

# **Well Drilling Equipment Tax Stakeholder Consultation Report June 2013**

## **Introduction**

The Well Drilling and Equipment Tax (“WDET”) was introduced in 1948 as a way to offset the cost of repairing damage to roads from well drilling activity. The regulation permitting the tax expires as of December 31, 2013, and at the request of Minister Doug Griffiths, review of it was undertaken.

The review was conducted by a stakeholder advisory committee comprised of representatives from the Canadian Association of Petroleum Producers, the Explorers and Producers Association of Canada, the Alberta Association of Municipal Districts and Counties, the Canadian Property Tax Association, individual rural municipalities currently levying the tax, the Alberta Urban Municipalities Association, as well as MLA Richard Starke. A detailed list of representatives can be found in Appendix A.

The initial joint stakeholder meeting was held in Edmonton on February 7, 2013, followed by two small working group meetings (April 25, 2013 and May 9, 2013) and a final joint meeting on May 22, 2013. At the conclusion of the February 7, 2013 meeting, a small working group was struck to scope out short-term options to be considered by the larger group at the May 22, 2013 meeting.

## **Findings**

The review process focused on three components related to the WDET:

- developing understanding between industry and municipal sectors,
- identifying underlying principles, and
- generating options.

The February 7, 2013 meeting focused on creating a common understanding of the issues surrounding the WDET. It provided general agreement that the current arrangement is flawed and does not accurately reflect that many commercial, agricultural and industrial operations use municipal roads. In addition, it was agreed that the current WDET relationship does not represent the cost to address the incremental damage associated with oil and gas industry drilling and completions activities. However, the meeting did result in a general agreement on the following principles to guide any changes to the WDET:

- Simplicity/ Predictability
- Fairness
- Equity
- Transparency
- Consistency across the Province

The group concluded that due to the complexity surrounding the WDET and its administration, a short-term and long-term response is required. This complexity is reflected in changing oil and gas industry practices and that impact to roads are shared among a variety of industries.

## **Conclusion**

### **Short-Term**

The review process reached the following consensus:

- The existing minimum amount of \$290 in the current WDET is too low and does not reflect current conditions,
- The formula on which the WDET is based should be linear as opposed to the current exponential formula,
- The formula should be based on total measured depth of the well,
- Revenues received by municipalities from the WDET should go into a separate account to be used for road maintenance and road repair, and
- That any revisions to the current formula are short term and that the long term solution should take into consideration the layering of other taxes and fees.

The review process did not reach a consensus on what the revised minimum amount should be or the rate per meter above the minimum. Much of the discussion centered on what the purpose of the WDET is and what it covers pertaining to road maintenance. The resulting lack of agreement on the definition of road maintenance/road repair led to the groups bringing forth significantly different rates. As a result it was agreed that both industry and municipalities would prepare a paper outlining their respective perspectives on short term rates for the Minister's consideration. Those papers can be found in Appendix B and C.

### **Long-Term**

The group reached a consensus that the long-term solution should be developed in concert with the *Municipal Government Act* (MGA) review of revenue and taxation options and completed within the timeframe allocated to the current review. The group identified the following topics to be considered as part of the long-term review:

- Abolishing the WDET and investigating other mechanisms to address road maintenance issues:
  - o Many options were discussed,
  - o Appropriate options to be determined through the MGA Review,

- Determine what “incremental road damage” means within the context of the WDET and what portion of those costs should be attributed to the oil and gas industry,
- Road use by industry has changed dramatically since the WDET was enacted and the long-term response should reflect those changing circumstances (changes in load counts due to changes in operating practices),
- The oil and gas industry is no longer the only group with heavy loads that utilizes municipal roads, and
- Provide consultation opportunities for industry and municipalities to plan road use before starting drilling activity.

**Well Drilling Equipment Tax**  
**Stakeholder Consultation Report**  
**Appendix A**  
**Stakeholder Groups**

**Feb 7, 2013 Attendees:**

**Industry**

Aidan Walsh, Explorers and Producers Association of Canada  
Danielle Bielecki, Canadian Property Tax Association (CPTA)  
David Daly, Canadian Association of Petroleum Producers (CAPP)  
Gary Leach, The Explorers and Producers Association of Canada  
Jennifer Blaney, Encana Corp.  
Parm Virdee, Encana/CAPP  
Paul Roett, Canadian Natural Resources Ltd. (CNRL)  
Erin Peachey, Encana  
Shawna Burke-Martin, CPTA  
Vicki Benoit, Perpetual Energy  
Lee Curran, Peyto Energy

**Municipal**

Al Kemmere, AAMDC, Mountain View County  
Barry Donovan, County of Grande Prairie  
Brenda Christie, Brazeau County  
Darren Reedy, Alberta Association of Municipal Districts and Counties (AAMDC)  
Dave Dextraze, County of Wetaskiwin  
Denniece Crout, Clearwater County  
Jack Ramme, Yellowhead County  
Janis Simpkins, M.D. of Greenview  
North Darling, Alberta Urban Municipalities Association (AUMA), Peace River  
Sheila Kitz, Alberta Rural Municipal Administrators' Association (ARMAA), County of St. Paul  
Tim Stone, Saddle Hills County

