.

Permits to prospect for petroleum and natural gas are granted on areas of 2,560 acres up to 10,240 acres, for a period of one year. The minimum rental of 10 cents per acre may be increased by competition for reserve lands in active prospecting areas.

The maximum area of a petroleum and natural gas lease is 2,560 acres and the minimum area is 160 acres. Leases are granted for a term of 21 years, renewable, the rental being at the rate of 50 cents per acre for the first year and \$1 per acre for each subsequent year, the royalty being up to 15 per cent of the saleable value of the output.

Drilling operations must be commenced within three months of the date of issue of the lease and control of such operation is maintained by the Department as affecting the access of water and gas to the oil-bearing formation. Provision is made for a reasonable annual expenditure by the lessee on development work in the first two years. No well can be drilled within 300 feet of any road allowance, railway right-of-way, etc., without the written consent of the Minister or Director.

The lease does not include the oil shale rights to the land or to the oil which may be recovered from such shales by the process of extraction customary in such cases.

Surface rights may be leased at an annual rental of \$1 per acre and must be concurrent with the petroleum and natural gas lease.

¹ Prepared in collaboration with Major D. M. MacKay, Director, Indian Affairs Branch, Department of Citizenship and Immigration, Ottawa.

MINERALS

Reserves may be declared by the Minister open for prospecting and staking after the minerals have been surrendered by the Indians, and permits to prospect are granted by the Director to reputable persons who hold a Provincial miner's licence. The mode of staking and the size and number of mineral claims must conform to the mining laws of the province in which the reserve is situated.

Mineral claims must be recorded within 30 days from the date of staking and recorded holders thereof must perform specified assessment work within a period of 5 years from the date of recording. If such work is performed within the first two years no rental is charged, but if not completed within that period, rental at the rate of 50 cents per acre per annum must be paid during the third, fourth, and fifth year.

Sworn statements as to the progress of assessment work must be furnished at regularly stated intervals and provision is made for com-

pensation to be paid to the Indians for any damage to their improvements, for the reservation of timber, and for Departmental inspection of the

records of lessees.

Upon completion of assessment work and a proper survey of the claim being made by the recorded holder a long term lease (21 years) may be granted on payment of rental at the rate of \$1 per acre per annum for the first 5 years, \$1.50 per acre per annum for the second 5 years, and \$2 per acre per annum for the remaining 11 years.

Royalty is payable in proportion to the annual net profits and at

specific rates. (See under Sect. V, Royalties.)

Under the British Columbia Indian Reserves Mineral Resources Act, when minerals in Indian reserves in the Province have been surrendered by the Indians, they come under the administration of the Department of Mines in British Columbia.

LIST OF REGULATIONS

IV.

Regulations respecting Petroleum and Natural Gas on Indian Reserves. Regulations for the disposal of Quartz mining claims within Indian Reserves.

ROYALTIES

V.

Petroleum and Natural Gas Up to 15 per cent of the output.

Quartz Mining:

1. Upon annual profits up to \$100,000	3	per cent
2. On the excess above \$100,000 up to \$200,000	4	- "
3. On the excess above \$200,000 up to \$300,000	5	"
4. On the excess above \$300,000 up to \$400,000	6	"
5. On the excess above \$400,000 up to \$500,000	7	"
6. On the excess above \$500,000 up to \$600,000	8	"
7. On the excess above \$600,000 up to \$700,000	9	"
8. On the excess above \$700,000	1 0	44

BOUNTIES

VI.

None.

SCHEDULE OF FEES

VII.

Petroleum and Natural Gas	
Permit to prospect\$	5.00
Application for lease	5.00
Registration assignment	5.00
Quartz Mining	
Permit to prospect or renewal thereof	5.00
Recording each claim	10.00
Transfer or agreement to sell or transfer the whole or part of a mineral	
claim	2.00
Recording extension of time for performing assessment work and survey	3.00
Application for lease of mineral claim	5.00
Certificate for relieving from disqualification under Sect. 13	20.00
Abstract or copy of entries in record book respecting any mineral claim,	10
per folio (100 words)	.10
Minimum charge per claim	.25

REPRESENTATIVES

VIII.

Director					 D.	Μ.	MacKay.
Superintendent	of	Reserves	and	Trusts	 D.	J	Allan.

For more detailed information and copies of the Regulations pertaining to Indian reserves apply to the Director, Indian Affairs Branch, Department of Citizenship and Immigration, Ottawa.

OTHER DOMINION LEGISLATION AFFECTING MINING

ATOMIC ENERGY CONTROL BOARD

Radioactive Minerals

Under the authority of The Atomic Energy Control Act, 1946, the Atomic Energy Control Board is given wide powers over the production, manufacture, sale, and use of radioactive materials. Under the Atomic Energy Regulations of Canada no person may produce, buy, sell, import, export, or use radioactive materials or special equipment which can be used for the release of atomic energy except in accordance with these Regulations, or with the permission of the Board.

Any person who finds a mineral deposit containing uranium or thorium or who performs an analysis of a radioactive mineral must report his findings to the Director, Geological Survey of Canada, Department of Mines and Technical Surveys, Ottawa, who is acting in this connection on behalf of the Atomic Energy Control Board. These findings and other information about such deposits where working has not reached the production stage may be made public. Exploration (beyond the stage of prospecting) and mining of a radioactive mineral deposit may be undertaken only with the permission of the Atomic Energy Control Board. The uranium mined must be sold to the Canadian Government through Eldorado Mining and Refining (1944), Limited.¹

THE INCOME TAX ACT

This Act is administered by the Taxation Division of the Department of National Revenue. Legislation under the Act which particularly affects mining enterprises is summarized hereunder.

The Dominion income tax rate on all corporation incomes where companies do not consolidate their incomes with subsidiary companies is, beginning with the taxation year 1949:

- (a) 10 per cent of the taxable income if such is less than \$10,000 and
- (b) \$1,000, plus 33 per cent of the amount by which the taxable income exceeds \$10,000.

In the case of consolidated incomes an amount equal to 2 per cent of the consolidated income is added to the tax computed at the foregoing rates. Mining and oil companies, however, are allowed a special deduction for depletion in the calculation of their taxable profits. This allowance is granted in recognition of the fact that production involves exhaustion of the natural resource. The depletion allowance rates in respect of various deposits are as follows:

(a) All metalliferous mines (except gold mines) and all industrial mineral mines operating on non-bedded deposits, 33½ per cent of net profits.

¹ Further information may be obtained on application to the Director, Geological Survey of Canada, Department of Mines and Technical Surveys, Ottawa.

- (b) Gold mines, the value of whose production is more than 70 per cent from gold, the greater of either 40 per cent of net profits or \$4 per ounce of gold produced in taxation period.
- (c) Coal mines, 10 cents per ton of coal mined.
- (d) Oil and gas wells, $33\frac{1}{3}$ per cent of net profits.
- (e) Industrial mineral mines in bedded deposits, at a rate based on the apparent life of the mine.

The depletion allowance is calculated after allowing for depreciation and all operating expenses, including an allowance to cover the taxpayer's pre-production development expenses, but no depletion is allowed on income from sources such as dividends, interest, rentals, etc.

Shareholders resident in Canada are allowed in the calculation of their taxable income to deduct 20 per cent from dividends received from Canadian oil or gas companies or mining companies which derive their profits directly from the operation of oil or gas wells or from metalliferous and certain industrial mineral mines.

To stimulate further exploration and development of Canada's mineral resources certain mines are granted a period of exemption from Dominion income tax following the commencement of production. Section 74 of the Income Tax Act authorizes the exemption from tax of the profits derived from the operation of a metalliferous mine or an industrial mineral mine operating on a non-bedded deposit which came into production between January 1, 1946 and December 31, 1952. The exempt period is three fiscal years following the date when the mine was determined to have come into production in reasonable commercial quantities. However, those mines that came into production before January 1, 1947 are subject to tax on any profits they may have earned in that part of their exempt period which occurred in 1946. In addition, a preliminary period not exceeding six months following the date when the milling or shipping of ore commenced is tax free. This period is allowed for tuning up, adjustments, and absorption.

Special Tax concessions introduced as a war measure to encourage the search for minerals, petroleum, and natural gas allow certain classes of taxpayers to deduct expenditures on prospecting or exploration from their taxable income. These deductions are allowed only in respect of exploration from which no production resulted.

FEDERAL FINANCIAL ASSISTANCE TO THE CANADIAN COAL INDUSTRY¹

The Dominion Coal Board is in charge of the administration of the various Orders in Council which have been passed since March 1928, authorizing assistance to the Canadian coal industry, as well as the supervision of payments to coke plants operating under the Domestic Fuel Act, 1927.

The Orders in Council deal with the movement of Canadian coals from Eastern and Western Canada to the Provinces of Ontario and Quebec. There are also provisions relating to inland rail of water-borne coal.

¹ The Maritime Coal Production Act was passed in 1919 and came into force on January 7, 1950. Provisions of the Act are given on page 133 of the Supplement to this report.

Competition of foreign coals at different points in Ontario and Quebec have had a direct bearing upon the application of these dispositions, and the situation consequently has necessitated a great deal of investigation by the Board.

The total coal moved with the assistance of the Government from 1928 to the end of 1948 amounted to approximately 35,486,730 tons, at a cost to the Government of approximately \$43,337,716 or \$1.22 per ton.

COAL USED IN THE MANUFACTURE OF IRON OR STEEL

An Act to place Canadian coal used in the manufacture of iron or steel on a basis of equality with imported coal was assented to in May 1930.

This Act was passed to implement the recommendation of the Royal Commission on Maritime Claims, and the provisions are as follows:—

- 1. So long as the provisions of tariff item No. 1019 in schedule B to the Customs Tariff remain in full effect, the Governor in Council may authorize the payment, out of the Consolidated Revenue Fund to manufacturers of iron or steel, of 49½ cents per ton of bituminous coal mined in Canada and converted into coke by a proprietor of coke ovens at his coke ovens in Canada, and used by such manufacturers in the smelting in Canada of iron from ore or in the manufacture in Canada of steel ingots or steel castings. No such payments shall be made more than once in respect of any coal so used.
- 2. No payment shall be made to any person or corporation entitled to receive any payment under this Act, or any drawback under the tariff item mentioned in the preceding section, where it is shown to the satisfaction of the Governor in Council that such person or corporation is not complying with laws enacted by the province in which the industry concerned is operating, for the purpose of maintaining in the operation of such industry hours of labour and rates of wages consistent with the provisions of any international convention adopted by a labour conference held under the Treaty of Versailles.
- 3. The Governor in Council may make regulations to carry out the intentions of this Act.
- 4. The Minister of Trade and Commerce is charged with the administration of the provisions of this Act.

Claims relating to the use of Canadian coals in the manufacture of iron and steel and the payments made from 1930 to December 31, 1948 were, respectively, 9,489,150 tons and \$4,697,130.

ELECTRICITY AND FLUID EXPORTATION ACT

The Act and Regulations are administered by the Standards Division of the Department of Trade and Commerce.

This Act, passed in 1907 as Chapter 16, and revised in 1927, Chapter 54, R.S. 1927, regulates the exportation of electric power and of petroleum, natural gas, water, or other fluid, whether liquid or gaseous, capable of being exported by means of pipelines or other like contrivances, and produced in Canada. The Regulations governing the exportation of electric

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energy, petroleum, natural gas, water, or other fluid have been established, and those in force now were established by Order in Council P.C. 5179

dated November 10, 1948.

The Act provides for the imposing of export duties not exceeding \$10 per annum per horse-power, upon power exported from Canada, or not exceeding 10 cents per 1,000 cubic feet on fluid exported from Canada. Exempt from a payment of such duties are such persons as comply with the direction of the Governor in Council in regard to the quantity of power or fluid supplied by such persons for distribution to customers for use in Canada.

A licence granted by the Governor in Council is required before any power or fluid may be exported. The licence may provide that the quantity of power or fluid to be exported shall be limited to the surplus after the licensee has supplied, for distribution to customers for use in Canada, power or fluid to the extent defined by such licence, at prices and in accordance with conditions, rules, and regulations prescribed by the Governor in Council.

A licence is required permitting the construction or placing in position of any line of wire or other conductor for the exportation of any power or fluid. This licence also is granted by the Governor in Council.

Every licence shall terminate on the last day of March next following its effective date, unless an earlier date of termination is specified in the licence. The fee for any licence is \$25.

THE EMERGENCY GOLD MINING ASSISTANCE ACT

This Act, which came into force on June 15, 1948, provides "cost-aid" assistance to the operators of Canada's primary gold mines towards meeting the large post-war increases in costs of production of gold which under the law is saleable in Canada only at the pre-war fixed price of \$35 per ounce.

Under the Act the Minister of Mines and Resources is authorized to make assistance payments to these primary gold mine operators in respect of gold produced from their mines and sold to the Royal Canadian Mint or exported during each of three "designated years", which are the calendar years 1948, 1949, and 1950.

In the case of an old mine, that is, a mine whose first year of production ended prior to January 1, 1948, the amount of assistance payable to its operator in respect of gold produced and sold in a designated year is equal to the "rate of assistance" for the year multiplied by the number of ounces of gold by which the number produced from the mine and sold in the year exceeds two-thirds of the number of ounces produced from the mine in its "base year".

Provision is made that in the case of a new mine, that is, a mine whose first year of production is partly or wholly in the designated years to which the Act relates, the rate of assistance for the designated year shall apply to the total number of ounces produced from the mine in that part of the first year of production which is part of the designated year, and also to the number of ounces produced and sold in the remaining part of the designated year that exceeds two-thirds of the number of ounces produced in the corresponding part or fraction of the base year.

The "rate of assistance" for a mine in a designated year is an amount per ounce equal to one-half of the amount by which the cost per ounce of production of gold from the mine for the year exceeds \$18, the maximum

rate of assistance allowable being \$16.

The "base year" of a mine which commenced production prior to July 1, 1946, is the year ending June 30, 1947, or, if its operation was suspended during the whole of that year, the period of twelve months following its resumption of operation after June 30, 1947. The "base year" of all other

mines is the "first year of production".

The commencement of the "first year of production" for the purpose of the Act is determined on the same basis as the beginning of the three-year exemption from income tax provided under Section 4 (x), Income War Tax Act, whether the latter applies or not. Under such basis the first year of production is deemed to have begun at the end of a tuning-up or adjustment period not exceeding six months following the starting of milling ore at the mine with a commercial milling unit, or, if the ore is not milled at the mine, following the beginning of ore shipments from the mine.

The cost of production of gold from a mine during any period is deemed for the purposes of the Act to be the cost incurred by its operator in, and properly attributable to, the production of the gold so produced, and includes mining, milling, smelting, refining, transportation, and administrative costs so incurred and attributable; also such amounts in respect of depreciation, amortization of pre-production expenses, and costs of exploration and development in the mine as are prescribed in the Regulations, but does not include any amount in respect of depletion or off-property exploration and development, or, subject to the Regulations, any amount in respect of any matter for which a deduction is not allowed in determining income from the mine for the purposes of the Income War Tax Act.

The Regulations provide for the making of adjustments to base year production in cases where the mine suspends operation for periods of at least thirty consecutive days and prescribes the methods employed in calculating the amounts of assistance payments where similar suspensions of operation during a designated year occur for specified reasons beyond

the control of the operator.

Provision is made for the payment of advances to the amount of 80 per cent on account of assistance payments in respect of quarterly periods

in the designated year.

Application forms, as prescribed in the Regulations, also copies of an Office Consolidation of the Emergency Gold Mining Assistance Act and the Regulations thereunder may be obtained from the Director General of Scientific Services, Department of Mines and Technical Surveys, Ottawa, Canada.

THE EXPLOSIVES ACT, 1946¹

This Act regulates the manufacture, testing, sale, storage, and importa-

tion of explosives.

Only explosives which after testing have been declared authorized by the Minister of Mines and Technical Surveys may be manufactured or imported. Manufacturers, by regulations made under the Act, are required

¹ Prepared in collaboration with W. P. Campbell, Chief Explosives Inspector, Explosives Division, Mines Branch, Department of Mines and Technical Surveys, Ottawa.

to disclose the composition of each explosive, and all explosives when authorized must be made to conform within narrow limits to the formula approved when authorized.

The distribution of buildings in explosives factories, the quantity of explosives in each, the conduct of operations and other factors bearing on the safety of personnel and the public are controlled by licences issued under authority of the Act. Compliance with the Terms of Licence is

checked by frequent inspection.

The establishment of magazines for use in construction work, logging, etc., is subject to like licensing and inspection, but the storage of explosives at and for the use of mines and quarries in a province in which provision is made by law for efficient inspection of mines and quarries is not controlled by regulations under the Explosives Act. Provision is made by regulation for the sale of explosives by a mine operator for use in the mine, to miners or contract workers. Sales are also permitted, without licence, to bona fide prospectors. Storekeepers carrying small stocks of explosives for sale are required under the Act to have their premises certificated and such premises are subject to periodic inspection.

The sale of rifle, revolver, or pistol ammunition of calibre greater than .22 is controlled by general regulations the enforcement of which requires

much inspection work.

GOLD EXPORT ACT

An Act respecting the export of gold from Canada was passed in

May 1932.

The Act, as amended in 1935, provides that the Governor in Council may prohibit from time to time and for any period or periods the export of gold whether in the form of coin or bullion from the Dominion of Canada, except in such cases as may be deemed desirable by the Minister of Finance and under licences to be issued by him, provided that no such licence shall be issued to other than a Canadian chartered bank, or the Bank of Canada.

The Act also provides for the making of any necessary regulations to

ensure the carrying out of the provisions and the intent of the Act.

The regulations as passed in 1932, and amended in 1935 and 1948 are

mainly as follows:

The export of gold, whether in the form of coin or bullion (bullion to include gold from ore, concentrates, or base bullion), from the Dominion of Canada, is hereby prohibited except in such cases as may be deemed desirable by the Minister of Finance, and under licences to be issued by him. No such licence shall be issued to other than a Canadian chartered bank or the Bank of Canada.

LIST OF ACTS

Atomic Energy Control Act, 1946.
 Department of Mines and Resources Act.

3. Dominion Coal Board Act, 1947.

4. Electricity and Fluid Exportation Act, 1927. 5. Emergency Gold Mining Assistance Act.

6. Explosives Act, 1946.

7. Gold Export Act, 1932, and amendments.

8. Income Tax Act.

NEWFOUNDLAND1

INTRODUCTORY

I

Newfoundland became a province of Canada on March 31, 1949.

The first mining law of Newfoundland, passed in 1860, empowered the Governor to issue grants in fee or for terms of 99 years on a royalty basis. In 1872 the statutes of Newfoundland were consolidated and the law relating to mines and minerals formed Chapter 47 of the consolidation. Amendment followed amendment up to 1903, after which year the law remained substantially the same until 1930 when "The Crown Lands Act, 1930" was passed. This Act is similar in general principles to the Ontario Mining Act.

Prior to 1930, all Crown lands were administered under Chapter 129 of the Consolidated Statutes by which original discoveries were marked by a stake placed on the centre of the discovery. A mining claim was then laid out in the form of a rectangle of one mile by one-half mile, having the greater length parallel to the strike of the discovery. The Minister of Natural Resources then placed on a plan in his office a section of the area having claims laid out in the form of rectangles one mile by one-half mile, parallel to the original discovery location. These claims were numbered and any interested party could obtain a one-year licence for a claim by applying at the office of the Minister. Applications for a 99-year lease had to be made before the expiry of the one-year licence, and a survey was required within the first year. Upon expenditure of the sum of \$6,000 within the first five years of the 99-year lease, a grant in fee simple could be obtained. Under this Act no royalty or export tax of any kind was payable to the Government.

PROSPECTING AND MINER'S LICENCE

II.

By the Crown Lands Act, 1930, it is necessary for the prospector to obtain a "miner's permit". This may be obtained on the payment of the prescribed fee of \$5 by any person or incorporated company.

The permit holder may stake any number of claims on behalf of a company that is also the holder of a "miner's permit". A permit expires on December 31 of each year and may be revoked for good reason. The permit entitles the holder to prospect for minerals, natural gas, coal, oil, or salt in and upon all Crown lands in Newfoundland, and upon all lands on which the mines and minerals or mining rights have been reserved by the Crown, and to explore such lands by such means as may be necessary to prove the existence, value, and extent of minerals therein, providing that such search shall be bona fide with a view to obtaining mining location under the provisions of the 1930 Act. The permit does not confer the right to mine or to remove minerals, save as samples, nor is it transferable.

¹ Prepared in co-operation with C K. Howse, Government Geologist, Newfoundland Department of Natural Resources, St. John's, Newfoundland.

A permit holder for himself or on behalf of any other permit holder may stake out a claim on any land open for searching and prospecting in the manner provided in the Act, and may transfer his interest therein to any person.

A mining claim shall be laid out with the boundary lines horizontal and running north, south, east, and west magnetically. The boundaries must extend downwards vertically on all sides. The claim shall be a square of 40 acres, being 1,320 feet on each side.

Compensation must be made where the surface rights in the lands

have been granted or leased by the Crown.

Within 60 days from staking the claim application must be made to record it, and with each application shall be paid a fee of \$10. When a mining claim has been recorded for 60 days upon application by the

applicant a "certificate of record" is issued.

The recorded holder of a claim shall within 5 years following the recording thereof perform 200 days' work of not less than 8 hours per day on it. At least 30 days' work must be done within 6 months from the recording of the claim; 40 days' in the remaining 4 years, and 50 days' the last year.

Where any person has been unable for any reason to perform the whole or part of the work required to be done on a claim, he may pay to the Commissioner the equivalent of the work not done at the rate of

\$3 per day's work.

Upon compliance with the requirements of the Crown Lands Act, 1930, the holder of a mining claim shall be entitled to a "grant in fee simple" on the claim. The application for the grant must be made to the Commissioner within one month from the date before which all work on the mining claim is required to be performed. Unless otherwise expressly stated, the grant shall convey all title of the Crown in such land and all mines and minerals therein. Non-compliance by the claim-holder with any requirements of this Act shall subject the claims to forfeiture.

The staking out or the filing of an application for, or the recording of a mining claim, shall not confer upon a "permit holder" any right in, or to a mining claim, other than the right to proceed in accordance with the Act to obtain a "certificate of record" and a "grant in fee simple". Prior to the issuance of a certificate of record the permit holder shall be a licensee of the Crown, and after the issue of the certificate of record and until he

obtains a grant in fee simple he shall be a tenant of the Crown.

Application for mining location may be made without staking: (1) if the location or locations referred to in such application is or are covered by the sea or public tidal water; (2) if the location or locations referred to is or are on an island off the coast of this island and the area of the location applied for is equal to or greater than the area of the said island.

EASEMENTS AND RIGHTS-OF-WAY

Whenever the holder of a mining lease or grant, or any person or corporation engaged in mining wishes to acquire rights-of-way or other rights over private property for transways, transmission lines, etc., is unable to make an agreement with the owner of such property the Governor in Council may permit such rights to be acquired. The need for such rights and the compensation to be awarded shall be determined by arbitration.

PETROLEUM, GAS, COAL, AND SALT

A permit holder may stake an area not exceeding 640 acres and apply for a "boring permit", application fee for which is \$100. The issuance of a boring permit gives the holder the exclusive right to prospect for petroleum, gas, coal, and salt for a period of one year. During the term of permit he must spend on the area not less than \$2 per acre. A renewal may be granted for one year on the same conditions contained in the original permit. Application fee of \$100 is also required. A boring permit is transferable with the permission of the Governor in Council.

Upon proof that petroleum, gas, coal, or salt has been found in commercial quantities, the permit holder may obtain a lease for 10 years at a rental of \$5 per acre per year. He must spend at least \$2 per acre for the area leased. The lease is renewable for another term of 10 years at such rental as may then be agreed upon or provided by a statute or regulations.

DREDGING

The Governor in Council may make regulations respecting the issue of leases authorizing the holders thereof to dredge in any river, stream, or lake, in, or flowing through Crown lands, or the bed of which belongs to the Crown, for the purpose of recovering any valuable mineral therefrom. Every Order in Council made under this section takes effect from the date of the first publication thereof in the Newfoundland *Gazette*.

Every lease shall provide for the payment in advance of an annual rental of not less than \$20 per mile in length of any such river, stream, or lake, and shall not be for more than 10 years, renewable at the expiration thereof for a further term of not more than 10 years. Each lease shall contain such provisions as may be required by the Governor in Council for protecting all public interests.

OUARRYING

A quarry for the purpose of this Act is a working for the purpose of getting limestone, granite, slate, marble, gypsum, marl, gravel, sand, clay, or any building stone, or volcanic ash.

The Governor in Council may grant leases of land for quarrying purposes for a term not exceeding 99 years. The area and rental per acre per

year is as determined by the Governor in Council.

Applicants for such leases must give notice of their intention to apply for the same in the Newfoundland *Gazette* for one month prior to such application. The lessee must commence quarrying within 2 years from date of the lease, and must continue the effective operation of the work during the term of the said lease. Otherwise the land comprising the lease shall revert to the Crown.

LABRADOR

III.

The mineral rights in Labrador are governed by a special Act "The Labrador (Small Concessions) Act, 1936". By authority of this Act the Governor in Council may issue to any one applicant in any one year grants, licences, or leases covering:

(a) Mining, quarrying, or prospecting rights for an area of not more than 1 square mile.

(b) Dredging rights for an area of not more than 5 lineal miles of river bed or for an area up to and including 1 square mile of lake or estuary bottom.

(c) Rights to drill for oil in an area up to and including 5 square miles. Conditions and rentals may vary in each case.

Grants, leases, and licences for larger areas must be made by special Statute.

LIST OF ACTS

IV.

The Crown Lands Act, 1930. The Labrador Small Concessions Act, 1936.

ROYALTIES

V.

Five per cent of the net profit is payable to the Government from minerals obtained from mining claims issued since 1930.

In ascertaining the net profits various deductions are permitted. At present no royalty is payable on grants issued prior to 1930.

BOUNTIES

VI.

None.

Fees:

SCHEDULE OF FEES

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Miner's permit	10.00
Rentals (annual):	
Quarry leases, variable Boring permits, application fee Boring lease, per acre Water power lease, variable	100.00 5.00
Dredging leases, mile in length	20.00

REPRESENTATIVES

VIII.

Minister	Hon.	E. Russell.
Deputy Minister	K. J.	Carter.
Government Geologist		

More detailed information and copies of the mining laws and regulations of Newfoundland may be had on application to the Government Geologist, Newfoundland Department of Natural Resources, St. John's, Newfoundland.

NOVA SCOTIA¹

INTRODUCTORY

I.

The general mining law of Nova Scotia is found in the Mines Act of 1941, Chapter 4. The law relating to the operation of coal mines, mines of stratified ironstone, of shale, and of fireclay is contained in the Coal Mines Regulation Act, Acts of 1927, Chapter 1. The law relating to the operation of quarries and mines other than those covered by the Coal Mines Regulation Act is contained in the Metalliferous Mines and Quarries Regulation Act, Acts of 1937, Chapter 3. The above Acts, with the Amendments made since contain all the legislative provisions of the Province now in effect on the subject.

The first general mining Act was enacted in 1885. Previous to that year mines were operated under ordinances, rules, and decrees which purported to control the operation of mines within the Province but could not be

regarded as general mining law.

All minerals in Nova Scotia are the property of the Crown in the right of the Province of Nova Scotia with the exception of limestone, gypsum, and building materials which are the property of the owners of the soil.

Aliens enjoy the same mining rights as do Canadian citizens.

Crown lands, whether ungranted or under timber licence or lease, may be entered upon and prospected only with the consent of the Minister of Lands and Forests and upon such terms as he may prescribe.

The Mines Act and other Acts are administered, under the direction of

the Minister of Mines, by the Nova Scotia Department of Mines.

THE MINES ACT

II.

The Act is divided into five parts, as follows:

1. General provision relating to mines of all kinds.

- 2. Provisions relating exclusively to mines of gold, gold and silver, base metals other than ironstone, and to other veined minerals.
- 3. Provisions relating exclusively to mines of coal, ironstone, salt, and other stratified minerals.
- 4. Provisions relating to the power of the Governor in Council with reference to submarine areas.
- 5. Provisions relating to assistance to the mineral industry.

GENERAL PROVISIONS RELATING TO MINES OF ALL KINDS

Inspection

A Chief Inspector of Mines, Inspectors, and Deputy Inspectors, appointed by the Governor in Council, are required to visit and inspect all mines in the Province and to ascertain that the laws relating to the working and management of such mines, and to the payment of rents and royalties

¹ Prepared in collaboration with J. P. Messervey, Deputy Minister, Department of Mines, Halifax, Nova Scotia.

are complied with, and that the mines are being worked in a scientific, workmanlike and effective manner, and with due regard to the maintenance of the value of such mines, and to the safety and protection of the persons employed therein.

Boundaries

The National Topographic Series map-sheets on a scale of 1 mile to 1 inch, established by the Department of Mines and Technical Surveys of the Dominion of Canada, and representing areas of ground bounded by each 30 minutes of longitude and each 15 minutes of latitude, are used as a basis for the purpose of determining the boundaries of mineral land licences and leases within the Province.

All mining claims contain approximately 40 acres. East and west boundaries are astronomic, and north and south boundaries are chord of 30 minutes of latitude each. Each lease or licence comprises at least one mining claim and contains no more than sixteen mining claims which must be contiguous and must not exceed four north or south or four east and west.

Licences

Every application for a licence must be made in writing to the Minister, the fee being \$10. A licence is for one year but may be renewed each year for five consecutive years if the licensee carries on mineral investigation and work to the satisfaction of the Minister.

The licence permits the licensee to mine any mineral found in the area for purposes of investigation, examination, or test only and does not give the right to wine for the righ

give the right to mine for commercial and industrial purposes.

The licensee must report the results of his search to the Minister and his report must be accompanied by plans and sections at a scale no smaller than 200 feet to 1 inch, showing the position and extent of all surface and underground work done on the property.

No licensee may transfer, mortgage, or otherwise part with his licence without the consent of the Minister. The holder of a licence may surrender it by notice in writing signed by him and lodged in the office of the Depart-

ment of Mines.

No licensee may enter upon any private lands included in his licence except with the consent of the owner, tenant, or occupant, or under special licence from the Minister.

The licensee is required to perform or cause to be performed in each licence year on a licensed premises certain operations to an extent of not less than 80 man-days' work for each mining claim or fraction thereof covered by the licence, provided, however, that the Minister may accept certain expenditures in lieu of the required work. At least one-quarter of the work prescribed for a licence must be performed within 3 months of the date of the licence, and the remainder of said work within 11 months of the date of the licence.

