Revoked on September 20, 2018
This document has official status.

chapter M-13.1, r. 1

Regulation respecting petroleum, natural gas and underground reservoirs

Mining Act
(chapter M-13.1, ss. 306, 310 and 313).

Revoked, O.C. 1254-2018, 2018 G.O. 2, 4726; eff. 2018-09-20.

Note *The fees prescribed in the Regulation have been indexed pursuant to the notice published in Part 1 (French) of the Gazette officielle du Québec of 27 January 2018, page 69. (ss. 2, 15, 49, 56, 59, 63, 64, 65, 70, 70.1, 82, 87, 113, 119, 120, 121). (Effect from 1 January 2018.)*

O.C. 1539-88; O.C. 1381-2009, s. 1.

TABLE OF CONTENTS

CHAPTER I
DEFINITIONS **1**

CHAPTER II
LICENCES FOR GEOPHYSICAL SURVEYING **2**

CHAPTER III
WELL DRILLING LICENCES, WELL COMPLETION LICENCES, WELL CONVERSION LICENCES AND CLOSING OF A WELL

DIVISION I
WELL DRILLING LICENCES **15**

DIVISION II
WELL COMPLETION LICENCES **49**

DIVISION III
WELL CONVERSION LICENCES **56**

DIVISION IV
CLOSING OF A WELL **58**

CHAPTER IV
EXPLORATION LICENCES FOR PETROLEUM, NATURAL GAS AND UNDERGROUND RESERVOIRS **62**

CHAPTER V
LEASES TO USE NATURAL GAS **74**

CHAPTER VI
LEASES TO PRODUCE PETROLEUM AND NATURAL GAS AND LEASES TO OPERATE UNDERGROUND RESERVOIRS

DIVISION I
GENERAL **81**

DIVISION II
LEASES TO PRODUCE PETROLEUM AND NATURAL GAS..... **86**
§ 1. — *Evaluation of a pool or field*..... **90**
§ 2. — *Conservation of petroleum and natural gas*..... **97**
§ 3. — *Measurement and production flow*..... **101**
§ 4. — *Records and reports*..... **105**
DIVISION III *(Revoked)*
DIVISION IV
LEASES TO OPERATE UNDERGROUND RESERVOIRS..... **112**
CHAPTER VII
MISCELLANEOUS..... **119**
CHAPTER VIII
FINAL..... **124**
SCHEDULE I
SCHEDULE IA
SCHEDULE II
SCHEDULE III
SCHEDULE IV
SCHEDULE V

CHAPTER I

DEFINITIONS

1. *In this Regulation,*

"artificial underground reservoir" means any cavity resulting from excavation, regardless of the excavation method used; (réservoir souterrain artificiel);

"blowout prevention system" means the entire well control equipment comprising a blowout preventer valve, an accumulator and a piping system providing a safe flow of liquid or gas during the drilling, completion, conversion and closing of a well; (système anti-éruption)

"casing" means a steel tubular element that covers the internal wall of a well to ensure tightness in order to continue drilling operations; (coffrage);

"conductor casing" means the casing usually installed first in a well to facilitate well control during drilling of the hole for the installation of surface casing; (tubage initial)

"delineation well" means any well drilled for the purpose of determining the extent of the pool or field and the petrophysical properties of the reservoir that contains it; (puits de délinéation)

"drilling mud" means an aqueous fluid used when drilling to cool and lubricate the bit, remove cuttings, maintain the walls of the hole and balance by its own weight the pressure of the fluids contained in the rock or sediments drilled; (boue de forage);

"drilling rig" means the equipment used to drill a well including in particular a derrick, a winch, a rotary table, a mud pump, a blowout preventer, and power, control and monitoring systems; (appareil de forage)

"drill-stem test" means operations consisting of insulating a zone of the well between 2 different depth marks with the help of 1 or more mechanical packers allowing an opening to atmospheric pressure and fluid or gas to flow to the surface; (essai aux tiges)

"enhanced recovery" means any recovery of hydrocarbons by methods of maintaining pressure on the pool or field by water or gas injection; (récupération assistée)

"firing hole plug" means a brightly-coloured plastic cone of variable diameter used to identify shot holes loaded with explosives; (bouchon de trou de tir)

"injection well" means any well used to inject fluids or gases into a pool or field; (puits d'injection)

"intermediate casing" means a casing installed in a well, after the installation of surface casing, through which further drilling operations may be conducted inside the well; (tubage intermédiaire)

"mechanical packer" means a mechanically activated plug used to insulate a zone of a well either temporarily or permanently; (bouchon mécanique de retenue)

"permanent closing" means a cessation of drilling, completion or conversion operations of a well with the intention of ceasing all activity and no longer continuing operations in the well, such well being designated as an abandoned well; (fermeture définitive)

"production tubing" means a steel tubular element used to equip a producing well and used to route the fluids or gases produced; (tube de production)

"pump and plug method" means a method of cementing casing by means of which the quantity of cement necessary for cementing is moved inside the casing towards the annular space, using a cement plug which separates the cement from the displacement fluid; (méthode de la pompe du bouchon)

"shotpoint" means the place at which an energy source is produced to generate a seismic wave; (point de tir)

"surface casing" means the casing installed in a well after the installation of the conductor casing and inside it to provide control for the continuation of the drilling operations; (tubage de surface)

"temporary closing" means an interruption in drilling, completion or conversion operations of a well with the intention of postponing the operations of a well to a later date, such well being designated as a suspended well; (fermeture temporaire)

"wellhead" means surface equipment giving access to a well for production, comprising a set of control valves; (tête de puits)

"wireline log" means measurement of the petrophysical properties of geological layers traversed in a well by means of a cable transmitting information to a recording apparatus on the surface. (diagraphie par câble)

O.C. 1539-88, s. 1; O.C. 1381-2009, s. 2.

CHAPTER II

LICENCES FOR GEOPHYSICAL SURVEYING

2. *Application for a licence for geophysical surveying shall be made to the Minister in the form in Schedule I.*

The form must be accompanied by:

(*1*) *a document describing the nature of the project, its objectives, the description of the geological context, the degree of maturity of the exploration on the territory in question and the timetable for the proposed operations;*

(*2*) *a map indicating the location, number and length of the lines of the proposed geophysical survey;*

(*3*) *(paragraph revoked);*

(*4*) *payment of the fee in the amount of $1,038.*

Where a geophysical survey takes place offshore, the document referred to in subparagraph 1 must also indicate the name of the ship used, its registration number, the name of the owner, the number of persons on board and the types of navigation equipment used.

O.C. 1539-88, s. 2; O.C. 1381-2009, s. 3; S.Q. 2013, c. 16, s. 22.

3. *An application for a licence for geophysical surveying together with the accompanying documents must be signed by an engineer who can prove training or experience in geophysics and sent to the Minister:*

(*1*) *at least 15 days before starting operations, in the case of a onshore survey; and*

(*2*) *at least 30 days before starting operations, in the case of a offshore survey.*

O.C. 1539-88, s. 3; O.C. 1381-2009, s. 4.

4. *A licensee for a geophysical survey shall give notice to the Minister in writing, at least 3 days before starting operations, informing him of the starting date of the operations.*

O.C. 1539-88, s. 4.

5. *The licensee of a geophysical survey must, while the survey is being carried out, send a weekly written report of activities to the Minister on the form prescribed in Schedule IA.*

In accordance with the instructions of the geophysical survey licensee, the operator may submit the report.

The weekly report must include:

(*1*) *the geophysical survey licence number;*

(*2*) *the period covered;*

(*3*) *the licensee's name;*

(*4*) *the number of kilometres of lines of the geophysical survey covered during the period and the number remaining;*

(*5*) *the dates of the start-up, interruptions, resumptions and completion of operations;*

(*6*) *the length of interruptions of operations due to weather conditions, breakdowns and technical difficulties;*

(*7*) *the location and number of lines of the geophysical survey to be covered during the following period;*

(*8*) *the last location of the ship, if applicable.*

O.C. 1539-88, s. 5; O.C. 1381-2009, s. 5.

6. *The licensee of a geophysical survey must, while the survey is being carried out, avoid placing the power source at a distance less than*

(*1*) *30 m from a railway line;*

(*2*) *10 m from a boundary marker;*

(*3*) *100 m from a surface pipeline or 75 m from an underground pipeline belonging to a third person;*

(*4*) *120 m from an oil or natural gas well belonging to a third person;*

(*5*) *200 m from a water well or an aqueduct;*

(*6*) *200 m from a building, high voltage transmission line or underground work;*

(*7*) *100 m from a cemetery.*

O.C. 1539-88, s. 6; O.C. 1381-2009, s. 6.

7. *A geophysical survey licensee who uses explosives as an energy source shall:*

(*1*) *show on the location map referred to in subparagraph 2 of section 2 the exact location of all boundary markers on the area covered by the licence for geophysical surveying;*

(2) *before the geophysical equipment traverses the land, indicate by means of posts not less than 1 m in height every boundary marker within a 50 m radius of the location of a shotpoint.*

O.C. 1539-88, s. 7; O.C. 1381-2009, s. 7.

8. *(Revoked).*

O.C. 1539-88, s. 8; O.C. 1381-2009, s. 8.

9. *(Revoked).*

O.C. 1539-88, s. 9; O.C. 1381-2009, s. 8.

