



ACTS: *The Crown Minerals Act*
The Freehold Oil and Gas Production Tax Act, 2010

REGULATIONS: *The Crown Oil and Gas Royalty Regulations, 2012*
The Freehold Oil and Gas Production Tax Regulations, 2012

TOPIC: **ROYALTY/TAX INCENTIVE VOLUMES
FOR
HORIZONTAL OIL WELLS
DRILLED
ON OR AFTER OCTOBER 1, 2002**

This Information Circular has been prepared by the Ministry of the Economy to explain the policies and procedures which are used to administer the Crown royalty and freehold production tax (royalty/tax) incentive volumes for horizontal oil wells in accordance with *The Crown Oil and Gas Royalty Regulations, 2012* and *The Freehold Oil and Gas Production Tax Regulations, 2012* (collectively the "regulations"). Reference should be made to the Acts and regulations for an exact statement of the law. In case of a conflict between this Information Circular and the provisions of the Acts and regulations, the Acts and regulations will govern. This Information Circular has no legal force or effect.

Note: This circular replaces Information Circulars PNG94IC05 and EFA-IC05 and is available on The Ministry of the Economy's web site at www.economy.gov.sk.ca/royaltytaxinfocirc

I. DEFINITION OF TERMS REFERRED TO IN THIS CIRCULAR

DEEP OIL WELL means an oil well that is producing oil:

- (i) from a zone:
 - (a) the upper limit of which, measured from the Kelly Bushing, is more than 1,700 metres in depth as determined in accordance with the records of the ministry, or any lesser depth the minister may approve; and
 - (b) within the Mississippian Period; or
- (ii) from a zone that was deposited before the Bakken zone, regardless of the depth.

NOTE: The Bakken producing zone is considered part of the Mississippian Period.

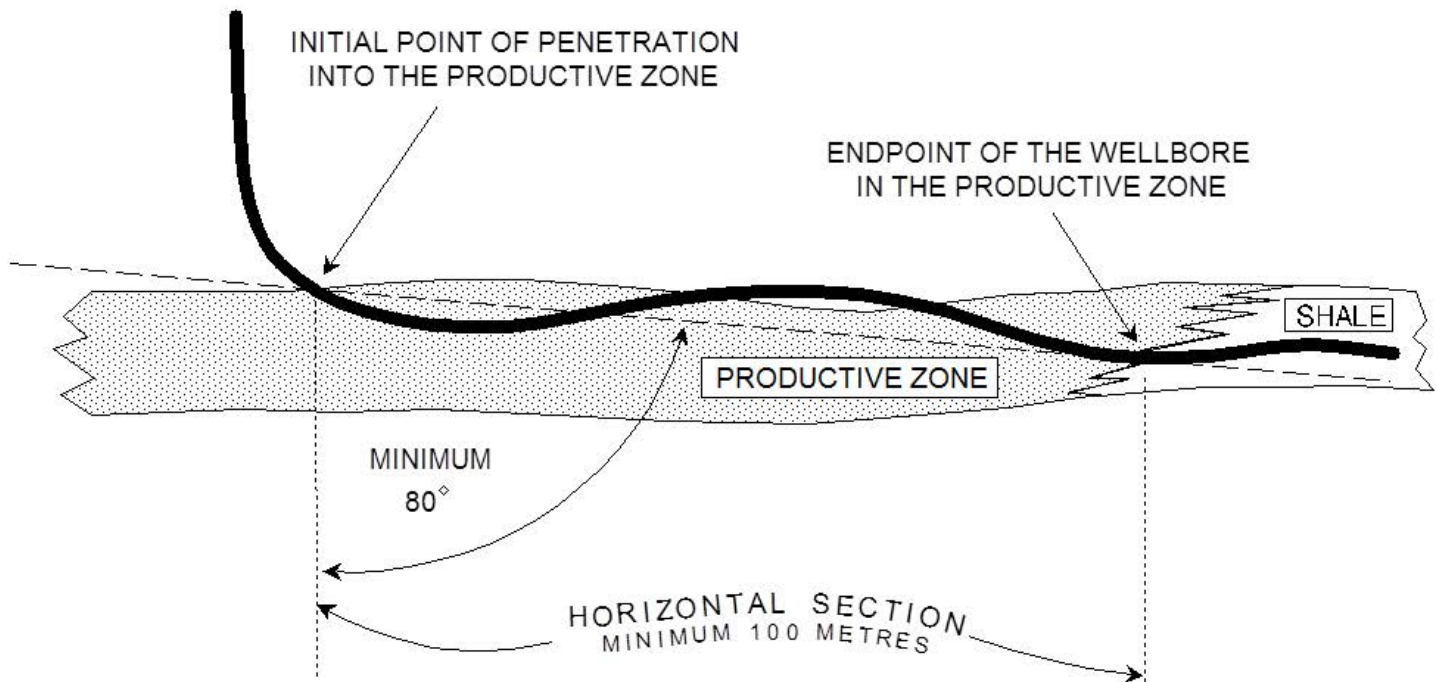
HORIZONTAL OIL WELL means:

