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### INFORMATIONAL NOTICE 13-06 - September 6, 2013

Manitoba Drilling Incentive Program Proposal

Attached you will find a paper outlining proposed changes to the Manitoba Drilling Incentive Program (MDIP). The current incentive program is set to expire on December 31, 2013 and the Department of Innovation, Energy and Mines, the Canadian Association of Petroleum Producers and the Explorers and Producers Association of Canada have reviewed the effectiveness of the program.

The attached paper outlines the Department's proposal for the program during the five year period from 2014 to 2018 and proposes changes to most of the components of the current program.

Industry comments are to be submitted to Keith Lowdon, Director, Petroleum Branch at <a href="mailto:keith.lowdon@gov.mb.ca">keith.lowdon@gov.mb.ca</a> by **September 27, 2013**. Following review of industry submissions the Department will seek internal approval for changes to MDIP, with a target date for release of the new MDIP by December 6, 2013

Sincerely,

Keith Lowdon Director

Keith Purde

Attachment

# Proposal for Changes to the Manitoba Drilling Incentive Program - September 6, 2013

#### 1.0 Introduction

The Manitoba Drilling Incentive Program (MDIP) was introduced in 1992. Since 1992, MDIP has been an integral part of Manitoba's oil and gas fiscal regime. MDIP in combination with the province's Crown royalty and freehold production tax rates forms a very competitive investment climate for the exploration for and development of Manitoba's oil and gas resources. In 2008, MDIP was extended without changes for another five years. MDIP is scheduled to expire on December 31, 2013.

An Industry-Government Working Group with representatives from the Canadian Association of Petroleum Producers (CAPP), Explorers and Producers Association of Canada (EPAC) and the Department was formed to review the effectiveness of and potential changes to MDIP. The Industry-Government Working Group met three times between April – June 2013 to discuss proposed changes to MDIP and to share ideas.

This paper outlines the Department's proposal for changes to MDIP and includes feedback received from the Industry-Government Working Group. The paper includes a comparison of key elements of Manitoba's oil and gas fiscal regime with Saskatchewan and Alberta. The paper also includes a summary of the Manitoba Bureau of Statistics (MBS) study on the economic impact of the oil industry in Manitoba based on 2011 industry expenditures in the province.

During the MDIP review two other key issues were raised by industry, infrastructure priorities in southwestern Manitoba and rural municipality involvement in oil and gas activities. The Department has participated in the creation of two separate working groups to address these issues. The Oil Industry Joint Task Force with representatives from Manitoba Infrastructure and Transportation, the Department, Manitoba producers, pipeline operators, trucking companies and oilfield service and supply companies is investigating funding mechanisms to upgrade PR 256 (PTH 2 to Cromer). In previous meetings attended by MIT and IEM, industry identified a list of infrastructure priorities with the upgrade of this highway at the top of the list. The Rural Municipality-Oil Industry Working Group with representatives from the Oil Producing Municipalities of Manitoba (OPPM), the Association of Manitoba Municipalities (AMM), Manitoba Local Government, Manitoba Infrastructure and Transportation, Manitoba Conservation and Water Stewardship, the Department and oil industry have met twice to discuss a wide range of issues and concerns raised by rural municipalities. The Department has also organized a seminar for representatives from rural municipalities to outline the role and responsibilities of the Petroleum Branch and the regulatory requirements under The Oil and Gas Act.

# 2.0 Manitoba Drilling Incentive Program

The Department recognizes the importance of maintaining a stable, predictable and competitive oil and gas fiscal and regulatory regime. MDIP is an integral component of the province's oil and gas fiscal regime and has played an important role in attracting record levels of oil industry investment to Manitoba over the past five years. In February 2013, the Department released a preliminary discussion paper that reviewed the effectiveness of the existing MDIP and outlined a number of proposed changes to the six components of MDIP and the introduction of maximum Crown royalty and production tax rates.

Following consultation with industry, the Department is proposing changes to and extension of MDIP for another five years from January 1, 2014 to December 31, 2018. The proposed changes to MDIP have been designed in accordance with the following seven objectives outlined in the preliminary discussion paper:

- (1) Continue to attract high levels of industry investment and the associated economic activity, opportunities and jobs for Manitobans;
- (2) Maintain the competitiveness of Manitoba's oil and gas fiscal regime with other Western Canadian provinces, primarily Saskatchewan and Alberta;
- (3) Encourage the use of new technologies in the development of Manitoba's oil and gas resources;
- (4) Encourage the implementation of enhanced oil recovery projects to maximize recovery from Manitoba oil pools;
- (5) Encourage exploratory drilling;
- (6) Encourage gas conservation; and
- (7) Secure long term Crown royalty and freehold production tax revenue from the development of Manitoba's oil and gas resources.