10. *A geophysical survey licensee shall, when carrying out a geophysical survey, indicate by means of a firing hole plug every shot hole loaded with explosives.*

O.C. 1539-88, s. 10.

11. *If a misfire occurs in a shot hole, the geophysical survey licensee shall make an additional attempt with a new load.*

O.C. 1539-88, s. 11.

12. *If a firing or the firing of a new load misfires, the geophysical survey licensee shall abandon the shot holes in the following manner:*

(1) *fill the shot hole up to the surface of the firing hole with materials from the firing hole or materials of the same type as those from the firing hole;*

(2) *when the firing of a new load misfires, put a firing hole plug at a depth of 30 cm below the surface of the soil;*

(3) *level excess materials from the firing hole or materials of the same type.*

O.C. 1539-88, s. 12; O.C. 1381-2009, s. 9.

13. *When a flow of water or gas occurs during or after drilling a shot hole, or after the explosion of an explosive charge, the geophysical survey licensee shall plug the hole immediately, in order to confine a water influx or a gas kick.*

O.C. 1539-88, s. 13.

14. *The report that the geophysical survey licensee shall transmit to the Minister under section 159 of the Act shall include the following information in order:*

(1) *a title page giving:*

(a) the name of the geophysical survey licensee;

(b) the geophysical survey licence number;

(c) the title of the report;

(d) the kind of geophysical survey carried out;

(e) the name of the region where the geophysical survey was carried out;

(f) the designation, if applicable, of another mining right affecting the area covered by the geophysical survey, the description of the site where such right is exercised and the name of its holder;

(g) the name of the contractor responsible for the operations;

(h) the name of the person responsible for the report;

(i) the name of the author of the report;

(j) the date of the report;

(2) a table of contents and a list of enclosures;

(3) a resumé of the contents of the report;

(4) an introduction;

(5) a location map having the same dimensions as the pages of the report, giving:

(a) the location of the geophysical survey;

(b) the limits of any mining rights as prescribed by subparagraph f of paragraph 1;

(c) the geographical coordinates of the location map indicating date of issue and visual scale;

(6) statistical data concerning the geophysical survey carried out:

(a) the dates of mobilization and demobilization;

(b) the dates of the start-up, interruption, resumption and completion of the operations of the geophysical survey;

(c) the personnel assigned to the carrying out of the geophysical survey;

(d) daily progress data;

(7) a description of equipment used for the acquisition of gravimetric, magnetic or seismic data and their characteristics;

(8) a description of the geophysical survey acquisition parameters indicating:

(a) the geometry of the input device;

(b) the geometry of the output device;

(c) spacing between stations;

(d) intervals of sampling, fire control or sweeping, as the case may be;

(e) the characteristics of the energy source used;

(f) sampling rates;

(g) adjustment of recording filters;

(9) in the case of an onshore survey, a topographic map indicating:

(a) the number of the geophysical survey profiles;

(b) the length of the geophysical survey profiles;

(c) the location of sampling stations or the location of shotpoints, if applicable;

(10) in the case of an onshore survey, a topographic map indicating the location of any misfires and any flow of water or gas due to the drilling of a shothole or the explosion of an explosive charge;

(11) in the case of an offshore survey, a map showing the location of sampling stations or the location of shotpoints with regard to the coastline;

(12) a description of all processing parameters used for each type of data processing;

(13) the following interpretation maps:

(a) in the case of a seismic reflection survey, the time structure map (isochrone) of the main target;

(a.1) in the case of a seismic refraction survey, the velocity map;

(b) in the case of a magnetic survey, the maps for the total and residual magnetic fields;

(c) in the case of a gravimetric survey, the maps of Bouguer anomalies and of the residual field;

(14) a written description of each of the maps specifying the nature of the correlation between geological and geophysical data;

(15) adjustments made to data during interpretation time;

(16) in the case of a seismic reflection survey, at least 1 profile of a geophysical survey entirely interpreted, and where a well has already been drilled in the area under survey the profile shall be selected near the deepest well, and correlated to the well, and the correlation between the main reflectors and the regional stratigraphy;

(17) in the case of a seismic reflection survey, a CD-ROM or an electronic medium containing the geographical coordinates of the shotpoints of each profile, which must be, if applicable, recorded in the ASCII format.

The report must be signed by an engineer who can prove training or experience in geophysics.

O.C. 1539-88, s. 14; O.C. 1381-2009, s. 10.

CHAPTER III

WELL DRILLING LICENCES, WELL COMPLETION LICENCES, WELL CONVERSION LICENCES AND CLOSING OF A WELL

DIVISION I

WELL DRILLING LICENCES

15. *Application for a well drilling licence, including well re-entry shall be made to the Minister in the form in Schedule II, not less than 30 days prior to the commencement of drilling operations.*

The application must be accompanied by the following documents:

(1) a cadastral map or failing that, a topographic map, scale 1:20 000, illustrating the location of the proposed drilling;

(2) where drilling is carried out in an area covered by water, a report indicating the depth of the water, the nature of the seafloor and marine currents;

(3) *a drilling program certified by an engineer who can prove training or experience in drilling indicating:*

(a) the type of drilling rig that will be used to carry out the operations and its specifications;

(b) a chronological description of the technical operations to be carried out during drilling;

(c) a graphic projection of the formation pressure to the total planned depth;

(d) a graphic projection of the deviation and the drilling angle to the total planned depth;

(4) *a geological projection, certified by a geologist or an engineer who can prove training or experience in operations geology, comprising:*

(a) a stratigraphic column showing the projected horizons and their thickness;

(b) anticipated hydrocarbon objectives;

(c) an interpreted seismic profile indicating the top of geologic formations, the shotpoint corresponding to the drilling location, the projected drilling deviation to its total depth, and the location of projected objectives of primary and secondary hydrocarbons;

(5) *a program of evaluation of the well certified by an engineer who can prove training or experience in drilling indicating the nature of the gas detecting system, the different core zones, the drill-stem test program and the wireline logs;*

(6) *payment of the fee in the amount of $4,462*

The drilling program referred to in subparagraph 3 of the second paragraph must indicate that operations will be carried out according to recognized practices so as to ensure the safety of persons, property and the environment as well as the sustainability of the resource. In the case of the drilling of a well for exploration or operation of an underground reservoir, the requirements in the second paragraph of section 115 must be met, with the necessary modifications.

O.C. 1539-88, s. 15; O.C. 1381-2009, s. 11; S.Q. 2013, c. 16, s. 23.

16. *The application must be accompanied by a performance guarantee. The amount of the guarantee is equal to 10% of the estimated cost of operations; however, it may not be less than $5,000 or more than $150,000. The guarantee must be provided in one of the following forms:*

(1) *a certified cheque to the order of the Minister of Finance;*

(2) *a suretyship, with waiver of the benefits of discussion and division, issued by a company legally empowered to stand surety;*

(3) *an irrevocable and unconditional letter of credit issued by a bank, a savings and credit union or a trust or savings company.*

O.C. 1539-88, s. 16; O.C. 1381-2009, s. 12.

17. *The application shall be submitted with a certified copy of a liability insurance policy in the amount of $1,000,000 covering any damage due to drilling operations or the drilling equipment.*

O.C. 1539-88, s. 17.

18. *The well drilling licensee shall, until the well is closed permanently in accordance with Division IV of this Chapter, keep in force the performance guarantee required under section 16 and the liability insurance policy required under section 17.*

In the case of a petroleum or natural gas production well, the performance guarantee is released following the cumulative payment of the royalty provided for in section 204 of the Act for an amount equal to the amount of the guarantee required.

In the case of an underground reservoir production well, the preformance guarantee is released following the cumulative payment of the rental provided for in the second paragraph of section 202 of the Act for an amount equal to the amount of the guarantee required.

In the case of a well other than a petroleum, natural gas or underground reservoir production well, the guarantee is released at the time of the release of the last security for the deposit or the underground reservoir.

O.C. 1539-88, s. 18; O.C. 1381-2009, s. 13.

19. *The well drilling licensee shall start drilling within 12 months following the date on which the licence is issued.*

O.C. 1539-88, s. 19.

20. *Where the well drilling licensee is unable to meet the date for commencement of the operations as projected in the application for a well drilling licence prescribed in Schedule II, he shall notify the Minister in writing, not later than 15 days prior to the date set, of the delay and the reasons therefor.*

He shall also, not less than 15 days prior to the new commencement date, inform the Minister thereof in writing.

O.C. 1539-88, s. 20.

21. *A well drilling licensee shall abide by the well drilling program required under section 15.*

He may modify the drilling program by transmitting to the Minister beforehand, a supplementary agreement certified by the drilling engineer responsible for carrying out the operations giving the origin of the modification as well as the reasons therefor.

O.C. 1539-88, s. 21; O.C. 1381-2009, s. 14.