Every licensee must, not later than the expiration of 15 days from the time allowed for performance of each instalment of work under his licence and at any other time he is required so to do by the Minister, report in writing to the Minister the amount and nature of the work done under the licence and, on failure to so report, such licence will immediately become null and void. In computing the time within which work under a licence is required to be performed the following periods of time may be excluded:

(i) All the time which by an Order in Council or Order by the

Minister is excluded;

(ii) The time between the 16th day of November and the 15th day of April, both days inclusive, but this shall not have the effect of extending the time for the performance of the second instalment of work;

(iii) Any time during which entry upon Crown land covered by

the licence is prohibited by the Minister of Lands and Forests.

In making the returns of work required by this Act the licensee must show in detail the names and residences of the men who performed the work and the dates upon which each man worked in its performance.

Lease

The application for a lease must be made to the Minister. A lease will be granted for a specific mineral but will be deemed to include authority to mine all minerals held in composition, associated with, or contained in the specific mineral.

The application fee for every lease of mineral other than gold or gold and silver, and for base metals other than ironstones, is \$50. The fee for every area applied for under a "prospecting licence or lease" for gold and silver (not less than twenty adjoining areas to be taken if available) is 50 cents per acre. The fee for every area under alluvial licence for gold and silver (tract to comprise 500 areas) is 10 cents per acre.

Each lease must be dated the second day of July of the year in which the application was accepted. A lease is for a term of 20 years and is renewable for a further term of 20 years or such extended time as progressive development work proves the presence of mineable mineral, provided that the owner or operators aggressively carry on mining operations to the satisfaction of the Minister.

The lessee must not at any time during the term of his lease set over, transfer, mortgage, or otherwise part with it without the consent of the Minister. The holder of a lease may surrender the same by notice in writing signed by him and lodged in the office of the Department of Mines, provided, however, that if any lien has been registered against the lease the lessee shall not be permitted to surrender the lease without the consent in writing of the lien holder.

Crown lands whether ungranted or under timber licence or lease may be entered upon and prospected only with the consent of the Minister of Lands and Forests and upon such terms and conditions as he may prescribe.

The lessee must not enter upon private lands or use private lands for mining purposes until he has obtained the right to enter upon and use them for such purposes by agreement with the owner or under the provisions of this Act.

If a lessee requires any land or interest in any land for certain mining purposes and is unable to reach an agreement with the owner, he may present a petition to the Minister containing certain information and praying that proceedings be taken under the Mines Act to enable him to acquire such property right or interest.

A lessee shall perform or cause to be performed in each lease year on the leased premises certain development work so that not less than 600 lineal feet of such work divided between at least two levels is accomplished in excess of any stoping of ore or mineral. Certain expenditures on the mine property may be accepted by the Minister in lieu of the development work.

Any lease may be forfeited for failure to perform the work required or to comply with any of the terms contained in the lease.

Royalty

Every person mining under a lease or a licence must pay royalties to the Crown, as set forth, on the 10th day of March, June, September, and December of each year. (See Sect. V, Royalties.)

PROVISIONS RELATING TO MINES OF GOLD, GOLD AND SILVER, BASE METALS OTHER THAN STRATIFIED IRONSTONE, AND TO OTHER VEINED MINERALS

Licences

"Prospecting licences" are good for one year from the date of application and give the right to search or prospect. They are subject to automatic forfeiture for non-performance of the statutory amount of work, and fee at rate of \$10 must accompany an application for a licence.

A licence may comprise from one to sixteen mining claims subject to the same restrictions as apply to a lease, but no licence is granted for less than a full mining claim except where areas are held under licence or lease within the boundary of such claims.

An "alluvial licence" (a licence to search for alluvial gold, tin, or gem) is in force for a period of 6 months only (between March 31 and December 1) in any one year, and may cover a territory comprising ten adjoining claims. Adjoining may mean a simple point of contact. Each application for an alluvial licence must be accompanied by a fee of 10 cents per acre.

The holder of an alluvial licence may obtain a "prospecting licence" covering the territory held by him under alluvial licence after having expended 40 cents for every acre contained in his licence, made return of the gold or alluvial mineral extracted, and paid all royalty due. This licence is in force for 12 months.

Leases

Leases for the right to mine gold and silver are granted by the Minister and bear date of the second day of July of the year in which the applications were accepted. Applications for leases must be in writing and must specify the mining claims, mining tracts, and reference map of the ground applied for.

All mines of gold, etc., are laid off in claims of approximately 40 acres. East and west boundaries are astronomical chords of 30 minutes of longitude and north and south boundaries are chords of 15 minutes of latitude.

A lease must comprise at least one mining claim and no more than sixteen mining claims, which claims must be contiguous and must not exceed four north and south and four east and west.

Every application for a lease must specify the mining claims applied for and be accompanied by a payment at the rate of \$20 for every mining claim or fraction thereof covered by such application. Every lessee must pay a yearly rental of 50 cents for each acre comprised in his lease.

On or before the 10th day of every month in each year the lessee must make a correct return showing the number of days' work performed during the preceding month, the number of tons of mineral taken from the demised (leased) premises, persons to whom the same have been sold, the weight of all mineral materials sent during the preceding month to any licensed mill, the yield of each separate parcel returned by the mill, the total quantity of material obtained during the preceding month, and amount expended during the preceding month for labour, plant equipment, and supplies.

Leases are also subject to payment of royalties on the minerals mined thereunder at a specified rate. Lessees may make with the Minister an agreement substituting royalties based on the annual profits of the mine in excess of \$10,000. (See Sect. V, Royalties.)

Treatment

No person may crush or treat any metal-bearing or mineral material except in a mill and premises for which a licence has been issued by the Minister.

CONTROL OF MINING OPERATIONS

The control of mining operations is governed by the Metalliferous Mines Regulation Act, 1937, Chapter 3. This Act makes detailed provision for the conduct of mining operations and for the safety of the workmen engaged therein.

PROVISIONS RELATING EXCLUSIVELY TO MINES OF COAL, STRATIFIED IRONSTONE, SALT, AND OTHER STRATIFIED MINERALS

Every licensee and lessee under this part is required to meet the same requirements with regard to work and development as heretofore set forth.

Licences to search for, and leases for the right to mine coal, ironstone, salt, or other stratified deposits are granted by the Minister. Applications for same describing the tract of ground and specifying the mineral applied for must be in writing and must be accompanied in the case of an application for lease by a fee of \$50, and in the case of an application for licence to search by a fee of \$10.

A licence or a lease may cover a tract of ground comprising from one to sixteen mining claims. Restrictions regarding boundaries are similar to those applying to minerals under Part II of the Act,

A licence is in force for a period of one year from the date of application, subject, however, to automatic forfeiture for non-performance of statutory amount of work. The licensee may at any time before the expiration of his licence make application for a lease of the tract covered by his licence and may obtain a lease for the purpose of mining the mineral specified in the licence.

Every lessee must for every year after the date of the lease, except for the first year, pay in advance a rental of \$30 for every square mile comprised in his lease provided, however, that if the lessee in any one year pays as royalty an amount greater than the annual rental he shall upon application receive a refund of the rental. (See Sect. V, Royalties).

The holder of every licence to search must perform on the licensed area bona fide mining or prospecting work to the extent of not less than the work of two man-days for each acre or less under licence. At least one-half of this work must be performed within 3 months of the date of the licence and the remainder within 11 months of that date. If the work is not reported within the time required, the licence automatically becomes void. The time between November 16 and April 15 is excluded for first instalment of work, also any time which by an Order in Council or order of the Minister is excluded.

The holder of every lease must perform in each lease year on the leased area bona fide mining work equivalent to not less than 600 lineal feet divided between at least two levels. Failure to perform the work required makes a lease forfeitable, but forfeiture can be declared only after a hearing and investigation by the Minister and is only declared when it is considered to be for the best interest of the Province.

The Governor in Council or the Minister may exempt the lessee from the performance of work for such time as he may determine.

With the consent of the Minister areas may be grouped for work.

In the case of leases for coal, if the Governor in Council is satisfied that the holder of any lease or leases is prepared to carry on mining operations on a scale large enough to increase the amount derived from royalties, or is prepared to enter into such terms as would be in the interest of the Province, the Governor in Council may authorize the Minister to accept a surrender of any lease or leases and to issue in place thereof a consolidated lease covering such tract of ground, and being for such term of years, and containing such terms as the Governor in Council directs.

Before any lessee begins to open any coal mine he must submit to the Minister for approval a plan of the tracts of ground or areas proposed to be operated, on which shall be set forth the location of the shaft or slope, the number and size of the openings, the main roadways, and the method of ventilation.

If actual mining operations are being conducted on any lease, every lessee or his agent or manager must send to the Minister on or before the tenth day of each month in each year, a correct return in the form prescribed specifying among other things the quantity of coal, iron ore, or other mineral brought or obtained under authority of such lease, the probable use and destination of the same, the number of days' labour, the number of persons ordinarily employed in or about every mine held under such lease, and the expenditure on all the shafts, quarries, slopes, levels, planes, works, machinery, tramways, and railways, sunk, driven, opened, or constructed during the preceding month.

Every lessee shall in the months of March, June, September, and December, send to the Minister correct returns showing among other things the quantity of mineral mined during the previous quarter, the amount of royalty accrued, the number of persons employed about the mine, and a description of the shafts, slopes, and works opened or constructed.

The Act provides instructions as to the procedure to be followed in the case of the lease of a submarine area, and also for the opening up of a coal mine.

SUBMARINE AREAS

The Governor in Council may appoint two or more persons to be commissioners to inquire into submarine coal mining areas now held under lease and whether the said areas can be advantageously worked.

The Governor in Council on the report of the commissioners may by Order in Council vest in the lessee of any coal mining area that is subject to the provisions of the Mines Act, any submarine coal mining area that is so subject and is held by any other person as lessee, and may make such orders to ensure that such submarine coal mining areas shall be worked in the best interests of the Province.

The Governor in Council may also determine the compensation to be paid to the person from whom the lease has been taken. This part, however, does not apply to any submarine coal mining areas now held under lease dated April 1, 1893, issued pursuant to Chapter I of the Acts of 1893 entitled, "An Act for the Further Encouragement of Coal Mining".

ASSISTANCE TO THE MINERAL INDUSTRY

The Governor in Council is authorized to assist the mineral development by the performance of work under contract by the payment of bills, or by becoming guarantor to any bank, person, trust, or loan company that may make a loan for the purpose of mineral development in the Province.

The Province has a first and paramount lien for all moneys paid or guaranteed. The Minister has broad powers to deal with a situation where he believes the mineral industry of the Province is being impeded by the holding of areas of mining claims under licence or lease. The Governor in Council as a last resort may order that such licences and leases as are impeding mineral development shall be sold at public auction, or that they be vested in His Majesty the King in the right of the Province of Nova Scotia, or in any person developing or about to develop the said district, and may also determine the compensation to be paid in such a case.

The Governor in Council is authorized to render assistance in underground mining development, as approved by an inspector or engineer selected by the Minister. The Governor in Council may also assist the mining industry to procure power on the most economical basis.

The Minister is authorized to purchase or rent all such mining plant as deemed suitable and necessary for the purpose of searching for, testing, mining, and bringing to a marketable state, any minerals, and to use or permit the use of the same by such persons and on such terms as deemed proper.

An advisory board to be known as "The Advisory Board for Mineral Development" was appointed in 1932 by provision of the Mines Act to advise the Department of Mines on matters affecting the development of mining in Nova Scotia, and on approval, to perform special services to assist the mining industry.

On the recommendation of the Deputy Minister, a "special prospecting licence" over a tract of vacant mining claims or areas not exceeding in the whole 10 square miles may be issued for a period not exceeding 3 months, or may be withdrawn from application. The fee for such "special prospect-

ing licence" is ten dollars (\$10).

MISCELLANEOUS ACTS

MINING TAXATION

III.

There is no mining taxation Act in Nova Scotia. Revenue is derived in the form of royalties.

THE AGRICULTURE AND MARKETING ACT

This Act (1949, Chap. 4) replaces the Agriculture Limestone Act, 1933, Chapter 10.

Part Nine (IX) of this Act deals with soil improvement.

The Act provides for the appointment of a Provincial Chemist whose duties (See Sect. 112) are:

(a) To study, examine or test soil for the purpose of determining its suitability for agricultural purposes or for certain agricultural purposes;

(b) To advise farmers and other persons as to the most economical and suitable use of fertilizers and other soil amendments;

(c) To examine the limestone deposits of the Province and to encourage the use of ground, pulverized, burnt or hydrated limestone for agricultural purposes;

(d) To analyse and determine the suitability for agricultural purposes of water, feed, sprays, and other substances used for agricultural

purposes;

(e) To perform such other duties as may from time to time be assigned to him by the Minister or the Governor in Council.

The Governor in Council may from time to time:

(a) Operate such limestone or marl quarries, plants, mills, workshops, warehouses or storage depots for the production, manufacture, storage or distribution of agricultural limestone as may be deemed useful in carrying into effect the provisions of Part IX of the Act;

(b) Facilitate the economical distribution of agricultural limestone by rebates of freight rates, cash bonuses, or by such other methods as may be deemed advisable and for such periods as is deemed expedient;

(c) Acquire equipment for grinding, manufacturing, or distributing agricultural limestone, and lease or rent the same on such terms as may be deemed expedient;

(d) Without in any way limiting or being limited by the foregoing clauses, generally do all such things as may be deemed advisable for the purpose of carrying into effect the purposes of Part IX of the Act.

All the real and personal property, etc., enjoyed or incurred by the Agricultural Limestone Board is now vested in the Governor in Council, and the Board has been abolished.

THE MINERAL PROSPECTING COMPANIES ACT

This Act (1940, Chap. 10) provides for the incorporation of mineral prospecting companies.

In this Act, the expression "Mineral Prospecting Company" means a company incorporated under the Nova Scotia Companies Act, 1935, whose objects, as set forth in its Memorandum of Association, are solely as follows:

- (a) To hold by way of investment and for prospecting purposes, prospecting licences, or licences to search, and any real or personal property deemed necessary for prospecting.
- (b) For purposes incidental to such holdings or prospecting, to acquire, and to dispose of any such prospecting licences, or licences to search, or any such real or personal property.
- (c) For purposes incidental to such holding, or prospect, or purchase, or sale, to draw, make, accept, endorse, discount, execute, and issue promissory notes, bills of exchange, bills of lading, warrants and other negotiable or transferable instruments.
- (d) To do all such other acts or things as are incidental or conducive to or consequential upon the attainment of the above subjects.

The nominal share capital of a mineral prospecting company must not exceed \$35,000. The Registrar of Joint Stock Companies must not register any Memorandum of Association of a mineral prospecting company until the same has been approved by the Minister of Mines.

Prospecting in this instance means and includes geological surveys and other surface work, diamond drilling, unwatering and examining mining shafts, sampling workings, trenching, underground lateral work, and general investigation and preparatory work for development of properties under licence.

THE PETROLEUM AND NATURAL GAS ACT

This Act (1942, Chap. 5) regulates the search for and production of petroleum and natural gas in Nova Scotia.

All petroleum in Nova Scotia is vested in the Province, notwithstanding by whom the lands containing the same are held or the manner in which they were acquired, and, notwithstanding any other law, no petroleum, or right in relation thereto is capable of alienation except as provided in this Act, and every grant made by the Crown is now held to reserve all the petroleum in the land so granted.

A licence or lease is required to drill or operate any well. A licence to search for petroleum and for that purpose to drill wells and do all other necessary acts, does not authorize the operation of any well for

the taking of oil except for exploratory or experimental purposes. A lease may be obtained to operate wells for the production of oil for whatever purpose.

A lessee must obtain permission to enter upon any private lands for the purpose of drilling wells.

Regulations respecting the search and production of petroleum and natural gas have been made under the provision of the petroleum and natural gas act.

REGULATIONS UNDER THE PETROLEUM AND NATURAL GAS ACT

The application may be for a licence or a lease. Licences are for class one and class two, and are for one year and renewable.

A licence, class one, comprises not more than one-quarter map-sheet consisting of one hundred and eight contiguous mining tracts of approximately one square mile each, and not less than ten such tracts, all within one-quarter sheet. Not more than eight such licences may be issued to any one person in any one year.

A minimum rental fee of \$200 is charged for a licence, class one. The applicant must furnish a bond of himself and a surety company in the sum of \$5,000, conditioned for the due performance of the requirements of the licence. A geological examination must be made of the whole area comprised in the licence to determine those areas likely to show features geologically favourable for the accumulation of oil.

The minimum work requirements consist of: (a) geological reconnaissance reports on the whole area held; and (b) determination of at least one potential oil area, if found, clearly defined by geological structures in plans and sections.

The holder of a licence, class one, who has obtained a licence, class two, at the conclusion of a licence year, may obtain a renewal of his licence, class one, on the payment of a rental fee of \$200.

The holder of a licence, class one, having met the necessary requirements, is entitled to a licence or lease to search, class two, for petroleum and gas over the areas which have been indicated by the preliminary exploration under licence, class one, as possible sources of oil. Each such licence covers not more than twenty and not less than four contiguous mining tracts selected from areas previously held under licence, class one.

In an application for licence, class two, the bond requirement is for \$10,000 and annual rentals are \$60 per mining tract.

A "lease" covers an area of not more than twelve contiguous mining tracts on which at least one well has been brought into commercial production of oil. The annual lease rental is \$600 per mining tract and a refund can be obtained if the royalty paid is in excess of the rental. The royalty varies from one per cent of entire monthly production for an average daily production of 20 barrels (barrel = 35 Imperial gallons) and under, up to 10 per cent for 100 barrels and over. The lessee is also liable to a royalty of $\frac{1}{2}$ cent per 1,000 cubic feet in all sales of natural gas.

There are numerous other regulations, such as those dealing with boring operations, etc.

THE RESEARCH FOUNDATION ACT

This Act (1946, Chap. 9) provides for the examination of and research respecting the utilization of the natural resources of Nova Scotia.

The Foundation is under the general direction and control of a Board of Governors. The Act provides for a Director of Research, and for the appointment of Associate Committees.

The Foundation has charge of all matters affecting scientific and industrial research within the Province which are assigned to it by the Governor in Council, and advises the Governor in Council on questions of scientific and technological methods affecting the utilization of the natural resources, or the expansion, or development of industry in Nova Scotia.

AN ACT FOR THE ENCOURAGEMENT OF THE MAKING OF IRON AND STEEL FROM NATIVE ORES

This Act, 1923, Chapter 133, Amended by Chapter 64, Acts of 1925, reads as follows:

- 1. The Governor in Council may by order refund the whole or any part of the royalty paid on coal used within the Province of Nova Scotia in the making of iron or steel to any company now carrying on the business of making iron and steel or to any company that may be organized hereafter, and which has or shall have erected within the Province plant, buildings, machinery and appliances capable of a daily output of not less than two hundred tons, where such iron or steel is made from ore of which at least 25 per cent is mined in the Province of Nova Scotia.
- 2. The Governor in Council may by Order in Council fix the period during which in the case of each company such rebate shall continue and may also provide such regulations as may be necessary for ascertaining the amount of coal consumed by each company referred to in this Chapter, and the rebate to which it may be entitled thereon, and for the proper carrying out of the provisions of this Chapter.

LIST OF ACTS

IV.

The Mines Act, Acts of 1941, Chap. 4, and Amendments to date.

The Coal Mines Regulation Act, Acts of 1927, Chap. 1.

The Metalliferous Mines and Quarries Regulation Act, Acts of 1937, Chap. 3.

The Mineral Prospecting Companies Act, Acts of 1940, Chap. 10.

The Petroleum and Natural Gas Act, Acts of 1942, Chap. 5.

An Act for the Encouragement of the Making of Iron and Steel from Native Ores, Acts of 1923, Chap. 133.

The Agriculture and Marketing Act (1939) (Re Limestone).

The Research Foundation Act (1946).

The Steam Boiler Inspection Act (1941).

Workmen's Compensation Act (1938).

The Nova Scotia Companies Act, Acts of 1935, Chap. 6.

The Nova Scotia Securities Act, Acts of 1945, Chap. 8.

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REGULATIONS

Regulations Governing the Use of Electricity in Mines.

Regulations Governing the Use of Diesel Locomotives in Coal Mines.

ROYALTIES

v.

Royalties on minerals mined are payable as follows:

Gold and Silver: On gold, 35 cents per ounce; and on silver, 2 cents on each ounce.

Lessees may make an agreement with the Minister substituting for the royalties above mentioned (for a period not exceeding 20 years), royalties based on the annual profits of the mine in excess of \$10,000.

Coal: $12\frac{1}{2}$ cents upon every ton (2,240 lbs.) removed from the demised area or areas on which the mine is situated, or used in the manufacture of coke or other manufactured fuel, but excluding coal used for domestic purposes by the workmen and coal used in mining operations and in locomotives or by railways owned or operated by the lessee in connection with the operations at the mine.

Copper: 4 cents upon every unit, that is, upon every 1 per cent of copper contained in each ton (2,000 lbs.) of copper ore sold, concentrated, smelted, or shipped.

Iron: 5 cents on every short ton of ore sold or smelted.

Lead: 2 cents upon every unit, that is, upon every 1 per cent of lead contained in each ton (2,000 lbs.) of lead ore sold, concentrated, smelted, or shipped.

Zinc: Same as lead.

Other Minerals: On any and all other minerals such royalty as may from time to time be fixed and determined by the Governor in Council.

The Minister may by agreement with the lessee of any mineral other than coal, substitute during a period not exceeding 20 years, for the abovementioned royalties, the following royalty on the profits of the mine in excess of \$10,000, such substituted royalty to be according to the following scale:

(c) On the excess above \$5,000,000 up to \$10,000,000... 6 "

(d) On the excess above \$10,000,000 a proportional increase of 1 per cent for each additional \$5,000,000.

BOUNTIES

VI.

None; but for the encouragement of the making of iron and steel from native ores the Governor in Council may refund the whole or any part of the royalty paid on coal used within the Province of Nova Scotia in the making of iron or steel to any company which erects within the Province plant, buildings, and machinery capable of a daily output of not less than 200 tons, where such iron or steel is made from ore at least 25 per cent of which is mined in Nova Scotia.

SCHEDULE OF FEES

	SCHEDULE OF FEES	
VII.		
(1)	For every search of any lease or licence or application for lease or licence or of title of any kind relating thereto when made in person.	\$ 0.30
(2)	For a like search on request by mail	0.50
(3)	For every copy of any lease or licence or of any paper affecting title, per folio	0.15
(4)	For every certificate of competency for:	
	Mine Official First-class	5.00
	Mine Official Second-class	3.00
	Mine Official Third-class	2.00
	First-class Electrician	5.00
	Second-class Electrician	3.00
	First-class Stationary Engineer	5.00
	Second-class Stationary Engineer	$\frac{3.00}{2.00}$
	Third-class Stationary Engineer Mine Examiner	1.00
	Fireman	0.50
	Certificates by Local Boards	1.00
	Mine Surveyor	3.00
(5)	For every other certificate under the hand and seal of the Minister	2.00
	For the registration of any document affecting the title of any lease	
	or licence for each lease or licence affected by such document For every copy of any plan, such reasonable sums as the Minister	1.00
(1)	approves, not less than	1.00°
(8)	For consent of Minister to the assignment, transfer, or mortgage of any lease, or interest therein or for ratification of any assignment,	
	transfer, mortgage, deed or other instrument affecting any lease	2.00
(9)	For every inquiry and certificate granted by the Minister in connection with expropriation proceedings, etc., under the Mines Act	25.00
(10)	For every inquiry and certificate in connection with application for forfeiture of any lease (in addition to necessary expenditure incurred by the Minister) a sum to be determined by the Minister not exceed-	400.00
	ing	100.00
	For endorsement of certificate of registration or duplicate of instrument lodged for registration	0.50
(12)	Application fee for every prospecting licence or licence to search	10.00
	Application fee for every mining claim of 40 acres applied for under lease Part II	20.00
(14)	Application fee for every lease of mineral under Part III	50.00
(15)	Application fee for every acre under alluvial licence for gold or silver (ten adjoining claims to be taken)	0.10
****	REPRESENTATIVES	
VIII.		
De_{i}	nister	on.
Ch	ef Inspector of Mines	
Mi	ning Engineer	
	(E. J. Cole,	
Ins	pector of Mines	
In s	pector of Electricity	
Ins	pector of Mechanical Equipment	
De	outy thepector of mines (mechanical)	

Deputy Inspectors of Mines:	
Pictou District	G. W. Vacheresse,
Pictou District	J. H. Lowe A. E. Fowler.
Sydney Mines District	R. J. Brown,
New Waterford District	
Sydney Mines District New Waterford District Glace Bay District	A. G. Penney. M. J. McPhee,
	D. E. MacLeod.

For more detailed information and copies of the Mining Laws of Nova Scotia, Mines Reports, etc., apply to the Deputy Minister, Nova Scotia Department of Mines, Halifax, Nova Scotia.

NEW BRUNSWICK¹

INTRODUCTORY

T.

In most grants of land issued by the Crown in New Brunswick since about the year 1805, all minerals are reserved to the Crown and are regarded as property separate from the soil. Most of the grants previous to that year reserve only gold, silver, copper, lead, and coal.

By the Act of 1948, all oil and natural gas existing or which may be found in their natural state within the Province under the surface of the earth are hereby declared to be, and to have been at all times prior thereto, property separate from the soil and vested in the Crown in the right of the Province.

Aliens, as well as British subjects, may receive mining rights.

The attention of those interested in prospecting and mining development is called to the fact that the Government of New Brunswick has three diamond drills which, when not already in service, may be obtained under favourable conditions, full particulars of which can be had upon application to the Chief Inspector of Mines.

THE MINING ACT

II.

The Mining Act, 1927, of New Brunswick, with Amendments up to the end of 1948, is summarized as follows:

Minerals under this Act include: salt, oil, natural gas, infusorial earth, ochres, paints the base of which is found in the soil, fireclay, carbonate of lime, sulphate of lime, gypsum, coal, bituminous shale, albertite, but do not include building and monumental stones, mill stones, grindstones, sand, gravel, pottery clay, mineral waters, soapstone, or peat.

There are four classes of rights under this Act, namely, prospecting licences, mining claims, mining licences, and 20-year leases.

PROSPECTING LICENCES

A prospecting licence is necessary before beginning search for minerals, and is in effect until the end of October next following the date of issue. This licence is issued at a cost of \$10 to any person 18 years of age or over. It is effective throughout the Province and applies to all lands except:

- (a) any lands which may have been specially reserved from prospecting;
- (b) lands already held under mining licence or lease; (c) lands in a village, town, or city; (d) lands used for railway or highway purposes;
- (e) lands occupied by or surrounding buildings, and land under cultivation. In the cases of (c), (d), and (e) entry may be made with consent of the owner or by order of the Lieutenant-Governor in Council.

¹ Prepared with the collaboration of C. S. Clements, Chief Inspector of Mines, Mines Braneh, Department of Lands and Mines, Fredericton, N.B.

When the Crown has already disposed of rights in certain minerals the prospector may enter upon the land to search for other minerals, but if the person holding such rights objects then the prospector may not work on those lands until 10 days have elapsed after the notice of objection, or longer if the Minister so directs.

MINING CLAIMS

The holder of a prospecting licence may stake a maximum of ten 40-acre claims in his own name and he may also stake the same number for another licensee. Claims are one-quarter of a mile on the side. They are marked by substantial posts at each of the four corners and the lines surrounding the claims must be clearly marked by blazing trees, by planting pickets, or by raising small mounds as may be dictated by local conditions. The corner posts of the claim are numbered 1, 2, 3, 4, for the NE., SE., SW., and NW. corners respectively. No. 1 post must have upon it the name of the prospector, his licence number, with the date and hour of staking. The other posts must bear the prospector's name.

Where the claim is within territory not laid out for settlement purposes the side lines shall run north and south, east and west by the magnetic needle; but where the territory has been so laid out the bounds of the claim may conform or lie parallel to the lines of the lot containing it, or the claim lines may be run north and south, east and west as above. Application to record every claim so staked must be made within 30 days at the office of the Mining Recorder in Fredericton. The fee is \$1 for every claim so recorded.

If he desires, the prospector may have the lines of his claim run by a surveyor. Work thus performed will be reckoned as the equivalent of 10 days of certain required labour on the claim.

In filing the claim, a sketch must be given the Recorder so that he may be able to lay down the location on his maps. There must be an affidavit that the statements made regarding the claim are correct and that at the time of staking there was nothing on the claim to indicate it was not open for staking. Whenever a claim is recorded the prospecting licence must be endorsed to that effect by the Recorder.

Should the validity of a claim be disputed, provision is made for an official investigation after notice has been sent to interested persons. If no dispute stands against a claim after it has been recorded for 60 days then the Recorder on application gives a certificate of record.

In order that mining rights on a claim may be continued beyond the last day of October following the date of recording, proof must be given that 25 days' work has been performed on it during the period about to expire. All such work may be done on one or more of a group of adjoining claims. One foot of boring is the equivalent of 2 days' work and additional allowance may be made for geological, geophysical, or special work. There are exceptions, however, in regard to this required labour during that period of time.

The Minister may extend the rights to such claims notwithstanding that all required work was not performed,

(a) if the date of recording the claim is subsequent to the 31st day of August; or

(b) if it can be shown to the satisfaction of the Minister that the prospector was unable to perform any of the required work on his claim.

In no case shall the rights on mining claims be extended beyond a period of 2 years following the date of recording, except with the consent and approval of the Lieutenant-Governor in Council.

MINING LICENCES

At any time after the full amount of work has been performed on the claim or group of claims the holder thereof may apply for a mining licence. This licence will cost \$10 for each 40-acre claim. Mining licences may be renewed from November 1 to October 31 of the next year and for subsequent periods at a cost of \$10 per 40 acres upon proof that 25 days' work has been performed for each 40 acres during the preceding period. Should the mining licensee have failed to do the necessary work during any one 12-month period the licence may be renewed on payment of the renewal fee of \$10, if the Minister is satisfied there was sufficient reason for not doing the work.

Before a mining licence may be issued it is necessary to file a return of the survey of the tract. This return is made by a Deputy Land Surveyor

at the cost of the applicant.

If any of the land to be taken under a mining claim or licence is privately owned the applicant for a licence must furnish a bond with sureties satisfactory to the Minister in order to recompense the owner of the soil for any surface damage.

A mining licence gives the holder the right to mine any minerals within its bounds except any already conveyed by the Crown under a licence or

lease or disposed of in any other way.

MINING LEASES

The holder of a mining licence who has complied with its requirements and who has under it opened up and for at least 6 months worked a mine may apply for and receive a lease effective for a period of 20 years and renewable up to 80 years. The rental is \$10 a year for each 40 acres. The lease will be for certain specified mineral or minerals. Where a royalty is to be paid it is specified in the lease and can be changed only by order of the Governor in Council. Royalty will be a credit on the rental after the initial year's rental has been paid so that where royalty exceeds the amount of the rental there is no rental due.