The Industry-Department Working Group was aligned on the Department's proposed objectives to guide the development of changes to MDIP and industry emphasized that objectives (1) to (4) were paramount. There was discussion about the importance of competitiveness with other jurisdictions and it was agreed that maintaining competitiveness with Saskatchewan was critical. The Working Group was also interested in the economic impact of oil industry investment in Manitoba.

Manitoba Bureau of Statistics (MBS) conducted a study of the economic impact of oil industry expenditures in Manitoba using the MBS Economic Impact Assessment Model. The study was based on 2011 oil industry expenditures in Manitoba, which totalled \$1.39 billion. Table 1 summarizes the results of the MBS study in terms of net monetary impact on the provincial economy (GDP), labour income, total employment and provincial revenues including individual and corporation income tax, retail sales tax,

other direct and indirect taxes, Crown oil royalties, Crown oil and gas rights lease revenue and production tax. The results are shown for two different assumptions of direct Manitoba expenditures; 53% and 58%. Direct Manitoba expenditures represent the percentage of total industry expenditures spent directly in Manitoba. Only direct Manitoba expenditures impact GDP, labour income and employment.

Table 1 – Manitoba Oil Industry Economic Impacts

	53% Direct	58% Direct
Oil Industry Economic Impacts	Manitoba	Manitoba
	Expenditures	Expenditures
Total Direct Expenditures (\$ Millions)	1388.4	1388.4
Direct Expenditures in Manitoba (\$ Millions)	735.1	805.3
Labour Income (\$ Millions)	235.2	252.8
Total Employment (person-years)	4150	4425
Total Provincial Revenue (\$ Millions)	158.7	162.0
Provincial Revenue per \$1.00 of Total		
Expenditures	0.11	0.12
Local Taxes (\$ Millions)	18.4	18.7

The MBS economic impact study helps emphasize the importance of ensuring proposed changes to MDIP maintain Manitoba's competitiveness and continue to attract high levels of industry investment proportional to Manitoba's oil and gas resource endowment. The Department would like to acknowledge the high degree of cooperation and support industry provided to MBS in the completion of this study.

## **3.0 Proposed Changes to MDIP (2014-2018)**

The Department is proposing changes to the majority of components of MDIP. In proposing the changes the Department has carefully considered the input of the Industry-Government Working Group. The Department will also consider additional comments received on the proposed changes before making final recommendations to government on changes to and extension of MDIP for another five years, January 1, 2014 to December 31, 2018.

Table 2 lists the proposed components of the new MDIP (2014-2018) and the components of the existing MDIP that they replace. The following sections describe the proposed components of the new MDIP. For ease of reference Appendix 1 shows a comparison of the new and existing MDIP components.

Table 2 - Comparison of New and Existing MDIP Components

New MDIP Components	Existing MDIP Components
Vertical Well Incentive	New Well Incentive
Exploration and Deep Well Incentive	Deep Drilling Incentive
Horizontal Well Incentive	Horizontal Well Incentive
Marginal Well Major Workover Incentive	Marginal Well Major Workover Incentive
Pressure Maintenance Project Incentive	Injection Well Incentive
HOV Account (Phased Out)	HOV Account
HOV Production Period (unchanged)	HOV Production Period
Solution Gas Conservation Incentive (new)	
New Fiscal Measures	Existing Fiscal Measures
Horizontal Well Drainage Units (unchanged)	Horizontal Well Drainage Units
Maximum Crown royalty and production tax (new)	

#### 3.1 Vertical Well Incentive

The proposed Vertical Well Incentive replaces the existing New Well Incentive. Under the Vertical Well Incentive a newly drilled, vertical development or exploratory well drilled less than 1.6 kilometres from the nearest well cased for production from the same or a deeper zone earns a holiday oil volume (HOV) of 500 m³. The proposed Vertical Well Incentive recognizes that the majority of vertical wells drilled under the existing New Well Incentive earn the minimum HOV of 500 m³ and the New Well Incentive HOV calculation formula, developed for a lower price oil price environment, was ineffective and added complexity to the administration of the incentive. With the fundamental shift in development of Manitoba's tight oil reservoirs from vertical to horizontal wells, industry anticipates minimal uptake of this component of MDIP.