22. *A well drilling licensee may not drill a well:*

(*1*) *less than 100 m from a public highway within the meaning of the Highway Safety Code (chapter C-24.2), a railway line, a pipeline, a high voltage transmission line carrying more than 69,000 volts, any dwelling or public building; in the case of an artificial underground reservoir or of drilling the depth of which does not exceed 15 m under the layer of unconsolidated deposits, the distance may vary from 50 to 100 m;*

(*2*) *less than 100 m from the boundaries of land covered by an exploration licence or a producing lease on which well drilling is being carried out, or within 400 m if the well is situated on water-covered land;*

(*3*) *onshore, less than 100 m from the high-water mark however, in the case of an artificial underground reservoir or of drilling the depth of which does not exceed 15 m under the layer of unconsolidated deposits, the distance may vary from 50 to 100 m;*

(*4*) *on water-covered land, less than 1,000 m from the high-water mark on the seacoast, or less than 400 m from the high-water mark of the St. Lawrence River;*

(*5*) *less than 1,000 m from an airport;*

(*6*) *(paragraph revoked);*

(*6.1*) *(paragraph revoked);*

(*7*) *less than 1,600 m from any existing underground reservoir with respect to which the licensee holds no right.*

O.C. 1539-88, s. 22; O.C. 1081-90, s. 1; O.C. 1381-2009, s. 15; O.C. 700-2014, s. 1.

23. *A well drilling licensee shall, when drilling a well, use casing, a wellhead, a blowout prevention system and other equipment capable of resisting the pressures projected in the drilling program required under section 15.*

O.C. 1539-88, s. 23; O.C. 1381-2009, s. 16.

24. *A well drilling licensee shall make sure during drilling operations that casings and their cementation:*

(*1*) *insulate all the geological horizons encountered containing water, oil or gas;*

(*2*) *prevent any migration of oil, gas or water from one geological horizon to another;*

(*3*) *can support any bursting, crushing, tension and any other physical stress to which they may be subjected.*

O.C. 1539-88, s. 24.

25. *A well drilling licensee must secure the surface casing at a depth equal to or greater than 10% of the maximum depth specified in the drilling program.*

O.C. 1539-88, s. 25; O.C. 1381-2009, s. 17.

26. *A well drilling licensee shall carry out the cementation of casing in accordance with his application for a well drilling licence.*

O.C. 1539-88, s. 26.

27. *A well drilling licensee shall cement casing by use of the pump and plug method.*

Part of the poured cement must surface through the annular space. Failing that, the placing of the casing must be verified by means of a cement-bond log on the internal wall of the hole to determine the exact position of the cement. Except in the cases provided for in the third paragraph, each casing must be cemented up to the surface.

Where the casing could not be cemented up to the surface or, in the case of an intermediate casing, where the technical conditions do not allow it, cementation must be completed by perforation or injection in the annular space to meet the following conditions:

(*1*) *in the case of cementation of the surface casing:*

(a) the cement column above the shoe must be at least 50% the length of the casing;

(b) the cement column up to the surface of the ground must be at least 5 m under the ground level or, where the well goes through potable water zone, at least 25 m under the potable water zone;

(*2*) *whether in the case of the cementation of a subsequent casing, intermediary or production:*

(a) the cement column above the shoe must be at least 150 m;

(b) the cement column must be present at the level of any porous and permeable zone and at the level of the 100 m above that zone;

(c) the cement column in the annular space above the shoe of the preceding casing must be at least 50 m.

The licensee shall allow the cement to harden for at least 12 hours before subjecting the casing to a pressure test, allowing the shoe of the casing to be drilled, or the casing to be perforated.

O.C. 1539-88, s. 27; O.C. 1381-2009, s. 18.

28. *A well drilling licensee shall equip all wells being drilled and under maintenance with a blowout prevention system.*

O.C. 1539-88, s. 28.

29. *A well drilling licensee shall have tightness pressure tests made when the blowout prevention system, the casing or the surface equipment needed for a flow test of a well is installed.*

Where the casing is being installed, the test must be made before drilling the shoe.

O.C. 1539-88, s. 29.

30. *The working condition of the blowout prevention system must be verified every 24 hours.*

O.C. 1539-88, s. 30.

31. *A well drilling licensee shall ensure that the blowout prevention system specified in the well drilling program for operations below the surface casing has a rated working pressure that is equal to or greater than the maximum formation pressure specified in the program.*

Where the maximum formation pressure cannot be predicted, it is presumed to be equal to or greater than 11 kPa per metre of the depth of the well.

O.C. 1539-88, s. 31; O.C. 1381-2009, s. 19.

32. *A well drilling licensee shall conduct a pressure test on the formation before drilling at more than 60 m below any casing other than the conductor casing, except in the case of an open hole completion already specified in the drilling program required under section 15.*

O.C. 1539-88, s. 32; O.C. 1381-2009, s. 20.

33. *A well drilling licensee shall include a piping system to the blowout prevention system. The piping system shall comprise 2 steel pipes, one used for the return of the drilling fluid and the other as a pressure relief.*

O.C. 1539-88, s. 33.

34. *Steel pipes must:*

(1) be placed under a blowout preventer valve;

(2) be equipped with a control valve;

(3) have a diameter over 50 mm and be capable of supporting a continuous pressure equal to that of the blowout control system.

O.C. 1539-88, s. 34.

35. *A well drilling licensee shall, while drilling a well, carry out deviation surveys of the well at intervals not exceeding 150 m.*

O.C. 1539-88, s. 35.

36. *A well drilling licensee shall, during or after the drilling of a well, carry out directional deviation surveys when the well reaches a deviation in inclination or orientation exceeding the projection in the drilling program required under section 15 by more than 10 degrees.*

O.C. 1539-88, s. 36; O.C. 1381-2009, s. 21.

37. *A well drilling licensee must, during drilling operations, have a quantity of drilling cuttings collected in their natural state at 5-m intervals in such a manner as to fill*

(*1*) *a 10-ml flask of cuttings washed and dried beforehand; however, the licensee must refrain from washing samples from the layer of unconsolidated deposits; and*

(*2*) *a 500-g bag.*

A well drilling licensee shall indicate on the samples the name of the well and the section of the well sampled. He shall submit the identified samples to the Minister not later than 1 month after drilling is completed.

A well drilling licensee must use sample flasks and bags designed for conservation purposes.

O.C. 1539-88, s. 37; O.C. 1381-2009, s. 22.

38. *A well drilling licensee shall analyze 1 sample of each core collected while drilling a well in order to determine its porosity and its permeability.*

O.C. 1539-88, s. 38.

39. *A well drilling licensee shall, as soon as the analysis is completed, submit to the Minister at least half the core cut lengthwise.*

O.C. 1539-88, s. 39.

40. *A well drilling licensee shall have wireline logs taken during drilling operations. The logs must make possible evaluation of the well below the surface casing.*

Where the well is less than 150 m in depth, the logs must be of the gamma and resistivity types.

Where the well is more than 150 m in depth, the logs must be of the sonic, gamma, porosity and resistivity types.

O.C. 1539-88, s. 40.

41. *Where a well is on water-covered land, the well drilling licensee may not carry out flow tests except in a well where the full section under test is cased.*

O.C. 1539-88, s. 41.

42. *When a drill-stem test is being taken, and oil or gas is recovered, the well drilling licensee shall not have the drill-stems drawn out at night, unless the drilling rig is provided with a permanent lighting system illuminating the entire operation being carried out under the derrick.*

O.C. 1539-88, s. 42.

43. *When a drill-stem test is being taken, and gas, oil or water is recovered, the well drilling licensee shall on the same day notify the Minister in writing, take samples of the gas, oil or water recovered and send him the results of the analyses of the samples not later than 1 month after the end of the drilling.*

O.C. 1539-88, s. 43; O.C. 1381-2009, s. 23.

44. *Where drilling is stopped temporarily or permanently, a well drilling licensee shall abide by the conditions for the closing of a well under Division IV.*

O.C. 1539-88, s. 44.

45. *A well drilling licensee shall prepare and keep on the drilling site a daily record of drilling.*

O.C. 1539-88, s. 45.

46. *The daily report under section 45 shall contain all the information collected concerning operations carried out while drilling the well, in particular:*

(*1*) *spudding date and date of the end of drilling;*

(*2*) *the name of the drilling contractor;*

(*3*) *depths reached at the beginning and end of each shift;*

(*4*) *the time spent by the drilling crew on different operations related to drilling operations;*

(*5*) *the type, dimensions and weight of the casing and its setting depth;*

(*6*) *the quantity and rate of drilling mud lost in the well;*

(*7*) *a summary of the working condition of the blowout prevention equipment;*

(*8*) *the type of pump used and its capacity;*

(*9*) *properties and volumes of mud used;*

(*10*) *components used to assemble the drill strings;*

(*11*) *the weight applied to the bit and its speed of rotation;*

(*12*) *results of all deviation and directional surveys;*

(*13*) *the type of cement used for cementation of each casing, giving its density, the nature of its additive and the quantity used;*

(*14*) *mention of any trace of gas, oil or water in the well;*

(*15*) *results of pressure tests;*

(*16*) *the reasons for the loss of any casing or other equipment in the well together with a description of fishing operations;*

(*17*) *a description of the well closing procedure used, where drilling is stopped temporarily or permanently;*

(*18*) *the following information concerning the conditions of the drilling unit operations, where drilling is in a water-covered area:*

(a) name of the drilling unit;

(b) number of persons aboard;

(c) variations in temperature during the day;

(d) wind velocity and direction;

(e) height, interval and direction of wavers and swell;

(f) visibility in kilometres;

(g) the roll, pitch and vertical movement in the case of an offshore drilling unit;

(h) dimensions, distance and direction of any icebergs.