The lessee is required to pay rent or royalty when due, to operate his mine in a workmanlike manner, to make reports regularly of work and of the men employed, and to submit a plan of his mine workings to the

Minister once a year.

A lease should be executed and recorded within a year after date of issue to prevent loss of rights.

SPECIAL PROVISIONS

Under the Mining Act a lessee may obtain the necessary right of way either for road or railway. A lessee may obtain an easement or right of way for drainage or a water supply.

Transfer of mining rights in whole or in part must be registered in the office of the Mining Recorder at Fredericton. In the case of a lease the consent of the Minister to transfer is first required. The fee for each transfer is \$1. Mining lease rights may also be surrendered to the Crown.

When a mining property is abandoned or the rights thereon cancelled, the former holder has 6 months to remove his personal property and ore,

or longer if necessary upon order of the Minister.

A licence or lease is not intended to give the holder more rights in the surface than are necessary for the convenient opening up, working, and use of his mining property. The surface must be used in a manner that will cause as little injury as possible to the owners and occupants of the land or of adjoining lands.

A prospectus inviting subscriptions for shares issued by an incorporated company must first be submitted to the Minister of Lands and Mines for

approval.

CONTROL OF MINING OPERATIONS

Regulations were passed in 1933 regarding employment underground, hours of working, age limit, care and use of explosives, cage signals and safety rules for cage travel, slopes, ladders, shaft sinking, etc.

Persons violating these safety rules are liable to a fine of \$20 or to

a month's imprisonment.

ENTERING NEW LANDS

Subject to the provisions of The Mining Act, any licensee or lessee may enter upon any granted as well as Crown lands of New Brunswick, and search, dig, explore for, mine, and work minerals and carry on mining operations, carry away minerals, and market same. If the entry is to be on granted lands the licensee or lessee must first give a bond to cover all damages that may occur. If the lands to be entered are in a wooded district, in addition to the security, certain means and precautions must be taken as directed.

RESERVES ON RADIUM

The Governor in Council is empowered to place a reserve on all radium within the public lands of New Brunswick and at pleasure cancel all reserves. (See The Mining Act, 1927, Sect. 110).

"Radium" means all deposits of carnotite, pitchblende, or other ores containing radium in sufficient quantity for commercial extraction (1927, Chap. 4, Sect. 110).

A reward not exceeding \$1,000 may be paid to the first person discovering radium within the Province. There are provisions for making rules and regulations for the exploitation, occupation, and purchase of radiumbearing ore lands.

MINING TAXATION

III.

There is no Mining Taxation Act in New Brunswick. The revenue is in the form of royalties.

LIST OF ACTS

IV.

The Mining Act, R.S.N.B., 1927, Chap. 35, and amendments. The New Brunswick Companies Act, 1927, and amendments. The New Brunswick Security Frauds Prevention Act, 1935.

ROYALTIES

V.

Royalties have been set as follows:

Coal and oil shale as fixed by the Lieutenant-Governor in Council, but not to exceed 15 cents a long ton. The present rate on coal is 9 cents per short ton.

Petroleum and natural gas, 5 per cent of the value at the well's mouth. There is no royalty on limestone or gypsum.

Other products of the mine are subject to such royalty as may from time to time be imposed by the Lieutenant-Governor in Council.

Where it is deemed in the interest of development the Lieutenant-Governor in Council may by order provide that no royalty shall be collected for 10 years from the date of the lease.

BOUNTIES

VI.

None.

SCHEDULE OF FEES

A 11.

Prospecting licence\$	10.00
Recording each claim	1.00
Recording a transfer	1.00
Renewal of claim for the second 12-month period	1.00
Cost of mining licence per claim per 12-month period	10.00
Rental of 20 years' lease for each 40 acres—per 12 months	10.00
(Royalty is credit on rentals)	

REPRESENTATIVES

VIII.

Minister of Mines	Gill
Deputy Minister Dr. G. H.	Prince
Chief Inspector of Mines and Recorder C. S. Clem	ents

More detailed information and copies of the "Mining Laws and Regulations for New Brunswick" may be had on application to the Chief Inspector of Mines, Mines Branch, Department of Lands and Mines, Forestry and Geology Building, Fredericton, N.B.

QUEBEC1

INTRODUCTORY

I.

The Mining Law of Quebec, as it is found in the Revised Statutes of 1941, Chapter 196, with the amendments made since, contains all the legislative provisions of the Province at present in effect on the subject. The first general Mining Act dates back to 1880. Previously, certain rules or decrees had been promulgated, but they were enacted for protecting local interests in the development of particular mineral deposits. What may remain of these early provisions is subject to the present law known as the "Mining Law of Quebec."

The Quebec Mining Act is administered under the direction of the Minister of Mines.

THE MINING ACT

II.

In summarizing the provisions of this Act, reference to the penalty clauses is omitted and attention is confined mainly to the clauses describing the practical steps to be taken, that is, to the part that refers to property rights, following up all phases through which the land passes from the moment of its leaving the public domain to its final acquisition by a private individual. The above-mentioned stages may be reduced to three: (1) prospecting of the claim covered by miner's certificate; (2) the period of development required by the development licence; (3) the mining concession. The last is subdivided into "mining concession" and "underground mining concession". It may also be merely conditional or made final by the issue of letters patent.

Aliens enjoy the same privileges in regard to mining rights as do Canadian citizens.

MINER'S CERTIFICATE

The "miner's certificate" gives to the person holding it the right to prospect on all lands surveyed or unsurveyed, including the land of private persons where the mining rights have been reserved to the Crown.

The fee is \$10 payable on delivery of the certificate, which is valid from the date of issue until the first day of January next following. The prospector should make sure that a territory is open for staking before venturing upon it.

On unsurveyed lands, the bearer of a miner's certificate may stake on the ground on his own behalf not more than five claims, each covering not more than 40 acres and the aggregate area of the five claims not to include more than 200 acres. Each claim in unsubdivided area must be square in shape and marked by properly inscribed stakes at each angle, and well blazed lines.

¹ Prepared in co-operation with Dr. A. O. Dufresne, Deputy Minister, Quebec Department of Mines, Quebec, Que.

Staking in surveyed areas is also governed by special regulations. In subdivided lands, the holder of a miner's certificate may stake out one or two lots of 100 hundred acres each, or half lots. In the case of lots of over 120 acres, the claim may comprise a quarter lot only.

The holder of a miner's certificate who begins staking out a claim must complete same before starting to stake out a second, and notice of it must be given within the 15 days following to the Department of Mines or to the nearest mining recorder. However, one extra day is allowed per 10 miles when over 50 miles from a railway.

The holder of a miner's certificate may stake claims in the names of other persons who have certificates, but not exceeding a total of 400 acres in any one year; that is to say, he may stake for two other persons. In the case of claims situated at 100 miles or more from a railway or a highway, the total area permissible is 800 acres. The procedure to be followed in this form of staking is governed by certain special rules.

Any person who has staked out the maximum area allowed may, after having abandoned this area or disposed of it, secure a new miner's certificate, which is issued free. However, this certificate does not give the holder the right to stake out claims in the names of other persons.

The Mining Recorder provides the staker of a claim with metal identification plates to be placed on each stake when staking.

A claim may be abandoned and replaced by another, provided notice to that effect is given to the Department of Mines. Land covered by a claim that has been abandoned cannot be reopened for prospecting nor restaked until a period of 20 days has elapsed from the date of abandonment, or expiry, during which time a notice of it may be posted up. If, however, such land remains free for 60 days from the date of expiration of the claim, it may, after such delay, be again taken by or on behalf of the former holder.

Any prospector may protest the establishment of a claim obtained by illegal means, by laying before the Department of Mines a declaration supported by an affidavit, within the 30 days following the recognition of the claim, which may then be cancelled as illegal.

Within the 12 months following the date of staking the holder of a claim must prove that he has done development work equivalent to 25 days of 8 hours on each claim. The work for five contiguous claims can be concentrated on one.

DEVELOPMENT LICENCE

Every person is prohibited from mining in any mine either upon public or private lands when the mining rights belong to the Crown, unless he has previously purchased the same, in accordance with the Act, and no person may do prospecting and development work on the said lands without being holder of a claim or of a "development licence".

There are two kinds of "development licences":

(a) "private lands' development licence", where the mining rights belong to the Crown, and

(b) "public lands' development licence".

Within the period of 12 months allowed for the required assessment work the holder of a claim who wishes to maintain his rights over it must secure a "development licence". This delay is extended to 24 months for claims located 100 miles or more in a straight line from the nearest railway point or highway.

The fee for a licence is \$10, and the annual rental, 50 cents per acre. The licence is valid for one year from the date of issue, and is transferable by consent of the Minister. It cannot cover more than 200 acres, or in surveyed territories, for less than a half lot in the case of lots of less than 120 acres, or less than a quarter lot in the case of lots of over 120 acres.

The holder of such a licence may renew it before it expires, or within 10 days thereafter, on payment of a like fee of \$10 and an annual rental of 25 cents per acre, and on filing an affidavit stating that the required development work for the current year has been done, namely 25 days of 8 hours each for every 40 acres. An excess of work done within any one year may be applied on the next year, as well as surveying and core drilling.

In the case of lands more than 50 miles from a railway, the Minister may substitute an additional annual rental of 50 cents per acre in lieu of the required development work. That substitution, in fact, may be granted in

any case where the Minister deems it advisable.

In the case of a group of not more than five adjoining claims, the development work may be concentrated upon one of them. The Minister may extend this provision to a larger group of claims, but not exceeding fifteen contiguous claims, if diamond drilling or underground work has been performed.

The development of an underground mine can be undertaken only with the permission of the owner of the surface rights, or, failing such permission, by arbitration.

A third party may do mine development work on private lands subject to his paying for the damages and to expropriation failing an agreement.

Development licences covering natural gas and mineral oil are the subject of special procedure and the same may be said of excavations made near dwelling houses. The special directions concerning claims and property licences must be strictly followed.

MINING CONCESSIONS

Notwithstanding the foregoing, a "mining concession" may be made at any time and at any stage of the claim or of the development licence, without delay. The cost¹ is \$5 per acre for the "superior metals and minerals" as defined by the regulations, and \$3 per acre for the "inferior minerals."

Unless stipulated to the contrary in the letters patent, in every concession for the mining of superior metals, the purchaser has the right to mine for all metals that may be found therein, but in every concession for the mining of inferior metals he has the right to mine for inferior metals only.

In unsurveyed territory a mining concession is limited to a rectangular area of not more than 200 acres nor less than 40 acres, the claims to be at

least 20 chains wide, adjoining one another or separate.

In surveyed lands and in seigniories, the limit is fixed at not more than two lots and not less than half a lot in the case of lots less than 120 acres in area; or of not less than a quarter of a lot where the lots are 120 acres or more. Certain exceptions are provided in special cases when, by Order in Council, the area can be extended to cover 1,000 acres.

Any owner of mining lands, even if his title deeds are only conditional,

 $^{^{\}rm 1}$ Early in 1950, the cost of a mining concession was increased to \$15 an acre for "superior metals and minerals", and \$9 an acre for "inferior minerals".

may transfer his "mining rights" with the consent of the Minister to another individual or to a company. The Department of Mines must be advised of the sale by the dispatch to the Department of the deed, together with \$10 for registration fee. The same is true in the case of transfers of lots held as claims or under a development licence.

The Crown retains full "mining rights" on: (1) lands in townships granted subsequent to July 24, 1880, and (2) in the case of gold and silver,

in lands granted previous to that date.

In seigniories all "mining rights" belong to the Crown, with a few exceptions.

Special conditions apply to concessions along lakes and rivers.

Underground concessions situated under the lands of private owners

may be acquired from the Minister by purchase.

Sand and gravel used for mortar and concrete, road making, and repairing, etc., are not considered as mineral substances in virtue of the Mining Act. To obtain any right in deposits of sand and gravel, application must be made to the Department of Lands and Forests as staking under the Mining Law is not allowed.

Minerals and substances in the lands of private persons are neither mines nor minerals within the meaning of the Mining Act, and application must be made to the surface owners of the lands to obtain the right of

working them.

The grantees of a concession may utilize the wood on it for the construction of necessary buildings by paying the value of the white and red pine only.

ACQUISITION OF MINING LANDS

All lands, supposed to contain mines or ores belonging to the Crown, may be occupied, prospected and developed, or be worked, after having been acquired as a mining concession by purchase. The Minister may authorize the holder of a development licence to extract and ship each year, to any ore-treatment mill situated in the Province, a quantity of ore not exceeding 300 tons. The Minister may exercise the same discretion in the case of substances which (within the meaning of Subparagraph 2 of Section 4 of the Mining Act) are neither mines nor minerals when found in the lands of private parties, and may authorize the exploitation thereof on Crown lands, under a development licence. In such cases, the licence is issued upon payment of a fee of \$10 and an annual rental of \$1 an acre.

No one may, without permission, stake or acquire, as mining lands of which the mining rights belong to the Crown: (a) lands set aside as village or town lots; (b) lands subdivided into building lots; and (c) lands lying within the boundaries of a city or town duly incorporated as a

municipality.

The owner of a mining concession as well as the holder of a development licence or holder of a claim may sell, assign, etc., his rights as owner or licensee.

CANCELLATION OF SALES OF MINING LANDS

Mining lands are sold on the express condition that the purchaser shall bona fide commence mining operations within 2 years from the date of purchase and within such delay he shall spend for every section or lot of 100 acres a sum not less than \$1,000 if for superior metals, and not less than \$500 if for inferior metals.

All mining land and underground mining concessions thus sold which have not been patented on the expiration of the delay of 2 years and those the letters patent whereof have been issued after July 1, 1911, shall be subject to an annual tax of 10 cents per acre.

Any concession of land for exploitation of the ore to be found therein, for which letters patent were issued before July 1, 1911, and any concession of land containing ore made before July 24, 1880, the working of which has remained idle during the five years preceding March 1, 1939, may be revoked by order in council upon the recommendation of the Minister of Mines.

SPECIAL PROVISIONS RESPECTING MINING

The Mining Act provides for legislation regarding party passages, damages resulting from mining operations, water-courses and excavations, works to facilitate the transportation of mineral products, for the construction of mining roads and for geological exploration.

Miscellaneous provisions in the Mining Act deal with the use and application of dues, fees, and fines; provides for sale of lands and reserves of mining lands; and provides also for municipal valuations of taxable mining property.

Provision is also made for the appointment of a mining commissioner, mining inspectors, mining recorders, and geologists, and the establishment of mining townsites. Up-to-date laboratories have been installed in Quebec as an aid to the mining industry.

CONTROL OF MINING OPERATIONS

The Mining Act also contains detailed regulations intended to protect the health and lives of miners and workmen in mines and quarries. These regulations deal with open-cast workings in mines and quarries; protection of workmen in underground works, such as fire protection, handling water, air supply, sanitation, hoisting and shafts, haulage, timbering, scaling of workings, and protection in working places; care and use of explosives.

There are also regulations concerning the safety of work in mines, and dealing with boilers, compressors, buildings, etc.; and regulations governing prospecting and drilling operations for combustible gas and petroleum.

TREATMENT PLANTS

The place and location of every smelter, mill, or refinery built in the Province of Quebec to smelt, treat, or refine ore, minerals, or mineralbearing substances shall be chosen, determined, or approved by the Lieutenant-Governor in Council.

Should the ore, minerals, or mineral-bearing substances coming from mines of the Province be removed outside of the Province for treatment, or if they are treated in the Province in a smelter, mill, or refinery, the place and location of which has not been chosen, etc., as aforesaid the Lieutenant-Governor in Council may exact from the owner, manager, holder, lessee, occupant, or operator of such mine three times the amount of the duties established by the Mining Act, Section 12.

MISCELLANEOUS ACTS

Ш.

THE MINERAL EXPLORATION PARTNERSHIP ACT

This is an Act (1941, Chap. 198) respecting the mineral exploration partnerships, without personal liability.

A partnership with a capital of \$10,000 may be formed by three or more persons who must execute in triplicate a declaration, according to instructions, and who shall have subscribed a total amount of not less than \$1,000, and fully paid their subscriptions in cash to the partnership. The Act specifies regarding shares, their prices, purchases, etc., the administration, the using the funds for the purpose of mineral prospecting and exploration only, the acquiring and disposing of mining rights, and other related matters.

THE UNWROUGHT METALS SALES ACT

This Act (1941, Chap. 199) deals with the sale of unwrought precious metals.

Unwrought metal for the purpose of this Act means gold, silver, platinum or other precious metal in:

(a) Ore the value whereof exceeds 25 cents per pound "avoirdupois" weight;

(b) Nugget's, amalgams, concentrates, or residues obtained from the treatment of ore;

(c) Ingots, bars, wire, beads, or sheets.

A licence is required to receive, purchase, sell or alienate unwrought metal in the Province. No person is permitted to sell or deliver unwrought metal to a person who does not hold such licence, nor to receive or purchase it from such person.

These provisions do not apply to:

(a) The person who purchases from the holder of a licence unwrought metal delivered in a form suitable for industrial, artistic, or scientific purposes;

(b) The person who sells less than 3 ounces of unwrought metal per month.

MINING TAXATION

The Quebec Mining Act provides that all mining land and underground mining concessions sold, which have not been patented on the expiration of the delay of 2 years, and those the letters patent whereof have been issued after July 1, 1911, are subject to an annual tax of 10 cents per acre. This tax is remitted if at least \$200 has been spent in mining work during the year. (Chap. 195, Sect. 50).

LIST OF ACTS

IV.

The Quebec Mining Act, 1925.

The Quebec Security Frauds Prevention Act.

Territory in which prospecting for minerals is prohibited. Act 1941, Chap. 156, and Orders in Council.

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The Municipal organization of Mining Villages, 1941, Chap. 246. Act to provide for the establishing of mine-schools, 1938, Chap. 14. The Mineral Exploration Partnerships Act. (1941, Chap. 198). The Unwrought Metals Sales Act. (1941, Chap. 199.)

Regulations

Regulations governing prospecting and drilling operations for combustible gas and petroleum.

Regulations concerning the carriage and passage of water for mining

purposes.

Regulations for the safety and protection of workmen in mines and quarries.

ROYALTIES

V.

None.

Duties

From and after the first of January, 1925, every mine in the Province of Quebec shall be liable for, and the owner, manager, holder, lessee, occupant, or operator of the mine shall pay the following duties:

(a) Upon annual profits in excess of \$10,000 up to \$1,000,000 4 per cent

(b) On the excess above \$1,000,000 up to \$2,000,000.......5 "
(c) On the excess above \$2,000,000 up to \$3,000,000......6 "
(d) On the excess above \$3,000,000......7 "

All mines and mineral workings in the Province of Quebec, occupied or operated by the same person, or under the same management or control, or the profits of which accrue to the same person shall, for the purpose of determining whether there is liability for the payment of the duties hereinabove enumerated, be deemed to be one and the same mine, and not separate mines.

BOUNTIES

VI.

None.

SCHEDULE OF FEES

VII.

Miner's certificate\$ Registration of claims I	
Development licence, fee	
	0.25
Annual rental (gas and oil) per acre	0.10
Mining concession, superior metals per acre	5.00
Mining concession, inferior metals per acre	3.00
("Early in 1950, the cost of a mining concession was increased to	\$15
an acre for "superior metals and minerals", and \$9 an acre "inferior minerals").	or

REPRESENTATIVES

VIII.

Minister: Hon Chas. D. French.
Deputy Minister: Dr. A. O. Dufresne.
Technical Adviser: Dr. Théo. C. Denis.
Chief, Mining Land Titles Branch: J. X. Mercier.
Mine Assessor: S. Drouin.

Mining Inspectors:

Chief Mining Inspector: R. H. Taschereau, Quebec City. Ass't. Chief Mining Inspector: M. O. Lafontaine, Noranda.

Western Quebec District: B. Joyal and G. E. Lacaille, Noranda.

Eastern Townships 2: G. Michaud, Thetford Mines.

Montreal District: E. Berubé.

Mining Recorders:

Chief Mining Recorder: T. H. Ledden.

Quebec Office: Yves Mercier.

Amos Office: R. Roux.

Noranda Office: P. H. Soulard.

Chief, Geological Survey Branch: Dr. I. W. Jones. Chief, Mineral Deposits Branch: Dr. B. T. Denis.

Chief, Laboratories: Dr. M. Archambault.

For more detailed information and copies of the Mining Laws of the Province apply to the Deputy Minister, Quebec Department of Mines, Quebec City, Que.

ONTARIO¹

INTRODUCTORY

. I.

Ontario owns and administers all the public lands within its boundaries, except Indian lands and National Parks which are under the control of the Government of Canada.

The principal statute concerning mines and the mineral industry of Ontario is the Mining Act 1937, Chapter 47, with amendments to date.

Mining lands are subject to the provisions of this Act, summarized

below:

The usual form of title given by the Crown is a "grant in fee simple" (patent). In Provincial forests 10-year renewable leases only are given. The beds of navigable waters are not patented, but licences of occupation, or leases may be issued authorizing the extraction of minerals.

Mining divisions are set apart covering the mineral areas, and a resident mining recorder is appointed for each division. Up to the time of issue of Crown title all agreements, transfers, and other documents respect-

ing mining claims must be filed in the recorder's office.

Mining recorders have authority to settle disputes between licensees, subject to appeal to the Judge of the Mining Court. In cases of importance, appeal may be made from the mining judge to the ordinary courts of law.

As the mineral areas are mainly in the newer districts where the Land Titles Act is in force, the original instrument of title is forwarded to the Local Master of Titles for the district in which the land is situated. All subsequent transfers, etc., are also filed with the Local Master, who, when required, will issue a certificate showing ownership in the person named therein.

With a few exceptions, grants of land by the Crown for other than mining purposes convey also the minerals.

THE MINING ACT

II.

LICENCE TO MINE AND LICENCE HOLDERS

No person, not the holder of a "miner's licence" may prospect for minerals upon Crown lands or land of which mining rights are in the Crown, or stake out, record, or acquire any unpatented mining claim, or area of land for boring permit, or acquire any right or interest therein.

area of land for boring permit, or acquire any right or interest therein.

Any person over 18 years of age, and any company incorporated or licensed under the laws of Ontario to transact business or hold lands in Ontario is entitled on payment of the prescribed fee to obtain a "miner's licence". All licences expire at midnight on the 31st day of March then next ensuing, and may be obtained or renewed at cost of \$5 for an individual, or for a larger sum by a mining company, proportionate to its

¹ Prepared in collaboration with H. C. Rickaby, Deputy Minister, Ontario Department of Mines, Toronto, Ont.

capitalization. Licences to companies are issued only by the Minister or the Deputy Minister. Licences to individuals may be issued by the Department or by any recorder. Failure to renew a licence automatically forfeits all mining claims depending upon its validity.

The licence of any person who has held a miner's licence continuously for 25 years or more may be renewed without payment of the prescribed fee, provided application has been made prior to the expiration of the last renewal.

No person or company may apply for or hold more than one "miner's licence" (Part I, Sect. 24, etc.)

MINING CLAIMS

Lands Open

Subject to the provisions of the Act, the holder of a "Miner's licence" may prospect for minerals and stake out a mining claim on (a) any Crown lands surveyed or unsurveyed, and (b) lands, the mines, minerals or mining rights whereof have been reserved by the Crown in the location, sale, patent, or lease of such lands when the same have been located, sold, patented, or leased after the 6th day of May 1913; and that are not at the time, (i) under staking or recorded as a mining claim which has not lapsed or been abandoned, cancelled, or forfeited; (ii) withdrawn from prospecting, location or sale, or declared to be not open to prospecting, staking out, or sale as mining claims.

Lands Not Open

No mining claim may be staked out or recorded upon any land transferred to or vested in the Northern Ontario Transportation Commission without the consent of the Commission, nor except with the consent of the Minister upon any land:

- (a) Reserved as a townsite by the Crown:
- (b) Laid out into town or village lots on a registered plan by the owner thereof, or forming station grounds, right of way of railways and roads;
- (c) Which, without reservation of the minerals has been sold, located, leased, or included in a licence of occupation;
- (d) For which a bona fide application is pending in the Department of Lands and Forests under the Public Lands Act, or under any Regulation made under that Act or under other Act or Regulation;
- (e) Which has been reserved for summer resort purposes except where the Minister of Mines certifies in writing that in his opinion discovery of valuable mineral in place has been made;
- (f) Where the land is required for use in the public interest and the Minister of Mines is satisfied that a discovery of mineral in place has not been made thereon;
- (g) In Indian reserves, except as provided by the Indian Lands Act; and
- (h) When land is staked out and applied for as a mining claim, but for use other than as mining land or for the purposes of the mineral industry, when the claim may be cancelled (Part II, Sect. 36, etc.)

Provincial Forests

Mining lands in a Provincial forest shall not be sold or granted, but a lease may be obtained for a period not exceeding 10 years, at a rental payable in advance of \$1 per acre for the first year and 25 cents per acre for each subsequent year, but the minimum rental shall be \$10 for the first year and \$4 for each subsequent year. The lease is renewable in perpetuity for periods of not more than 10 years at such rentals as may be provided.

A permit to perform work in a Provincial forest must be obtained from the Provincial Forester. (Sect. 48).

Size and Form of Claims

A mining claim in unsurveyed territory consists normally of a square of 40 acres, 20 chains to a side, and is laid out with boundary lines running north and south and east and west astronomically, and the measurements must be horizontal. In a township surveyed into lots, etc., a mining claim is such part of a lot, etc., as defined in section 52 of the Act and the boundaries of all mining claims extend downwards vertically on all sides.

Staking out Claims

A mining claim is staked out by planting or erecting a post at each of the four corners of the claim, beginning with and marking that at the northeast corner "No. 1", that at the southeast corner "No. 2", etc., and by connecting the posts with blazed lines if in forest country or by mounds of earth or rock where the land is bare. The Mining Act (Part II, Sect. 54) gives specific directions for staking claims.

A licensee cannot in any one licence year in any one mining division or in territory not included in a mining division, stake out or apply for more

than nine mining claims. Discovery of mineral is not required.

Recording

The next step is to file an application for the claim with the Recorder for the mining division. The application is to be accompanied by a sketch showing as accurately as possible the position of the claim with reference to some known point previously established by survey, or in the absence of such, to some prominent physical feature such as a river or lake.

Thirty days are allowed for recording except in that part of Kenora district (Patricia portion) not included in the Red Lake mining division, where 60 days are allowed. Metal tags impressed with the number of the mining claim are supplied by the Recorder, and the claim-holder must affix these to his corner posts within 6 months of recording the claim.

A claim-holder must do 40 days' work within one year of recording

the claim. Roads, cabins, etc., are not classed as mining work.

In each subsequent year computed from the date of recording, 40 days' work is required, five in all, to make up a total of 200 days' work. The work required, however, may be performed within a shorter period, if desired.

A claim-holder must, not later than 10 days after the expiry of each work period, file with the Recorder an affidavit showing performance of the work, giving particulars of the same. If in unsurveyed territory, he

must also have the claim surveyed by an Ontario Land Surveyor, and file a plan and field notes, two copies with the Recorder and one copy with the Department of Mines. The survey must be made in accordance with the instructions contained in the Act and regulations.

Every licensee who stakes out and records a mining claim is given by the Recorder two free assay coupons on recording and two additional

ones on recording each 40 days' work.

Any water-power capable at low-water mark, and in its natural condition, of producing 150 horse-power or upwards is not deemed part of the claim for the uses of the claim-holder.

PATENT OR LEASE FOR MINING CLAIM

Upon compliance with the requirements of the Mining Act and upon payment of the purchase price or rental, the holder of a mining claim is entitled to a "patent or lease", as the case may be, for the claim. The application for a patent or lease should be made to the recorder within one year after date on which the work is required to be completed, and the holder of the claim may pay in the purchase money and receive a "patent (fee simple) or lease", as the case may be. The price for a patent is \$2.50 per acre in unsurveyed, and \$3 per acre in surveyed territory.

In all patents for mining claims within the various districts, unless already provided for, there must be a reservation for roads of 5 per cent

of the quantity of land granted.

TREATMENT OF ORES

All lands, claims, or mining rights leased, patented, or otherwise disposed of after the 12th day of April 1917, are subject to the condition that all ores or minerals raised or removed therefrom will be treated and refined within the Dominion of Canada, unless granted an exemption. This rule does not apply to iron ore, nor to the lands, claims, or mining rights from which the same is mined.

RESERVATION OF TIMBER RIGHTS

Every patent of Crown lands sold or granted as mining lands contains a reservation of all trees, and any person holding a licence to cut timber on such land may enter at all times during the continuance of the licence.

PLACER MINING

A "placer mining claim" may be staked and recorded by a licensee who makes a discovery of a natural alluvial deposit carrying gold, platinum, or precious stones, which is of a size and character likely to be workable at a profit. The usual provisions of the Act, as regards valuable mineral in place, are applicable. (See Part VII, Sect. 107).

DREDGING LEASES

The Mining Act provides for the making of regulations respecting the issue of leases authorizing the holders thereof to dredge or work any river, stream, or lake, or on lands not covered by water, to recover alluvial gold.

platinum, precious stones, or other valuable mineral not in place. Provision is made for the payment in advance of an annual rental of not less than 25 cents per acre, and the lease is limited to 10 years and renewable. (See Part V, Sect. 110).

BORING PERMITS FOR PETROLEUM, ETC.

A licensee may obtain a "boring permit" granting him the exclusive right for a period of one year to prospect for petroleum, natural gas, coal, or salt upon an area of land open for prospecting and staking out in those portions of Ontario lying north and west of Mattawan River, Nipissing Lake, and French River. Section 109 contains special regulations governing the issue of Boring Permits and leases for natural gas and petroleum north of the Transcontinental Railway.

Following the discovery of one or more of the above-mentioned substances in commercial quantities, the holder of a boring permit may secure a lease of the land or any portion of it for a term of 10 years at an annual rental of \$1 per acre and subject to the expenditure of not less than \$2 per acre per year, in obtaining petroleum, etc., or in actual bona fide operations and is entitled to renewals by terms of 10 years.

The rights of the lessees are confined to petroleum, natural gas, coal, and salt; and all other valuable minerals are reserved to the Crown. (See Part IV, Sect. 107).

CONTROL OF MINING OPERATIONS

On opening up a deposit of mineral, the operator becomes subject to Part VIII of the Act, which contains detailed regulations intended to protect the health and lives of miners and workmen.

The hours of work underground are limited to eight in any twenty-four. Mining Inspectors are appointed to see that the regulations are properly observed. An inquest is required wherever a fatal accident occurs, and an Inspector is entitled to be present and examine witnesses.

Sanitation, care and use of explosives, protection in working places, handling water, ladderways, raising or lowering persons, shaft equipment, hoisting, haulage, scaling, escapement shafts, signals, protection of machinery, boilers, dressing-rooms, aid to injured, prevention of dust, blast furnaces, electrical machinery and apparatus, are all regulated or provided for. There are special rules to combat silicosis in miners.