# 3.2 Exploration and Deep Well Incentive

The proposed Exploration and Deep Well Incentive replaces the existing Deep Drilling Incentive. Under the Exploration and Deep Well Incentive a newly drilled exploratory well or deep development well earns a HOV as follows:

- (a) Non-deep exploratory well drilled more than 1.6 kilometres from a well cased for production from the same or a deeper zone earns a HOV of 4,000 m<sup>3</sup>;
- (b) Deep exploratory well drilled below the Birdbear Formation earns a HOV of 8,000 m<sup>3</sup>; and
- (c) Deep development well completed for production in the Birdbear or deeper formation earns a HOV of 8,000 m<sup>3</sup>.

The proposed Exploration and Deep Well Incentive is designed to encourage exploration for and development of new oil pools in Manitoba and to encourage drilling below the Three Forks Group (Bakken-Torquay Formation), to evaluate the potential of Manitoba's deeper formations productive in other parts of the Williston Basin. The incentive is similar to Saskatchewan's Vertical Well Drilling Incentive, however the offset distanced to qualify as an exploratory well is 1.6 km in Manitoba versus 3.0 km in Saskatchewan.

Horizontal exploratory wells qualify for the Horizontal Well Incentive.

#### 3.3 Horizontal Well Incentive

It is proposed to continue the Horizontal Well Incentive but reduce the HOV earned by a newly drilled horizontal well to 8,000 m<sup>3</sup> from 10,000 m<sup>3</sup> and eliminate the HOV earned by a new horizontal leg drilled from an existing horizontal well.

The Horizontal Well Incentive recognizes the higher costs and risks associated with horizontal well drilling and completion and provide companies with upfront Crown royalty and production tax relief to help facilitate the recovery of investment costs. The incentive has encouraged companies to use new horizontal drilling and multi-stage hydraulic fracturing technology to develop Manitoba's tight oil reservoirs. The success of this technology has led to record levels of industry investment. The Industry—Government Working Group agreed on the need to continue this incentive to allow companies to continue to test the application of this new technology and to expand the economic limits of Manitoba's tight oil reservoirs.

The proposed reduction in the HOV under the Horizontal Well Incentive to 8,000 m<sup>3</sup> from 10,000 m<sup>3</sup> is designed to align the HOV earned by a well with the production performance of horizontal wells drilled between 2009 – 2012, while maintaining competitiveness with horizontal well investment opportunities in Saskatchewan and Alberta. Much of the discussion about changes to MDIP focused on horizontal wells and there was general support from the Industry–Government Working Group for the reduction in HOV.

## 3.4 Horizontal Well Drainage Units

The Department is proposing to continue the use of horizontal well drainage units to allocate production from a horizontal well for the purpose of calculating Crown royalty

and production tax. A horizontal well drainage unit includes all spacing units located within 100 m of the completed interval of the horizontal well. The calculation of royalty and tax on a per spacing unit basis reduces the total royalty and tax payable for a horizontal well when compared to calculating royalty and tax based on total well production as in other jurisdictions.

Drainage units were introduced by the Department in 1995 and are unique to Manitoba. The use of drainage units has proven effective in facilitating the development of Manitoba's oil pools using horizontal wells. Drainage units have allowed operators to equitably pool complex mineral rights ownership to allow for the optimal placement of horizontal wells. The Industry–Government Working Group strongly supported the continued use of drainage units to allocate horizontal well production to calculate royalty and tax and to protect correlative rights.

## 3.5 Marginal Well Major Workover Incentive

It is proposed to continue the Marginal Well Major Workover Incentive with changes to the minimum production rate to qualify for the incentive and changes to the definition of a major workover. Under the Marginal Well Major Workover Incentive shut-in and marginal wells where a major workover is completed, will continue to earn a holiday oil volume of 500 m<sup>3</sup>. The following proposed minor changes to the incentive are designed to encourage companies to carry out workovers on shut-in and marginal wells:

- (a) A change in the minimum production rate to qualify for the incentive to 3 m<sup>3</sup>/d from 1 m<sup>3</sup>/d; and
- (b) An expansion of the types of workovers that qualify for the incentive to include reentry of an abandoned well; deepening of a well into a new formation; recompletion of a well from one pool to another; stimulation of a well; casing repairs; drilling of an additional horizontal leg and any other workover designed to increase recovery from a pool that costs more than \$75,000.