O.C. 1539-88, s. 46; O.C. 1381-2009, s. 24.

47. *A well drilling licensee must, once a week, send the Minister a copy of each daily report completed up until the drilling is stopped temporarily or permanently.*

O.C. 1539-88, s. 47; O.C. 1381-2009, s. 25.

48. *The report that a well drilling licensee shall transmit to the Minister under the second paragraph of section 162 of the Act must contain the following information:*

(1) a summary of the drilling operations carried out;

(2) a description of the condition of the well;

(3) depth of the superincumbent stratum and the thickness of different geological formations traversed;

(4) a summary of deviation and directional surveys;

(5) results of the well evaluation tests;

(6) a copy of the wireline logs and the results of their analyses and studies;

(7) results of drill-stem tests and analyses of the fluids recovered;

(8) the description of cores and results of their analysis;

(9) the list of bits used and a description of their performance;

(10) the type of cement used for the cementation of every casing specifying its density, the nature of the additives and the quantity used;

(11) the types, quantities and data sheets of products used in the manufacturing of drilling mud;

(12) a description of the procedure followed when drilling is stopped temporarily or permanently;

(13) a geological description of the drill cuttings and their stratigraphic correspondence;

(14) the survey according to the NAD-83 map reference system.

The report must be accompanied by:

(1) a CD-ROM or electronic medium, containing the text of the report. The CD-ROM or electronic medium must indicate the name of the report, the name and number of the well, and the version of the operating system used, giving the name of the word processing software;

(2) *a CD-ROM or an electronic medium containing the data of the wireline logs taken in the well, which must be, if applicable, recorded according to the Log ASCII standard format of logging information commonly called L.I.S. format.*

O.C. 1539-88, s. 48; O.C. 1381-2009, s. 26.

48.1. *A well drilling licensee must, while drilling, deposit the drilling mud in a leakproof structure designed according to recognized practices. At the end of the drilling, the structure must be removed or dismantled and the drilling mud must be reclaimed or eliminated in accordance with the provisions of the Environment Quality Act (chapter Q-2) and its regulations.*

O.C. 1381-2009, s. 27.

DIVISION II

WELL COMPLETION LICENCES

49. *Application for a well completion licence shall be made to the Minister in the form in Schedule III.*

The application must be accompanied by:

(1) *a completion program certified by an engineer who can prove training or experience in drilling indicating:*

(a) the kind of drilling rig to be used for the completion and its specifications;

(b) a chronological description of operations to be carried out for the completion;

(c) the pressures to which the equipment will be subjected;

(d) a longitudinal section indicating the mechanical conditions of the well after modification;

(2) *a description of the different geological units traversed when drilling a well including:*

(a) a stratigraphic column indicating the depth and thickness of horizons met;

(b) the porosity, permeability and nature of the fluids or gas in zones where completion work is being carried on;

(c) a geological correlation with logs taken in accordance with section 40;

(3) *a well evaluation program certified by the drilling engineer responsible for the operations, indicating the nature and results of drill-stem tests;*

(4) *the payment of the fee in the amount of $2,595.*

The completion program referred to in subparagraph 1 of the second paragraph must show that operations will be carried out in accordance with recognized practices so as to ensure the safety of persons, property and the environment as well as the sustainability of the resource. In the case of a well completion carried out for exploration or operation of an underground reservoir, the requirements in the second paragraph of section 115 must be met, with the necessary modifications.

O.C. 1539-88, s. 49; O.C. 1381-2009, s. 28; S.Q. 2013, c. 16, s. 24.

50. *A well completion licensee shall abide by the well completion program required under section 49.*

He may modify the completion program by transmitting to the Minister, beforehand, a supplementary agreement certified by the drilling engineer responsible for the carrying out of operations, stating the nature of the modification as well as the reasons therefor.

O.C. 1539-88, s. 50; O.C. 1381-2009, s. 29.

51. *Where the pressure differences of 2 zones may impede the recovery of mineral substances or the use of the underground reservoir owing to the absence of separation between zones, the well completion licensee shall complete the well either as a single zone or as a well with multiple separate zones.*

O.C. 1539-88, s. 51.

52. *A well completion licensee shall notify the Minister in writing, at least 15 days in advance, of the projected date for the carrying out of the maintenance of a well and the nature of that work.*

O.C. 1539-88, s. 52.

53. *A well completion licensee when completing a well shall equip the well with a production casing and a wellhead enabling it to be controlled at all times.*

O.C. 1539-88, s. 53.

54. *A well completion licensee, while processing the stimulation of production, shall not subject the casing to a pressure greater than 75% of its nominal bursting strength.*

O.C. 1539-88, s. 54.

55. *A well completion licensee shall, where completion operations are stopped temporarily or permanently, respect the conditions for the closing of a well as specified under Division IV.*

O.C. 1539-88, s. 55.

DIVISION III

WELL CONVERSION LICENCES

56. *Application for a well conversion licence shall be made to the Minister using the form in Schedule IV, and must be accompanied by the payment of $2,075 in costs.*

O.C. 1539-88, s. 56; S.Q. 2013, c. 16, s. 25.

57. *The sections in Division II apply, with the necessary modifications, to well conversion licences.*

O.C. 1539-88, s. 57.

DIVISION IV

CLOSING OF A WELL

58. *A well may be closed temporarily starting on the date that the drilling, completion or conversion operations of a well cease. The holder of a drilling licence, a completion licence or a conversion licence shall close the well permanently before the expiration of the exploration licence for petroleum, natural gas and an underground reservoir or production lease relating to petroleum and natural gas or an underground reservoir.*

O.C. 1539-88, s. 58; O.C. 1381-2009, s. 30.

59. *An application for the authorization to close temporarily or permanently a well must be submitted to the Minister, prior to the closing, on the form prescribed in Schedule V and be accompanied by the closing program signed by an engineer who can prove training or experience in drilling.*

The application must be accompanied by the payment of $2,075 in costs for a temporary closure, or $2,699 for a permanent closure.

O.C. 1539-88, s. 59; O.C. 1381-2009, s. 31; S.Q. 2013, c. 16, s. 26.

60. *An exploration licensee or production lessee for petroleum and natural gas, brine or for an underground reservoir shall, where drilling, completing or converting operations are temporarily stopped, respect the following closing conditions:*

(*1*) *if a well is not insulated with casing, it must be cemented;*

(*2*) *if a well is insulated by means of a blank casing, it must be equipped with a wellhead or a steel plate having a thickness of not less than 1 cm sealed to the coupling flange;*

(*3*) *if a well is insulated by a perforated casing, it must be filled with a fluid whose density will create a pressure greater than the formation pressure and be equipped with a wellhead;*

(*4*) *if a well is onshore, the wellhead shall be indicated and protected with a fence or a shelter;*

(*5*) *if a well is in a water-covered area, the wellhead must be equipped with a device enabling it to be located easily;*

(*6*) *if a well is closed temporarily it must be left in a condition that will prevent a fluid or gas flow from the well;*

(*7*) *the closing of the well must be done according to recognized practices so as to ensure the safety of persons, property and the environment as well as the sustainability of the resource. In the case of the closing of a well done for the exploration or operation of an underground reservoir, the requirements provided for in the second paragraph of section 115 must be met, with the necessary modifications;*

(*8*) *when a well is closed temporarily, a yearly inspection must be carried out and an annual inspection report must be sent to the Minister before the anniversary date of the closing; the report must indicate the condition of the wellhead, fence or shelter and all operations carried out to maintain the closing conditions and be accompanied by photographs.*

O.C. 1539-88, s. 60; O.C. 1381-2009, s. 32.

61. *An exploration licensee or production lessee for petroleum and natural gas, brine or an underground reservoir shall, where operations of a well, whether drilling, completing or modifying, are permanently stopped, abide by the following rules:*

(*1*) *a cement plug having a length of not less than 30 m must be placed at the bottom of the well;*

(*2*) *each permeable zone of the well must be isolated by means of a cement plug, which must not be less than 30 m in length when placed in a part of the well unprotected by a casing, nor less than 10 m in length when placed in a part of the well protected by a casing;*

(*3*) *a cement plug having a length of not less than 30 m shall be placed across the surface casing shoe when this casing is the deepest casing string in the well;*

(*4*) *in the case of an onshore well, each casing shall be sectioned at 1 m below ground, a cement plug shall fill in the last 10 m of intermediate casing, and a steel plate having a thickness of not less than 1 cm shall be welded to the outer casing opening;*

(*5*) *in the case of a well in a water-covered area, each casing shall be sectioned at at least 2 m below the surface of the seafloor, a firing hole plug shall be placed in the internal casing at 150 m below the seafloor and those 150 m shall be filled with a cement plug;*

(*6*) *the exact position of the top of any cement plug must be verified by means of a string of rods at least 12 hours after setting the cement plug, if it is located:*

(a) level with the deepest casing shoe string;

(b) above an abnormal pressure zone;

(c) above a zone containing hydrocarbons;

(*7*) *an onshore well must be identified by means of a steel plate 15 cm wide and 30 cm high indicating in relief the name of the well and its geographic coordinates. The plate must be fastened by a steel rod at 1.5 m above ground. When the steel rod is not welded to the outside casing, the plate must also indicate in which direction and at what distance the well is located;*

(*8*) *the well shall be left in a condition preventing any fluid or gas flow outside the well.*

O.C. 1539-88, s. 61; O.C. 1381-2009, s. 33.