The Ontario Department of Mines, Toronto, has published these Regulations in the form of a pamphlet entitled "Handbook of Regulations Governing The Operation of Mines".

REFINING PROVISIONS

A refinery means any apparatus or equipment used for the refining, retorting, smelting, etc. of any ore, mineral or substance for the purpose of recovering or determining the quantity of gold, silver, platinum, and any other precious metal, and a refinery licence must be obtained before any person can operate such a refinery, unless a certificate of exemption has been issued. The refinery licence and the certificate of exemption expire on the 31st day of March. (Part VIII A, Sect. 170a).

SURVEYS OF MINING CLAIMS

Regulations governing the survey of mining claims by Ontario Land Surveys were approved by Order in Council dated May 24, 1937. Copies of same may be obtained on application to the Ontario Department of Mines, Toronto.

GENERAL PROVISIONS OF THE MINING ACT

These provisions deal with a multiplicity of conditions and are contained in Part X of the Mining Act. A few of them are herein summarized.

Exploratory Drilling

The Minister may, out of any money appropriated for the purpose, purchase such diamond drills as he may deem necessary for use in prospecting for ores or minerals under various rules and regulations.

Sampling and Testing of Ores

The Minister is empowered to establish, maintain and operate assaying and testing laboratories for sampling, assaying, testing, analysing or determining ores and minerals.

Mining Court

A special tribunal is provided, called the "Mining Court of Ontario," presided over by a judge duly appointed, for the settlement on appeal to him from the decision of a Recorder, of all disputes regarding lands, whether patented or unpatented, arising under the Mining Act. The judge has also power to grant easements, etc., on other lands for the proper working of any mine.

SAND AND GRAVEL

The staking and recording of a mining claim does not confer upon the licensee the right to sell or otherwise dispose of any sand, gravel, or stone located thereon, and all such material is reserved to the Crown together with the right of access thereto until title to the claim is obtained by patent or leases; and until the issue of a patent or lease the Minister may in the public interest and for public purpose use or dispose of any such product as he may deem proper. (Chap. 47, Sect. 68a.)

PERMITS TO WORK ON MINING CLAIMS

Before beginning or doing any work prescribed by the Act on any mining claim, the holder thereof, in addition to any other requirement, must obtain from the Provincial Forester or other authorized officer a written permit entitling him so to do as provided in The Forest Fires Prevention Act.

If a mining claim is included in lands under timber licence or for which a permit has been granted to cut timber, the holder of the claim must compensate the timber licensee or person holding such permit for his interest in any timber cut or damaged thereon, and any dispute between the holder of the mining claim and the timber licensee or person holding such permit in respect of the quality or value of the timber so cut or damaged shall be disposed of by the Minister of Lands and Forests whose decision shall be final. (Chap. 47, Sect. 48.)

MISCELLANEOUS ACTS

III.

THE UNWROUGHT METAL SALES ACT

No transactions in unwrought metals exceeding sales or purchases involving more than 3 troy ounces in any one month or certain purchases in special form suitable for industrial uses are permitted under the Act except by authority of a licence or formal exemption.

Licences are renewed from year to year on April 1st., each year at the discretion of the Minister and on payment of the renewal fee of \$2.

All licensees are required to keep a register containing particulars of all transactions and must furnish monthly detailed reports of all such transactions in duplicate.

Special provisions in the regulations pursuant to the Act deal with matters affecting extra-provincial purchases and sales.

Offences against the Act are punishable by penalties stipulated in the Act.

THE NATURAL GAS CONSERVATION ACT

Gas shall be supplied to consumers according to the order of preference specified in the Regulations.

The heating equipment for which gas may be supplied shall include only such appliances as are constructed and equipped for heating purposes, ordinary steam-power boilers used for steam heating shall not be supplied with gas.

Gas will be supplied for special purposes where, in the opinion of the Commissioner, natural gas is essential, a limited amount may be allotted under special permit. Permits shall expire on a date not later than December 31 of the year in which they are issued, but no gas may be sold or used for any purpose other than cooking and heating (as provided for in Section I of the Regulations) without a special permit.

Gas may be supplied under annual permit in accordance with the provisions of the Regulations.

Every person before prospecting for gas or acquiring by lease or otherwise rights in gas, whether acting on his own behalf or on behalf of others, shall obtain a licence from the Natural Gas Commissioner, and the fee for such licence shall be \$5.

Every owner of a drilling rig shall, before using the same, obtain from the Natural Gas Commissioner an annual licence for each rig operated, and the fee for such licence shall be \$5.

The owner of every drilling rig shall collect samples of rock cuttings in every well drilled, at about every five feet; such samples shall be plainly marked with the identity of the well, date, depths, etc., on the receptacles furnished by the Commissioner, and upon completion of the well the same shall be forwarded to the Commissioner, along with a log of the well on a form provided by the Commissioner on application.

Every person or company producing, transmitting (by pipeline), or distributing natural gas shall:

- (a) Obtain a licence from the Commissioner for each class of operation. The fee for such licence shall be \$10, but this fee shall not apply to any person or company producing, transmitting, or distributing, as the case may be, less than one million cubic feet per annum, based on the previous year's business.
- (b) Furnish the Commissioner with plans on a scale not smaller than one mile to one inch, showing the location of all wells drilled or to be drilled, meters and regulators (excepting consumers), also pipes and pipelines with their respective diameters; also plans of alterations as made.

Every licence issued by the Commissioner shall expire on the 31st day of December of the year in which the same is issued and may be renewed from year to year upon payment of the licence fee.

If gas is encountered in any drilling operations in any district where other minerals or substances are being sought, such operations shall come under these regulations and shall not be continued until a licence has been procured.

No drilling for gas shall be done upon any highway without the permission of the Commissioner.

The above are only a few of the various regulations. The reader is referred to the official text for detailed information on this subject.

WELL DRILLERS ACT

Natural Gas and Oil Wells

- 1. All owners or operators of drilling rigs shall obtain from the Natural Gas Commissioner a licence for each drilling rig in operation before drilling for oil or natural gas, such licence to expire on the last day of the year for which it is issued, and no drilling operations shall be carried on without a licence.
 - 2. Licence fees for drilling rigs shall be \$5.
- 3. Before drilling any well for oil or gas, the owner or operator of the drilling rig shall notify the Natural Gas Commissioner at least two weeks before commencing operations and show the location of such well on a form to be obtained from the Commissioner, in order that any instructions regarding the collecting of geological data may be issued.
- 4. The owner or operator of every drilling rig shall forward to the Natural Gas Commissioner:
 - (a) Unwashed samples, as collected, of rock cuttings in every well drilled, taken at about every five feet; such samples to be plainly marked with the identity of the well, date, depths, etc., on the receptacle furnished by the Commissioner on application.
 - (b) A log of the well on a form to be supplied by the Commissioner on application and showing a definite location and all other information as set out on such form.

(c) Samples of all mineral water encountered at different depths (in quart bottles or other suitable containers) plainly marked with the location of the well and the depth and formation from which it originated.

5.

(a) Should anyone fail to carry out any of the conditions of these Regulations, it shall be deemed a breach of these Regulations.

(b) Anyone who disobeys any regulations made under this Act may have his licence cancelled at the option of the Minister.

Plugging Regulations

An abandoned well shall not be plugged until the owner or other person in possession or control thereof shall have given the Commissioner at least two weeks' notice by registered mail of the date on which the plugging is to be done, so as to enable the Commissioner or Inspector to be present and approve the method of plugging; and in the case of a gas well he shall, at least two weeks immediately before such date, close in the same in such a manner that no gas may escape.

The Regulations contain detailed instructions on how to proceed in

plugging wells under various conditions.

Water Wells

No person shall bore or drill a well for water unless he is the holder

of a licence from the Minister. No fee is charged for the licence.

Every person boring or drilling a well for water shall furnish to the Minister geological and other information in accordance with the Water Well Record form supplied by the Department.

MINING TAX ACT

- 1. Taxation is levied on the annual profits of mines, at the rate of 6 per cent on all profits in excess of \$10,000 up to \$1,000,000; 8 per cent on profits over \$1,000,000 up to \$5,000,000, and 9 per cent on the excess over \$5,000,000. In ascertaining profits, all working costs and expenditures are deducted from the gross revenue. Dividends are not reckoned as costs and no allowance is made for exhaustion of the mine. Mines and mining work are largely exempt from local taxation, but where a mine is situated in a municipality a specified proportion of the tax on profits is payable to the municipality.
- 2. On patented or leased mining lands in unorganized territory, on mining rights on land situated within the limits of a municipality granted, held or used for mining purposes, and on mining rights held separately from surface rights either in organized or unorganized territory, there is an acreage tax of 10 cents per acre per annum. Failure to pay this tax for two years or more renders the land liable to forfeiture to the Crown.
- 3. When exported from Canada, there is a tax of two cents per thousand cubic feet on natural gas, but when the gas is consumed in Canada the tax is one-half cent per thousand cubic feet. The Minister may remit the annual tax to the extent of \$250 on natural gas consumed in Canada.

LIST OF ACTS AND REGULATIONS

IV.

The Mining Act, R.S.O. 1927, Chap. 45, and amendments to date.

The Mining Tax Act, R.S.O. 1927, Chap. 28, and amendments to date.

The Iron Ore Bounty Act, 1937, Chap. 34.

The Natural Gas Conservation Act, R.S.O. 1927, Chap. 47, and amendments to date.

The Well Drillers Act, R.S.O. 1927, Chap. 48, and amendments to date.

The Damage by Fumes Arbitration Act, R.S.O. 1927, Chap. 49. The Unwrought Metal Sales Act, R.S.O. 1927, Chap. 50.

The Fuel Supply Act, R.S.O. 1927, Chap. 51.

The Railway Act, R.S.O. 1927, Chap. 224, and amendments to date, also R.S.O. 1927, Chap. 170.

The Beach Protection Act, R.S.O. 1927, Chap. 298, and amendments to date.

The Ontario Companies Act, 1927, and amendments. The Ontario Extra Provincial Corporation Act.

The Ontario Companies Information Act, 1928.

The Ontario Securities Act, and amendments to date.

Regulations

Regarding the Survey of Mining Claims.

Regarding Boring Permits.

Regarding Dredging Leases.

Regulations under the Unwrought Metal Sales Act.

Regulations under Natural Gas Conservation Act.

Regulations under The Well Drillers Act. Regulations under the Beach Protection Act.

ROYALTIES

V.

There are no royalties on ores mined in Ontario, but charges are levied on sand and gravel dredged from the lands of the Crown under water.

BOUNTIES

VI.

The Iron Ore Bounty Act was for a period of 10 years and expired January 1949. This Act, which was not renewed, provided a bounty of two cents per unit of metallic iron in the long ton of low-grade iron ore beneficiated in Ontario, so as to be suitable for use in the blast furnace, or on natural ore of commercial quality smelted in Ontario.

SCHEDULE OF FEES

VII.

(The Sections noted refer to The Mining Act.)

For a miner's licence or renewal thereof for an individual (See Sects. 25, 184) \$ 5.00 For an individual miner's licence issued on or after 1st October in any year. (See Sects. 25, 184)

08	
The fee for a miner's licence or renewal thereof for a duly incorporated company, or a company licensed under The Extra Provincial Corporations Act to carry on business in Ontario, shall be based on the authorized capital, according to the following scale, namely,— (a) Where the authorized capital is less than \$50,000 or 50,000 shares of no par value (b) Where the authorized capital is \$50,000 or 50,000 shares of no par value or in excess thereof, but less than \$1,000,000 or 1,000,000 shares of no par value or in excess thereof, but does not exceed \$3,000,000 or 3,000,000 or 3,000,000 shares of no par value or in excess thereof, but does not exceed \$3,000,000 or 3,000,000 shares of no par value.	\$ 10.00 25.00
or 3,000,000 shares of no par value	75.00
For recording each claim or boring permit staked out by a licensee on his own licence. (See Sects. 57, 184)	$5.00 \\ .10$
For recording a dispute, per claim. (See Sects. 61, 184) For certificate of record of claim. (See Sects. 62, 184) For certificate of performance of working conditions. (See Sects. 78, 184) On filing appeal from recorder's decision. (See Sects. 127, 184) On filing appeal from Judge's decision. (See Sects. 124, 184) For filing transfer or agreement to sell or transfer the whole or part of a mining claim, quarry claim, boring permit, power of attorney, revocation of power of attorney, copy of writ of execution, discharge of execution or any other instrument affecting any recorded claim, right or interest, per claim. (See Sects. 73, 107, 184) For special renewal licence under section 86, to save forfeiture, twice the	10.00 1.00 1.00 10.00 20.00
prescribed licence fee. For filing report of work under section 86, to save forfeiture, per claim For certificate relieving from disqualification under section 55	$3.00 \\ 20.00$
For recording extension of time for performing working conditions, affixing metal tags or making application and payment for patent or lease, per claim. (See Sects. 86, 184) For recording an order or judgment of the Judge, or made on appeal from him, per claim. (See Sects. 77, 184) For recording a certificate that interest in claim or other recorded right	3,00 1.00
or interest is called in question, per claim. (See Sects. 77, 184) For copies or certified copies of any document, paper or record obtained from any officer, per folio For every affidavit sworn before a recorder For abstract or copy of entries in record book respecting any mining claim,	10.00 .10 .25
per folio (100 words) 10 cents, minimum charge per claim	$\begin{array}{c} .25 \\ 5.00 \end{array}$
REPRESENTATIVES Minister	
W . Tell.	

VIII.

Minister	Hon. W. S. Gemmell.
Deputy Minister	H. C. Rickaby.
Assistant Deputy Minister	D. G. Sinclair.
Director of Publications	Alex. Braidwood.
Mine Assessor and Fuel Controller	A. R. Crozier.
Natural Gas Commissioner	R. B. Harkness.
Provincial Geologist	Dr. M. E. Hurst.
Chief Inspector of Mines	W. O. Tower.
Provincial Assayer	

MINING RECORDERS:	
Elk Lake	W. C. Sharp.
Fort Frances	C. R. Richardson.
Haileybury	S. J. Mason.
Kenora	
Port Arthur	J. P. Bolduc.
Red Lake	P. Logee.
Sault Ste. Marie	W. N. Miller.
Sioux Lookout	T. A. Wood.
Sudbury	M. A. Story.
Swastika	H. G. Ginn.
Timmins	
Toronto	
Mining Inspectors:	
Kenora	R. L. Smith.
Port Arthur	
Sudbury	
Kirkland Lake	
Timmins	
Toronto	

For more detailed information and copies of the Mining Laws and Regulations for Ontario apply to the Deputy Minister, Ontario Department of Mines, Toronto, Ontario.

MANITOBA 1

INTRODUCTORY

I.

The Province of Manitoba has since July 15, 1930, administered its own natural resources. Prior to that date the authority for the leasing and disposal of mineral lands was in the hands of the Government of the Dominion of Canada.

The Department of Mines and Natural Resources was created in Manitoba on March 9, 1928, in order to assist the development of resources

other than those of agriculture.

The Province has had a Mines Act since 1897 which was consolidated in 1913. In 1930, the Legislative Assembly of Manitoba enacted the Mines Act (S.M. Chap. 27) repealing the Act of 1913 but retaining all regulations in force under that Act as part of the new Act. Various amendments to the Act of 1930 have been made, and the present Act is "The Mines Act" R.S.M. 1940, Chapter 136, and amendments to date.

Mineral lands and rights are administered by the Mines Branch,

Mineral lands and rights are administered by the Mines Branch, Department of Mines and Natural Resources, subject to the provisions of The Mines Act. Regulations under The Mines Act, put into force by

Order in Council, govern the administration and leasing of:

(a) Mining claims—gold, silver, copper, zinc, etc.(b) Boring locations—oil shale, coal, and salt.

(c) Quarrying locations—granite, limestone, marble, slate, or any building stone, gypsum, gravel, marl, peat, sand, or volcanic ash.

(d) Oil and natural gas rights.

These regulations are applicable to all minerals on Crown lands in, upon, or under which the minerals have been reserved to the Crown, and acquired under The Mines Act and regulations made thereunder. Where, prior to the coming into force of The Mines Act, mining rights were acquired by entry or by lease under the provisions of the Acts of the Parliament of Canada, known as "The Dominion Lands Act," and the regulations made thereunder, such mining rights and all matters appertaining thereto are now deemed to be subject to these Regulations.

THE MINES ACT

II.

In summarizing the provisions of the Mining Law of Manitoba the penalty clauses are omitted and attention is confined to the clauses describing the practical steps to be taken; that is to the part which refers to property rights, following up all phases through which the land passes from the moment of its leaving the public domain to its final acquisition by a private individual.

In the matter of mining rights in Manitoba, aliens enjoy the same

privileges as do British subjects.

¹ Prepared in collaboration with J. S. Richards, Director, Mines Branch, Manitoba Department of Mines and Natural Resources, Winnipeg, Manitoba.

PROSPECTING LICENCES

A prospecting (miner's) licence is necessary before beginning search for minerals. This licence is issued at a cost of \$5 to any person of 18 years of age or over, and at a cost of \$75 to any company incorporated, licensed, or registered under the laws of Manitoba to transact business in Manitoba.

The prospecting licence is good from the date of the issue until the 31st day of March. Upon the recommendation of the Director of the Manitoba Mines Branch, the Minister may, before the 31st day of March in any year, extend the time for renewing licences for any period not exceeding one month.

The licence is effective throughout the Province and applies to any vacant Crown lands and upon all lands where the mining rights have

been reserved to the Crown, with the exceptions given below.

Subject to certain provisions and rules, the holder of a mineral location may work or mine on such location, but before a lease is issued no person can ship, send, carry away, or permit to be shipped, etc., from the location from which the same has been won any ore, mineral or mineral-bearing substance without permission.

Except where the Minister is satisfied that a discovery of valuable mineral in place has been made, no mineral location shall be staked out or recorded upon any of the following—

(a) Lands for townsite, settlement, or parish.(b) Lands laid out into town or village lots.

(c) Lands used for railways and highway purposes.

(d) Lands reserved for summer resort purposes and for provincial game preserves and bird sanctuaries.

No land shall be prospected or staked:

(a) Which is under staking or record as a mineral location which has not lapsed, been abandoned, cancelled or forfeited.

(b) Which has been withdrawn from prospecting or staking, or

declared to be not open to prospecting.

(c) Which is required for the development of water power or some other purpose in the public interest.

(d) Which, without reservation of the minerals, has been sold, etc., or included in a permit of occupation.

(e) Which is in an Indian reserve, a Dominion park, or other reser-

vation made by the Dominion Government.

Any mineral location used for purposes other than that of mining

or for the mineral industry shall be cancelled.

No prospecting is permitted on private grounds except with the written consent of the owner. In case of dispute, the applicant may apply to the Minister for permission to submit the matter to arbitration, and adequate security must be given, to the satisfaction of the recorder, as to possible damages, before entry can be made.

MINING CLAIMS

The following regulations apply to the disposal of all claims containing gold, silver, and all naturally occurring useful minerals other than placer deposits, or coal, natural gas, oil shale, petroleum and salt, or granite, limestone, marble, slate, and any building stone, or clay, gravel, gypsum, marl, peat, sand, and volcanic ash.

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In unorganized territory each claim must be in the form of a square, as nearly as possible, with boundary lines running north-south, and east-west, astronomically, and not exceeding 1,500 feet on each side, and of an area of 51.65 acres.

In organized territory surveyed into sections of 640 acres, every claim shall consist of a so-called legal subdivision and shall consist of about 40 acres, but no such claim can be located partly in one legal subdivision and partly in another.

A licensee cannot in any one licence year in any one division stake out or apply for more than nine claims. All nine claims may be staked on his own licence or on behalf of any other licensee.

Claims must be marked by properly inscribed stakes at each angle, and well blazed lines.

Notice of the staking must be given within 15 days following, to the mining recorder for the division in which the claim is located. If the claim is situated more than 10 miles in direct line from the office of the recorder, an additional day for recording is allowed for each additional 10 miles or fraction thereof; but in no case should the time for recording be more than 60 days. In the event of the claim being more than 200 miles from the office of the recorder, provision is made for appointing an "emergency recorder".

There are regulations dealing with the abandonment of a claim, its relocation, and the staking of other claims after abandonment.

Rights of Licensee

The interest of a holder of a claim shall, prior to the issue of a lease, be deemed to be a chattel interest, equivalent to a lease of the minerals in or under the land for one year, and thence from year to year, subject to the performance and observance of all the terms and conditions of these Regulations.

Every licensee shall be given by the recorder two free assay coupons on recording a claim, and two additional free assay coupons on recording each year's work, and on forwarding, charges prepaid, samples from the claim to the Provincial Assayer, he is entitled to have assays made without charge for one of the following metals: gold, silver, copper, lead, or iron; and for two coupons one assay for nickel, zinc, or tin.

The holder of adjoining claims, not exceeding thirty-six in number, may comprise the claims in one group and the work required for a certificate of work may be performed on any one or more such claims.

Any licensee, having duly located and recorded a claim, shall be entitled to hold it for a period of one year, and thence from year to year without the necessity of re-recording, provided that within 5 years immediately following the recording thereof he shall perform or cause to be performed annually thereon work which shall consist of:

(a) Trenching, shaft sinking and sinking test pits by removing 144 cubic feet of solid rock; or

(b) Stripping, shaft sinking and sinking test pits in overburden by removing 288 cubic feet; or

(c) Boring 35 lineal feet by diamond drill, irrespective of the size of drill used or core recovered;

and at the completion of the 5 years' work, including survey, he shall apply for a lease in accordance with the necessary regulations.

The survey of a claim may be accepted in lieu of work on the claim for the year in which the survey is made. Survey by a recognized geo-electrical, geophysical, or geological method may be counted as one year's work, subject to specified conditions.

Roads, houses, etc., are not classed as mining work.

Provision is made under special conditions, for the extension of time for the performance of work. Provision is also made for compensation to the owner of the surface rights of lands being prospected, etc.

A certificate of improvements may be granted after the requirements as to work (5 years) and survey have been met.

A lease must be applied for within 3 months after the issue of a certificate of improvements.

The holder of a claim by lease, located on vacant Crown lands, is entitled to all minerals within the meaning of the Regulations, found in place. The use of the surface of a claim is restricted to the requirements of the operations. But surface rights may be obtained subject to specific conditions. The surface permit is for one year and the fee not less than \$1 per acre.

The lease of a claim is for a term of 21 years and is renewable. The fee for the issue of the lease is \$10. The rental is at the rate of \$1 an acre or fraction thereof, provided the claim does not exceed the maximum area of 51.65 acres—but in no case can it be less than \$5.

The procedure for the transfer of a mineral claim is dealt with under the Regulations.

The mineral rights under highways and road allowances may be leased subject to the provisions of the mining regulations.

PLACER CLAIMS

The Act provides for the staking of placer claims, and the provisions of the Regulations are very similar to those for the staking of a claim upon the discovery of valuable mineral in place.

OPERATING REGULATIONS

The Act as amended in 1927 provided for the making of general rules for the protection of workmen engaged in and about mines. Rules under the Mines Act passed by Order in Council effective as of date November 1, 1928, and amended at intervals, regulate the use and care of explosives, the installation of proper ventilation and sanitary conveniences, protection in working places, provision for suitable dressing rooms, equipment, and means of furnishing aid to the injured, safety in hoisting and lowering equipment, use of electrical power, fire-prevention precautions, as well as providing for the inspection of mines, mine works, and all matters in connection therewith.

On opening up a deposit of mineral the operator becomes subject to these rules under the Mines Act.

The "Provincial Lands Act" (S.M. Chap. 32, 1930) was repealed in 1934 and was replaced in the same year by "The Crown Lands Act" (S.M.

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Chap. 7, 1934), wherein all mines and minerals are reserved to the Crown out of every disposition of Crown land unless there is express provision to the contrary.

BORING CLAIMS

These Regulations apply to oil shale, coal, or salt upon or under Provincial lands or such lands where the mineral rights have been reserved to the Crown.

A licensee may obtain a "Boring Permit," granting him the exclusive right for a period of one year to prospect for the above-mentioned minerals, by

(a) Staking out, or having another licensee stake out on his behalf and in his name an area;

(b) Furnishing an application, after the staking out, within the period specified under "Mining Claims"; (c) Furnishing a plan showing the situation of the lands and a descrip-

tion of same;

(d) Proving within 30 days that he has paid or secured to the owner of the surface rights, if any, the compensation agreed upon or determined.

The area of land included in a Boring Permit is limited to 1,920 acres, and the length of the location must not exceed three times its breadth.

The fee is \$5 for an application and 10 cents rental for each acre applied for. The application is renewable.

The applicant must commence prospecting operations within 90 days of

the acceptance of his application.

Permission to enter must be obtained when the surface rights of a location are covered by a timber licence, grazing lease, mineral claim, or other form of terminable grant.

On the discovery of one or more of the substances covered by these Regulations, the holder of a permit obtains a lease for a period of 21 years, at a rental not less than \$1 per acre per year. The lease is renewable.

All valuable minerals other than those covered in these Regulations are reserved to the Crown.

A lease may be obtained for such portion of the surface rights as may be considered necessary for the efficient and economical working of the location.

QUARRYING CLAIMS

These Regulations deal with granite, limestone, marble, slate, or any building stone, and with clay, gravel, gypsum, marl, peat, sand, or volcanic ash.

A licensee may obtain a "Quarrying Location" for the purpose of quarrying out, mining, or removing stone, or other material above mentioned by: in unsurveyed territory staking out or having another licensee stake out on his behalf and in his name; in surveyed territory furnishing an application for a lease or permit of the quarrying location. The fee for an application for a lease of a quarrying location is \$5, and the annual rental \$1 per acre.

The licensee is limited to one quarrying location not exceeding 40 acres

in any one year, except by assignment.

The lease conveys the rights only to the minerals covered by the lease or permit.

The lessee is limited to such surface rights as may from time to time be absolutely necessary for the removal of the material covered by the rights granted.

Permission to enter must be obtained when the surface rights of a location are covered by a timber licence, grazing lease, mineral claim, or other form of terminable grant.

In the case of the mineral rights having been disposed of by the Crown, no lease for quarrying purposes may be granted unless the application has been approved by the Minister and unless he is satisfied that such lease will not unduly interfere with mining operations.

The term of the lease is 10 years and is renewable.

OIL AND NATURAL GAS RIGHTS

Oil and natural gas rights, the property of the Crown, may be leased or reserved to applicants in accordance with the following regulations:

Leases

The lease is for a primary term of 3 years and a secondary term of 6 years, provided that, where production is obtained, the term of the lease may be extended for successive periods of 6 years. Rental for the lease is 50 cents per acre per annum for the primary term, and \$1.50 per acre per annum for the secondary term, provided that, where production is obtained, the annual rental shall be 50 cents per acre.

The area of an oil and natural gas lease must not exceed three sections, and not be less than one-quarter section. No person may acquire in any calendar year locations that comprise in the aggregate more than fifteen sections.

In unsurveyed territory the location shall be described by metes and bounds (boundary lines), and the locator in person must define the tract by two legal posts marked "1" and "2" respectively, the distance between post No. 1 and post No. 2 not to exceed 15,840 feet. The name of the locator and certain other markings must be placed on each post.

Drilling operations must commence within one year of the date of the lease with approved equipment.

A credit may be established in favour of the lessee, for his expenditures in drilling and in geological and geophysical exploratory operations, which may be used, subject to approval, to satisfy the rentals for a period not in excess of 3 years from its establishment.

Where the surface rights are owned by other than the lessee, no entry may be made unless by mutual agreement, or until the owner of the surface rights has been protected by arbitration in accordance with the provisions of The Mines Act.

Geological and Geophysical Reservations

Tracts of lands may be reserved to applicants for approved geological and geophysical exploration.

Each application must be accompanied by a fee of \$250 and a cash deposit for each 20,000 acres or fraction thereof in the amount of \$750

in the case of surface geological investigation, and \$2,000 where the work relates to subsurface geology. A licence is also required for subsurface investigations.

The cash deposit will be held as a guarantee that an approved expenditure will be made on geological and geophysical exploration.

Up to 75 per cent of approved exploration expenditures may be established as a credit to be applied on subsequent lease rentals.

The area of reservation must not exceed 200,000 acres nor be less than 10,000 acres, and its length must not be more than twice its breadth.

The term of the reservation is for one year, but under certain stipulated conditions this may be extended to 3 years.

Prior to the expiration of the reservation the holder shall have the exclusive right to apply for a lease or leases of not more than 50 per cent of the area contained within the reservation.

Before the termination of a reservation, the holder must submit a complete record of the geological, geophysical, and other data obtained.

Drilling Reservations

Tracts of land may be reserved to applicants for the purpose of carrying on subsurface geological investigations by methods usual in drilling wells for production of oil and gas.

Each application must be accompanied by a fee of \$250 and a cash deposit of \$1 per acre or fraction thereof. The cash deposit is refundable on receipt of satisfactory progress reports and of a statutory declaration setting forth the details of expenditures incurred.

The area of the reservation must not exceed 10,000 acres, and the length must not be greater than twice the breadth.

The term of the reservation is 60 days, but renewals may be granted for further periods provided that the extensions do not exceed 12 months from the effective date of the reservation. Drilling shall commence within 60 days of the effective date of the reservation. The holder may at any time prior to the termination of the reservation convert all or any part to lease, provided, however, that this conversion shall take place within 30 days of the discovery of commercial quantities of oil and gas. (See Sect. 79).

The drilling and production operation sections of these regulations deal with location of well sites, directional surveys and testing of wells, equipment to be used, sampling, and other phases of operational technique.

These Regulations apply to all lands in the Province in respect of which exploration, development, or production of oil and natural gas is undertaken.

TREATMENT OF ORES

All permits or leases are subject to the provision that all ores or minerals mined from locations described in such permits or leases must be treated and refined within Canada, so as to yield refined metal or other product suitable for direct use in the arts and industry without further treatment. Provision is made for exemption from the operation of this section for such period of time as may seem proper. (1940, Chap. 136, Sect. 9).

MINING BOARD

The Mining Board consists of three members or more as appointed by the Lieutenant-Governor in Council and has power to hear and determine all disputes, and settle all difficulties, etc., between licensees which arise under The Mines Act or which are referred to the Board. (1940, Chap. 136, Sect. 28).

MINING TAXATION

III.

The Manitoba Corporation Income Tax Act, 1947, applies to companies or individuals operating mines in Manitoba. The provisions of this Act are essentially the same as the Dominion Income War Tax Act, except that the tax is set at 5 per cent.