The HOV earned under the Marginal Well Major Workover Incentive will be added to a well's remaining HOV. This is a new feature of the incentive that recognizes that companies may wish to workover a horizontal well before it has produced the HOV earned under the Horizontal Well Incentive.

### 3.6 Pressure Maintenance Project Incentive

The proposed Pressure Maintenance Project Incentive replaces the existing Injection Well Incentive. The Pressure Maintenance Project Incentive will provide a 12 month exemption from the payment of Crown royalty or production tax on production allocated to a unit tract in which a well is drilled or converted to injection of water or another substance in an approved new or modified pressure maintenance project. If a well is placed on injection before it has produced its HOV and within 5 years of the finished drilling date of the well, the exemption period will be extended to 18 months.

The Pressure Maintenance Project Incentive exemption applies, for a vertical injection well, to the unit tract in which the well is located; and for a horizontal injection well to a maximum of four unit tracts within the drainage unit of the well. The Pressure Maintenance Project Incentive exemption will be limited to a maximum of 50% of the unit tracts within the approved pressure maintenance project or unit area. However, the Department may, upon application, increase the percentage of unit tracts that qualify for the exemption, where the operator can demonstrate that the increase is required to make the project economically feasible.

In order to further encourage companies to implement pressure maintenance projects, no Crown royalty and production tax is payable during the 12 -18 month exemption period and incremental recoverable reserves attributed to the project will continue to be classified as third tier oil for the calculation of Crown royalty and production tax. These additional features of the incentive are designed to ensure that implementation of pressure maintenance projects are not deferred until wells have produced their HOV.

In order to recognize the higher investment, operating costs and risks associated with a project of enhanced oil recovery (EOR) other than waterflood projects, companies may apply under subsection 189(2) of *The Oil and Gas Act* and subsection 2(2) of *The Oil and Gas Production Tax Act* for a variation or waiver of Crown royalty and/or production tax for EOR projects.

#### 3.7 HOV Production Period

The Department is proposing to continue the 10-year HOV production period. HOV earned under the new MDIP must be produced within 10 years of the finished drilling date of a newly drilled well, or the completion date of a major workover.

## 3.8 Holiday Oil Volume Account

The Department is proposing to phase out the Holiday Oil Volume Account (HOV Account). Companies with HOV in their HOV Account will have one year to assign HOV from their HOV Account to newly drilled wells. Companies will be able to assign a maximum of 2,000 m³ of HOV from their HOV Account to vertical or horizontal wells drilled between January 1 - December 31, 2014. Effective January 1, 2014, companies will no longer be able to assign HOV from a well to their HOV Account.

The shift to horizontal drilling has greatly reduced the effectiveness of the HOV Account. Companies' utilization of HOV Accounts has declined dramatically during the current term of MDIP and the HOV Account is no longer effective in helping companies optimize the value of HOV earned. Industry had proposed a two year phase out period but the Department believes that a one year HOV Account phase out period provides enough time for the majority of companies active in Manitoba to substantially reduce the HOV in their HOV Account.

#### 3.8 Solution Gas Conservation Incentive

The Department is proposing a new Solution Gas Conservation Incentive. Under the Solution Gas Conservation Incentive no Crown royalty or production tax is payable on natural gas sold from new solution gas conservation projects where gas sales commence after January 1, 2014. An exemption from the payment of Crown royalty or production tax will apply to solution gas produced and sold between January 1, 2014 and December 31, 2018.

The new Solution Gas Conservation Incentive is designed to improve the economics of solution gas conservation projects and reduce the amount of gas flared and vented in Manitoba. In conjunction with the introduction of this incentive the Department will be requesting companies review the feasibility of implementing solution gas conservation at their batteries.

## 4.0 Maximum Crown Royalty and Production Tax

The foundation of MDIP is the holiday oil volume (HOV) earned by all newly drilled wells. Under the existing MDIP no Crown royalty or production tax is payable until a well has produced its HOV. The Department is proposing to introduce maximum Crown royalty and production tax rates payable during the production of HOV.

The determination of maximum Crown royalty and production tax rates was identified by the Industry-Government Working Group as the single most important element in maintaining the competitiveness of Manitoba's oil and gas fiscal regime. Both Saskatchewan and Alberta have a maximum Crown royalty rate during production of incentive oil. In Saskatchewan, the maximum Crown royalty rate is 2.5% and there is no production tax payable during production of incentive oil. In Alberta, the maximum Crown royalty rate is 5.0% and the incentive program doesn't apply to freehold production.