CHAPTER IV

EXPLORATION LICENCES FOR PETROLEUM, NATURAL GAS AND UNDERGROUND RESERVOIRS

O.C. 1539-88, c. IV; O.C. 1381-2009, s. 34.

62. *(Revoked).*

O.C. 1539-88, s. 62; O.C. 1381-2009, s. 35; S.Q. 2013, c. 16, s. 27.

63. *The lessee must provide the Minister with the following information and documents:*

(*1*) *(paragraph revoked);*

(*2*) *a program of the operations certified by a geologist or a geological engineer specifying the nature and extent of the operations projected and the geological and geophysical information held by the applicant;*

(*3*) *a declaration justifying the technical capacities and financial qualifications of the applicant, indicating:*

(a) for a legal person, its legal status;

(b) its main fields of activities and its specialization;

(c) the experience of the applicant and his main achievements;

(d) the last annual financial statements and, if applicable, the last quarterly financial statements drawn up by a chartered professional accountant auditor;

(*4*) *payment of the fees for the first year;*

(*5*) *payment of $3,113 in costs.*

O.C. 1539-88, s. 63; S.Q. 2012, c. 11, s. 33; S.Q. 2013, c. 16, s. 28.

64. *An exploration licensee shall pay to the Minister an annual fee of $10.40 per km^2.*

O.C. 1539-88, s. 64; S.Q. 2013, c. 16, ss. 29 and 39; S.Q. 2014, c. 6, s. 2.

65. *The annual fee is reduced to $5.20 per km^2 for the duration of the licence where the exploration licensee holds the rights on an area of at least 1,000 km^2 in a marine environment.*

O.C. 1539-88, s. 65; O.C. 1381-2009, s. 36; S.Q. 2013, c. 16, s. 30.

66. *An exploration licensee shall submit to the Minister, 30 days prior to the beginning of each year of validity of his licence, the program of his exploration operations for the coming year.*

O.C. 1539-88, s. 66.

67. *Operations to be carried out in accordance with section 177 of the Act are geological studies, geophysical studies or drilling, and assessments of the economic potential of the deposit carried out under the second paragraph of section 176 of the Act.*

The minimum fee for the operations shall be as follows:

(*1*) *for the first year of validity of the licence, $50 per km^2 or $3,000, whichever is greater;*

(*2*) *for the second year of validity of the licence, $100 per km^2 or $6,000, whichever is greater;*

(*3*) *for the third year of validity of the licence, $150 per km^2 or $9,000, whichever is greater;*

(*4*) *for the fourth year of validity of the licence, $200 per km^2 or $12,000, whichever is greater;*

(*5*) *for the fifth year of validity of the licence, $250 per km^2 or $15,000, whichever is greater;*

(*6*) *for each period of licence renewal, $250 per km^2 or $20,000, whichever is greater.*

O.C. 1539-88, s. 67; O.C. 1381-2009, s. 37; S.Q. 2013, c. 16, s. 31.

68. *The annual report under section 177 of the Act must contain the following information:*

(*1*) *a description of the operations carried out as pursuant to section 67;*

(*2*) *a statement signed by a chartered professional accountant auditor of the sums of money spent under the exploration licence during the year.*

O.C. 1539-88, s. 68; S.Q. 2012, c. 11, s. 33.

69. *Where the report covers operations carried out during the last year of validity of the exploration licence, a synthesis signed by a geologist or a geological engineer must be included with the following information:*

(*1*) *a summary of the operations carried out during the last 5 years;*

(*2*) *a description of all the new geological, geochemical and geophysical data acquired about the area in question;*

(*3*) *the degree of completion of exploration of the area in question;*

(*4*) *temporal structural maps (isochrones) whose interpretation takes into account the most recent geophysical data;*

(*5*) *interpreted seismic profiles illustrating the markers, their geological correlations and the seismic adjustment of any wells operated in the area in question.*

O.C. 1539-88, s. 69.

70. *An application for the renewal of an exploration licence must be accompanied by the payment of annual fees of $52 per km^2 together with the program of operations certified by a geologist or a geological engineer specifying the nature and extent of the operations projected and the geological and geophysical information held by the applicant.*

O.C. 1539-88, s. 70; S.Q. 2013, c. 16, ss. 32 and 40; S.Q. 2014, c. 6, s. 2.

70.1. *The annual fee is reduced to $26 per km^2 for the duration of the licence where the exploration licensee holds the rights on an area of at least 1,000 km^2 in a marine environment.*

O.C. 1381-2009, s. 38; S.Q. 2013, c. 16, s. 33.

71. *The trial period referred to in section 174 of the Act begins on the first day of extraction and must not exceed*

(*1*) *240 consecutive days when extracting petroleum and natural gas; and*

(*2*) *365 consecutive days when extracting from gas shale.*

The exploration licensee submits to the Minister for approval, at least 30 days before the projected date for the work prior to extraction, a detailed program of the projected tests during that period.

The program must be certified by an engineer. It indicates in particular

(*1*) *the depth interval and a description of the geological formations and zones in which the projected tests will take place;*

(*2*) *geological, geophysical, petrophysical and hydrostatic information, as well as drilling results justifying the projected tests;*

(*3*) *the location, present condition and characteristics of the well where the projected tests will be carried out and a description of the geological formations, whether consolidated or not, traversed by the well and an interpreted seismic profile indicating the location of zones where any projected tests are to be carried out;*

(*4*) *the nature, purpose, duration and project schedule of each projected test;*

(*5*) *methods used to dispose of extracted substances.*

The Minister approves the program with or without amendment.

O.C. 1539-88, s. 71; O.C. 1381-2009, s. 39; O.C. 1092-2015, s. 1.

71.1. *The exploration licensee who is carrying out tests pursuant to section 71 sends the Minister a weekly report of the work carried out. The report includes, with the necessary modifications, the information required under section 73.*

O.C. 1092-2015, s. 2.

71.2. *The exploration licensee must abide by the trial program required under section 71.*

The exploration licensee may modify the trial program by transmitting to the Minister beforehand, a supplementary agreement certified by the engineer responsible for the carrying out of operations, stating the nature of the modification as well as the reasons therefor.

Any modification to the trial program must be approved by the Minister.

O.C. 1092-2015, s. 2.

71.3. *When the Minister notes that the program referred to in section 71 is not complied with, the Minister may put an end to the trial period.*

O.C. 1092-2015, s. 2.

72. *The test period for the utilization of an underground reservoir must not exceed 1 year.*

An exploration licensee shall, 1 month prior to the utilization of the underground reservoir, notify the Minister in writing and transmit to him a test program certified by an engineer who can prove training or experience in drilling indicating:

(*1*) *the location and description of the underground reservoir where the projected tests are to be carried out;*

(*2*) *geological, geophysical, petrophysical and hydrostatic information, as well as drilling results justifying the projected tests;*

(*3*) *the location, actual condition and characteristics of the well where the projected tests will be carried out and a description of the geological formations, whether consolidated or not, traversed by the well;*

(*4*) *a minimum of 3 complete and interpreted seismic profiles indicating the subsurface and location of the underground reservoir where the projected tests are to be carried out and the seismic adjustment of the well drilled above the underground reservoir;*

(*5*) *the hydrostatic pressure of the underground reservoir recorded for each well used during the projected tests;*

(*6*) *the nature and properties of the substances stored or buried in the underground reservoir during the projected test;*

(*7*) *the method, quantity and pressure used when injecting substances into the underground reservoir;*

(*8*) *the nature, purpose and duration of each projected test;*

(*9*) *the names of the contractors responsible for carrying out operations;*

(*10*) *any methods used to dispose of extracted substances.*

O.C. 1539-88, s. 72; O.C. 1381-2009, s. 40.

73. *The holder of an exploration licence who is carrying out tests pursuant to section 71 or 72 shall, 1 month after the end of the test period, send to the Minister a report in writing certified by an engineer indicating:*

(*1*) *a description of all the tests made;*

(*2*) *a description of the results of the tests, in particular:*

(a) recorded pressures;

(b) measured flows of production;

(c) injection rates, if applicable;

(d) quantities of fluids or gas recovered in cubic metres; and

(e) quantities of any fluids or gas injected in cubic metres;

(3) *the costs of carrying out the tests;*

(3.1) *methods used to dispose of extracted substances;*

(4) *(paragraph revoked).*

O.C. 1539-88, s. 73; O.C. 1381-2009, s. 41; O.C. 1092-2015, s. 3.

CHAPTER V

LEASES TO USE NATURAL GAS

74. *Application shall be made to the Minister in writing for a lease to use natural gas, indicating:*

(1) *the name and address of the owner of the land in question;*

(2) *the names of the township, the range and the parish, and the number of the lot corresponding to the location of the well.*

O.C. 1539-88, s. 74.

75. *The application must be accompanied by:*

(1) *a cadastral map or, failing that, a topographic map illustrating the location of the well on the property;*

(2) *a declaration giving the circumstances of the discovery of natural gas;*

(3) *a well completion program indicating*

(a) the type of drilling rig that will be used for the completion and its specifications;

(b) the chronological description of the operations that will be carried out during the completion;

(c) the pressure to which the equipment will be subjected;

(4) *a description of all equipment from the wellhead to the place of utilization;*

(5) *a description of the use that will be made of the natural gas;*

(6) *payment of the rent for the first year of the lease, equivalent to 17% of the cost of residence energy requirements calculated in accordance with Hydro-Québec electricity rates applicable to the domestic sector.*

O.C. 1539-88, s. 75; O.C. 1381-2009, s. 42.