- (i) an oil well with a horizontal section, including any subsequent horizontal sections drilled in the same zone, that is approved as a horizontal well by an order of the minister pursuant to section 17.1 of *The Oil and Gas Conservation Act*; or
- (ii) any other oil well approved by the minister as a horizontal oil well.

HORIZONTAL SECTION means the portion of a wellbore:

- (i) with an angle of at least 80°, measured between the line connecting the initial point of penetration into the productive zone and the end point of the wellbore in the productive zone and the line extending vertically downward from the initial point of penetration into the productive zone; and
- (ii) with a minimum length of 100 metres, measured from the initial point of penetration into the productive zone to the end point of the wellbore in the productive zone.

NOTE: "Drain holes" (generally small diameter and short radius) and other similar portions of a wellbore are not considered horizontal sections.



NON-DEEP OIL WELL means an oil well that is not a deep oil well.

OIL WELL means:

- (i) a wellbore:
 - (a) that has been cased and that is not completed or abandoned, and:
 - (I) that has oil indicated as the well objective on the well licence and the minister has not received written notice from the operator indicating the well objective has been changed to an objective other than oil; or
 - (II) that does not have oil indicated as the well objective on the well licence and the minister has received written notice from the operator indicating the well objective has been changed to oil;

and includes all reserves within the boundaries of the drainage unit for the zone from which the wellbore is expected to produce; or
 - (b) that is completed in a zone for the purposes of producing oil, and includes all reserves in that zone within the boundaries of the drainage unit for that zone and is not part of a gas well in that zone; or
- (ii) any other wellbore or group of wellbores, in conjunction with any reserves, that may be approved by the minister as an oil well.

- NOTE:
- 1) If a wellbore is deepened, any oil well that produces from a zone that was not previously part of the wellbore will be considered a newly drilled well. The finished drilling date of the well will be the date when the deepening of the wellbore was completed.
 - 2) If a wellbore is plugged-back or re-completed up-hole, the resulting oil well will not be considered a newly drilled well. The finished drilling date of the well will be the date when the drilling of the wellbore was completed.

WELLBORE means a drilled opening in the ground other than a seismic shot hole or structure test hole, and includes the total drilled length of the opening.

ZONE means any interval approved by the minister that is definable respecting a geological formation or geological unit.

II. CROWN ROYALTY/FREEHOLD PRODUCTION TAX SYSTEM

A. ROYALTY/TAX INCENTIVE VOLUME

A horizontal oil well with a finished drilling date on or after October 1, 2002 qualifies for an incentive volume:

- (i) a **Horizontal Oil Well** that is a **non-deep oil** well qualifies for a 6,000 cubic metre incentive volume.
- (ii) a **Horizontal Oil Well** that is a **deep oil well** qualifies for a 16,000 cubic metre incentive volume.