The Department is proposing a maximum Crown royalty rate of 3.0% and a maximum production tax rate of 1.0% payable during producing of HOV. The maximum Crown royalty and production tax rates apply during the production of HOV earned under the Vertical Well Incentive, the Exploration and Deep Well Incentive, the Horizontal Well Incentive and the Marginal Well Major Workover Incentive. As previous noted, under the proposed Pressure Maintenance Project Incentive; no Crown royalty and production tax is payable during the 12 -18 month exemption period.

The proposed maximum Crown royalty and production tax rates are marginally higher than, but competitive with, rates applied in Saskatchewan. The proposed maximum Crown royalty and production tax rates are required to secure long term Crown royalty and production tax revenue from the development of Manitoba's oil and gas resources. Introduction of maximum Crown royalty and production tax rates will reverse the trend of declining Crown royalty and production tax revenue as a percentage of the total value of

oil production caused by the dramatic increase in horizontal drilling, in combination with the existing Horizontal Well Incentive.

# 5.0 Competitiveness of Manitoba's Oil and Gas Fiscal Regime

In discussions with the Industry–Government Working Group it was agreed that to measure the competitiveness of changes to MDIP economic analysis should focus on horizontal drilling. Between 2009 and 2013, under the existing MDIP, 90% of the wells drilled in Manitoba were horizontal with the majority targeting the tight oil plays of the Bakken -Torquay and Lower Amaranth. The Working Group focused their economic analysis on the comparison of horizontal drilling opportunities in Manitoba and Saskatchewan with an emphasis on project economics.

The proposed changes to the Horizontal Well Incentive and the introduction of maximum Crown royalty and production tax rates payable during the production of HOV will reduce the competitive advantage enjoyed by Manitoba producers compared to Saskatchewan. However, the Department believes the higher HOV earned by horizontal wells in Manitoba; the use of horizontal drainage units to calculate Crown royalty and production tax; Manitoba's non-price sensitive Crown royalty and production rates and the new Pressure Maintenance Project Incentive all combine to ensure the continuing competitiveness of Manitoba's oil and gas fiscal regime

Table 3 provides a comparison of horizontal drilling incentives in Manitoba with the proposed changes, Saskatchewan and Alberta. The table shows the level of HOV or equivalent incentive oil volume provided to horizontal wells; maximum Crown royalty and production tax rates payable during the production of HOV or incentive oil; and the duration of the incentive period.

Table 3: Provincial Horizontal Drilling Incentives

Province	Holiday or	Royalty	Production Tax	Incentive
	Incentive Oil	Payable during	Payable during	Period
	Volume	Incentive	Incentive	
		Period	Period	
Manitoba 1	8,000 m <sup>3</sup>	3.0%	1.0%	10 years
		maximum	maximum	
Saskatchewan <sup>2</sup>	6,000 m <sup>3</sup> non-	2.5%	0	No limit
	deep horizontal	maximum		
	well			
	2			
	16,000 m <sup>3</sup> deep			
	horizontal well			
Alberta	7,945 m <sup>3</sup>	5.0%	Incentive does	18 months
	measured depth	maximum	not apply to	(<2500 m)
	< 2,500 m		freehold oil	
			production	24 months

m	534 m <sup>3</sup> easured depth 500 to 3,000		(2500 – 3,000 m)
m	,		

#### Notes:

- 1. In Manitoba, the HOV earned by horizontal wells drilled between January 1 and December 31, 2014 can be topped up to 10,000 m<sup>3</sup> with HOV from a company's HOV Account.
- 2. A deep well in Saskatchewan is a well producing from a zone deeper than 1,700 m and within the Mississippian or from a zone deposited before the Bakken zone, regardless of depth. The Bakken is considered part of the Mississippian.

Table 4 shows a comparison of Crown royalty and production tax payable for a typical Lower Amaranth (2 spacing units per drainage unit) and Bakken-Torquay horizontal well (4 spacing units per drainage unit) in Manitoba, Saskatchewan and Alberta using the Department's proposed maximum Crown royalty rate of 3.0% and production tax rate of 1.0% and a HOV of 8,000 m³. The Crown royalty and production tax were calculated over the initial 4 years of production using an oil price of \$535/m³ (\$85/bbl). Limiting the analysis to the initial 4 years of production is to show a comparison of Crown royalty and production tax payable in each jurisdiction during the horizontal well incentive period.