76. *The annual rent of the lease to use natural gas is the amount prescribed under subparagraph 6 of section 75, and shall be revised every 5 years from the date of the lease, in accordance with Hydro-Québec electricity rates applicable to the domestic sector.*

O.C. 1539-88, s. 76.

77. *The holder of a lease to use natural gas shall complete the well by equipping it with flow strings and a wellhead to enable him to control the well.*

O.C. 1539-88, s. 77.

78. *The lump sum payable to the holder of a lease to use natural gas under section 190 of the Act shall be calculated according to the number of years to run in the lease multiplied by 83% of the cost of the lessee's*

residence energy requirements calculated in accordance with Hydro-Québec electricity rates applicable to the domestic sector at the time of the cancellation.

O.C. 1539-88, s. 78.

79. *Application for the renewal of a lease to use natural gas shall be made to the Minister in writing and be accompanied by:*

(*1*) *a report certified by an engineer specialized in the field certifying that the equipment identified in subparagraph 4 of section 75 is in good working order and of good quality;*

(*2*) *payment of the rent for the first year of the renewed lease equivalent to 17% of the cost of residence energy requirements calculated in accordance with Hydro-Québec electricity rates applicable to the domestic sector.*

O.C. 1539-88, s. 79.

80. *The annual rent for a renewed lease to use natural gas shall be in accordance with subparagraph 6 of section 75 and shall be revised every 5 years from the date of renewal of the lease in accordance with Hydro-Québec electricity rates applicable to the domestic sector.*

O.C. 1539-88, s. 80.

CHAPTER VI

LEASES TO PRODUCE PETROLEUM AND NATURAL GAS AND LEASES TO OPERATE UNDERGROUND RESERVOIRS

O.C. 1539-88, c. VI; O.C. 1381-2009, s. 43.

DIVISION I

GENERAL

81. *Application for a production lease shall be made to the Minister in writing, indicating:*

(*1*) *the name and address of the applicant;*

(*2*) *in the case of a legal person, the names and addresses of its officers;*

(*3*) *the purpose of the application.*

O.C. 1539-88, s. 81.

82. *The application must be accompanied by:*

(*1*) *a cadastral map or, failing that, a topographical map for the area covered by the application;*

(*2*) *a structural temporal map of the top of the pool, field, aquifer or reservoir, scale 1:10 000, having a contour interval of isochronous curves of not less than 25 milliseconds;*

(*3*) *a complete seismic profile located nearest to the culmination of the pool, field, aquifer or reservoir and interpreted in such a way as to illustrate the various stratigraphic and structural relations;*

(*4*) *payment of the rent as prescribed by section 87 or 113 for the first year of the lease;*

(*5*) *payment of $5,188 in costs.*

O.C. 1539-88, s. 82; O.C. 1381-2009, s. 44; S.Q. 2013, c. 16, s. 34.

83. *A production lessee shall make sure, when drilling, testing or producing, that there is no fluid or gas communication from one porous level to another.*

O.C. 1539-88, s. 83.

84. *Application for the renewal of a production lease shall be made to the Minister in writing indicating:*

(*1*) *the name and address of the applicant;*

(*2*) *the number of the lease;*

(*3*) *the purpose of the application.*

O.C. 1539-88, s. 84.

85. *The application must be accompanied by:*

(*1*) *a report certified by an engineer specializing in the area, certifying the good working order and quality of all the equipment used during the production;*

(*2*) *a report certified by an engineer who can prove training or experience in geology describing the characteristics of the oil or gas pool, aquifer, or underground reservoir covered by the application.*

O.C. 1539-88, s. 85; O.C. 1381-2009, s. 45.

DIVISION II

LEASES TO PRODUCE PETROLEUM AND NATURAL GAS

86. *An application for a lease to produce petroleum and natural gas must, in addition to the requirements under sections 81 and 82, contain the following information certified by an engineer who can prove training or experience in geology:*

(*1*) *a technical description of characteristics of the pool or field indicating:*

(a) the type of stratigraphic or structural trap and the name of the geological formation and the type of rock or deposits it holds;

(b) the surface area of the pool or field determined by means of a vertical projection from the closing area to the top of the pool or field;

(c) the depth of the pool or field at its apex;

(d) the average thickness of the pool or field;

(e) the porosity and permeability of the pool or field;

(f) the water saturation of the pool or field;

(g) the temperature of the pool or field;

(h) the absolute static initial pressure of the pool or field;

(i) fluid and gas analyses depending on the temperature and pressure conditions of the pool or field;

(*2*) *a resumé of exploration operations carried out prior to the application for a lease, of tests made of the well flow and of the production capacity as determined under paragraph 2 of section 90 for each well of the pool or field;*

(*3*) *a development and infrastructure program for the pool or field;*

(*4*) *an estimate of the recoverable reserves of petroleum and natural gas and the method of calculation of the estimate.*

O.C. 1539-88, s. 86; O.C. 1381-2009, s. 46.

87. *The annual rent of a lease to produce petroleum and natural gas shall be $364 per km^2.*

O.C. 1539-88, s. 87; O.C. 1381-2009, s. 47; S.Q. 2013, c. 16, s. 34.

88. *The holder of a lease to produce petroleum and natural gas shall, at all times:*

(*1*) *keep all the wells and their surface equipment in condition to produce hydrocarbons;*

(*2*) *abide by the program for the development of the pool or field prescribed by paragraph 3 of section 86.*

A licensee may modify the program referred to in subparagraph 2 of the first paragraph by submitting to the Minister, at least 15 days prior to the modification, a supplementary agreement certified by an engineer who can prove training or experience in geology explaining the nature of the modification and the reasons therefor.

O.C. 1539-88, s. 88; O.C. 1381-2009, s. 48.

89. *Where more than 1 well is used for production, the holder of a lease to produce petroleum and natural gas shall produce the pool of petroleum or a field of natural gas as 1 pool or field.*

O.C. 1539-88, s. 89.

§ 1. — Evaluation of a pool or field

90. *The holder of a lease to produce petroleum and natural gas shall carry out production tests for every new well in order to determine:*

(*1*) *the nature of fluids or gases therein;*

(*2*) *the production capacity of the well calculated in cubic metres of fluid or gas per day;*

(*3*) *the characteristics of the new pool or field.*

O.C. 1539-88, s. 90.

91. *A holder of a lease to produce petroleum and natural gas shall measure the gravitational flow of natural gas of a new well by means of the back pressure method, by carrying out successively at least 4 flow tests, from the lowest to the highest.*

O.C. 1539-88, s. 91.

92. *The holder of a lease to produce petroleum and natural gas shall measure the pressure interference from one well to another while carrying out production tests of a new well.*

O.C. 1539-88, s. 92.

93. *The holder of a lease to produce petroleum and natural gas shall measure the static pressure of a pool or field before and after the initial flow test of a new well.*

O.C. 1539-88, s. 93.

94. *The holder of a lease to produce petroleum and natural gas shall, when a well has produced during the year, measure its static pressure during the first and last months of every year of the lease.*

O.C. 1539-88, s. 94.

95. *The holder of a lease to produce petroleum and natural gas shall take production loggings before ceasing operations of a producing well.*

O.C. 1539-88, s. 95.

96. *In a discovery or appraisal well, the holder of a lease to produce petroleum and natural gas shall take fluid samples at the bottom of the well. Fluid components must be analyzed separately.*

O.C. 1539-88, s. 96; O.C. 1381-2009, s. 49.

§ 2. — Conservation of petroleum and natural gas

97. *The holder of a lease to produce petroleum and natural gas shall recover petroleum or natural gas to the maximum by seeing that:*

(*1*) *the wells of 1 pool or field are close enough together to allow delineation;*

(*2*) *the production flow of each well is determined in accordance with the characteristics of the pool or field referred to in paragraph 1 of section 86.*

O.C. 1539-88, s. 97.

98. *(Revoked).*

O.C. 1539-88, s. 98; O.C. 1381-2009, s. 50.

99. *(Revoked).*

O.C. 1539-88, s. 99; O.C. 1381-2009, s. 50.

100. *(Revoked).*

O.C. 1539-88, s. 100; O.C. 1381-2009, s. 50.

§ 3. — Measurement and production flow

101. *The flow and volume of all fluids or gases produced from or injected into a well must be measured. Measurements of the flow and volume must be converted to 15 ºC and 101.325 kPa.*

O.C. 1539-88, s. 101.

102. *When the holder of a lease to produce petroleum and natural gas mixes the production of 1 well or of a group of wells, he shall, 1 month prior to measuring the production flow of a pool or field, notify the Minister in writing of the method, the frequency and the duration of the measurements, indicating the manner in which the total production of each of the mixed fluids will be allocated to each of the wells.*

O.C. 1539-88, s. 102.