Mining operations are also subject to "The Mining Royalty and Tax Act", which imposes a royalty tax of 8 per cent on the income derived from the operation of the mine in excess of \$10,000. New mines pay a rate of 6 per cent for the first year and 7 per cent for the second year. "Income" is net profit less a deduction equal to 8 per cent of the original cost of the depreciable assets used in processing the ore; or in the case of base metal mines, the deduction shall not be smaller than the following proportion of the net profit:

(i) Where both copper and nickel are recovered, each in	
amounts which exceed in value 5 per centum of the total value of	
metals recovered	40%
(ii) Where both lead and zinc are recovered, each in amounts	
which exceed in value 5 per centum of the total value of metals	
recovered	30%
(iii) Where both copper and zinc are recovered, each in	
amounts which exceed in value 5 per centum of the total value	
of metals recovered	20%
(iv) In other cases	15%

LIST OF ACTS

IV.

The Mines Act, R.S.M. 1940, Chap. 136, and amendments to date. Regulations under "The Mines Act," governing disposal of:

- (a) Mineral claims and placer claims.
- (b) Boring claims.
- (c) Quarrying claims.
- (d) Oil and Natural Gas Rights and exploration and development.
- (e) Regulations under "The Mines Act" governing the operation of Mines.

The Crown Lands Act, R.S.M. 1940, Chap. 48, and amendments to date. The Well Drilling Act, R.S.M. 1940, Chap. 232.

The Mining Royalty and Tax Act, R.S.M. 1948, Chap. 52.

The Securities Act, R.S.M. 1940, Chap. 188, and amendments to date.

ROYALTIES

V.

The Minister may set a royalty not in excess of 10 cents per cubic yard on sand and gravel produced from Crown lands.

BOUNTIES FROM CROWN LANDS

VI.

None.

SCHEDULE OF FEES

	SCHEDULE OF FEES	
VI		
	For a miner's licence or renewal thereof for an individual	$\begin{array}{c} 5.00 \\ 3.00 \end{array}$
	For a miner's licence or renewal thereof issued to a registered mining syndicate. For a miner's licence issued to a registered mining syndicate on or after	25.00
	ist venoner in any vear	12.50
	FOR a miner's accepted or renewal thereof for a company corporation or firm	75.00
	other than a syndicate	37.50
	For a special renewal licence under section 66 of these Regulations to save	1.00
	fortesture, twice the fee prescribed above:	F 00
	For recording each claim, located by a licensee on his own licensee For recording each claim, located by a licensee on behalf of another licensee	$\begin{array}{c} 5.00 \\ 10.00 \end{array}$
	For substituted record of entry	$\frac{2.00}{1.00}$
	For filing application for rental permit covering mineral rights where such rights are totally submerged in water	10.00
	rights are totally submerged in water. For rental under permit covering mineral rights where such rights are totally submerged in water, per acre, per year.	.10
	For each geophysical reservation	500.00
	thereof. For airborne geophysical survey permit for each 12-month period or	125.00
	fraction thereof. For the grouping certificate, for every nine claims or fraction thereof	500.00
	For filing a report of work.	5.00
	For filing a report of work. For recording extension of time for performance of work, per claim. For filing application for a vesting order.	$\substack{2.00 \\ 5.00}$
	For recording a dispute, per claim	$\begin{array}{c} 5.00 \\ 10.00 \end{array}$
	For filing application for relief from forfeiture under section 66, per claim For application for a certificate of improvements, per claim	$5.00 \\ 5.00$
	For application for a lease of mineral rights, per claim	10.00
	Rental of a lease of a mining claim, per acre or fraction thereofbut in no case shall the rental for any lease be less than	$\substack{1.00 \\ 5.00}$
	Rental of excess area for first period, per acre or fraction thereof Rental for renewal of lease for a further period of 21 years, if in production,	5.00
	per acre or fraction thereof	1.00
	fraction thereof	5.00
	duction, per acre or fraction thereof	4.00
	acre or fraction thereof	20.00
	For recording application for a surface permit	5.00

Rental of a surface permit, per acre or fraction thereof, per annum\$ but in no case shall the rental for the entire permit be less than For recording application for a surface lease	$1.00 \\ 5.00 \\ 10.00 \\ 1.00 \\ 5.00$
held under entry, or against any right or interest therein, for each claim affected. For recording any document, not otherwise provided for, against a lease or	2.00
any right or interest therein for each lease affected For an abstract of the records of a claim or lease: for first entry for each additional entry	$3.00 \\ .25 \\ .10$
For an examination of the record book, per claim or lease	.10 .10
from any officer per folio of 100 words or less	.50 25.00

REPRESENTATIVES

VIII.

Minister Deputy Minister	.D. M. Stephens.
Director	J. S. Richards.
Chief Mining Engineer	M. J. Gobert.
Chief Geologist	J. D. Allan.
Chief Mining Recorder (Winnipeg District)	.R. Cox.
Mining Recorder (The Pas District)	.T. Morgan.

More detailed information and copy of "The Mines Act" of Manitoba and Regulations made thereunder may be obtained on application to the Director, Mines Branch, Department of Mines and Natural Resources, Winnipeg, Manitoba.

SASKATCHEWAN 1

INTRODUCTORY

T.

Saskatchewan has administered its own natural resources since October 1, 1930. Previous to that the authority for the leasing and disposal of mineral lands was in the hands of the Government of the Dominion of Canada. Administration of the mineral resources of the Province was taken over in 1930 by the Saskatchewan Department of Natural Resources.

The Act creating Saskatchewan as a province came into force September 1, 1905. Previously, Saskatchewan was part of the Northwest Territories, and its first mining Act dates back to 1898 when "The Coal Mines Regulations Ordinance" was passed. (Consolidated Ordinance of the Territories, No. 9 of 1898, Chap. 16). These regulations provided for the safety, working conditions, employment and personnel in the coal mines. They were replaced in 1909 by "The Coal Mines Act" (1909, Chap. 23), and in 1917 by "The Mines Act" (1917, Chap. 10), which provided general regulations for all mines. The Act was amended and consolidated in 1920, and again in 1930. This Act was replaced in 1932 by "The Coal Mines Safety and Welfare Act" (1932, Chap. 46), and in 1940 by "The Coal Miners' Safety and Welfare Act" (1940, Chap. 270).

In 1934 an Act was passed to regulate the working of certain mines and known as "The Mines Regulation Act, 1934" (1934, Chap. 46), replaced by R.S.S. 1940, Chap. 271, and also an Act respecting the licensing and regulation of coal mines, known as "The Coal Mines Licensing and Regulation Act 1934" (1934, Chap. 47), replaced by "Coal Mining Industry Act", R.S.S. 1940, Chap. 295. Various other Acts have been passed in recent years to provide special regulations, such as "The Oil and Gas Wells Act", now R.S.S. 1940, Chap. 255.

After taking over the control and administration of the natural resources of the Province, special legislation had to be provided for, and "The Mineral Resources Act", 1931, Chap. 16, was passed, replaced by R.S.S. 1940, Chap. 40. Various regulations have since been passed to supplement this Act.

THE MINERAL RESOURCES ACT

II.

Under this Act the disposition of the surface rights in respect of any Provincial lands conveys the land only and not the minerals, which may be leased or disposed of in accordance with the regulations provided therefor.

The mines, minerals, and mining rights in or under highways and road allowances are vested in the Crown and may be leased or otherwise disposed of.

¹ Prepared in collaboration with W. J. Bichan, Director, Mineral Resources Branch, Saskatchewan Department of Natural Resources and Industrial Development, Regina, Saskatchewan.

The Act provides for the making of all regulations and orders necessary

to carry out its provisions, some of which are given herein:

(a) The leasing of land containing minerals or disposal of mining rights underneath lands, the surface rights of which have been disposed of, and for the protection and compensation of the holders of surface rights, in so far as they may be prejudicially affected.

(b) Prescribing the land subject to be staked as mineral claims or quarry locations, or to be disposed of under petroleum, coal, gas, salt or saline deposit leases, or placer mining rights, their size, manner of staking, etc.

(c) The disposal of surface rights or any part thereof of any mineral

claim.

(d) Prescribing the respective rights of persons holding land or estate under two or more Acts.

(e) Creating natural resources districts and regulating the recording of claims in any part of the Province.

(f) Licensing persons, firms, or corporations to prospect, stake or mine mineral claims, and prescribing the number of claims permissible, i.e., the number of claims which may be staked under a licence in any one year, or in any mining district.

(q) The appointment of arbitrators or mining boards, and prescribing

the powers, duties, and mode of procedure of same.

(h) The opening, construction, maintenance, and use of roads, power transmission lines and tramways, and for the opening, etc., of ditches, aqueducts, or raceways through or over mineral claims.

(i) The disposal of tailings, slimes, or waste products for the discharge

thereof into any body of water.

- (j) Determining the reservation as to timber that shall be inserted in all leases of Provincial lands leased as mining lands.
- (k) Fixing the royalties, fees, dues, or charges to be paid for leases, permits, mineral rights, etc.
- (1) Prescribing penalties, in cases not otherwise provided for, for the breach of any regulations or orders made under this Act.
- (m) Requiring from the holders, owners or occupiers of mineral claims or mining property, reports and statements respecting the work and operations carried on at any mine or on any mineral claim.
- (n) Governing the mining, production, distribution, sale and control of any mineral or compound containing potassium or sodium or any radioactive substance.

The Act provides also for the protection of investors and for the making of statistical returns to the Department.

OUARTZ MINING CLAIMS

MINER'S LICENCE

Any person 18 years of age and over, and every mining partnership or joint stock company, may obtain a "miner's licence" on payment of the required fee. All licences expire on the 30th day of April next after the date of the issue and may be obtained or renewed at a cost of \$5 for an individual, \$15 for a mining partnership, and \$75 for a company. The renewal of the licence may be obtained for any number of years not exceeding 5 years.

The licence entitles the holder to enter, locate, prospect, etc., for deposits of gold, silver, and all other minerals other than placer deposits, peat, coal, petroleum, natural gas, bitumen and oil shales, and certain other minerals as defined in the Regulations, upon any vacant Provincial lands and upon all lands where the minerals have been reserved to the Crown, and also to prospect, etc., for gold and silver upon any lands where the rights to mine gold and silver have been reserved to the Crown.

The holder of a licence may stake out nine claims in any one licence year in any or all of the eight mining districts of the Province. All of the nine claims may be staked by the licence holder or he may stake not more than three claims for each of two other licensees and the remainder of the nine for himself. This may be repeated for each mining division.

A mining claim in unsurveyed territory consists normally of a square, 1,500 feet to a side (a maximum of 51.65 acres), with boundary lines running north-south and east-west. In surveyed territory a mineral claim consists of 40 acres, being a legal subdivision of a township.

Land covered by water may be included in a mineral claim, subject to certain provisions.

The granting of a location for the mining of iron and mica is limited to 160 acres, and includes the right to the iron and mica only, and does not include the surface.

Each claim must be marked at each corner by properly inscribed posts and by well blazed and clearly cut lines, and in treeless country by regulation land marks.

Fifteen days are allowed for recording, if within 10 miles of the Recorder's office, and one additional day for each additional 10 miles distance from the Recorder's office.

The appointment of an Emergency Recorder is provided for in areas more than 300 miles from the Recorder's office.

Metal tags impressed with the number of the mining claim are supplied by the Recorder, and must be affixed to the corner posts before expiry of the period for performing the first instalment of work.

A mineral claim can be held for one year and then from year to year without re-recording, provided that within 10 years immediately following the recording the holder has performed the required work, consisting of stripping, trenching, shaft sinking, or other actual mining operations to the value of \$1,000 as follows: at least \$100 within one year immediately following the recording of the claim and not less than \$100 worth of work in each succeeding year, after which having been granted certificates of work for each year and a certificate of improvement he may apply for a lease.

The work may be completed in less period of time. Boring by diamond or other core drill may count as work at the rate of \$5 per foot of boring, and work by a drill operated by compressed air is recorded at the rate of \$7.50 per foot (20 lineal feet of diamond drilling minimum requirement).

A geophysical survey, or the cost of the survey of the claim may be accepted in lieu of representation work for the year in which the survey is made.

A claim-holder must, within one month of the expiry of each work period, file with the Recorder an affidavit showing performance of work with particulars and a sketch showing the location of the work, and is granted a certificate of work for each year of work.

The application for a "certificate of improvement" must be made to the Recorder within 3 months after the required work has been performed. The certificate of improvement is granted after the necessary requirements have been met. (Filing of survey plan must be made along with notice for "certificate of improvement".)

The claim-holder having secured a "certificate of improvement", is then entitled to a "lease" of the claim for a term of 21 years at a rental of \$5 per annum. The first year's rental shall be paid within three months after the date of the certificate of improvement. The rental for a 21-year renewal is \$10 per annum. For a claim containing an area of 160 acres the rental is \$15 per annum, and for a 21-year renewal the rental is \$30 per annum.

EXCLUSIVE PROSPECTING RIGHTS

- (1) Nothwithstanding anything herein contained, in case evidence is furnished to the satisfaction of the Minister that any person is prepared to incur large expenditures in prospecting and development work with a view to discovery of minerals and the ultimate establishment of a large mining industry, the Minister may, upon the application of such person and upon payment of a fee of \$500 and such further sum, if any, as may be agreed upon through negotiations with such person, and upon proof of his financial ability and intention to make such expenditures, withdraw from disposal under these regulations for such period and upon such terms and conditions as the circumstances may appear to warrant, such area or areas as the Minister may determine to permit legitimate prospecting operations being carried out commensurate with the expenditures contemplated.
- (2) Notice of such withdrawal shall be posted in the office of the Mining Recorder and from the time of such posting until the cancellation of the withdrawal no person other than the person on whose behalf the withdrawal was made shall have any right to prospect or mine upon the land mentioned in the notice.
- (3) The Mining Recorder shall, while any land remains withdrawn, refuse to record any mineral claim upon or in respect of such land except in favour of the person on whose behalf the withdrawal was made or his nominee.

TREATMENT OF ORES

All grants and leases issued under the provisions of these Regulations shall be subject to the provision that all ores or minerals mined from locations described in such grants or leases shall be treated and refined within Canada or the British Empire, except as otherwise permitted so to do at the Minister's discretion, so as to yield refined metal or other product, suitable for direct use in the arts without further treatment. Otherwise the

grant or lease issued for such lands shall become void, and the said lands shall forthwith revert to and become re-vested in the Crown freed of any interest or claim of any other person or persons, and shall be open to disposal in such matter as the Minister may decide.

PLACER MINING

Any person 18 years of age or over may prospect on Crown lands. Permission may be granted to prospect for minerals on other than Crown lands after adequate security as to loss or damage has been given.

The claims are designated as creek, river, and inland claims. A creek claim is 500 feet long, measured along the base line of the creek, and

1,000 feet deep on each side of the base line.

A river claim must be on one side of the river only, and is 1,000 feet long, measured in the general direction of the river. The rear boundary shall be defined by measuring 1,000 feet from the low-water mark.

Inland claims are 1,000 feet in length by 1,000 feet deep.

The Regulations provide for the form of the claims, the marking, numbering of the posts, the size and number of discovery claims, and the procedure for locating and recording claims.

Grouping of claims up to thirty in number may be permitted for a

period of 10 years, upon payment of a fee of \$5 for each claim.

The fee for a water grant is \$5 and the Regulations deal in detail with the provisions for applying for water rights, the diversion, use, measuring of water, etc.

ALKALI MINING

These Regulations govern the disposal of the rights, the property of the Crown, to natural accumulations of soluble mineral salts and associated marls, excepting the lands covered by Little Lake Manitou.

The right to the naturally occurring "alkali" accumulations, the

property of the Crown, are leased at an annual rental of 25 cents an acre,

payable in advance. The application fee is \$10.

The Regulations do not apply to lands occupied by buildings, dwelling houses, or any orchard, etc., except with the consent of the owner, nor to lands lying within cities, towns, etc., nor to school lands, Indian reserves, etc.

The term of the lease is for 20 years, and is renewable.

When extracting alkali accumulation from any source of water supply to which the Water Rights Act applies, a water licence must be acquired. The maximum area of a location is 1,920 acres, except by assignment,

when it must not exceed 9 square miles. The minimum area is 40 acres.

The Regulations provide for the application for locations comprising surveyed and unsurveyed lands, as well as methods of staking and marking.

COAL MINING

The coal mining rights, the property of the Crown, are leased at an annual rental of \$1 per acre, payable within 30 days of the receipt of the application. The application fee is \$5.

The Regulations do not apply to lands comprised within any Provincial

forest, Provincial park, or protected area, or land within any city, etc.

The term of the lease is for 21 years, and is renewable.

The maximum area of a location is 640 acres and the lessee is limited

to three locations, except by assignment.

In surveyed areas, the locations must consist of legal subdivisions of sections and must be adjoining; the area applied for must not exceed 3 miles in length, and the width is limited to one-third the length. The minimum area is 80 acres.

The Regulations contain instructions as to making application, filing,

staking, etc.

The boundaries of coal locations are vertical planes and the lessee is limited to mining or excavating coal within 60 feet of the boundaries, and also is prohibited from mining coal under the rights of way of a railway, or in any way which might interfere with any power line.

Active operations must begin within one year from the date of the lease and after the expiration of one year the lessee must mine a minimum

of 5 tons of coal a year.

Actual settlers are entitled to buy at the pit's mouth whatever coal they may acquire for their own use, at a price not to exceed \$2.75 per ton.

A royalty at the rate of 5 cents per short ton is levied on the merchantable output of the mine and is payable monthly to the Coal Administrator from the date upon which operations are commenced.

The surface rights may be leased yearly on the payment of a rental

of \$1 per acre.

In the case of land covered by a timber licence, petroleum lease, etc., permission to enter must be obtained from the Minister, and arbitration is provided for in the case for entry on patented lands.

An operator's licence must be obtained from the Coal Administrator

before any mining operations can be undertaken.

QUARRYING RIGHTS

These Regulations are for the disposal of the rights, the property of the Crown in Saskatchewan, to bentonite, building stone, clay, granite, gravel, gypsum, iron oxide, limestone, marble, marl, sand, slate, and volcanic ash.

Any person 18 years of age and over may lease any quarriable sub-

stance which is the property of the Crown.

In Surveyed Areas. If the quarriable substance applied for occurs on the surface of the land, the application must include a description of area by quarter-section, etc.; if it occurs under the surface, the same description applies and the boundaries are the vertical planes.

The term of a quarrying lease is for a maximum of 21 years, computed from the 1st day of May of the year in which the lease is executed. The lease is renewable. The area is limited to 160 acres and the length must not

exceed twice its breadth.

The rental is at the rate of \$1 per acre per annum, payable by May 1. In addition there is payable an application fee of \$5.

The quarrying lease does not convey the right to any other mineral other than the substance or substances mentioned in the lease, even though such other mineral is mixed with or occurs above or below the substance leased.

The lease does not convey any water rights.

A quarrying lease does not convey the surface rights, so that the applicant must apply also for a lease or occupational permit under the Provincial Lands Act, or if the land is included in a forest reserve, under the Forest Act. If the land is not the property of the Crown, the lessee must pay a reasonable compensation to the owner.

The lessee must begin actual operations of the property within one

year from the date of the lease.

The lessee must pay royalties on the quarriable substance.

Yearly permits are granted for the removal of sand, stone, and gravel from the beds of rivers and lakes. The permits expire on the 30th day of April following the date of issue. One permit only is issued to an applicant in any one fiscal year, unless the rights granted have been fully exhausted.

The permit is limited to a certain specified number of cubic yards, and does not constitute any exclusive right to the portion described in the

permit or to the quantity of material specified.

A fee of \$1 is charged for each permit together with dues at the

rate of 5 cents per cubic yard.

Quarriable substances which do not occur in or under the beds of rivers or lakes may, in the discretion of the Minister, be disposed of by yearly permit instead of by lease.

Annual royalty-free permits may be obtained for a fee of \$1 by the Department of Highways and Transportation, rural municipalities, eities, towns, villages, hamlets, and settlements authorizing the removal of sand, gravel, and stone for the purpose of building and maintaining roads, surfacing streets, and constructing public works or buildings. (On school lands these permits are subject to a royalty of 5 cents per cubic yard.)

A farmer who is legally in possession of surface rights to land, in respect to which the minerals are the property of the Crown, may take free of royalty or other fees, sand, gravel, or clay from such land for his own

use only.

In Unsurveyed Areas. If the quarriable substance is situated within 10 miles of a post office 30 days is allowed for submission of the application and one additional day is allowed for each additional 10 miles. A proper description of the location must be included with the application. The regulations provide instructions for the staking of a location, for substitution of a new lease after survey, and for withdrawal after survey of portions found to be the property of the Hudson's Bay Company.

PETROLEUM AND NATURAL GAS RIGHTS

The petroleum and natural gas rights, the property of the Crown, are leased at a rental of 50 cents an acre for the first year, and at the rate of \$1 an acre for each subsequent year. The lease is for a term of 21 years and is renewable for a further period of 21 years. The minimum area is 40 acres, except where a smaller area has become isolated by reason of former regulations or otherwise, and except by assignment, the maximum area in unsurveyed territory is 1,920 acres, and in surveyed territory 19,200 acres. In unsurveyed territory the number of leases held, except by assignment, is limited to three.

The maximum area included in one consolidation is limited to 19,200 acres, and the locations so included shall not be separated one from the

other by more than 2 miles.

The Regulations deal with the procedure for relocation of a lease, with the description of the tract in surveyed and unsurveyed territory, the staking, marking of posts, etc.

Application for a lease must be made to the Director of Mineral Resources at Regina, within 30 days after the staking, if situated within 100 miles of the office of the District Superintendent, and one extra day is allowed for each additional 10 miles.

The fee for each application for a lease is \$5 for the first 1,920 acres or less, and \$1 for each additional section (640 acres) or fraction thereof.

All necessary machinery and equipment must be installed within one year from the date of the lease. On a location of 1,920 acres or less the value of the machinery is not required to exceed \$5,000, but on locations from 1,920 acres to thirty sections or 19,200 acres the value must be not less than \$10,000.

Boring operations must begin within 15 months of the date of the lease and be continued with reasonable diligence for the discovery of oil or natural gas. The sum of \$2,000 for boring operations must be spent upon a leasehold in any year. For purposes of conservation the lessee of a location adjoining privately owned mineral lands on which oil or gas have been obtained in commercial quantities must conduct his boring operations as the Minister may determine.

The lessee must take reasonable measures to prevent access of water to the oil-bearing formation. Upon a well proving to be unproductive, ceasing to yield oil in paying quantity, or being abandoned, the lessee may withdraw the casing and shall immediately close the well by filling it with any substance that will prevent the water from gaining access to the well.

If natural gas is discovered through boring operations, precaution must be taken to control and prevent the escape of the gas. If water is encountered through operations the well must be sealed at such depth as may prevent the water from gaining access to the oil-bearing formation.

The lessee before commencing boring operations must give notice in writing of such intention, and supply information as to the particular point on the location, the designation of the well, the size and weight of the casing, the kind of drilling rig to be employed, and the name and address of the person in charge. There are regulations dealing with the procedure when abandoning a well.

No well may be bored or drilled within 200 feet of the boundaries of a location, or of any road allowance or surveyed roadway.

MISCELLANEOUS ACTS

III.

THE OIL AND GAS WELLS ACT

This Act applies to all the oil and gas wells in the Province and provides for making all necessary regulations dealing with the commencement of drilling operations, the drilling operations, and the operation and management of wells. It also provides for the appointment of Advisory Committees.

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THE WELL DRILLER'S ACT

This is an Act to regulate the boring and protection of wells, and provides for the making of necessary regulations, such as: requiring dry and abandoned wells to be plugged and protected; respecting the method and requirements to be observed in plugging and protecting any wells; respecting the method of boring wells and for the proper protection of wells during boring operations; governing the issue of certificates and the suspension and cancellation of same, and requiring the furnishing of reports and returns, geological and other information and specimens as prescribed.

A certificate must be obtained before starting boring operations. The fee is \$1 and the certificate expires on April 30. It is renewable annually

on payment of the fee of \$1.

The operator must from time to time, as boring operations proceed, furnish:

(a) All geological and other data obtained as a result of the boring;

(b) A log of the well drilled, conditions ascertained, and the results obtained;

(c) Forward to the Department, a sample of the material encountered at every ten feet from the surface and at every change in strata.

PIPELINES

A permit must be obtained for the purpose of laying mains or pipes to conduct gas or petroleum, before a company can exercise the powers conferred upon it by "The Public Utilities Companies Act". (See Part II

of Act 1936, Chap. 32).

Application must be made to the Minister for a permit to break up, dig, trench, or use streets, highways, etc., for the purpose of laying therein mains or pipes to conduct gas or petroleum. A plan of the proposed undertaking must accompany the application, and for the purpose of making such plan, rights of entry are granted upon any Crown lands or other lands.

Notwithstanding anything in "The Rural Municipality Act," a company upon the registration of the plan has the right, subject to the regulations and conditions as may be imposed, to construct, maintain and

operate its pipelines.

A declaration order from the Local Government Board must be

obtained before starting the operation of any pipeline.

Regulations under the Public Utilities Companies Act governing gas and petroleum pipelines now appear as O.C. 1002/46. They provide for the construction, maintenance, and repair of gas and oil pipelines and distribution systems.

QUARTZ MINING SAFETY REGULATIONS

(Under The Mines Regulation Act, 1934)

These Regulations govern the operation and inspection of quartz mines, quarries, and oil and gas drilling plants, and deal with employment in and about the mines, the responsibility of mine officials, ventilation, sanitation, dust prevention, care and use of explosives, underground safety measures, fire protection, etc.

There are rules for metallurgical works, quarries, oil and gas well drilling plants and rigs, and provision for making special rules for individual mines. The Regulations deal also with steam boilers, the protection from machinery, and governing the use of electricity.

THE COAL MINING INDUSTRY ACT

This Act governs the operation of coal mines.

No coal mine in Saskatchewan may be operated unless a licence has been obtained from the Coal Administrator, and each mine operated requires a separate licence.

Every licence expires on August 31st in each year, and the licence fees are as follows:

(a)	Wagon mine\$	5.00
(b)	Shipping mine	20.00

The Regulations deal with the various requirements for securing a licence, including the furnishing of a schedule of wages. They also deal with agreements between operators for the stabilizing of conditions in the coal mining industry of Saskatchewan, which will ensure fair wages to employees, fair returns to operators and fair value to consumers. These agreements provide for: (a) minimum prices at the mine head for different grades and sizes of coal; (b) standards of grades and sizes upon which the minimum prices are based; and (c) conditions under which such prices shall be observed and maintained.

The Regulations also deal with the questions of overweights, new sizes of coal, security for payment of wages, registration of trade names for coal, invoices, keeping of records, etc.

THE COAL MINERS' SAFETY AND WELFARE ACT

This Act governs the safety and welfare of workers in coal mines.

Originally these regulations were known as "The Coal Mines Regulations Ordinance, 1898." This was replaced by "The Coal Mines Act" in 1909; by "The Mines Act" in 1917; The Coal Mines Safety and Welfare Act in 1930, and by the "Coal Miners' Safety and Welfare Act" (R.S.S. 1940, Chap. 270).

The provisions of the Act are dealt with under the following sub-divisions:

Part One, entitled "Operation and Management", deals with the supervision of a mine, certificate requirements, examination of candidates, registration of employees, precautions for safety, reports and plans of workings.

Part Two, entitled "Inspection," deals with the appointment and duties of inspectors.

Part Three, entitled "Employment and Wages", deals with maximum working hours underground and payment of wages.

Part Four contains the Schedule of "General rules for all mines". These rules deal with ventilation, storage and use of explosives, shafts 76264—7½

and winding apparatus, machinery and equipment, sanitation, proper supply of drinking water, work houses, mine stations, electrical equipment and inspection.

THE MINING, SMELTING, AND REFINING DISTRICT ACT

This is an Act to provide compensation for damage caused by mining, smelting, and refining operations.

The provisions of the Act are dealt with under four main subdivisions.

Part One, entitled "Mining, Smelting and Refining District", deals with the following provisions: creation of a district in northern Saskatchewan with descriptions of its boundaries; and no liability for damage occasioned by operations within the district.

Part Two, entitled "Arbitration", deals with the appointment of an arbitrator, his jurisdiction, the time limit for giving notice of damage, investigation and assessment of the damage, effect of the award, and

agreements of settlement.

Part Three, entitled "Compensation without Arbitration", contains the following stipulations: the owner or operator of any mining, smelting, refining or other reducing works, or any person who contemplates acquiring or operating such works may make an agreement with the owner or lessee of any land situated outside of the district for payment of compensation; the effect and extent of the operation of the agreement are defined; registration must be made of the agreement; and the payment of compensation shall afford a complete answer to any such action for damages.

Part Four, entitled "General", specifies that new regulations may be made for the better carrying out of this Act, and that it shall not alter or derogate the powers vested in the Government under the Mines Act

and any amendments thereto.

A public tailings disposal area was set aside by Order in Council March 1934. In this area the owners of mineral claims within or in the vicinity of the mining, smelting or refining district of Flin Flon, whether in Manitoba or Saskatchewan or both of them, may, subject to the order of the Minister of Natural Resources, deposit tailings, slimes or other waste, but subject to certain restrictions.

MINING TAXATION

(The Mineral Taxation Act, 1948, Chap. 24)

The Mineral Taxation Act was passed in 1944 (1944 Special Session, Chap. 27). The Act was variously amended and in 1948 was replaced by Chapter 24, 1948, (amended by Chap. 23, 1949). Under the Act all persons having title to minerals in the Province of Saskatchewan are subject to an annual tax of 3 cents an acre. In areas declared to be producing areas the mineral owner is taxed on the assessed value of the minerals at a tax rate not exceeding 10 mills on the dollar. The mill rate is set by the Lieutenant-Governor in Council. Only one producing area has been declared under the Act to date. This is in the Estevan district and includes the Souris Valley coal field. Parcels within a producing area not under development are taxed at 50 cents an acre.

LIST OF ACTS AND REGULATIONS

IV.

Acts

The Department of Natural Resources and Industrial Development Act, R.S.S. 1940, Chap. 24.

The Mineral Resources Act, R.S.S. 1940, Chap. 40 (amended by Chap. 12, 1944, and by Chap. 21, 1947).

The Mines Regulation Act, R.S.S. 1940, Chap. 271 (Mine Safety).

The Coal Miners' Safety and Welfare Act, R.S.S. 1940, Chap. 270 (amended by Chap. 82, 1944).

The Coal Mining Industry Act, R.S.S. 1940, Chap. 295. The Well Drillers Act, R.S.S. 1940, Chap. 256 (amended by Chap. 77,

The Public Utilities Companies Act, R.S.S. 1940, Chap. 118 (and amendments to date).

The Oil and Gas Wells Act, R.S.S. 1940, Chap. 255 (amended by Chap. 76, 1946, and Chap. 93, 1949).

The Mining, Smelting and Refining District Act, R.S.S. 1940, Chap. 263.

The Water Power Act, R.S.S. 1940, Chap. 42 (and amendments to date).

The Water Rights Act, R.S.S. 1940, Chap. 41 (amended by Chap. 15, 1949).