B. ROYALTY/TAX RATES FOR INCENTIVE VOLUME

The royalty/tax incentive volumes noted in section A receive the following royalty/tax rates:

Crown Royalty (applied to oil produced from or allocated to Crown lands)

A Crown royalty rate equal to the lesser of:

- the "fourth tier oil" Crown royalty rate; and
- 2.5%.

Freehold Production Tax (applied to oil produced from or allocated to freehold lands)

A freehold production tax rate of 0%.

C. ROYALTY/TAX RATES FOR PRODUCTION AFTER INCENTIVE VOLUME

After the incentive volume noted in section A has been produced, the oil produced from a horizontal oil well drilled on or after October 1, 2002 will be subject to the "fourth tier oil" royalty/tax rates which are outlined in Information Circular PR - IC01 titled "Crude Oil Price Sensitive Royalty/Tax Structure".

III. HORIZONTAL OIL WELLS WITHIN WATERFLOOD AND EOR PROJECTS

In situations where a horizontal oil well is drilled within an existing waterflood or EOR project area or where a waterflood or EOR project is implemented within an area containing a horizontal oil well that has not produced its full incentive volume, the following policies apply:

A. OIL WELL WITHIN AN APPROVED WATERFLOOD PROJECT

- (i) Where a horizontal oil well is drilled within an existing waterflood project area:
 - None of the oil produced from the well will be classified as incremental waterflood oil (as outlined in Information Circular PR - IC06 titled "Royalty/Tax Regime for Incremental Oil Produced from New or Expanded Waterflood Projects Implemented On or After October 1, 2002").
 - The total oil produced from the well will be used in determining when the incentive volume for the well has been produced and will be subject to the incentive volume royalty/tax rates as outlined in Part II.
- (ii) Where a horizontal oil well is drilled prior to or in conjunction with a project being implemented:
 - A portion of the oil produced from the well will be classified as incremental waterflood oil at the time the waterflood project commences operation. This portion will qualify for the "fourth tier oil" royalty/tax rates and not the incentive volume royalty/tax rates.
 - Only the non-incremental portion of the oil produced from the well will qualify for the incentive volume royalty/tax rates as outlined in Part II. The total oil produced from the well prior to the commencement date of the project and the non-incremental portion of the oil produced from the well after the commencement date of the project will be used in determining when the incentive volume for the well has been produced.

B. OIL WELL WITHIN AN APPROVED EOR PROJECT

Where a horizontal oil well is drilled as part of or becomes part of an EOR project:

- All or a portion of the oil produced from the horizontal oil well will be classified as EOR oil. The EOR factor (enhanced oil recovery factor) that applies to oil produced from existing oil wells within the project area will also apply to oil produced from the horizontal oil well.
- Only the non-EOR portion of the oil produced from the horizontal oil well will qualify for the incentive volume royalty/tax rates as outlined in Part II.
- All or a portion of the investment associated with the horizontal oil well may be recognized as investment within the EOR royalty/tax system, in which case the incentive volume applicable to the horizontal oil well will be adjusted in accordance with the following formula:

$$\text{Adjusted Incentive Volume} = \text{Incentive Volume} \times (100\% - \text{Investment Portion})$$

Where: Investment Portion means the percentage of the investment associated with the horizontal oil well that is approved by the minister as investment for purposes of the EOR royalty/tax system.

IV. INCENTIVE VOLUME APPROVAL PROCESS**IMPORTANCE OF DRILLING LICENCE INFORMATION**

To assist a company in finalizing drilling plans, the determination of whether or not an oil well qualifies for an incentive volume is made at the time the well is licensed. The level of the incentive volume for a horizontal oil well can vary depending on the producing zone and depth from which production is expected, both of which are indicated on Part 1 of the Well Licence (Application).