103. *A producing wellhead must:*

(*1*) *in the case of an onshore well:*

(a) be protected by a double wall shelter made of nonflammable materials and giving access to the well by the opening of a removable section of the roof or by moving a removable section of the shelter, or be protected with a 2.5-m fence surmounted by a 30-cm top made up of 3 twisted barbed wires. The fence must be of 9-calibre galvanized wire with openings not exceeding 6 cm on a side, and enclosing a protective perimeter of at least 12 m, with corner posts of 9-cm galvanized steel anchored in concrete to a depth of not less than 1.2 m;

(b) be identified by a sign affixed to the fence indicating the name of the producer, the production lease number, and the name and the number of the well designated by the Minister;

(2) in the case of a well in a water-covered area, be equipped with a device for locating it.

O.C. 1539-88, s. 103; O.C. 1381-2009, s. 51.

104. *The holder of a lease to produce petroleum and natural gas shall pay the following fees:*

(1) on petroleum extracted from the site under lease:

(a) when the average daily production per producing well is 7 m^3 or less: 5% of the market value at the wellhead;

(b) when the average daily production per producing well exceeds 7 m^3, but is less than 30 m^3:

i. 5% of the market value at the wellhead on the first 7 m^3;

ii. 10% of the market value at the wellhead on the remainder;

(c) when the average daily production per producing well exceeds 30 m^3:

i. 8.75% of the market value at the wellhead on the first 30 m^3;

ii. 12.5% of the market value at the wellhead on the remainder;

(2) on natural gas extracted from the site under lease:

(a) when the average daily production per producing well is equal to or less than 84,000 m^3: 10% of the market value at the wellhead;

(b) when the average daily production per producing well exceeds 84,000 m^3:

i. 10% of the market value at the wellhead on the first 84,000 m^3;

ii. 12.5% of the market value at the wellhead on the remainder.

O.C. 1539-88, s. 104; O.C. 1381-2009, s. 52.

§ 4. — Records and reports

105. *The holder of a lease to produce petroleum and natural gas shall, in the report prescribed by section 204 of the Act, provide a resumé of activities on each site. He shall also include the following particulars in his report:*

(1) a description of the equipment used on the surface and in the well or series of wells;

(2) results of verifications and checks carried out on the equipment and on the well or series of wells;

(3) the flow and volume of any fluid and gas produced from or injected into the well or series of wells;

(*4*) *results of well flow tests, pressure surveys and analyses of fluids and gases;*

(*5*) *a description of petroleum and natural gas refining processes on the production site;*

(*6*) *a copy of production loggings recorded before ceasing operation of a producing well;*

(*7*) *the results of the tests, measurements and loggings required under sections 90 to 95.*

O.C. 1539-88, s. 105; O.C. 1381-2009, s. 53.

DIVISION III

(Revoked)

O.C. 1539-88, div. III; O.C. 1381-2009, s. 54.

106. *(Revoked).*

O.C. 1539-88, s. 106; O.C. 1381-2009, s. 54.

107. *(Revoked).*

O.C. 1539-88, s. 107; O.C. 1381-2009, s. 54.

108. *(Revoked).*

O.C. 1539-88, s. 108; O.C. 1381-2009, s. 54.

109. *(Revoked).*

O.C. 1539-88, s. 109; O.C. 1381-2009, s. 54.

110. *(Revoked).*

O.C. 1539-88, s. 110; O.C. 1381-2009, s. 54.

111. *(Revoked).*

O.C. 1539-88, s. 111; O.C. 1381-2009, s. 54.

DIVISION IV

LEASES TO OPERATE UNDERGROUND RESERVOIRS

112. *An application for a lease to operate an underground reservoir, in addition to the requirements in sections 81 and 82, must contain the following information certified by an engineer who can prove training or experience in geology:*

(*1*) *the technical description of the characteristics of the reservoir, indicating*

(a) the type of underground reservoir and a description of the characteristics of the rock in which the reservoir will be laid out;

(b) the size of the reservoir and its plane projection;

(c) the depth to which the reservoir will be laid out;

(d) the porosity, permeability and saturation in water of the reservoir, if applicable;

(e) the temperature of the reservoir;

(f) the absolute static initial pressure of the reservoir, if applicable;

(g) an analysis of fluids and gases depending on the temperature and pressure of the reservoir;

(h) the usable capacity of the reservoir at its operating pressure;

(2) the technical description of the characteristics of the roof of the reservoir, which must indicate the characteristics identified in paragraph 1, with the necessary modifications;

(3) a description of the protective perimetre, which must comply with section 114;

(4) a summary of exploration, development and infrastructure work carried out in the reservoir before applying for a lease;

(5) the development program of the reservoir.

O.C. 1539-88, s. 112; O.C. 1381-2009, s. 55.

113. *To set the annual rental of a lease to operate an underground reservoir, the Minister takes into account the estimated volume of hydrocarbon that will be withdrawn in the year. The annual rental is adjusted at the end of the year on the basis of the actual volume withdrawn and,*

(1) where the volume of hydrocarbon withdrawn is 50 million cubic metres or less, the rental is $260 per million cubic metres;

(2) where the volume of hydrocarbon withdrawn is greater than 50 million cubic metres but less than 100 million cubic metres, the rental is $260 for the first 50 million cubic metres and $519 per million of cubic metres for the remainder;

(3) where the volume of hydrocarbon withdrawn is greater than 100 million cubic metres but less than 250 million cubic metres, the rental is $260 per million cubic metres for the first 50 million cubic metres, $519 per million cubic metres on volumes between 50 and 100 million cubic metres and $778 per million cubic metres for the remainder;

(4) where the volume of hydrocarbon withdrawn is greater than 250 million cubic metres, the rental is $260 per million cubic metres for the first 50 million cubic metres, $519 per million cubic metres for volumes between 50 and 100 million cubic metres, $778 per million cubic metres cubic for volumes between 100 and 250 million cubic metres and $1,038 per million cubic metres for the remainder.

However, the rental may not be less than $10,157 each year of the lease.

O.C. 1539-88, s. 113; O.C. 1381-2009, s. 55.

114. *The protective perimeter of an underground reservoir shall comprise the entire zone within which protection of the reservoir and that of the underground water must be provided.*

The width of the protective perimeter must be at least 10% of the width of the underground reservoir measured at its widest place.

O.C. 1539-88, s. 114.

115. *Sections 88 to 96, 100, 101, 103, 105, 109 and 110 apply, with the necessary modifications, to the holder of a lease to operate an underground reservoir.*

That holder must also comply with recognized practices in the design, development and shutdown of the underground reservoir, installations and related equipment, so as to ensure the safety of persons, property and the environment as well as the sustainability of the resource, in particular with regards to

— the materials used;

— the work related to drilling, completion and transformation of the well;

— the situation of the underground storage facilities;

— the design and development criteria;

— the development and construction work;

— surface installations;

— operations and maintenance;

— monitoring and security measures;

— operations for sealing, closing and restoring the underground storage site.

O.C. 1539-88, s. 115; O.C. 1381-2009, s. 56.

116. *The holder of a lease to operate an underground reservoir shall send to the Minister during the last month of each year of the lease:*

(*1*) *a cadastral map or, failing that, a topographical map of the area under lease indicating the location of the well, buildings, pipelines and other works constructed in relation to operation of the underground reservoir;*

(*2*) *maps and reports of operations or tests carried out during the year of the lease on the area under lease.*

O.C. 1539-88, s. 116.

117. *The holder of a lease to operate an underground reservoir shall not extract from an underground reservoir a quantity of mineral substances greater than the quantity injected, unless he holds mining rights on the extracted substances.*

O.C. 1539-88, s. 117.

118. *The holder of a lease to operate an underground reservoir shall notify the Minister, without delay, of any changes in characteristics of the underground reservoir referred to in paragraph 1 of section 112.*

O.C. 1539-88, s. 118.

CHAPTER VII

MISCELLANEOUS

119. *Every application for the revocation of a mining right relating to petroleum, natural gas, brine or an underground reservoir must be submitted with $752 for every mining right contested.*

O.C. 1539-88, s. 119; O.C. 1381-2009, s. 57; S.Q. 2013, c. 16, s. 36.

120. *The fee for the registration in the register of real and immovable mining rights, of a transfer or other deed relating to a real and immovable mining right applying to petroleum and natural gas, brine or an underground reservoir, is $156.*

O.C. 1539-88, s. 120; O.C. 1381-2009, s. 58; S.Q. 2013, c. 16, s. 37.

121. *The fee for the issuance of a certificate for an entry in the register of real and immovable mining rights of a mining right for petroleum and natural gas, brine or an underground reservoir, is $27.*

O.C. 1539-88, s. 121; O.C. 1381-2009, s. 59; S.Q. 2013, c. 16, s. 38.

121.1. *The holder of an authorization to produce brine pays the following fees on brine extracted from the site under the authorization:*

(*1*) *where the average daily production per producing well is 300 m^3 or less, 5% of the market value at the wellhead of the substance extracted from the brine;*

(*2*) *where the average daily production per producing well is greater than 300 m^3 but less than 1,000 m^3,*

(a) 5% of the market value at the wellhead of the extracted substance on the first 300 m^3;

(b) 10% of the market value at the wellhead of the extracted substance on the remainder;

(*3*) *when the average daily production per producing well is greater than 1,000 m^3,*

(a) 8.75% of the market value at the wellhead of the extracted substance on the first 1,000 m^3;

(b) 12.5% of the market value at the wellhead on the remainder.

O.C. 1381-2009, s. 60.