The Water Users Act, R.S.S. 1940, Chap. 245 (and amendments to

The Security Frauds Prevention Act R.S.S. 1940, Chap. 287 (amended by Chap. 66, 1942).

The Companies Act, R.S.S. 1940, Chap. 113 (and amendments to date). The Mineral Taxation Act. 1948, Chap. 24 (amended by Chap. 23, 1949).

Regulations:

Under The Mineral Resources Act

Quartz Mining, consolidation of regulations effective Dec. 1943 and amendments to 1946; Placer Mining, effective Dec. 1943.

Alkali Mining, effective Dec. 1943.

Quarrying, effective Dec. 1943.

Petroleum and Natural Gas, effective Dec. 1943.

Coal Mining, effective February 1944.

Under the Coal Mining Industry Act Regulations effective Feb. 1944.

Under the Coal Miners' Safety and Welfare Act

Regulations included in the Act R.S.S. 1940, C. 270.

Under the Mines Regulation Act

Quartz Mining Safety and pertaining to the operation and inspection of quartz mines, quarries, and oil and gas well drilling plants effective January 20, 1944.

Under the Oil and Gas Wells Act

Registration and licensing of drillers, drilling operation and management of wells, etc., effective Dec. 1943.

ROYALTIES

V.

Alkali—(See Sect. 18, Alkali Mining Regulations)

(1) The lessee must pay to the Crown the following royalty on all

products, anhydrous or hydrous, taken from the property leased.

(a) When the average market value of the product is \$8 per ton or less on shipping weight as determined from the transportation returns at the first point of shipment by railroad, the royalty shall be 16 cents per ton:

(b) When the average market value of the product is more than \$8 per ton on shipping weight as determined from the transportation returns at the first point of shipment by railroad, the royalty per ton of the product shipped shall be determined according to the

following percentages of such value:

(i)	For that	part of th	e value up t	to and including \$8	2 per cer
(ii)	For that	part of th	e value ove	r \$8 but not over \$10	4 "
				r \$10 but not over \$12	
(iv)	For that	part of the	e value ove	r \$12 but not over \$14	15 "
(v)	For that	part of th	e value over	r \$14 but not over \$16	20 "

ton shall be the greatest of:

(a) The average price per ton of product shipped during the period in respect of which returns are required to be made pursuant to subsection (4), according to the lessee's agreement or agreements for the sale of the product, less transportation charges and selling commissions actually paid by the lessee in respect of the product;

(b) The average market price per ton of product, during the period in respect of which returns are required to be made pursuant to subsection (4), as published in the "Canadian Chemistry and Process Industries" or other similar journal approved by the Minister, less transportation charges and selling commissions actually paid by the lessee in respect of the product; or

(c) The average price per ton of product received in the open market during the period in respect of which returns are required to be made pursuant to subsection (4), less transportation charges and selling commissions actually paid by the lessee in respect of

the product.

Where the product must be loaded on a truck for transportation to the railroad the transportation charges referred to in subsection (2) shall include 20 cents per ton, and where the product is transported on such truck for a greater distance than one mile such charges shall also include 10 cents per ton for each mile or fraction thereof greater than one-half, over which the product is so transported; provided that in no case shall the total amount so included in the transportation charges be greater than \$1 per ton.

Coal

On all Crown coal mining leases a royalty at the rate of 5 cents per short ton is levied on the merchantable output of the mine.

Petroleum and Natural Gas.—(See Sect. 46, Petroleum and Natural Gas Regulations.)

The products of all locations acquired are subject to the payment of the following royalties:

- (a) On natural gas—5 per cent of the sale value.
- (b) On all other products—a percentage of the sale value of the products of each well determined according to the following scale.

Average Daily Production

30 barr	els or less	3			per cent
over 3	0 but not	over 40	barrels		- "
over 4	0 but not	over 50	barrels		"
over 5	0 but not	over 70	barrels		"
over 7	0 but not	over 90	barrels	9	"
over 9	0 but not	over 110	barrels	10	"
over 11	0 but not	over 130	barrels	11	"
over 13	0 but not	over 150	barrels	12	"
over 15	0 but not	over 170	barrels	13	"
over 17	0 but not	over 200	barrels	14	"
over 20	0 barrels			15	"

Quartz—(See Sect. 113, Quartz Mining Regulations.)

A royalty is payable to the Crown at the rate of 5 per cent of the market value of the mineral content of any ore extracted from a mine and sold during the year, or in lieu of such royalty 12½ per cent of the income during the calendar year from the mining operations of the person liable for such royalty, whichever shall be the lesser amount, provided that in cases of mines commencing or re-commencing operations after January 1, 1947, annual royalty shall be paid to the Crown when profits are in excess of \$10,000 at the following rates:

- (b) on the excess above \$100,000 up to and including \$500,000.. 5%
- (c) on the excess above \$500,000 up to and including \$1,000,000. 7%
- (d) on the excess above \$1,000,000 royalty will be paid on the same basis as mines in operation prior to January 1, 1947.

The meaning of "market value", "mining operations", and "income derived from mine operations" is fully described under section 113 of the "Quartz Mining Regulations".

Quarrying—(See Sect. 34, Quarrying Regulations.)

The amount payable as royalty under Section 33 thereof shall be based on the quantity mined as follows:

- (a) On all quarriable substances shipped from Saskatchewan in the raw state or partially processed in the Province for further manufacture elsewhere the royalty shall be 2 per cent of the selling value.
- (b) On all quarriable substances processed or manufactured into finished products in Saskatchewan, the royalty shall be 5 cents per cubic yard of raw material.

(c) The royalty on quartzite pebbles recovered under the authority of any lease granted after December 31, 1942, shall be 25 cents per ton whether they are shipped out of Saskatchewan in the raw state or partially processed in Saskatchewan for further manufacture elsewhere or are processed or manufactured into finished products in Saskatchewan.

To apply the above rates the terms of the lease shall be considered as divided into separate periods of three calendar months each and the rates for each period shall be fixed on the basis of the quantity sold during such period only.

Sand and gravel when used for flux in smelting and filling operations shall not, in the discretion of the Minister, be subject to the royalty dues imposed by these regulations.

The royalty shall be subject to change at the discretion of the Minister.

BOUNTIES

VI.

None.

SCHEDULE OF FEES

VII.

(Quartz Mining)

For a miner's licence or renewal thereof for an individual\$ For a miner's licence or renewal thereof for a mining partnership For a miner's licence or renewal thereof for a company For recording each claim, located by a licensee on his own licence For recording each claim, located by a licensee on behalf of another licensee For application for a certificate of work For recording with the mining recorder a transfer, agreement of sale, option,	5.00 15.00 75.00 5.00 10.00 2.50
power of attorney, revocation of a power of attorney, copy of a writ of execution, discharge of execution, or any other instrument affecting any recorded claim, right or interest, for each claim For a substitutional miner's licence For application for a lease of surface or mineral rights For filing a certificate of mining partnership or certified copy thereof For recording a certificate of revocation of agent and appointment of a	2.00 1.00 10.00 1.00
new agent for a mining partnership For recording a transfer of a share or shares in a mining partnership For a grouping certificate Annual rental of a claim for first period of 21 years Annual rental of a claim for second period of 21 years Annual rental of claim of 160 acres for first period of 21 years Annual rental for renewal period Annual rental of claim of 160 acres for renewal period Annual rental of claim of 160 acres for renewal period Annual rental for fractional claim	1.00 1.00 5.00 5.00 10.00 15.00 10.00 30.00 5.00
Rental for surface lease, for each acre, per annum For registration of an assignment of a lease For substitutional record of entry For application for a certificate of improvements	1.00 5.00 5.00 5.00
(Placer Mining)	
For grant of a claim for one year For renewal of a grant of a claim Recording an abandonment.	$10.00 \\ 10.00 \\ 2.00$

Registration of any document, or filing of any document, affidavits, notices or evidence not otherwise provided for	5.00 3.00
Of 50 inches or less, per year From 50 to 200 inches, per year From 200 to 1,000 inches, per year For each additional 1,000 inches or fraction thereof, per year Filing notice of intention to apply for water Permit to record	5.00 10.00 20.00 20.00 5.00 5.00
Grouping: For every claim Fee bringing claims to one date, for every 3 months or fraction thereof	5.00 2.50
Drainage grants: Where no toll right Where toll right Annual rental fee per quarter mile Bonds:	10.00 50.00 15.00
Fee filing any bond required, \$1,000 or under	5.00 5.00
Filing to record or stake	5.00
(Petroleum and Natural Gas)	
Application fee for leases for first three sections or less For each additional section Rental, lease, first year, per acre Rental, lease, each year after first year, per acre Rental, lease from Crown of surface rights, per acre	5.00 1.00 0.50 1.00 1.00
Registration of Assignments For each lease or permit For a divided portion of a lease or permit and the issue of a new	5.00
lease or permit therefor Prospecting Permits Rental, 10 cents per acre to be accompanied by cash or guarantee bond at the rate of 40 cents for each acre included in the permit. (a) Application fee for first three sections or less For each additional section	5.00 1.00
Application for Geophysical or Subsurface Permit For each permit Licence to drill new well Application for Certificate of Grouping	250.00 10.00
For each lease or permit	5.00
Special Application Re Extension Special applications re extensions, concessions, etc. (a) Where no special Order in Council required for the first section covered by the application	10.00
(0. 1.35')	
(Coal Mining)	~ ^^
Application for lease Annual rental per acre, coal mining rights Annual rental per acre, surface rights Registration of Assignment, one lease Registration of Assignment, each additional lease Registration of Assignment of divided portion of location and issue of	5.00 1.00 1.00 3.00 1.00
new lease	25.00

Special applications re extensions, concessions, etc.:	
(a) Where no special Order in Council required:	
For the first section covered by the application	. 5.00
For each additional section or fraction thereof	. 3.00
(b) Where special Order in Council required:	
Minimum fee	. 10.00
For each additional section or fraction thereof after the first	st
section covered by the application	. 5.00

REPRESENTATIVES

VIII.

Minister	Hon.	J. H.	Brockelbank.
Deputy Minister	C. A.	L. E	logg.
Director of Mineral Resources	.W. Ja	imes :	Bichan.
Coal Administrator (Acting)	w. B	I. Ha	stings.

More detailed information and copies of the Mining Laws and Regulations pertaining to the Province of Saskatchewan may be had on application to the Director, Mineral Resources Branch, Department of Natural Resources and Industrial Development, Regina, Sask.

ALBERTA 1

INTRODUCTORY

T.

The Act creating Alberta as a province came into force October 1, 1905. Since October 1, 1930, Alberta has administered its own natural resources, prior to which date the authority for the leasing and disposal of mineral lands rested with the Government of the Dominion of Canada. Administration of the mineral resources was taken over in 1930 by the Department of Lands and Mines, and the Mines Branch of Alberta was transferred from under the Executive Council to the aforementioned Department, now known as the Alberta Department of Mines and Minerals. The Dominion regulations for the leasing and disposal of mining lands and rights in force at the time of the transfer were superseded by Provincial regulations established June 18, 1931, under provisions of the Provincial Lands Act. The Provincial regulations in force previous to the transfer dealt with the working and living conditions and the general welfare of miners.

The first "Mines Act" was assented to in 1913. This was replaced by the Coal Mines Regulations Act of 1930, and has since been replaced by "The Mines Act", 1939, Chapter 51, with amendments to date.

The Department of Lands and Mines was divided on April 1st into the Department of Lands and Forests and the Department of Mines and Minerals. Revision of current legislation was enacted by the 1949 session of the legislature. Changes were of a minor nature and the new regulations are similar to those previously in effect and the disposition of minerals is pursuant to the Mines and Minerals Act.

MINES AND MINERALS ACT

II.

QUARTZ MINING

This part of the Mines and Minerals Act applies to all deposits of gold, silver, and all naturally occurring useful minerals the property of the Crown, other than placer deposits, salt, coal, petroleum, natural gas, bitumen, and oil shales.

Limestone, marble, clay, gypsum, or any building stone when mined for building purposes, earth, ash, marl, gravel, sand, or any element that may, in the opinion of the Minister, form a portion of the agricultural surface of the land shall not be considered as mineral within the meaning of this Act.

Every person 18 years of age or over has the right to enter, locate, and prospect upon any vacant Crown lands and upon all lands where the mineral rights have been reserved to the Crown, except upon lands occupied by any building, or land under cultivation, etc.

¹ Prepared in collaboration with H. H. Somerville, Director of Mineral Rights.

Every person locating a mineral claim must record the same in person at the office of the local Mining Recorder within 15 days from the date of staking. One extra day is allowed for each 10 miles or fraction thereof in excess of 50 miles from the Mining Recorder's office; provided, however, if the claim is situated where other claims are being located, the locators, not less than five in number, are authorized to meet and appoint an "emergency recorder", who may accept the applications for delivery to the local Mining Recorder.

The location must be rectangular in shape and must not exceed 1,500

feet in length or breadth (51.65 acres).

The prospector is entitled to three claims in his own name, in any one mining district in any one calendar year, and not more than two claims each for not more than two other persons, being seven claims in all.

The location for the mining of iron and mica is limited to 160 acres, with boundaries running north-south and east-west and all sides equal.

The Act contains instructions as to the procedure for staking and

recording claims.

The fee for recording a claim is \$10, and a similar fee is charged for the application for a lease to a location. The term of the lease is for 21

years and is renewable for a further term of 21 years.

The locator, to be entitled to hold the claim, must do work on it each year to the value of \$150 or he may pay to the Mining Recorder the sum of \$150 in lieu of the work. A certificate of improvement may be obtained by the holder of a claim when work to the value of \$750 has been done on the claim in developing a mine or upon payment of the sum of \$750 in lieu of expenditure.

The rental of a claim granted under a lease is \$50 payable in advance within 3 months after the date of the issue of a certificate of improvement, and covers the period of 21 years. The renewal for a further period of 21

years is \$200.

The rental of a claim of excessive size granted under lease is \$150

for 21 years and \$600 for the renewal of 21 years.

The royalty on the sales of the products of a location are such as may be fixed by Order in Council.

COAL MINING

The coal mining rights, which are the property of the Crown, may be leased to applicants at an annual rental of \$1 an acre, payable yearly in advance. The term of the lease is 21 years and is renewable for further terms of 21 years. A fee of \$5 must accompany each application for a lease, which must be made in person at the office of the local Mining Recorder.

The maximum area of a coal mining location is 2,560 acres. A greater area can be obtained only by assignment. The minimum area is 40 acres.

In surveyed territory the tract must consist of sections or legal subdivisions, and the several parcels must be adjoining, the length not to exceed four times its breadth.

In unsurveyed territory, if at least one of the boundary lines has been surveyed, a lease may be granted for an area not in excess of 640 acres provided the length of the tract does not exceed its breadth. The

application for a coal mining location must be filed with the local Mining Recorder within 30 days from the date of the staking. If the location is distant more than 200 miles from the Mining Recorder's office, one additional day is allowed for each 25 miles or fraction thereof in excess of 200 miles.

The Regulations provide instructions as to staking, recording, etc., of locations.

The lessee must commence active operations on his leasehold within one year from date of notification from the Minister to do so and he must produce from such operations the quantity of coal specified in the notification.

The leases are subject to the provision that actual settlers are entitled to buy at the pit's mouth whatever coal they may require for their own use.

A royalty at the rate of 10 cents per short ton is levied on the output of a mine and is payable monthly to the Department.

The lease in all cases includes the coal mining rights only, the property of the Crown.

PETROLEUM AND NATURAL GAS

The petroleum and natural gas rights, the property of the Crown, may be leased to applicants at an annual rental of \$1 an acre, payable yearly in advance. The term of the lease is 21 years, renewable for a further term of 21 years, so long as commercial production can be obtained from the location.

The application for a lease must be filed by the applicant in person with the Mining Recorder. A fee of \$10 must accompany each application.

The maximum area of a petroleum and natural gas location is 5,760 acres. The minimum area is a quarter-section of 160 acres.

In surveyed territory the tract must consist of sections or quartersections, but the several parcels comprising the tract must be adjoining, the length of the tract not to exceed three times its breadth.

In unsurveyed territory the tract must be rectangular in form and be staked along its greatest dimension. The length and breadth of the tract must be 2,640 feet each or multiples thereof. The application must be filed with the local Mining Recorder within 30 days from the date of staking. One extra day is allowed for each 25 miles or fraction thereof if the tract is distant more than 200 miles in a direct line from the Mining Recorder's office.

The Act provides instructions as to the procedure for making an application for a location, its description, etc.

As soon as the survey of a township has been confirmed the leases embracing any portion of such township must conform to the Alberta Lands System of Survey.

The lessee must within one year of the lease have upon the location machinery and equipment suitable for carrying on drilling operations. These operations must commence within one year of the date of the lease, and be continued with reasonable diligence with a view to the discovery of oil or natural gas.

Consolidation of holdings is permissible subject to certain terms and conditions as set out in these regulations. The maximum area in one consolidation must not exceed 11,520 acres, provided that the leases included in any group shall be within a radius of 3 miles of the projected well.

A lessee who in the search for petroleum claims to have made a discovery of natural gas that indicates the area to be a natural gas field, and through drilling of wells adequately spaced to the satisfaction of the Minister reasonably delimits the field within the confines of his lease or leases thereby substantiating his claim, shall thereafter pay to the Minister an annual rental of 50 cents an acre payable yearly in advance so long as the location is capable of producing natural gas, provided that a well shall be drilled in the search for oil at a point and to a formation fixed by the Minister before the reduction in rental becomes effective.

The products of any location are subject to the payment to the Crown of such royalty as may from time to time be fixed by Order in Council.

Royalty on oil produced from Crown land in Alberta is the square root of the average daily production for the month with a minimum of 5 per cent and a maximum of 15 per cent for the 10-year period from June 1, 1941, or with the first return following a well coming into production a lessee may elect to pay on oil a royalty of 12½ per cent until June 1, 1951.

Royalty on natural gas is 15 per cent of the selling price or fair value

Royalty on natural gas is 15 per cent of the selling price or fair value at the time and place of production with a minimum of $\frac{3}{4}$ of a cent per thousand cubic feet.

CROWN RESERVES

The following Crown petroleum and natural gas rights have been constituted Crown Reserves.

- (1) Fractional areas which cannot be acquired by lease under Section 232 of the Mines and Minerals Act.
 - (2) The following areas within the Provincial Reserves:
 - (i) Clear Hills Area: Commencing at the northeast corner of township 92, range 7, west 6th meridian; thence south to intersection with left bank of Peace River; thence westerly along left bank of Peace River to intersection with Provincial boundary; thence northerly to intersection of north boundary of township 92, thence easterly to point of commencement.
 - (ii) Marten Hills Area: Townships 73, 74, 75, and 76, ranges 20 to 26 inclusive, west 4th meridian, and townships 73, 74, 75, and 76, ranges 1 to 7 inclusive, west 5th meridian.
 - (iii) Big Bend Area: Townships 65, 66, 67, and 68, ranges 24, 25, and 26, west 4th meridian.
 - (iv) Sand River Area: Townships 67 to 72 inclusive, ranges 3 to 8 inclusive, west 6th meridian.
 - (v) Smoky River Area: Townships 56 to 61 inclusive, ranges 1 to 9 inclusive, west 6th meridian.
 - (vi) Kaybob Area: Townships 61 to 64 inclusive, ranges 18, 19, and 20, west 5th meridian.
 - (vii) Virginia Hills Area: Townships 61 to 68 inclusive, ranges 7 to 13 inclusive, west 5th meridian.
 - (viii) Cynthia Area: Townships 49 to 52 inclusive, ranges 10 to 14 inclusive, west 5th meridian.

- (ix) Alhambra Area: Townships 37 to 42 inclusive, ranges 5, 6, and 7, west 5th meridian.
- (x) Acadia Area: Townships 23 to 27 inclusive, and lying north of the Red Deer River, in ranges 1, 2, and 3, west 4th meridian.
- (xi) Dorothy Area: Townships 27 to 30 inclusive, ranges 14, 15, and 16, west 4th meridian.
- (xii) Grand Forks Area: Townships 12 and 13, ranges 11 and 12, west 4th meridian.
- (xiii) Crown Indian Lake Area: Townships 5 and 6, ranges 13 and 14, west 4th meridian.
- (xiv) Lucky Strike Area: Townships 3 and 4, ranges 11 and 12, west 4th meridian.
- (3) In surveyed territory an area of approximately equal acreage as near as possible to the location.
- (4) In unsurveyed territory areas lying immediately along each side of the location a distance in width equal to the breadth of the location.

RESERVATION OF CROWN PETROLEUM AND NATURAL GAS RIGHTS FOR GEOLOGICAL AND/OR GEOPHYSICAL EXAMINATION

No reservation shall be granted for an area of more than 100,000 acres. The length of the tract shall not exceed three times the breadth.

Each applicant is restricted to two reservations at any one time.

Each application for a reservation must be accompanied by the following: a fee of \$250; a deposit of \$2,500 for each 20,000 acres or portion thereof. The deposit shall be held as a guarantee that an expenditure will be made in accordance with regulations in an approved geological or geophysical examination.

The term of a reservation shall be 4 months from the operative date. The reservation may be renewed for two further periods of 4 months each provided satisfactory progress has been made.

Where the holder of the reservation is continuing the examination to the satisfaction of the Minister the reservation shall be extended for further renewals of 3 months each, not exceeding a total of four renewals, upon payment by the holder of the reservation at the time of the granting of each renewal of a fee in cash for each and every acre comprising the reservation. The first and second renewal under this subsection shall be granted for a fee of 7 cents an acre, the third renewal for a fee of 8 cents an acre, and the fourth renewal for a fee of 8 cents an acre.

When drilling is continuing in a manner satisfactory to the Minister the reservation may be extended for up to four renewals of 3 months each upon payment of a fee per acre. The first such renewal shall be granted for a fee of 10 cents, the second for a fee of 15 cents, the third for a fee of 20 cents, and the fourth for 25 cents per acre.

When a well drilled on a reservation has found commercial production of oil, the holder shall within 3 months of the discovery apply for a lease or leases of the petroleum and natural gas rights, containing the discovery well. The commencement of another well within $4\frac{1}{2}$ miles of the discovery will not be permitted until the application for the lease or leases has been made.

Credit may be applied to the rental of one year of any lease or leases acquired out of a reservation for an amount not exceeding 50 per cent of approved expenditures on geophysical examination or drilling operations.

DRILLING AND PRODUCTION OPERATIONS OF OIL AND NATURAL GAS WELLS

These Regulations apply to every well under the jurisdiction of the Province of Alberta:

(a) Which is being drilled for the purpose of searching for or obtaining any petroleum;

(b) Which is producing or capable of producing any petroleum; or

(c) Which is drilled to a depth of more than 500 feet, regardless of the

purpose for which the same is being drilled.

The operator for the time being of every drilling well and every producing well must appoint some person residing in the Province as his representative and notify the Petroleum and Natural Gas Conservation Board of the appointee's name and address; and that person is empowered to act as the agent of the operator for the purpose of receiving directions and communications from the Board.

Every member of the Board and every person or official authorized

by the Board has access to all wells, records, plant and equipment.

A "subsisting licence" issued by the Board and pursuant to these Regulations must be obtained before any operations can be undertaken. This application must be accompanied by a plan of the lands showing the exact location of the proposed well site in relation to the original boundaries of the property, any rivers, lakes, roadways, existing wells, structures of any kind, and distances to drilling or completed wells on offset leases. A drilling licence fee of \$25 per well for all wells expected to be over 1,000 feet is required.

Subject to other provisions of the Regulations well spacing shall be one well to 40 acres. The well must be completed within a central target

area to qualify for a full production allowable.

No drilling operations can be started until approval by the Board of the

program of operations as outlined in the application has been received.

No licence is granted for the drilling of a well for petroleum or natural gas at any point within 330 feet of the nearest boundary of the area owned or controlled by the operator, or within 330 feet of any road, railway, dwelling, etc., except under special conditions.

The Regulations provide detailed instructions as to the procedure while carrying on drilling operations such as the proper casing of wells, suspension of operations, the taking of a series of samples of the various formations, and of core cuttings, the sampling of water and of oil and natural gas from the well, the anchoring of casings and the provision of a proper control lead, the maintaining of daily reports, the sealing of stratum, the shooting of a well, etc.

There are restrictions as to drilling on any land under which there

are beds or seams of coal which are being worked.

The escape of oil or gas must be prevented and the flow of water controlled, and precautions must be taken against wastage of oil or gas.

The use of vacuum pumps and casings swabs or other like devices are prohibited except by special permission.

The surface equipment of every gas well must include such fittings as will allow the Department to take the closed-in pressure, the bottom hole pressure, the working pressure, and any test required at any time, including the time when the initial open-flow capacity test is made. The operator must take a gauge of the volume and closed-in pressure of all the wells producing gas at least twice a year.

The production of oil or gas must be reported monthly to the Department and also a daily record must be kept of all production.

Instructions are given as to the equipping of every producing well with a proper and approved meter.

Natural gas, which contains natural gasoline or casing-head gasoline, or when produced with oil or water, must be separated and conserved. The method of separation and the type and size of the separators or other appliances are subject to approval by the Department.

PLACER MINING

Every person 18 years of age or over has the right to enter, locate, and prospect upon any vacant Crown lands.

The claims are designated as creek, river, or inland claims.

A creek claim must not exceed 500 feet in length measured along the base line of the creek established by a survey authorized by the Minister and must be marked by two legal posts at each end of the base line. The creek claim shall include the bed of the creek and a tract extending for 1,000 feet on each side of the base line.

A river claim must be situated on one side of the river only, and must not exceed 1,000 feet in length measured in the general direction of the river. The rear boundary of the claim runs in the general direction of the river and is 1,000 feet from the low-water mark of the river.

An inland claim (one situated elsewhere than on a creek or river) must not exceed 1,000 feet in length by 1,000 feet in breadth.

All claims must be as nearly as possible rectangular in form.

When locating a claim where none has been recorded previously, the sizes of the claims are as follows:

(a) Creek Claims:

One locator may locate one claim 1,500 feet long. Two locators may locate two claims, each 1,250 feet long. A party of more than two may locate two claims, each 1,000 feet long, and a claim of the ordinary size for each other member of the party beyond two.

(b) River Claims:

One locator, one claim, 3,000 feet long. Two locators, two claims, each 2,500 feet long. More than two locators, two claims, each 2,500 feet long, and a claim of the ordinary size for each other member of the party beyond two.

An application to record a claim must be filed in person with the Mining Recorder for the district within 15 days after staking if it is located within 50 miles of the Mining Recorder's office. One extra day shall be allowed for every additional 10 miles or fraction thereof.

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In the event of a claim being more than 100 miles from the Mining Recorder's office and situated where other claims are being located, the locators, not less than five in number, are authorized to appoint one of their number as emergency recorder, who shall act in that capacity and accept applications from the locators. The emergency recorder shall then notify the Mining Recorder and deliver the application and fees received for recording the claims.

REMOVAL OF SAND, STONE, AND GRAVEL FROM THE BEDS OF RIVERS AND LAKES

Yearly permits are granted for permission to remove a specified number of cubic yards of sand, stone, or gravel from the portion of the bed of the river or lake as described in the permit, but do not constitute any exclusive right to the described portion, or to the specified quantity of material.

The right granted in the permit applies only to the bars in, or the

bed of the river or lake itself below the ordinary high-water level.

The permittee is prohibited from doing any material damage or unnecessary disturbance to the bed or banks of the stream or lake affected by his permit.

The fee for a permit is \$1.00, and the dues are at the rate of 10 cents

per cubic yard.

Special permits may be granted without fee or yandage dues, to cities, towns, etc., requiring sand and gravel for public works. (O.C. 759, 1949.)

OTHER MINERALS

Anyone desiring to lease other types of minerals should write to the Director of Mineral Rights, Department of Mines and Minerals, Edmonton, Alberta, as provision is made in the Mines and Minerals Act for the Lieutenant-Governor in Council to authorize the issue of a lease after the merits of the application are considered.

MISCELLANEOUS ACTS

III. THE RIGHT OF ENTRY ARBITRATION ACT

No person shall have the right of entry to or the use of the surface of any land for any mining or drilling operations until he has obtained the consent of the owner or occupant or has become entitled to entry by reason of an order of the Right of Entry Arbitration Board. When the Board has received such an application it will fix a date for a hearing and may require the operator to give parties interested in the surface rights notice of the hearing.

(1) The Board shall determine:

(a) what portion of the surface rights the operator requires for the efficient and economical performance of the operations;

(b) the exact position thereof;

- (c) the amount of compensation which shall be payable and the person to whom such payment shall be made; and
- (d) such other conditions as the Board may deem necessary in connection with the granting of the right of entry.

(2) The Board, in determining the amount of compensation, may consider:

(a) the value of the land;

(b) the amount of land which may be permanently damaged by the operator's operation;

(c) the adverse effect of the right of entry on the remaining land;

(d) compensation for severance;

 (e) compensation for the nuisance, inconvenience and noise which may be caused by or arise from or in connection with the operations;

(f) such other factors as the Board may from time to time deem proper, or relevant.

The award and order of the Board shall be final.

If at any time after the expiration of six months the operator has ceased to use the land the owner or occupant may apply for an order terminating the right of entry.

THE URBAN MINING OPERATIONS ACT

This Act deals with the carrying on of underground coal mining operations within the limits of any city, town, or village, and provides for the appointment of mining inspectors, the right of entry and inspection of any mines so located, the quarterly delivery of up-to-date maps of the workings, and the appointment of commissioner of investigations.

THE UNIT OPERATION OF MINERAL RESOURCES ACT

In this Act "minerals" include natural gas, petroleum, gasoline, and all other oils of a mineral nature.

The Act empowers the Minister of Mines and Minerals to enter into agreements on behalf of the Province of Alberta with owners in fee simple of minerals with the object of the Province bringing about the development of such minerals and the minerals held by the Province upon a unit plan, and providing for participation jointly by the Province and the said owners in the expense of such development and in the benefits to be derived therefrom.

THE OIL AND GAS WELLS ACT

The Act applies to all oil and gas wells, whether drilled before or after its coming into force, and notwithstanding the terms of any lease or grant from the Crown in the right of Canada or from any other person.

grant from the Crown in the right of Canada or from any other person. It provides for the appointment of advisory committees or boards, for the purpose of inquiring into any matter or thing of a technical or scientific nature in relation to any oil or gas resources, the drilling for oil or gas, the management and operation of any oil or gas well, or the conservation of any source of supply of gas or oil. (R.S.A. 1931, Chap. 46.)

THE OIL AND GAS RESOURCES CONSERVATION ACT

The Act applies to every well producing any petroleum product whether drilled before or after the coming into force of this Act and not-withstanding the terms of any lease or grant from the Crown in the right of Canada or from any other person.