Table 4: Inter-Jurisdictional Comparison of Crown Royalty and Production Tax for a Horizontal Well

Province	Lower Amaranth Horizontal Well (\$ 000)		Bakken-Torquay Horizontal Well (\$ 000)	
	Crown Royalty Production Tax		Crown Royalty	Production Tax
Manitoba	\$89.5	\$23.6	\$103.8	\$18.4
Saskatchewan	\$74.6	\$ 0	\$89.7	\$0
Alberta	\$215.2	\$106.4	\$295.3	\$110.9

Figures 1 & 2 show effective Crown royalty and production tax rates for a horizontal well after production of HOV or incentive oil in Manitoba, Saskatchewan and Alberta. In Saskatchewan and Alberta horizontal well royalty and tax are calculated based on total well production. In Manitoba royalty and tax is calculated on production allocated to each spacing unit within the horizontal well drainage unit reducing the effective royalty and tax rates. In Manitoba, Crown royalty and production tax rates are only production sensitive. In Saskatchewan, Crown royalty and production tax rates are both production and price sensitive. In Alberta, Crown royalty rates are both production and price sensitive and production tax rates are only production sensitive. The figures show effective royalty and tax rates in Manitoba for a horizontal drainage unit containing two and four spacing units and a range in oil prices from \$75 - \$100 per barrel. Effective Crown royalty rates for horizontal wells in Manitoba are lower than Saskatchewan for production rates above 2 m<sup>3</sup>/d for the 4 spacing units per drainage unit scenario and above 3 m<sup>3</sup>/d for the 2 spacing units per drainage unit scenario. Effective production tax rates for horizontal wells in Manitoba are equal to or lower than Saskatchewan over the entire range of production rates for the 4 spacing units per drainage unit scenario and for the 2 spacing units per drainage unit scenario Saskatchewan tax rates are lower below 7 -11 m<sup>3</sup>/d, depending on oil price.

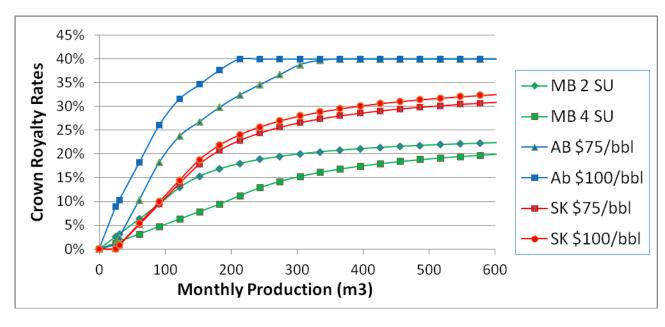
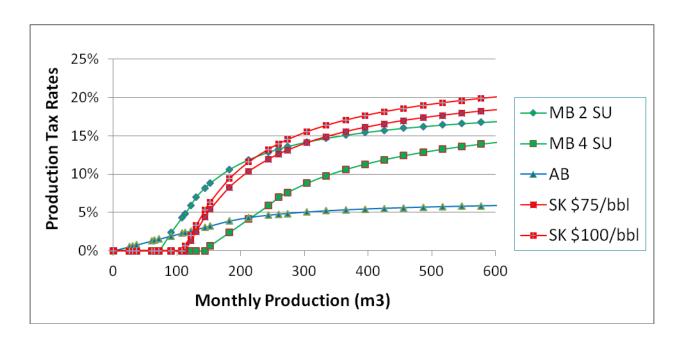


Figure 1 Interprovincial Crown Oil Royalty Curves

Figure 2 Interprovincial Oil Production Tax Curves



The lower effective Crown royalty and production tax rates in Manitoba have a significant impact on the royalty/tax burden for higher productivity horizontal wells that have produced their HOV or incentive oil. Since 2007, 152 horizontal wells in Manitoba have produced more than 8,000 m³. Table 5 shows a comparison of Crown royalty and production tax payable in Manitoba, Saskatchewan and Alberta for a high productivity horizontal well with initial production of 18.6 m³/d and cumulative recovery after 6 years of 12,560 m³, using the Department's proposed maximum Crown royalty rate of 3.0% and production tax rate of 1.0% in Manitoba and a HOV of 8,000 m³.