122. *Payment of fees prescribed by this Regulation must be in cash, or by cheque or postal money order payable to the order of the Minister of Finance of Québec.*

O.C. 1539-88, s. 122.

123. *Every person contravening any of sections 2, 15, 18, 58, 71, 71.1, 71.2, 74, 75, 81, 82, 84, 85, 86 and 112 commits an offence.*

O.C. 1539-88, s. 123; O.C. 1381-2009, s. 61; O.C. 1092-2015, s. 4.

CHAPTER VIII

FINAL

124. *(Omitted).*

O.C. 1539-88, s. 124.

125. *(Omitted).*

O.C. 1539-88, s. 125.

SCHEDULE I

Application for a licence for geophysical surveying

Application for a licence for geophysical surveying– Schedule 1
Mining Act (R.S.Q., c. M-13.1)

PART A – Identification of applicant

Name of applicant		
Address	Telephone number ( )	Fax number ( )
Number of the exploration licence, or of the lease to produce or the lease to operate, in the territory where geophysical surveying will be carreid out		
Signature for the applicant X	Title	Date

PART B – Description of operations

Type of geophysical survey		
Number of kilometres of geophysical surveying	Projected dates of the beginning of operations	Projected dates of the end of operations
Description of equipment used for data acquisition		
Description of the acquisition parameters of the geophysical surveying		

PART C – Engineer responsible for the geophysical survey

Family name and first name of engineer	Title	
Address	Telephone number ( )	Fax number ( )
Signature X	O.I.Q. member No..	Date

PART D – Subcontractors

Contractor in charge of data acquisition

Name of contractor	Telephone number ( )	Fax number ( )
Address	Estimated costs	

Contractor in charge of data processing

Name of contractor	Telephone number ( )	Fax number ( )
Address	Estimated costs	

Contractor in charge of data interpretation

Name of contractor	Telephone number ( )	Fax number ( )
Address	Estimated costs	

Ministère des Ressources naturelles et de la Faune Direction générale des hydrocarbures et des biocarburants 18 novembre 2008 – Page 1 de 1

O.C. 1539-88, Sch. I; O.C. 1381-2009, s. 62.

SCHEDULE IA

Application for a licence for geophysical surveying

Application for a licence for geophysical surveying - Schedule 1a
Mining Act (R.S.Q., c. M-13.1)

Number of the licence for geophysical surveying
Holder of the licence for geophysical surveying
Engineer responsible for the geophysical operations
Week of

Day N°	Date	Exploration licence	Activity	Line	Production (km)	Cumulative (km)
			WEEKLY TOTAL			

NOTE : Write or attach to this form other information in accordance with section 5 of the Regulation

Ministère des Ressources naturelles et de la Faune Direction générale des hydrocarbures et des biocarburants 18 novembre 2008 – Page 1 de 1

O.C. 1381-2009, s. 62.

SCHEDULE II

Application for a well drilling or re-entry licence

Application for a well drilling or re-entry licence – Schedule 2
Mining Act (R.S.Q., c. M-13.1)

PART A – Identification of applicant

Name of applicant		
Address	Telephone number ( )	Fax number ( )
Name of well	Number of the exploration licence or of the lease to produce or the lease to operate	
Signature for the applicant **X**	Title	Date

PART B – Drilling location

Lot	Range	Township	Parish
Rectangular coordinates (MTM) _____ _____ Zone_____		Geographical coordinates Latitude: _____ Longitude: _____	
Élevation (metres above sea level) Ground level _____ Rotary table _____			

PART C – Description of operations

Tubing and cementing program

	Diameter	Weight	Type	Depth	Cement/Additives

Date of the beginning of operations	Total projected depth (metres)	Estimated drilling costs
Description of the characteristics of the blowout preventer equipment		
Special remarks		

PART D – Drilling engineer responsible for the operations

Family name and first name of engineer	Telephone number ( )	Fax number ( )
Address		
Signature **X**	O.I.Q. member No.	Date

PART E – Contractor in charge of drilling the well

Name of contractor	Telephone number ( )	Fax number ( )
Address	Type of earth-boring machine	Number of earth-boring machine

Ministère des Ressources naturelles et de la Faune Direction générale des hydrocarbures et des biocarburants 18 novembre 2008 – Page 1 de 1

O.C. 1539-88, Sch. II; O.C. 1381-2009, s. 62.

SCHEDULE III

Application for a well completion licence

Application for a well completion licence – Schedule 3
Mining Act (R.S.Q., c. M-13.1)

PART A – Identification of applicant

Name of applicant			
Address		Telephone number ( )	Fax number ( )
Name of well	Well number	Number of the exploration licence or of the lease to produce or the lease to operate	
Signature for the applicant **X**		Title	Date

PART B – Description of operations

Tubing and cementing program

Function	Diameter	Weight	Type	Depth	Cement/Additives

Perforation and stimulation program

Perforating interval	Geological formation	Gas or petroleum	Type of perforation	Stimulation program

Date of the beginning of operations	Total planned depth (metres under sea level) before completion _____ after completion _____	Estimated completion costs
Description of the characteristics of the blowout prevented equipment		
Special remarks concerning completion		

PART C – Drilling engineer responsible for the operations

Family name and first name of engineer	Telephone number ( )	Fax number ( )
Address		
Signature **X**	O.I.Q. member No.	Date

PART D – Contractor in charge of completion

Name of contractor	Telephone number ( )	Fax number ( )
Address	Type of earth-boring machine	Number of earth-boring machine

Ministère des Ressources naturelles et de la Faune Direction générale des hydrocarbures et des biocarburants 18 novembre 2008 – Page 1 de 1

O.C. 1539-88, Sch. III; O.C. 1381-2009, s. 62.

SCHEDULE IV

Application for a well conversion licence

Application for a well conversion licence – Schedule 4
Mining Act (R.S.Q., c. M-13.1)

PART A – Identification of applicant

Name of applicant			
Address		Telephone number ( )	Fax number ( )
Name of well	Well number	Number of the exploration licence or of the lease to produce or the lease to operate	
Signature for the applicant **X**		Title	Date

PART B – Description of operations

Tubing and cementing program

Function	Diameter	Weight	Type	Depth	Cement/Additives

Perforation and stimulation program

Perforating interval	Geological formation	Gas or petroleum	Type of perforation	Stimulation program

Date of the beginning of operations	Total planned depth (metres under sea level) before conversion _____ after conversion _____	Estimated conversion costs
Description of the characteristics of the blowout preventer equipment		
Special remarks concerning the conversion		

PART C – Drilling engineer responsible for the operations

Family name and first name of engineer	Telephone number ( )	Fax number ( )
Address		
Signature **X**	O.I.Q. member No.	Date

PART D – Contractor in charge of completion

Name of contractor	Telephone number ( )	Fax number ( )
Address	Type of earth-boring machine	Number of earth-boring machine

Ministère des Ressources naturelles et de la Faune Direction générale des hydrocarbures et des biocarburants 18 novembre 2008 – Page 1 de 1

O.C. 1539-88, Sch. IV; O.C. 1381-2009, s. 62.

SCHEDULE V

Application for authorization to close a well

Application for authorization to close a well– Schedule 5
Mining Act (R.S.Q., c. M-13.1)

Part A – Identification of applicant

Name of applicant			
Address		Telephone number ( )	Fax number ( )
Name of well	Well number	Number of the exploration licence or of the lease to produce or the lease to operate	
Signature for the applicant X		Title	Date

Part B – Description of operations

Closing program

Plug number	Interval or depth	Type of plug	Characteristics of cement

Date of the beginning of operations	Type of closing Temporary ☐ Permanent ☐	Estimated closing costs
Description of the characteristics of the blowout preventer equipment		

Part C –Engineer responsible for the operations

Family name and first name of engineer	Telephone number ( )	Fax number ( )
Address		
Signature X	O.I.Q. member No	Date

Part D – Contractor in charge of closing

Name of contractor	Telephone number ( )	Fax number ( )
Address	Type of earth-boring machine	Number of earth-boring-machine

ESPACE RÉSERVÉ AU MINISTÈRE DES RESSOURCES NATURELLES ET DE LA FAUNE			
Nom de l'inspecteur	Date de l'inspection	Numéro de la déclaration	Date de libération de la caution

Ministère des Ressources naturelles et de la Faune Direction générale des hydrocarbures et des biocarburants 19 novembre 2008 – Page 1 de 1

9635

O.C. 1539-88, Sch. V; O.C. 1381-2009, s. 62.

TRANSITIONAL

2015

***(O.C. 1092-2015) SECTION 5**. The exploration licensee who carried out a trial period before 31 December 2015 may avail himself or herself of the provisions of section 71 of the Regulation as it read on 31 December 2015. Such trial period must take place within a period not exceeding 180 consecutive days when extracting petroleum and natural gas excluding extraction from gas shale.*

UPDATES
O.C. 1539-88, 1988 G.O. 2, 3724
O.C. 1081-90, 1990 G.O. 2, 2281
O.C. 1381-2009, 2010 G.O. 2, 8
S.Q. 2012, c. 11, s. 33
S.Q. 2013, c. 16, ss. 22 to 40
S.Q. 2014, c. 6, s. 2
O.C. 700-2014, 2014 G.O. 2, 1624
O.C. 1092-2015, 2015 G.O. 2, 3331