**Other**

Honourable Richard Starke, MLA, Vermillion-Lloydminster

## **May 22, 2103 Attendees**

### **Municipal**

Al Kemmere, AAMDC, Mountain View County

Barry Donovan, County of Grande Prairie

Darren Reedy, AAMDC

Dave Dextraze, County of Wetaskiwin

Denniece Croutt, Clearwater County

Jack Ramme, Yellowhead County

Janis Simpkins, M.D. of Greenview

John Evasiuk, Brazeau County (for Marco Schoeninger, Brazeau County)

Sheila Kitz, ARMAA, County of St. Paul

Sue Bohaichuck, AUMA (for North Darling, AUMA)

Tim Stone, Saddle Hills County

### **Industry**

Danielle Bielecki, CPTA

David Daly, CAPP

Erin Peachey, Encana

Lee Curran, Peyto Energy

Paul Roett, CNRL

Shawna Burke–Martin, CPTA

Kellen Foreman, Encana

### **Unable to Attend May 22, 2013 Meeting**

North Darling, AUMA

Gary Leach, Small Explorers

Glenn Osmack, Vermilion Energy

Jody Denis, Birchcliff Energy

Parm Virdee, Encana/CAPP

Vicki Benoit, Perpetual Energy

Honourable Richard Starke, MLA, Vermillion-Lloydminster

The review was led by a consultation team from Alberta Municipal Affairs consisting of Bill Diepeveen, Lisa Awid-Goltz, Kristin Lewis, Michael Scheidl and Sheila Young.

**Well Drilling Equipment Tax**  
**Stakeholder Consultation Report**  
**Appendix B**  
**Stakeholder Group Report – Municipal Perspective**  
**(submitted by AAMDC as a representative of rural municipalities)**

# 2013 Well Drilling Equipment Tax Review

## Stakeholder Group Report – Rural Municipal Perspective

### INTRODUCTION

The Alberta Advantage of oil and gas resources is one that benefits many communities and people across our diverse province. However, with any type of development, there are fall out impacts to certain stakeholders. One in particular is the damage to rural municipal road and bridge infrastructure caused by traffic from oil and gas drilling activities.

With technological advances, industry has transitioned to using heavier trucks along with increased volumes of traffic for certain types of drilling. The vast majority of rural municipal roads were not built to accommodate the weights and intensities of this heavy traffic and as a result, municipalities are experiencing rising costs in order to maintain and replace road infrastructure to a standard that adequately serves local residents and industry.

In a city or town, residents expect that their streets are built and maintained to a standard that allows a relatively smooth and safe drive to their destination. In a rural area, residents expect the same service from their local roads – safe transportation to and from home. Thus, when a rural road is damaged by industrial traffic, residents expect the municipality to return it to its previous condition. The challenge facing municipalities is that in most cases, the current Well Drilling Equipment Tax (WDET) does not sufficiently compensate for the damage sustained. As a result, the general tax base is responsible for picking up the shortfall in costs to maintain and rebuild the infrastructure to meet residents' needs.

### ISSUES

#### Road Capacity

The greatest challenge facing both municipalities and industry is the rural municipal road system's lack of structural capacity to accommodate the weight and intensity of today's industrial traffic. There are many examples where industry has recognized this issue and has worked with municipalities to make improvements to the road either before or after use. Despite these types of partnerships, there are also numerous examples of rural roads becoming almost impassable due to oil and gas related traffic.

A key point to consider is that rural municipal roads would not need to be upgraded if it was not for the activities of oil and gas drilling operators.

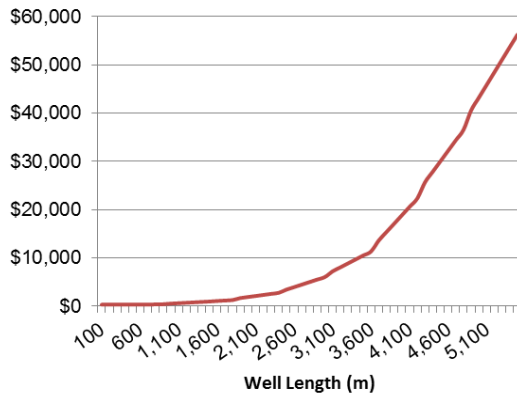
**Fig. 1**  
**Brazeau County**  
**Road with no industrial activity**



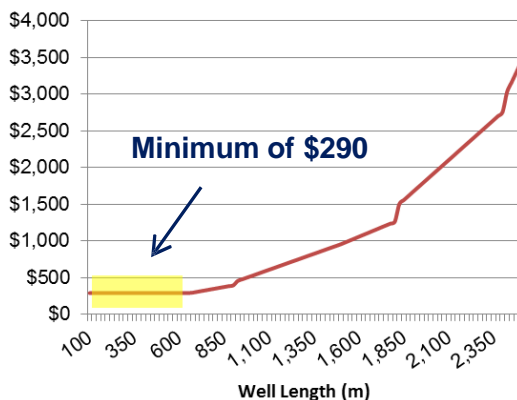
**Fig. 2**  
**Mountain View County**  
**Road damage caused by drilling rig move –**  
**rutting and road edge pushed out**



**Fig. 3**  
Current WDET Formula



**Fig. 4**  
Current WDET Formula – Minimum Tax



## Compensation

In a January 2012 survey of Alberta Association of Municipal Districts and Counties (AAMDC) members, respondents indicated that the current WDET does not sufficiently compensate for the costs of road damage.