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The Lieutenant-Governor in Council is authorized to constitute a Board known as "The Petroleum and Natural Gas Conservation Board", consisting of not more than three persons, one of whom shall be the chairman.

The purpose of the legislation is to effect conservation of oil and gas resources, to prevent waste of the resources, and to give each owner the opportunity of obtaining his share of production.

The Board is a body corporate with authority to carry out all the duties assigned to it by the Act, with emphasis on those relating to conservation.

Part of the funds for expenditures of the Board are acquired through the annual assessment of all producing wells in the Province.

The Board has the power to regulate production by restriction, proration or prohibition; require repressuring, recycling or pressure maintenance; require underground storage of excess gas; set amounts of gas or oil periodically which may be produced from a pool or from a well; declare persons dealing in oil or gas to be common purchasers or common carriers; order scrubbing plants and connected wells and facilities to gather, buy, sell, and treat gas as directed; order purchasers and producers to buy and sell residue gas; require producers of gas to continue production or return the product to underground storage; require absorption plants and owners to dispose of gas as directed; and to make orders overriding contrary terms in contracts for disposal of gas. The Board also has power to regulate pipelines that are not part of a system distributing to the ultimate consumer. Provision is made for appeal from a Board order.

Before gas can be used except as an aid to production or conservation or for light or as fuel, a permit must be obtained from the Board.

The Board may negotiate agreements with the owners of producing wells to provide for payment to the owners who have surrendered to the Board the right to produce from wells, such compensation as the Board considers fair and reasonable. If there are insufficient funds to provide such compensations the Board may levy in any area a special uniform rate upon the assessed value of all the producing wells in the area.

THE COAL MINES REGULATION ACT

This Act provides for the safe operation of coal mines in the Province. Operations must be under the control of certificated officials and rules made for the conduct of examinations for certificates.

Reports of operations must be forwarded monthly by each operator to the Minister on forms provided by the Minister.

Provision is made for the appointment of a Chief Inspector and District Inspector for the inspection of mines.

Power is given the Lieutenant-Governor in Council to make regulations, rules, and orders, for the better carrying out of the provisions of the Act; also as to the installation of electricity in mines; the leasing of coal mining rights under road allowances; and rock-dusting in dry and dusty mines.

THE COAL SALES ACT

The Act requires all operators of coal mines to register with the Director of Mines, Alberta, a name for the coal taken from their mines, and to see that no coal is sold in Alberta or shipped except under the registered name.

Every wholesale or retail dealer selling coal produced in Alberta must state upon every bill, weight-ticket, or invoice covering sales, the name of the mine, the district, and the name and size of grade of coal.

THE INDUSTRIAL WAGES SECURITY ACT

This Act makes the payment of wages to miners more secure.

Every employer in a designated industry on May 15 of each year, must deliver to the Minister an annual statement of the total amount of wages paid. He may be required to deliver a statement of assets and liabilities.

On or before the first day of June the employer must furnish a bond or other security in an amount equal to the greatest amount paid for wages in one month during the previous twelve months. If the operations were intermittent this security may be reduced. Penalties are provided if the provisions of the Act are not fulfilled. The Board of Public Utility Commissioners may on demand issue a certificate exempting the employer for a certain period from furnishing the necessary security, when satisfied that the mine owner has such resources as will assure the due payment of wages of all his employees.

THE BOILERS ACT

The Act provides for the registration and periodical inspection of all boilers in use throughout the Province. It sets out a standard for construction and operation of all boilers, and requires that all steam boiler plants must be under the charge of certificated steam engineers.

WORKMEN'S COMPENSATION ACT (ACCIDENT FUND)

The Act provides for compensation to be paid to workmen for accidents arising out of and in the course of their employment.

The Act is administered by a Board of Commissioners appointed by the Lieutenant-Governor in Council, and such Board is a body corporate.

For the purposes of the Act and to cover the cost of administration, the Board has authority to make an assessment from time to time as they think expedient, and of such amount as they may consider necessary, on each employer for the period which has elapsed since the next preceding assessment was made.

The assessment is based on the total payroll, except where the payroll includes wages or salary of workmen who have been paid at a higher rate than \$2,500 per year. Such excess amounts shall be deducted from the total payroll for the year before it is used as a basis for assessment.

Every employer is required to forward a statement on or before January 20 each year and at such times as the Board may require, showing the total amount of wages earned by all his workmen during the previous calendar year. The Board has the right to have the books of any or all employers audited as to the payroll, when adjustments are made as to assessments paid.

MINING TAXATION

The Alberta Corporation Income Tax Act provides that every company other than a municipal corporation, and including mining companies, is subject to a tax of 5 per cent which is collected by the Federal Department of National Revenue in accordance with the Taxation Agreement with the Government of Canada.

MINERAL TAXATION ACT

The Mineral Taxation Act, 1947, provides for the collection of a tax from all owners, part owners, or joint owners of the mineral rights of any property regardless of surface ownership.

Each owner is required to deliver to the Deputy Minister within 30 days after acquiring such rights, a written description of the property, minerals involved and a statement showing what mineral production is being taken or has been taken at any time from the property.

The tax is due on December 31 yearly and may be paid at the Land Titles Offices in Edmonton or Calgary, or at Room 403, Administration Building, Edmonton. The rate of taxation will be set yearly but will not exceed 5 cents per acre.

If the rights are held in what the Minister has designated a producing area an additional tax will be levied on what the Minister has designated the principal mineral. Producing area means any area designated by the Minister as one from which minerals have been produced or any parcel of land when five-eighths of a mile of a producing mine or well.

When the taxes are one year in arrears a notice will be sent by registered mail to the owner at the address shown on the title advising that unless all taxes and penalties due are paid within one year from the date of the notice the title will revert to the Crown, and if the owner fails to make the payments the certificate of title of that owner will be cancelled and the title free of all encumbrances will become the property of the Crown.

UNEARNED INCREMENT TAX ACT

When transfers are registered in the Land Titles Offices of minerals held in freehold a tax of 10 per cent is imposed on the increase in value over the last preceding value.

REGISTRATION OF ASSIGNMENT OF CROWN LANDS ACT

A 10 per cent tax is imposed on the increase and values upon the assignments of sublease of the natural resources held from the Crown under sale, lease, licence, permit, etc.

All assignments must be accompanied by an affidavit from the assignor and assignee giving complete details of the transaction for future reference.

The definition of the last preceding valuation for the purpose of this Act is:

- (a) In the case of the first sale or sublease after a grant from the Crown the amount of the annual cash rental plus the cash bonus paid by the party to whom the first sale or sublease is made.
- (b) In the case of a subsequent sale or sublease the value established at the time of the last assignment or sublease, or if no value was fixed at that time, the amount paid as determined by the Minister.

When the sale, lease, or sublease involves the sharing of some product or some other form of interest payment, then the tax may be paid by delivery to the Minister of a share of the product or interest considered by the Minister to be the equivalent of the tax.

When only a portion of the surface or mineral rights is involved in a deal then a proportionate part of the preceding established valuation will be used to determine the amount of the tax. If the claim is made that the portion concerned has a different value to any other similar section of the whole property then the Minister shall determine its true value.

When the agreement of sale or assignment or the sublease is submitted the parties involved make under oath or affirmation a complete list of improvements and development work with cost of each.

The tax does not apply to the transfer of the property of a deceased person.

THE GAS RESOURCES PRESERVATION ACT

This legislation is administered by The Petroleum and Natural Gas Conservation Board.

Its purpose is to provide for effective utilization of oil and gas resources having regard to present and future needs in the Province.

Anyone who produces or acquires gas and wishes to take it out of the Province for use or consumption elsewhere, must obtain a permit. Applicants must give the Board all pertinent information regarding proposed supplies of gas and markets. Applications are considered in a formal hearing. Renewals of permits require applications and hearings. The Board may divert a permittee's gas supply to meet an emergency in the Province, or may review and alter the conditions of a permit upon a hearing.

The Board's decisions are subject to the approval of the Lieutenant Governor in Council.

LIST OF ACTS AND REGULATIONS (ALBERTA)

IV.

Acts

Department of Mines and Minerals Act, 1949. Mines and Minerals Act, 1949, Chap. 66.

Coal Mines Regulations Act, 1945, Chap. 8, and amendments to date.

Coal Sales Act, 1925.

Gas Resources Preservation Act, 1949, Chap. 2.

Oil and Gas Wells Act, 1942, Chap. 67, and amendments to 1949. Oil and Gas Resources Conservation Act, 1942, Chap. 66, and amendments to 1949.

Pipe Line Act, R.S. 1942, Chap. 315, and amendments to 1949. Registration of Assignments of Crown Lands Act, 1949, Chap. 88. Right of Entry Arbitration Act, 1947, Chap. 24, and amendments

Urban Mining Operation Act, 1942, Chap. 274, and amendments

Unit Operation of Mineral Resources Act, 1942, Chap. 69, and amendments to 1949.

Industrial Wages Security Act, 1942, Chap. 281, and amendments to 1944.

Workmen's Compensation Act, 1948, Chap. 5.

Boilers Act, 1942, Chap. 307, and amendments to 1949.

Corporation Taxation Act (Mining Taxation), and amendments to 1949.

Mineral Taxation Act, 1947, Chap. 10, and amendments to 1949.

Unearned Increment Tax Act, 1942, Chap. 60.

Alberta Companies Act, 1942, Chap. 240, and amendments to

Alberta Securities Act, 1936, Chap. 243.

LIST OF REGULATIONS

Regulations re:-

Removal of Sand, Stone, and Gravel from Beds of Rivers and

Respecting Drilling and Production operations of Oil and Natural Gas Wells.

Reservation of Crown Petroleum and Natural Gas rights for Geological or Geophysical examination.

ROYALTIES

Royalties on minerals are payable as follows:

Copper—21 per cent of the value.

Gold and Silver—21 per cent of the value. (See "Quartz Mining").

Lead—2½ per cent of the value.

Placer Mining—2½ per cent on gold obtained; valued at \$15 an ounce.

Placer Mining—2½ per cent on gold obtained; valued at \$15 an ounce.

Zinc—2½ per cent of the value.

Quartz Mining.—Royalty at the rate of 2½ per cent, computed as follows:

Gold—Valued at \$15 an ounce; royalty 37½ cents an ounce.

Silver—Valued at 60 cents an ounce; royalty 15 mills an ounce.

Copper—Valued at 12 cents a pound; royalty 30 cents a hundredweight.

Zinc—Valued at 4 cents a pound; royalty 10 cents a hundredweight.

Lead—Valued at 4 cents a pound; royalty 10 cents a hundredweight.

All unspecified metals and minerals, royalty computed at rate 2½ per cent of the value of the products.

of the value of the products.

Bituminous Sands-Royalty at the rate specified in the lease. Coal-10 cents per short ton on coal mined or excavated.

Petroleum—Royalty on oil produced from Crown Land in Alberta is the square root of the average daily production for the month with a minimum of 5 per cent and a maximum of 15 per cent for the 10-year period from June 1, 1941, or with the first return following a well coming into production a lessee may elect to pay on oil a royalty of 12½ per cent until June 1, 1951. Royalty on natural gas is 15 per cent of the selling price or fair value at the time and place of production with a minimum of $\frac{3}{4}$ of a cent per thousand cubic feet.

Quarrying—5 cents per cubic yard on the products of the location for limestone, granite, slate, marble, gypsum, marl, clay, volcanic ash, or any building stone, 10 cents a cubic yard on sand and gravel recovered from the beds of rivers and lakes.

Salt-20 cents per short ton.

Other Minerals-Subject to such royalty as may from time to time be imposed.

BOUNTIES

VI.

None.

SCHEDULE OF FEES

(Established under authority of The Mines and Minerals Act by Order in Council dated April 1, 1949, and numbered O.C. 393-49.)

Fees Applicable Generally:	
For a certified copy of a lease (where statutory declaration furnished	
by lessee that original lost or destroyed)	\$10.00
For amending description of a lease	2.50
For a certified copy of document, first page	5.00
For each additional page	.50
For search of any lease, licence, permit or other agreement:	F 0
Verbal	.50
Written For each division of a lease	1.50
For reinstatement of any lease, other than a petroleum and natural	25.00
gas lease	25.00
For renewal of any lease, other than a road allowance lease	25.00 25.00
For assigning a divided portion of a lease	25.00
Assignment fee, other than for a petroleum and natural gas lease	5.00
Fees Applicable to Parts II and III: (Quartz and Placer Mining)	
For certificate of record of a claim	\$10.00
For renewal of a placer claim	10.00
For lease of a mineral claim	10.00
For a certificate of work	10.00
For a certificate of improvements	10.00
For a certificate of partnership	10.00
For recording an abandonment, affidavit or any other document, for	
each claim	5.00
For an abstract of the record of a claim:	F 00
For the first entryFor each additional entry	5.00
For copies of any documents recorded, up to three pages	$\frac{1.00}{4.00}$
For each additional page	1.00
For recording a power of attorney to stake for one person	10.00
For recording a power of attorney to stake for two persons	20.00
For examination of documents, for each claim	1.00
Rental, for a claim (51.56 acres), granted under a lease, for a period	_,,,,
of 21 years	50.00

\$200.00 150.00 600.00

> \$.5.00 1.00 5.00 5.00

\$10.00 1.00

25.00 250.00

5.00 2.50 2.50 10.00

10.00

\$25.00 25.00

•	Rental, for a renewal period of 21 years	riod of 21 years
	Fees Applicable to Parts IV and V: (Coal Mining For a lease Annual rental per acre for a coal lease For renewal of road allowance lease Annual rental for a road allowance lease	
	Fees Applicable to Part VI: (Petroleum and Natur For a lease Annual rental per acre For reinstatement of a lease, 10 cents an a charge of and a maximum charge of For filing a mechanic's lien (except for actual For discharging a mechanic's lien (except for ac For filing a certificate of lis pendens For assigning a lease For amending description of a reservation.	cre with a minimum labour)tual labour)
	Fees Applicable to Part VII: (Geophysical and Geo For a licence	logical Exploration)
ZΙ	REPRESENTATIVES	
	Minister Deputy Minister	Hon. N. E. Tanner. I. N. McKinnon.
	Director of Mineral Rights and Assistant Deputy Minister Director of Mines Assistant to Director of Mines Electrical Inspector of Mines DISTRICT INSPECTORS OF MINES: Edmonton Calgary Edson Blairmore Lethbridge Stettler Drumheller	H. H. Somerville. John Crawford. J. A. Dutton. B. Tait. J. Thompson. A. Muir. A. L. Lister. J. D. B. Brown. E. H. Morgan. R. Shaw. J. Horne.
	MINING RECORDERS: Edmonton Calgary	

More detailed information and copies of the Mining Laws and Regulations for Alberta may be had on application to the Director of Mineral Rights, Department of Mines and Minerals, Edmonton, Alberta.

INTRODUCTORY

I.

British Columbia entered Confederation in July 1871. Before Confederation, as a Crown Colony, various ordinances and acts affecting mining were established. First ordinances were based on Australian law, and later American and Mexican regulations were in part adopted. Titles acquired under some of these earlier ordinances and acts are still in effect and it should be noted that extralateral rights were conveyed by the

mining ordinance of 1867.

From 1872 to 1875, the Government of the new Province of British Columbia repealed and amended the Colonial ordinances, proclamations, and acts. In 1877 the "Mineral Act" and "Coal-mines Regulation Act" were passed and in 1882 an Act was passed to consolidate and amend the laws relating to gold and other minerals except coal. The "Coal Mines Act" was passed in 1888. In 1890 a commission was appointed to amend and consolidate the mining laws of the Province and in 1891 a new Mineral Act and new Placer-mining Act were passed. In 1892 extensive revisions were made to these Acts and the extralateral rights were abolished at that time. The Metalliferous Mines Regulation Act was passed in 1897. The "Mineral Act", "Placer-mining Act", "Coal-mines Regulation Act", and "Metalliferous Mines Regulation Act" have been amended from time to time and the last two Acts were rearranged and rewritten in 1948. Various other Acts and regulations relating to mining are in force.

The Department of Mines Act (1948, Chap. 211) empowers the

The Department of Mines Act (1948, Chap. 211) empowers the Minister of Mines to organize the Department or to reorganize it from time to time to meet changing conditions in the mining industry. It provides for examination and certification of assayers; for conducting a short course of lectures in practical geology and mineralogy; and for the expenditures of public monies for the construction, reconstruction, or repair of trails, roads and bridges to facilitate the exploration of the mineral resources of any mining district, and in the operation and develop-

ment of any mining property.

MINERAL ACT AND PLACER-MINING ACT2

II.

FREE MINER'S CERTIFICATES

Free miner's certificates must be obtained before any person can prospect for mineral and locate and record mineral claims in British Columbia.

Any person over the age of 18, and any joint-stock company incorporated or registered in British Columbia, may obtain a free miner's certificate on payment of the required fee.

² Abstracted from Synopsis of Mining Laws of British Columbia as published by the British Columbia Department of Mines.

¹ Prepared in collaboration with P. J. Mulcahy, Chief Gold Commissioner, British Columbia Department of Mines, and C. E. Hopper, Superintendent of Lands, British Columbia Department of Lands and Forests, Victoria, B.C.

The fee to an individual for a free miner's certificate is \$5 for one year: To a joint-stock company having a capital of \$100,000, or less, the fee for a year is \$50; if capitalized beyond this, the fee is \$100. If the

company has no stated capitalization, the fee is \$100.

The free miner's certificates run from date of issue and expire on the 31st day of May next after its date, or some subsequent 31st day of May (that is to say, a certificate may be taken out a year or more in advance if desired). Certificates may be obtained for any part of a year, terminating on May 31, for a proportionately less fee. The possession of this certificate entitles the holder to enter upon all lands of the Crown, and upon any other lands on which the right to so enter is not specially reserved, for the purpose of prospecting for minerals, locating claims, and mining.

In the event of a free miner allowing his certificate to lapse, his mining property (if not Crown-granted) reverts to the Crown (subject to the conditions set out in the next succeeding paragraph), but where other free miners are interested as partners or co-owners the interest of the defaulter becomes vested in the continuing co-owners or partners pro rata,

according to their interests.

Six months' extension of time within which to revive title in mining property which has been forfeited through the lapse of a free miner's certificate is allowed. This privilege is given only if the holder of the property obtains a special free miner's certificate within six months after the 31st of May on which his ordinary certificate lapsed. The fee for this special certificate in the case of a person is \$15 and in that of a company \$300.

It is not necessary for a shareholder, as such, in an incorporated mining company to be the holder of a free miner's certificate.

MINERAL ACT

All minerals occurring in place are acquired under the "Mineral Act", but limestone, marble, clay, sand, gravel, earth, building or construction stone, coal, petroleum, and natural gas are not considered as mineral.¹

A mineral claim is a piece of land not exceeding 1,500 feet square and 51.65 acres in area. The angles must be right angles unless the boundaries, or one of them, are the same as those of a previously recorded claim.

No special privileges are allowed for the discovery of new mineral claims or districts.

A mineral claim is located by erecting two "legal posts", which are stakes having a height of not less than 4 feet above ground and squared 4 inches at least on each face for not less than 1 foot from the top. A tree-stump so cut and squared also constitutes a legal post. A cairn of stones not less than 4 feet in height and not less than 1 foot in diameter 4 feet above the ground may also be used as a legal post. Upon each of these posts must be written the name of the claim, the name of the locator, and the date of location. On No. 1 post, in addition, the following must be written: "Initial post. Direction of Post No. 2 [giving approximate

¹ Limestone, marble, etc., are disposed of by lease under the provisions of the "Land Act", Coal is disposed of under the provisions of the "Coal Act" and petroleum and natural gas under the "Petroleum and Natural Gas Act", These Acts are under the administration of the Department of Lands and Forests, Victoria, B.C.

compass-bearing] feet of this claim lie on the right and feet on the left of the line from No. 1 to No. 2 posts." Numbered metal identification tags must be attached to both posts at the time of staking.

The location-line between Nos. 1 and 2 posts must be distinctly marked in a timbered locality by blazing trees and cutting underbrush, and in bare country by monuments of earth or rock not less than 2 feet in diameter at the base, and at least 2 feet high—so that the line can be distinctly seen.

Mineral claims must be recorded in the Mining Recorder's office for the mining division in which they are situated within fifteen days from the date of location, one day extra being allowed for each 10 miles of distance from the recording office after the first 10 miles. A free miner can hold, by location, during any period of twelve months, eight mineral claims within a radius of 10 miles, and may acquire others by purchase.

claims within a radius of 10 miles, and may acquire others by purchase.

If a location is not recorded within the time prescribed in the Act it is open for relocation, but if the original locator wishes to relocate he is not entitled to do so unless he has obtained the written permission of the Gold Commissioner, for which permission he shall pay a fee of \$10.

A free miner may at any time abandon a mineral claim by giving notice in writing of his intention to abandon to the Mining Recorder and

upon payment of a fee of \$10.

Until the Crown grant is issued, mineral claims are held practically on a yearly lease, a condition of which is that during such year assessmentwork be performed on the same to the value of at least \$100, or a payment of such sum be made to the Mining Recorder. Such assessments must be recorded before the expiration of the year, or the claim is deemed aban-If, however, the required assessment-work has been performed within the year, but not recorded within that time, a free miner may, within thirty days thereafter, record such assessment-work upon payment of an additional fee of \$10. The actual cost of the survey of a mineral claim, to an amount not exceeding \$100, may also be recorded as assessmentwork. If, during any year, work is done to a greater extent than the required \$100, any further sum of \$100—but not less—may be recorded and counted as further assessments. Such excess work must be recorded during the year in which it is performed. All work done on a mineral claim between the time of its location and recording may be counted as work done during the first period of one year from the recording. As soon as assessment-work to the extent of \$500 is recorded and a survey made of the claim, the owner of a mineral claim is entitled to a Crown grant on payment of a fee of \$25, and giving the necessary notices required by the Act. Liberal provisions are also made in the Act for obtaining mill-sites and other facilities in the way of workings and drains for the better working of claims.

PLACER-MINING ACT

In the "Placer-mining Act" "mineral" is defined as in the "Mineral Act," but includes only mineral occurring in any natural unconsolidated

material, excluding mineral in place.

Under the "Placer-mining Act" a free miner may locate, in any period of twelve consecutive months, one placer claim or leasehold in his own name and one placer claim or leasehold for each of three free miners for whom he acts as agent on any separate creek, river-bed, bar or dry diggings. Other placer claims or leaseholds may be acquired by purchase.

Placer Claims

Placer claims are of three classes, as follows:—

"Creek diggings": any mine in the bed of any stream or ravine; "Bar diggings": any mine between high- and low-water marks on a river, lake, or other large body of water;

"Dry diggings": any mine over which water never extends. Every placer claim shall be as nearly as possible rectangular in form,

and marked by four legal posts at the corners.

A placer claim must be recorded in the office of the Mining Recorder for the mining division within which the same is situated within fifteen days after the location thereof, if located within 10 miles of the office of the Mining Recorder by the most direct means of travel. One additional day shall be allowed for every 10 miles additional or fraction thereof. The number of days shall be counted inclusive of the days upon which such location was made, but exclusive of the day of application for record.

Placer-Mining Leases

Leases of unoccupied Crown lands approximately 80 acres in extent may be granted by the Gold Commissioner of the mining division after location has been made by staking along a "location-line" not more than one-half a mile (2,640 feet) in length. In this line one bend, or change of direction, is permitted. Where a straight line is followed two posts only are necessary—namely, an 'initial post' and a 'final post'. Where there is a change of direction a legal post must be placed to mark the point of the said change. The leasehold is allowed a width not in excess of one-quarter mile (1,320 feet), and the locator, both on his 'initial post' and in his notice of intention to apply, which is posted at the office of the Mining Recorder, is required to state how many feet are included in the location to the right and how many feet to the left of the location-line.

The section of the Act (Sect. 105) dealing with the staking of placer-

mining leases follows:—

(1) For the purpose of locating a placer leasehold a line to be known as the 'location-line' shall be marked on the ground by placing a legal post at each end, one post to be known as the 'Initial post' and the other as the 'Final post.' The direction of the location-line may change at not more than one point throughout its length, and an intermediate legal post shall be placed at the point at which the direction changes. The total length of the location-line, following its change of direction (if any), shall not exceed two thousand six hundred and forty feet.

(2) Upon the initial post and the final post shall be written the words 'Initial post' and 'Final post' respectively, together with the name of the locator and the date of the location. On the initial post shall also be written the approximate compass-bearing of the final post, and a statement of the number of feet of the leasehold lying on the right and on the left of the location-line, as viewed from the initial post, not exceeding in the aggregate a width of thirteen hundred and twenty feet, thus: 'Direction of final post, feet of this claim lie on the right and feet on the left of the location-line.' In addition to the foregoing, where there is a change of direction in the location-line as marked on the ground, the number '1' shall be written on the initial post; the number '2' shall be written on the intermediate post; and the number '3' shall be written on

the final post. There also shall be affixed to the initial post a notice to the following effect, namely: 'Application will be made under the "Placer-

mining Act" for a lease of the ground within this location.

(3) The location-line shall at the time of location be marked between the legal posts throughout its length so that it can be distinctly seen; in a timbered locality, by blazing trees and cutting underbrush, and, in a locality where there is neither timber nor underbrush, by placing legal posts or monuments of earth or stones not less than two feet high and not less than two feet in diameter at the base, so that the location-line can be distinctly seen.

- (4) Where from the nature or shape of the surface of the ground, it is impracticable to mark the location-line of a leasehold as provided by this section, the leasehold may be located by placing legal posts as witness-posts, as near as possible to the location-line, and writing on each witness-post the distance and compass-bearing of some designated point on the location-line from the witness-post; and the distances and compassbearing so written on the witness-posts shall be set out in the application for the lease and in any lease granted thereon.
- (5) The locator shall, within thirty days after the date of the location, post a notice in Form I in the office of the Mining Recorder, which notice shall set out:-
 - (a) The name of the intending applicant or each applicant if more than one, and the numbers of their free miner's certificates;

(b) The date of the location;

(c) The number of feet lying to the right and left of the location-line,

and the approximate area or size of the ground.

The words written on the initial post and final post shall be set out in full in the notice; and as accurate a description as possible of the ground to be acquired shall be given, having special reference to any prior locations it may join, and the general locality of the ground to be acquired.

At the time of location a metal identification tag must be affixed

to the 'initial post' and to the 'final post' or, if cairns are to be used,

placed in containers within the cairns.

The annual rental on a placer-mining lease is \$30, and the amount to

be expended annually on development-work is \$250.

Authority also has been given for the granting of special placer-mining leases in locations other than have been defined. Copies of Regulations governing the granting of special placer-mining leaseholds may be obtained upon application to the office of the Chief Gold Commissioner, Department of Mines, Victoria, B.C.

For more detailed information the reader is referred to the complete "Placer-mining Act", which may be obtained from the King's Printer,

Victoria, B.C.

Limestone, Marble, and other Materials

Leases for limestone, marble, and other materials not classed as minerals under the provisions of the "Mineral Act" are dealt with by lease under the provisions of Section 82, Paragraph "b" of the "Land Act", Part 4, 1948.

The prevailing rental on leases issued for removal of limestone and other material is \$2 per acre per annum, but no lease is issued at a rental less than a minimum of \$25 per annum. A fee of \$5 is payable for the issuance of the lease. In addition to rental a royalty of not less than 5 cents per cubic yard is payable on all commercial material removed from the premises with the exception of marble. The royalty is \$1 per cubic yard on all marble quarried and taken out in slabs or blocks and disposed of in that manner, and 5 cents per cubic yard for the material removed in other forms.

COAL, PETROLEUM, AND NATURAL GAS

Limestone, marble, etc., are disposed of by lease under the provisions of the "Land Act," coal is disposed of under the provisions of the "Coal Act," and petroleum and natural gas under the "Petroleum and Natural Gas Act." These Acts are under the administration of the Department of Lands and Forests, Victoria, B.C.

COAL ACT

The "Coal Act" is administered by the Coal Controller, British Columbia Department of Lands.

Crown coal may be disposed of: (a) by a licence to develop coal and to produce coal in an amount not exceeding 10,000 tons a year; (b) by a lease by the terms of which the lessee covenants to produce not less than 10,000 tons of coal a year.

Licences

An applicant for a licence must designate the location and state the annual tonnage of coal he proposes to mine if he finds a commercial deposit and also the market in which he plans to dispose of the coal.

In surveyed territory the application must be accompanied by a plan showing the lots, etc., of the location applied for. In unsurveyed territory the plan must show the position of the location in its relation to some prominent feature. The method of staking is fully explained in the Act.

The rental for a licence is 50 cents an acre. If development work to the value of \$7.50 per acre or more is done the rental shall be rebated.

The licence is for a period of one year and is renewable. The fee for a licence or a renewal is \$25 in each case.

Leases

A lease is granted to a licensee upon establishing that he is producing coal in excess of 10,000 tons a year and that he has complied with all the provisions of the Act.

A lease is for a period of 20 years and is renewable for successive periods of 20 years, or for such less time as will permit the lessee to recover the remaining coal.

The fee for a lease and that for a renewal is \$25 in each case. The

vental for a lease is \$1 per acre per year.

A licensee or a lessee has not any right to the surface of the location except: (a) to such part as is required for the efficient conduct of his operation, and (b) he has acquired the surface rights in accordance with the Regulations.

A licensee or lessee may acquire as many licences or leases as are commensurate with the size of the operation planned and available markets. The basis for determining the number of licences or leases is:

- (a) One licence to develop coal and to produce coal up to 10,000 tons a year.
- (b) One lease to produce from 10,000 to 100,000 tons a year.
- (c) For every 100,000 tons of output of coal or fraction thereof per annum in excess of the first 100,000 tons per annum an additional licence or lease.

Any number of adjacent licences or leases may be grouped in accordance with conditions prescribed by regulations and all the work required to be done on them may be done on any one or more of the licences or leases.

The location must be one square mile in area unless the area of coal lands applied for is less. It must be square in form unless the area of coal lands applied for is less than one square mile. In surveyed territory the boundaries must conform to the boundaries of sections, lots, etc. In unsurveyed territory they must run north and south, or east and west, and all bearings must be astronomic.

Royalties

Every licensee or lessee must pay a royalty of 25 cents on every ton of coal shipped, exported, or in any way delivered from the location. The royalty is payable monthly.

PETROLEUM AND NATURAL GAS ACT

This Act is administered by the Petroleum and Natural Gas Controller, British Columbia Department of Lands.

Crown petroleum and natural gas may be disposed of by a permit, a licence, or a lease.

Permits

A permit confers upon a permittee the right:

- (a) if the permit is restricted to surface geology, to prospect only on the surface of the location for petroleum and natural gas;
- (b) if the permit is not restricted to surface geology, to prospect on the location for petroleum and natural gas, and in prospecting to perform structural drilling and geophysical operations or investigations relating to subsurface geology.