The royalty/tax incentive volume will be available on Petrinex within two business days of the well licence issue date and is determined by the minister based on the information provided on Part 1. The final determination of the incentive volume is made once the minister has reviewed the completion information associated with initial oil production from the wellbore. In the following situations, the minister will notify the company that the incentive volume indicated on the query royalty tax attribute of the Petrinex has changed:

1. The horizontal portion of the wellbore does not meet the definition of a “horizontal section”.
2. A 16,000 cubic metre incentive volume was indicated, but the upper limit of the producing zone (which is located within the Mississippian Period) did not turn out to be more than 1,700 metres in depth.

V. MONTHLY ROYALTY/TAX CALCULATION

For each month in which the cumulative amount of oil produced from a horizontal oil well is less than the incentive volume for the well, the Crown royalty and freehold production tax shares are determined by applying the appropriate royalty/tax rates as outlined in section B of Part II to the monthly oil production from the horizontal oil well.

For the first month in which the cumulative amount of oil produced from a horizontal oil well exceeds the incentive volume for the well, the total royalty/tax share is determined by adding the results of the following two calculations:

- (i) multiply the portion of the oil for the month required to reach the cumulative royalty/tax incentive volume by the appropriate royalty/tax rate as noted in section B of Part II; and
- (ii) multiply the remaining portion of the oil for the month (cumulative amount of oil in excess of the incentive volume) by the "fourth tier oil" royalty/tax rate. The MOP (Monthly Oil Production) factor used in the royalty/tax rate formula is based on the entire amount of oil produced from the horizontal oil well for the month, including any incremental waterflood or EOR portion of the oil.

(Note: see example calculation in APPENDIX)

For each month thereafter, the "fourth tier oil" royalty/tax rates apply.

APPENDIX

EXAMPLE CROWN ROYALTY CALCULATION**ASSUMPTIONS:**

- The oil well:
 - (i) is located in the southeast area of Saskatchewan;
 - (ii) is on Crown land;
 - (iii) is a horizontal oil well eligible to receive the 6,000 m³ incentive volume;
 - (iv) is a non-deep oil well; and
 - (v) produced a cumulative 5,720.4 m³ of oil prior to the current reporting month and 519.8 m³ of oil during the current reporting month.
- The Crown royalty rate for the current reporting month = $(K - X/MOP) = 24.03652\%$
This rate is based on the “fourth tier oil ” royalty formula factors noted below and an MOP = 519.8:

$$NOP = \$242.00$$

$$K = 28.09$$

$$X = 2107$$

CALCULATIONS:

Since the current reporting month is also the month in which the oil well produced its total incentive volume of 6,000 m³ (5,720.4 + 519.8 = 6,240.2), the Crown royalty share of the 519.8 m³ produced in the month is determined as follows:

- (a) Calculate the Crown royalty share of 279.6 m³ (the portion of the 519.8 m³ produced in the current reporting month that was required for the well to reach the total volume incentive of 6,000 m³ [6,000 – 5,720.4 = 279.6]):

$$\text{Royalty rate} = \text{the lesser of the “fourth tier oil ” rate (24.03652\%) and } 2.5 = 2.5\%$$

$$\text{Royalty share} = 2.5\% \text{ of } 279.6 \text{ m}^3 = \underline{6.99000 \text{ m}^3}$$

- (b) Calculate the royalty share of remaining 240.2 m³ (519.8 – 279.6 = 240.2):

$$\text{Royalty rate} = \text{the “fourth tier oil ” rate} = 24.03652\%$$

$$\text{Royalty share} = 24.03652\% \text{ of } 240.2 \text{ m}^3 = \underline{57.73572 \text{ m}^3}$$

The total Crown Royalty Share of the 519.8 m³ produced in the current reporting month equals the amount determined in (a) plus the amount determined in (b):

$$\text{Total Crown royalty share} = 6.99000 + 57.73572 = \underline{64.72572 \text{ m}^3}$$

FOR FURTHER INFORMATION, PLEASE CONTACT:

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