Table 5: Inter-Jurisdictional Comparison of Crown Royalty and Production Tax for a High Productivity Horizontal Well

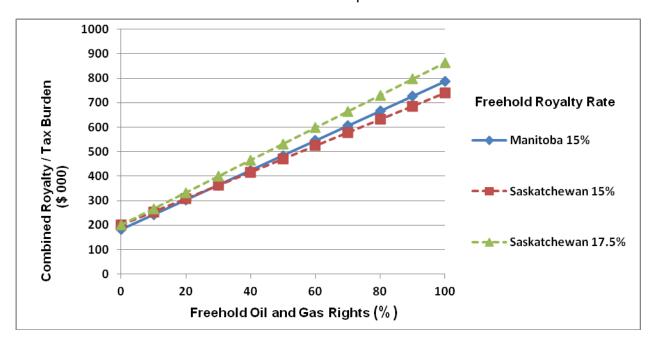
Province	High Productivity Horizontal Well		High Productivity Horizontal Well	
	(2 spacing units per drainage unit) (\$ 000)		(4 spacing units per drainage unit) (\$ 000)	
	Crown Royalty Production Tax		Crown Royalty	Production Tax
Manitoba	\$394.9	\$136.4	\$260.6	\$43.2
Saskatchewan	\$550.6 \$135.7		\$550.6	\$135.7
Alberta	\$1,052.5 \$264.0		\$1,052.5	\$264.0

When considering project economics, one of the key factors affecting the competitiveness of investment opportunities in Manitoba is the high proportion of freehold oil and gas rights ownership. In southwestern Manitoba oil and gas rights ownership is split 20% Crown and 80% freehold, compared to an average of 60% Crown and 40% freehold in Saskatchewan. Another key factor is the freehold royalty rate negotiated in the P&NG lease between the mineral owner and the oil company. Historically trend-setting freehold royalty rates in Saskatchewan have been higher than in Manitoba. Figure 3 shows the average combined Crown royalty and production tax burden for a horizontal well drilled in Manitoba and Saskatchewan as a function of the freehold royalty rate and the percentage of freehold oil and gas rights. The graph was adapted from horizontal well project economics provided by the Industry–Government Working Group. The graph shows that where oil and gas ownership in a play in Manitoba and Saskatchewan has a similar mix of Crown and freehold ownership, the competitiveness of the investment opportunity in each province is dependent on the freehold royalty rate.

Where a play in either province has a higher percentage of freehold oil and gas rights ownership, the royalty/tax burden increases. This places Manitoba at a competitive disadvantage due to our higher percentage of freehold oil and gas rights. It should be noted however that a 1.0% higher freehold royalty rate on a play in Saskatchewan more than offsets the proposed 1.0% maximum production tax rate in Manitoba.

Figure 3 – Combined Royalty/Tax Burden as a Function of Oil and Gas Rights

Ownership



Manitoba is the only province to offer a Crown royalty and production tax exemption for the implementation of waterfloods. Since 2009-2012, 15 new waterfloods have been approved in Manitoba. Six of the waterfloods have received the existing Injection Well Incentive to date and a total of 336 unit tracts received a 12 month exemption from the payment of Crown royalty or production tax. The average production per unit tract during the exemption period was 63 m³/month. Under the proposed Pressure Maintenance Project Incentive, 50% of the unit tracts in these same waterfloods would qualify for a 12 -18 month exemption and the operator could make application to increase the number of qualifying tracts.

## Summary

The Department would like to hear industry's comments on the effectiveness of the proposed changes to MDIP and the proposed maximum Crown royalty and production rates payable during production of HOV earned under a number of the components of MDIP. The Department would like to get industry's perspective on whether or not the proposed changes meet the objectives set out for the MDIP review. In particular, what if any changes industry would recommend to ensure the ongoing competitiveness of oil and gas investment opportunities in Manitoba.

Industry comments are to be submitted to Keith Lowdon, Director, Petroleum Branch at <a href="mailto:keith.lowdon@gov.mb.ca">keith.lowdon@gov.mb.ca</a> by **September 27, 2013**. Following review of industry submissions the Department will seek internal approval for changes to MDIP, with a target date for release of the new MDIP by December 6, 2013. The proposed MDIP changes would be effective January 1, 2014 upon expiry of the existing MDIP. Appendix 1 – Comparison of New and Existing MDIP Components

Existing	g MDIP	New	MDIP
New Well Incentive	vertical wells earn HOV of up to 10,000 m <sup>3</sup> with a minimum of 500 m <sup>3</sup>	Vertical Well Incentive	vertical development wells earn HOV of 500 m <sup>3</sup>
	HOV determined by formula		maximum Crown royalty and production tax applies during production of HOV
Deep Drilling Incentive	HOV under New Well Incentive increased by factor of 2 where well drilled to the base of Duperow Fm	Exploration and Deep Well Incentive	Non-deep exploratory wells earn HOV of 4,000 m <sup>3</sup> Deep exploratory wells drilled below