Any person may apply for a permit. The application should be made to the Controller and should designate the location and area, state whether the permit is to be restricted to surface geology, indicate the type, extent, and cost of the proposed prospecting, furnish an estimate of the time required to make an examination of the location, and submit a geological report if one is available.

The permit fee is \$250. If the permit is restricted to surface geology the rental is \$750 for each area of 15,000 acres or fraction thereof contained in the location. If not restricted to surface geology the rental is \$1,000 for each area of 10,000 acres.

The permittee is entitled to a refund of the first year's rent:

- (1) in the case of a permit restricted to surface geology:
 - (a) if, during the first year of the permit, investigation work to the value of 5 cents per acre or more is done, or
 - (b) if the permittee obtains a licence within the limits of the location and commences drilling for petroleum and natural gas;
- (2) in the case of a permit not restricted to surface geology:
 - (a) if, during the first year, investigation work to the value of 10 cents per acre or more is done on the location; or
 - (b) if the permittee obtains a licence within the limits of the location and commences drilling for petroleum or natural gas.

The maximum area of a location under a permit is 256,000 acres. The minimum area is 15,000 acres for a permit restricted to surface geology and 10,000 acres for a permit not so restricted.

A permit is for a period of one year, and may be extended for successive periods of three months up to a maximum of three years. With each application for extension there is a permit fee of \$65 and also rent as follows:—

- (a) if the extension is during the second year of the permit and the permit is restricted to surface geology, the rental is 2½ cents per acre, but if it is not so restricted, 3¾ cents per acre;
- (b) if the extension is during the third year, and the permit is restricted to surface geology the rental is $3\frac{3}{4}$ cents per acre, and if not so restricted, 5 cents per acre.

Licences

Any person may apply for a licence, but during the term of a permit no person except the permittee may apply for a licence within the limits of the location covered by the permit. The licence fee is \$25, and the annual rental is 50 cents an acre.

A licensee may search, prospect, and conduct drilling or other operations for the discovery of petroleum or natural gas within the limits of the location covered by the licence.

The area of a location under a licence is two square miles. It must be rectangular in form and the length must not exceed twice the width.

The term of a licence is one year, and the licence is renewable.

Leases

No person except a licensee who established that he has found petroleum or natural gas in commercial quantities on the location covered by his licence is entitled to apply for a lease.

A lessee may produce petroleum and natural gas from the location covered by the lease.

The fee for a lease is \$25 and the annual rental is \$1 per acre. The area of a location is two square miles and it must be rectangular in form and the length not exceed twice the width. The term of a lease is for 21 years and is renewable at a cost of \$25.

Surface Rights

An operator may use such part of the surface as is required for the efficient conduct of his operations. Subject to this right, the Crown may sell, grant, or give to any person any right over any part of the surface of a location. If any part of the location is lawfully occupied, the operator must first obtain permission to enter and make compensation.

Royalties

Every operator must pay a royalty on all products obtained from a location. The royalty payable in respect of natural gas is as stated in the permit, licence, or lease. In the case of all other products it is at the rate of $12\frac{1}{2}$ per cent of the gross value of the products at the well-head. No royalty is payable on products used by a licensee or lessee in conducting drilling operations.

For the purpose of computing royalty, the gross value of products shall be ascertained in accordance with the Regulations.

General Provisions

No permit, licence, or lease may be assigned, transferred, or disposed of without the consent of the Controller.

Licences or leases, if adjacent, may be grouped, but not in excess of eight. Licences cannot be grouped with leases.

Reserves

- (1) The Lieutenant-Governor in Council may at any time, by notice signed by the Minister and published in one issue of the *Gazette*, declare any area defined in the notice to be a reserve district.
- (2) If a person applies for licence in a reserve district, he must with his application describe an area of equal dimensions adjoining the location in respect of which the application is made.
- (3) If the application for a licence is granted, the area as described in (2) above shall thereupon become a reserve, and shall be known as a "Crown reserve".
- (4) The Lieutenant-Governor in Council may also at any time, by notice signed by the Minister, declare any area defined in the notice to be a Crown reserve.
- (5) Where two or more leases or licences are so situated that intervening land is less than two square miles in extent, that intervening land shall be a Crown reserve.
- (6) When a Crown reserve has been created pursuant to (3), (4), or (5), above, no person may apply for or receive a permit, licence, or lease in respect of that area.
- (7) Any part of a Crown reserve may be disposed of by the Lieutenant-Governor in Council at any time by public tender, and in that event tenders shall be called for by notice signed by the Minister and published in the *Gazette* and a newspaper published and circulating in the same land recording district.
 - (8) The Lieutenant-Governor in Council may cancel any reserve. 76264—91

Drilling and Production Regulations

The Regulations were made under the "Petroleum and Natural Gas Act, 1947", and deal with drilling and production operations of petroleum and natural wells. They apply to any well in British Columbia:

(a) that, in the opinion of the controller, is being drilled to search for

or obtain any petroleum;

(b) that is producing or capable of producing any petroleum;

(c) that is drilled to a depth of more than 500 feet regardless of the

purpose.

The Regulations deal with the management of the operation, the rights and duties of operators, the locations, permits, licences and leases, the number of wells and their spacing, drilling and production operations, and all other related conditions.

OTHER ACTS AND REGULATIONS

III.

METALLIFEROUS MINES REGULATION ACT

This Act is designed to provide for the safe working of metalliferous mines, metallurgical works, and quarries. It contains practical regulations which govern the main phases of mining, such as surface arrangements, fire-protection, use and storage of explosives, hoisting, haulage, ventilation, mine-rescue work, etc.

In preparing the present Act, passed in 1948, the former Act was entirely rewritten and rearranged to make it conform to modern mining

practice.

In the new Act, provision regarding explosive gases in metal mines has been made. A new rule allows the use of internal-combustion engines of the diesel type underground under conditions which make this form of power unobjectionable.

Provisions have been made for training and maintaining mine-rescue teams at the larger metal-mining centres. The new Act also provides for the appointment of electrical, mechanical, and metallurgical inspectors; for protection of public and private property from damage resulting from mining operations; and for appointing workmen's safety committees.

The Inspectors of Mines are empowered to enter and inspect any part of any mine, metallurgical works, or quarry, and to inspect any plant or equipment, or anything relating to the safety of persons employed in or about quarries, metalliferous mines, or metallurgical works. They are also empowered to require the remedy of conditions affecting the safety of employees, to make provisions safeguarding those employed, and, if need be, to order the closing of a mine or part of a mine, or the stopping of all work connected with it.

COAL MINES REGULATION ACT

This Act, like the "Metalliferous Mines Regulation Act," is designed to provide for the safe working conditions by practical regulations.

The Act was completely revised and rewritten in 1948, and several additions and changes have been made to bring it into conformity with modern practice. The additions and changes include: Rules providing for pre-

cautions against coal-dust underground and in cleaning plants; a new section governing surface coal-stripping operations; revised rules governing electrical installations; and provisions for the use of internal-combustion engines of the diesel type underground, where the equipment and the conditions maintained render this form of power unobjectionable.

The powers of Inspectors of Mines under this Act are similar to those

provided under the "Metalliferous Mines Regulation Act."

EXPLOSIVES

Dominion Order in Council No. 2903, July 1940, requiring a permit to maintain a magazine or purchase explosives on the authority of a Provincial Mines Inspector was repealed in December 1946.

MINES RIGHT-OF-WAY ACT

This Act provides for access to mining property. It provides for the obtaining of a right-of-way for any road, railway, aerial, electric, or other tramway, surface or elevated cable, electric or telephone pole-line, chute, flume, pipeline, drain, or any right or easement of a like nature.

IRON AND STEEL BOUNTIES ACT

The Lieutenant-Governor in Council may enter into an agreement with any person whereby the Crown will pay to that person, out of the Consolidated Revenue Fund, bounties on pig-iron and steel shapes when manufactured within the Province, as follows:—

- (a) In respect of pig-iron manufactured from ore, on the proportion produced from ore mined in the Province, a bounty not to exceed three dollars per ton of two thousand pounds;
- (b) In respect of pig-iron manufactured from ore, on the proportion produced from ore mined outside the Province, a bounty not to exceed one dollar and fifty cents per ton of two thousand pounds;
- (c) In respect of steel shapes of commercial utility manufactured in the Province, a bounty not to exceed one dollar per ton of two thousand pounds.

Bounty, as on pig-iron under this Act, may be paid upon the molten iron from ore which in the electric furnace, Bessemer, or other furnace, enters into the manufacture of steel by the process employed in such furnace; the weight of such iron to be ascertained from the weight of the steel so manufactured.

Bounty on steel shapes under this Act shall be paid only upon such steel shapes as are manufactured in a rolling-mill having a rated productive capacity per annum of at least twenty thousand tons of two thousand pounds per ton. The total amount of bounties paid under clauses (a) and (b) is limited to \$200,000 in any one year or \$2,000,000 in the aggregate; and the total amount of bounties paid under clause (c) is limited to \$20,000 in any one year or \$200,000 in the aggregate.

INDIAN RESERVES MINERAL RESOURCES ACT

This Act validates an agreement between the Dominion and the Province whereby mineral rights on Indian reserves, upon surrender by the Indians, shall be administered by the Province, subject to the laws of the Province. A free miner wishing to prospect on Indian reserves must obtain the approval of the Gold Commissioner for the mining division in which the reserve is situated and also of the Indian Agent for such reserve.

PROSPECTORS' GRUB-STAKE ACT

In this Act "grub-stake" means money, food supplies, clothing, powder, tools, or any other thing necessary to the business of prospecting. "Prospector" means any person who is a British subject and who is the holder of a valid free miner's certificate; who has been honourably discharged from any of His Majesty's Services, or has been resident in the Province during the year preceding any application for a grub-stake.

Information regarding grub-stakes may be obtained from the Department of Mines, Victoria, B.C., or from any Mining Recorder, Mining Engineer, or Inspector of Mines of the Department.

No grub-stake granted to one applicant shall exceed \$300 in value in any one year, but the grub-stake may be increased, if an applicant is required to travel to or from the area in which he is to prospect, by an amount sufficient to cover such travelling expenses. The total in no case shall exceed \$500 in any year. Applicants are required to identify some of the commoner rocks and minerals.

Provision has been made for the establishment and operation of one or more mining training camps at suitable locations within the Province.

TAXATION ACT

The procedure in applying to lease a reverted Crown-granted Mineral Claim is as follows:

(1) Where property which consists of a mineral claim has been forfeited to and vested in the Crown under the provisions of this Part, it shall be lawful for the Gold Commissioner for the mining division in which the mineral claim is situate to grant a lease thereof to any person for the term of one year upon payment of the sum of twenty-five dollars, and, upon payment of a further sum of twenty-five dollars, to grant a renewal of the lease for a further term of one year commencing on the expiration of the former lease, but for no longer period.

(2) No person shall be entitled to hold as lessee under this section more than eight claims in the same mining division at the same time.

(3) No lease granted under this section shall be transferable.

(4) Subject to the rights of any person to the surface or a portion of the surface of the mineral claim, the lessee shall, during the continuance of his lease, but no longer, have the right to enter, prospect, and mine upon the claim for all minerals, precious and base, save coal and petroleum, and for that purpose shall have the rights of a free miner under the 'Mineral Act'.

(5) Where the Gold Commissioner has granted a lease to any person under this section, he shall forthwith notify the Surveyor of Taxes, giving the name of the mineral claim, the name of the lessee, and the date of the lease, and the Surveyor of Taxes shall enter the particulars furnished him by the Gold Commissioner in a proper book to be kept by him for that purpose.

(6) The lessee may at any time before the expiration of his lease apply for and obtain a Crown grant of the mineral claim upon payment of all taxes, costs, expenses and interest which remain due and unpaid on the mineral claim on the date of its forfeiture to the Crown, together with a sum equal to all taxes and interest which would have accrued due in respect thereof from the date of the lease to the date of the application for a Crown grant had the claim been regularly assessed in like manner as it appeared upon the assessment roll for the year last preceding the date of the forfeiture and also with a fee of twenty-five dollars for a Crown grant: Provided that if the lessee establishes to the satisfaction of the Gold Commissioner that he has expended upon the claim in mining-development work a sum of not less than two hundred dollars a year during the continuance of the lease, then the payment of the sum in respect of taxes and interest from the date of the lease to the date of application for a Crown grant shall not be required.

Provided further that if the lessee is the holder of a number of adjoining mineral claims not exceeding eight, and establishes to the satisfaction of the Gold Commissioner that a sum equal to two hundred dollars a claim of the full number of adjoining mineral claims has been expended upon one or more of the adjoining mineral claims in mining-development work for each year during the continuance of the leases, then the payment of the sum in respect of taxes and interest from the date of the lease to the date of the application for a Crown grant shall not be required.

(7) The lessee shall be entitled to a Crown grant according to the acreage and description of the claim specified in the original Crown grant thereof under which the claim was held prior to the date of forfeiture, but

subject to the prior rights of any other person.

(8) Where the lessees under this section of a number of adjoining mineral claims, not exceeding eight, file with the Gold Commissioner a notice of their intention to perform on any one or more of the claims all the mining-development work that otherwise might be required in respect of all the claims, and where the lessees thereafter establish to the satisfaction of the Gold Commissioner that a sum equal to two hundred dollars a claim of the full number of the adjoining claims has been expended upon one or more of the adjoining claims in mining-development work for each year during the continuance of the leases, then the payment of the sum in respect of taxes and penalties from the date of each of the leases to the date of the application for a Crown grant shall not be required.

TAXATION OF MINES

The "Mining Tax Act" (1948, Chap. 329) deals with the tax on "income derived from mining operations", as authorized under the Dominion-Provincial agreement. Actually it is a tax on the net income after making the allowances set out in section 4 of the Act. The method of determining "total net income" is explained in section 5 of the Act.

The rate that the mines are subject to is 4 per cent on net income

derived from mining operations.

Crown-granted mineral claims are subject to a tax of 25 cents per acre. The tax becomes due on July 2nd in each year, and if unpaid on the following October 31st is deemed to be delinquent.

The Federal Government now collects the income tax for the Provin-

cial Government.

For further particulars see the "Mining Tax Act," also the "Public Schools Act," which are obtainable from the King's Printer, Victoria, B.C.

FOREST ACT
In 1939 the "Provincial Parks Act" was repealed and the administration of Provincial parks brought under the "Forest Act." Under this Act the Lieutenant-Governor in Council may constitute any portion of the Province a Provincial park and may also extend, reduce, or cancel any park created before or after the amendment to this Act.

The Act provides for three classes of parks to be known as "A", "B",

and "C" Class parks.

Lands included in Class "A" and Class "C" parks are reserved from pre-emption, sale, lease, or licence under the "Land Act" and with respect to mining are so reserved unless the consent of the Lieutenant-Governor in Council is obtained, and then only subject to further provisions of the Act.

No holder of any mineral claim in a Class "A" or Class "C" park may

obtain a Crown grant of the surface rights of a mineral claim.

All mineral claims in any Class "A" or Class "C" park shall be subject to such terms and conditions and restrictions, including cutting and use of timber, as the Lieutenant-Governor in Council may from time to time prescribe.

The restrictions on prospecting and mining in Class "A" and Class "C"

parks do not apply in the case of Class "B" parks.

Where, in the opinion of the Minister of Lands, the safety of life and property is endangered through the hazardous condition of the forest-cover or the occurrence or spread of forest fire, the Minister may declare a district closed for travel and prospecting so long as the hazard exists.

LIST OF ACTS

IV.

Department of Mines Act, R.S.B.C. 1948, Chap. 211.

Mineral Act, R.S.B.C. 1948, Chap. 213. Placer-mining Act, R.S.B.C. 1948, Chap. 214. ¹Coal Act, R.S.B.C. 1948, Chap. 209.

¹Petroleum and Natural Gas Act, R.S.B.C. 1948, Chap. 249.

¹Land Act, R.S.B.C. 1948, Chap. 175 (re Limestone, etc.).

Metalliferous Mines Regulations Act, R.S.B.C. 1948, Chap. 218. Coal Mines Regulation Act, R.S.B.C. 1948, Chap. 217. Mines Right-of-way Act, R.S.B.C. 1948, Chap. 216. Iron and Steel Bottonies Act, R.S.B.C. 1948, Chap. 32.

Indian Reserves Mineral Resources Act, R.S.B.C. 1948, Chap. 212.

Prospectors' Grub-Stake Act, R.S.B.C. 1944, Chap. 42.

²Taxation Act, R.S.B.C. 1948, Chap. 332.

¹Forest Act, R.S.B.C. 1948, Chap. 128.

ROYALTIES

V.

All minerals mined from lands covered by records of mineral claims and placer claims and by placer-mining leases issued after the 1st day of May, 1948, are subject to payment of such royalties as may be fixed by regulation made by the Lieutenant-Governor in Council from time to time.

Under jurisdiction of Lands and Forests Department.
 Under jurisdiction of Finance Department.

The amounts of royalties to be paid have not yet been set. Properties subject to the payment of royalties are exempt from payment of the 4 per cent tax under the "Mining Tax Act."

BOUNTIES

Ϋ́Ι.

None.

SCHEDULE OF FEES

VII.

Individual free miner's certificate, annual fee	\$ 5.00
Company free miner's certificate (capital \$100,000 or less), annual fee	50.00
Company free miner's certificate (capital over \$100,000), annual fee	100.00
Recording mineral claim	2.50
Recording certificate of work, mineral claim	2.50
Recording abandonment, mineral claim	10.00
Recording abandonment, placer claim	2.50
Recording any affidavit	2.50
Records in "Records of Conveyances" (for one claim or lease)	2.00
For each additional claim or lease in the same document	.50
Filing documents. "Mineral Act"	.25
Filing documents, "Placer-mining Act"	1.00
Recording certificate of work, placer-mining lease	2.50
For Crown grant of mineral rights under "Mineral Act"	25.00
For Crown grant of surface rights of mineral claim under "Mineral Act"	10.00
For every lease under "Placer-mining Act"	5.00
	5100

REPRESENTATIVES

VIII.

Minister	Hon. R. C. MacDonald.
Deputy Minister	Dr. J. F. Walker.
Chief Gold Commissioner	P. J. Mulcahy.
Chief Mining Engineer	Dr. Hartley Sargent.
Chief Inspector of Mines	H. C. Hughes.
Provincial Assayer	G. Cave-Brown-Cave.

More detailed information and copies of the Mining Laws of British Columbia may be obtained on application to the Deputy Minister, British Columbia Department of Mines, Victoria, B.C.

SUPPLEMENT

ROYALTIES LEVIED IN CANADA

Dominion Lands (See "Quartz Mining".)
Nova Scotia4 cents per unit, in each short ton of copper ore sold or smelted.
Alberta
Gold and Silver
Dominion Lands (See "Placer and Quartz Mining".)
Nova Scotia On gold, 35 cents per ounce.
On silver, 2 cents per ounce. Alberta
Iron
Dominion Lands (See "Quartz Mining".)
Newfoundland 5 per cent of the net profit, in Labrador. The Newfoundland Government has imposed an export tax of 10 cents per ton on all iron ore shipped by Dominion Steel and Coal Corporation from its Bell Island operations on tonnages up to 1,000,000 tons per annum and an export tax of 5 cents per ton on tonnages from 1,000,000 to 1,500,000. Above that tonnage there is no tax payable.
Nova Scotia 5 cents on any short ton of ore sold or smelted.
OntarioIron mines are subject to the payment of the profit tax (See "all minerals"), but the Minister may remit the tax upon the profits arising out of the mining of iron ore if such iron ore is smelted in Canada or delivered to a blast furnace in Canada for the purpose of being smelted.
Lead
Dominion Lands (See "Quartz Mining".)
Nova Scotia2 cents per unit, in each short ton of lead ore sold or smelted.
Alberta
Placer Mining
Dominion Lands Yukon: 2½ per cent on gold valued at \$15 per ounce; Northwest Territories: 1½ per cent of its value.
Alberta
Zinc
Dominion Lands (See "Quartz Mining".)
Nova Scotia2 cents per unit, in each short ton of zinc ore sold or smelted.
Alberta $\dots 2^1_2$ per cent of the value.
Quartz Mining
Dominion Lands3 per cent upon annual profits in excess of \$10,000 to \$1,000,000. 5 per cent upon annual profits in excess of \$1,000,000 to
\$5,000,000. 6 per cent upon annual profits in excess of \$5,000,000 to
\$10,000,000. 1 per cent proportional increase upon annual profits in excess of \$10,000,000 for each additional \$5,000,000.

Indian Reserves.... 3 per cent upon annual profits up to \$100,000.

4 per cent on the excess above \$100,000 up to \$200,000.

5 per cent on the excess above 200,000 up to 300,000.

6 per cent on the excess above 300,000 up to 400,000.

7 per cent on the excess above 400,000 up to 500,000.

8 per cent on the excess above 500,000 up to 600,000.

9 per cent on the excess above 10 per cent on the excess above 700,000.

Saskatchewan 5 per cent of the market value of the mineral content of

Saskatchewan 5 per cent of the market value of the mineral content of any ore extracted and sold during the year, or 12½ per cent of the income from mining operations, whichever is the lesser amount. For mines commencing operation after January 1, 1947, royalty is as follows:

3 per cent on profits over \$ 10,000.

5 per cent on profits over 100,000.

7 per cent on profits over 500,000.

On profits in excess of \$1,000,000 royalty is on same basis as for mines in operation prior to January, 1947.

Alberta Royalty at the rate of $2\frac{1}{2}$ per cent, computed as follows:

Gold: Valued at \$15 an ounce; royalty $37\frac{1}{2}$ cents an ounce.

Silver: Valued at 60 cents an ounce; royalty 15 mills an ounce.

Copper: Valued at 12 cents a pound; royalty 30 cents a hundredweight.

Zinc: Valued at 4 cents a pound; royalty 10 cents a hundredweight.

Lead: Valued at 4 cents a pound; royalty 10 cents a hundredweight.

All unspecified metals and minerals, royalty computed at rate of $2\frac{1}{2}$ per cent of the value of the products.

Alkali

Saskatchewan(a) On products, when average market value is less than \$8 a ton, 16 cents per ton of product shipped;

(b) On products, when average market value is over \$8 a ton, the royalty is on a sliding scale stanting at 4 per cent for a value over \$8 a ton, and up to 25 per cent for a value of \$16 and over. (See under Saskatchewan, Part V, page 92, for further details.)

Bituminous Sands

Alberta Royalty at the rate specified in the lease.

Coal

Dominion Lands.... Coal mined under the "Domestic Coal Regulations", 25 cents per short ton;

Coal mined under the "Coal Mining Regulations", the royalty is at such rate as may be prescribed from time to time by Order in Council.

Nova Scotia...... 12½ cents per long ton for all coal removed from the mine, including coal used in the manufacture of coke or other manufactured fuel.

Coal used for domestic purposes by the workmen and coal used in the actual operating of the colliery is exempt from royalty.

New Brunswick As fixed by the Governor in Council, but not to exceed 15 cents a long ton. The present rate (1949) on coal is 9 cents per short ton.
Saskatchewan 5 cents per short ton on merchantable coal. Alberta 10 cents per short ton on coal mined or excavated.
Petroleum and Natural Gas Dominion Lands Royalty is charged varying from 7½ to 12½ per cent of the value of the product.
Indian Lands 15 per cent of the value of the output. New Brunswick 5 per cent of the value at the well's mouth.
Ontario Every person producing natural gas is liable for an annual tax as follows: (a) When exported from Canada, 2 cents a thousand
cubic feet.
(b) When consumed in Canada, ½ cent a thousand cubic feet. The Minister may remit the annual tax to the extent of \$250 on natural gas consumed in Canada.
Saskatchewan (a) On natural gas, 5 per cent of the sale value; (b) On all other products, a percentage of the sale value on a sliding scale, thus: 5 per cent for an average daily production of 30 barrels or less, up to 15 per cent for over 200 barrels.
Alberta
British Columbia In respect to natural gas, royalty is as stated in the permit, licence, or lease. In respect to all other products, $12_{\frac{1}{2}}$ per cent of the gross value of the products at the well-head.
Quarrying
Newfoundland For all quarry leases under the 1930 Crown Lands Act the Governor in Council may charge such royalty as it decides in each case.
Saskatchewan(a) 2 per cent of selling value on all quarriable substances shipped from Saskatchewan in the raw state or partially processed;
(b) 5 cents per cubic yard of raw material on all quarriable substances processed or manufactured into finished products in Saskatchewan;
(c) 25 cents per ton on quartzite pebbles.
Alberta
British Columbia The minimum royalty in respect to any leases issued under the Land Act is 5 cents per cubic yard on all commercial material removed (note reference in relation to removal of any material not classed as mineral under the Mineral Act).
Sand and Gravel
Ontario Dredging outfits licensed to remove sand and gravel from the beds of the Great Lakes are subject to the payment of royalty at rates stipulated in the licence.

Manitoba The Minister may set a royalty not in excess of 10 cents per cubic yard on sand and gravel produced from Crown lands.
Salt
Alberta 20 cents per short ton.
Other Minerals
Newfoundland 5 per cent of the net profit payable from minerals obtained from mining claims since 1930.
Nova Scotia Subject to such royalty as may from time to time be fixed and determined by the Governor in Council.
Alberta Subject to such royalty as may from time to time be imposed.
Other Minerals
Newfoundland Under the Pulp and Paper Act of 1905 the Buchans Mining Company pays a royalty of 5 per cent of the net profits, i.e., on a basis similar to that presently obtaining under the Crown Lands Act, 1930.
QuebecOn annual net profits:— 4 per cent in excess of \$ 10,000 up to \$1,000,000. 5 per cent in excess of 1,000,000 up to 2,000,000. 6 per cent in excess of 2,000,000 up to 3,000,000. 7 per cent in excess of 3,000,000.
OntarioProducing mines are subject to the payment of a profits tax as set out in "The Mining Tax Act". The tax is levied on the annual profits at the following rates: 6 per cent on all profits in excess of \$10,000 up to \$1,000,000. 8 per cent on all profits over \$1,000,000 up to \$5.000,000. 9 per cent on all profits on the excess over \$5,000,000.
Manitoba Mining operations are subject to "The Mining Royalty and Tax Act", which imposes a royalty tax of 8 per cent on the income derived from the operation of the mine in excess of \$10,000. New mines pay a rate of 6 per cent for the first year, and 7 per cent for the second year. "Income" is net profit less a deduction equal to 8 per cent of the original cost of the depreciable assets used in processing the ore; or, in the case of base metal mines, the deduction shall not be smaller than the following proportion of the net profit: (i) Where both copper and nickel are recovered, each in amounts which exceed in value five per centum of the total value of metals recovered—40 per cent. (ii) Where both lead and zinc are recovered, each in amounts which exceed in value five per centum of the total value of metals recovered—30 per cent. (iii) Where both copper and zinc are recovered, each in amounts which exceed in value five per centum of the total value of metals recovered—20 per cent. (iii) Where both copper and zinc are recovered, each in amounts which exceed in value five per centum of the total value of metals recovered—20 per cent. (iv) In other cases—15 per cent. British Columbia All minerals from mineral claims and placer claims and from
placer-mining leases issued after May 1, 1948, are subject to royalty, but the amounts to be paid have not yet been set.

BOUNTIES

In cases where it is considered advisable for the Government to encourage the production of a particular commodity, bounties baid by the Government are recognized substitutes for protective duties.

In the past they have been made use of by Canada to a considerable degree. The only bounties at present being paid are those on coal. The bounty on bituminous coal was the outcome of a recommendation of the Royal Commission on Maritime claims relating to the use of Canadian coal in the manufacture of iron and steel. The rate is $49\frac{1}{2}$ cents per short ton of coal. First payment was made during the fiscal year of 1930-31, and total payments from 1930 to December 1949 were \$5,063,572 on 10,229,438 tons of coal.

Bounties Offered in Canada

Iron Ore

None.

Coal

Dominion Payment out of Consolidated Revenue Fund of 49½ cents per ton of bituminous coal mined in Canada and converted to coke used in the manufacture of iron and steel.

Previous bounties were as follows:

Lead: Bounties were paid from 1897 to 1916. The amount paid was not to exceed \$2,450,000 and the total amount paid was \$1,979,216. The Lead Bounty Act expired in 1918. The rate was 75 cents per 100 pounds on lead contained in lead-bearing ores in Canada.

Zinc: Bounties were paid from about July 1919 to March 1921 and totalled \$400,000, the amount stipulated by Zinc Bounty Act of 1918 which expired July 31, 1921. The bounty was equal to the difference between the standard price of zinc and 9 cents per pound when the price was below 9 cents and the bounty was not to exceed 2 cents per pound. A previous bounty act was passed in 1916 but no payment was made under this Act.

Copper: The Copper Bounty Act of 1923 expired in June 1931 and the total amount paid was \$611,763 on 101,604,182 pounds of bars and rods. The bounty was on a sliding scale, starting at 1½ cents per pound for the fiscal year 1923-24 and yearly decreasing by $\frac{1}{4}$ cent to $\frac{1}{2}$ cent for the year 1927-28 and subsequent years. Various regulations were passed to regulate the payment of the bounties.

Iron and Steel: Bounties were paid from 1896 to 1912 to the extent of \$16,785,827. The bounty on steel varied over a period of years, reaching a maximum of \$3 per ton from July 1897 to April 1902 and a minimum of 60 cents per ton in 1910, when the bounty ceased. Bounties on wire rods were paid at \$6 per ton from October 1903 to June 1911. Bounties at various rates were paid on manufactured and semi-manufactured products over a period of years.

Petroleum: Bounties were paid from 1905 to 1927 totalling \$3,457,173 on 233,135,217 gallons. The bounty was originally $1\frac{1}{2}$ cents per Imperial gallon; it was gradually reduced to \(\frac{3}{4}\) cent in June 1924 and ceased on June 30, 1925..

The total payment of bounties on mineral products between 1896

and March 31, 1937, amounted to \$24,235,000.

THE MARITIME COAL PRODUCTION ASSISTANCE ACT¹

This Act came into force on January 7, 1950 and provides, subject to the terms and conditions therein stipulated, for Government loans to coal producers in the Atlantic Maritime Provinces for undertakings designed to increase the efficiency of their operations by means of mechanization. The Act further provides that no such loan shall exceed two-thirds of the cost of the project in respect of which it is made and that no such loan shall be granted unless the Minister of Trade and Commerce is satisfied that:

- (a) The project is in the public interest and completely and efficiently planned in its economic, engineering and operating aspects;
- (b) The project when completed will substantially increase the efficiency of coal production;
- (c) The coal producer is able to finance the cost of the project in excess of the amount of the loan provided for by the agreement, and will efficiently operate the plant after completion of the project;
- (d) The coal producer is following sound and reasonable policies as to dividends and will repay the loan and interest as provided by the agreement.

¹ See reference to this Act on page 22.

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828, 1951, c.3.

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