HOV may be topped Birdbear Fm earn a up to 10,000 m<sup>3</sup> HOV of 8,000 m<sup>3</sup> where completed in Deep development formation deeper than the Threewells completed for Forks Group production in the (Bakken- Torquay Birdbear or deeper Formation) formation earn a HOV of 8,000 m<sup>3</sup> an exploratory well is defined as a well drilled more than 1.6 km from a well cased for production from the same or a deeper zone maximum Crown royalty and production tax applies during production of HOV



Horizontal Well Incentive	All horizontal wells earn HOV of 10,000 m <sup>3</sup> New horizontal leg	Horizontal Well Incentive	All horizontal wells earn HOV of 8,000 m <sup>3</sup> maximum Crown
	drilled from existing horizontal well, under certain conditions, earns HOV of 3,000 m <sup>3</sup>		royalty and production tax applies during production of HOV
Marginal Well Major Workover Incentive	major workover on a shut in well or marginal well producing less than 1 m³/day earns HOV of 500 m³	Marginal Well Major Workover Incentive	major workover on a shut in well or marginal well producing less than 3 m³/day earns HOV of 500 m³
	Major workover includes: re-entry of abandoned well, deepening into new formation, recompletion into new formation,		Additional qualifying major workovers to include stimulation of a well and drilling of an additional horizontal leg
	casing repairs, and any other workover designed to increase recovery that costs more than		increased expenditure limit to \$75,000 for qualifying workover
	\$10,000		maximum Crown royalty and production tax applies during production of HOV
Injection Well Incentive	Where is a well is drilled or converted to water injection, unit tract qualifies for a 12 month exemption from payment of royalty or tax	Pressure Maintenance Project Incentive	Where a well is drilled or converted to water injection, the unit tract qualifies for a 12 month exemption from the payment of Crown royalty or
	Where the well converted is a		production tax

horizontal up to 4 unit tracts can qualify

IWI can be piggybacked with other components of MDIP to extend the 12 month extension to a maximum of 18 months

incremental recoverable reserves attributed to the project will be classified as third tier oil for the calculation of Crown royalty and production tax

Where the well converted is a horizontal up to 4 unit tracts can qualify

Where a well is placed on injection before it has produced its HOV and within 5 years of the finished drilling date of the well, the exemption period is extended to 18 months

exemption will be limited to a maximum of 50% of the unit tracts within the approved pressure maintenance project or unit area.

Operator may apply to increase the percentage of unit tracts that qualify for the exemption

no Crown royalty and production tax is payable during

			incremental recoverable reserves attributed to the project will be classified as third tier oil for the calculation of Crown royalty and production tax
HOV Account	HOV account is established for each company who earns HOV under MDIP  Provides companies with flexibility of allocating earned HOV among new wells in accordance with a complex set of rules	HOV Account	one year to assign HOV from existing HOV Account to new wells drilled between January 1 – December 31, 2014  Top up new vertical or horizontal well HOV by a maximum of 2,000 m <sup>3</sup> companies can no longer assign HOV from a well to HOV Account.
HOV Production Period	HOV earned must be produced within 10 years of the finished drilling date of a newly drilled well, or the completion date of a major workover	HOV Production Period	HOV earned must be produced within 10 years of the finished drilling date of a newly drilled well, or the completion date of a major workover
Natural gas Crown royalty and production tax rates	12.5% Crown royalty payable on volume of solution gas sold	Solution Gas Conservation Incentive	no Crown royalty or production tax payable on gas sales from new

	1.2% freehold production tax on payable on volume of solution gas sold		solution gas conservation projects where gas sales commence after January 1, 2014  waiver of royalty/tax to apply to solution gas produced and sold between January 1, 2014 - December 31, 2018  companies to review the feasibility of implementing solution gas conservation
Existing Fiscal Measures		New Fiscal Measures	
Horizontal Well Drainage Units	use horizontal well drainage units to allocate production for the purpose of calculating Crown royalty and production tax	Horizontal Well Drainage Units	use horizontal well drainage units to allocate production for the purpose of calculating Crown royalty and production tax
No maximum Crown royalty and production tax	no Crown royalty or production tax is payable until a well has produced its HOV	Maximum Crown royalty and production tax	maximum Crown royalty rate of 3.0% and maximum production tax rate of 1.0% to apply during HOV production period