Through its review, the rural municipal stakeholder group identified a number of issues with the current WDET.

- The current formula (fig.3) compensates municipalities with deep well drilling to a much greater extent than municipalities with shallow well drilling activity
- The minimum tax of \$290 is deemed insufficient (fig.4)
- Some municipalities collect WDET even if an operator does not access a well site using municipal roads
- The one-time payment does not compensate municipalities for road use damage associated with re-entries on existing wells
- The current model provides no consideration for the number of km travelled on municipal roads
- The current model provides no consideration for whether or not the municipal road is of a specification that can accommodate the type and volume of traffic
- Municipalities have either none or limited means to seek compensation from other industrial road users (i.e. forestry, gravel operators, intensive livestock)

A key element of any type of tax is to understand its intent. With no guiding historical documentation, the rural municipal stakeholder group has proposed that the WDET should compensate for the long-term sub-surface structural damage. The basis for this recommendation is that the structural integrity of each rural road's sub-surface base is being impaired by today's heavy industrial vehicle weights – weights that rural roads were not originally designed for.

## Road-Use Agreements

Municipalities value road-use agreements and bonds as a tool to protect municipalities from one-off situations. These agreements generally require pre and post inspections to identify visual surface damage that needs to be corrected. It should be noted that operators often perform rig moves without notice to municipalities which does not allow for pre inspections and presents a challenge for municipalities in attempting to assess blame for damage.

## Municipal Representation during the Review

The rural municipal stakeholder group acknowledged that the majority of municipalities involved in the review only represented deep well municipalities. The current proposal by industry stakeholders would result in a significant revenue loss for deep well municipalities and a moderate increase in revenue for shallow well municipalities. Since any change in the WDET will likely have differing impacts on shallow and deep well municipalities, it would be recommended that a broader representation of municipalities be involved in any future review of the WDET.



### Financial Reporting

Many municipalities have noted that rural roads are not meeting the planned lifespan of the asset. In some cases, it has been noted that roads built to a 40 year standard are requiring full rebuilds after only 20 years. The municipality in these cases are not only experiencing the cost of constructing the new road, but with the 2009 introduction of tangible capital asset (TCA) reporting, any unamortized portion of the old road must now be expensed in the year of rebuild. This can have a significant impact on a municipality's net bottom line in a particular year. When TCA was introduced, most municipalities set their road amortization schedules based on historical trends (i.e. 40 years). If roads continue to not meet planned lifespans, municipalities will have been over-stating previous year's financial performance due to a lack of amortization of its primary assets. This gap in reporting can also lead to inadequate planning for future capital funding needs.

### History of WDET and Well Assessment Taxation

In May 2009, the Alberta Urban Municipalities Association released a report titled, *Property Assessment and Taxation Issues*. Section 5.44 of the report highlights that the Well Drilling Equipment Tax was in existence before oil and gas wells became subject to property taxation. At the time, the Government of Alberta decided to not include the costs of drilling the well in the construction costs used to calculate the cost approach to value because it deemed the WDET to already be a tax on drilling. The report goes on to note that the WDET is a one-time tax while property tax is an ongoing annual tax.

This begs the question on whether the elimination of the WDET and the inclusion of drilling costs in the well assessment may provide a better system. It would reduce the administrative burden for the province, municipalities, and the oil and gas industry as well as still compensate municipalities for road use.

## PRIMARY RECOMMENDATION

The WDET review has provided a valuable opportunity for both municipalities and industry to become better aware of each other's concerns and issues. However, the rural municipal stakeholder group have found that the timeframe provided has been insufficient to have conducted a quality review of the issue. Determining a fair and equitable amount that oil and gas should be assessed to compensate for such intense road use is an exceptionally complex issue considering the variety of other users of rural roads.

One noted challenge has been the lack of time to collect, present, and audit quantifiable data. In order to reach an agreement, the process needs to move forward based on trusted information. Municipalities believe this can only be successful if undertaken by an independent third party who can provide a common database and examine all factors to identify an appropriate compensation model.

**Fig. 5**  
**County of Wetaskiwin**  
**Road damage from oil and gas drilling**



**Fig. 6**  
**Mountain View County**  
**Damage has required operator to lay pit run gravel in the centre to allow continued movement of trucks**



Some municipalities have acknowledged the challenges in developing a fair WDET model and have questioned if other tax tools would be more appropriate for collecting compensation from heavy road users. One such suggestion would be to allow municipalities to split mill rates for different industries.

**Recognizing the complex nature of this issue and the relatively limited time for review, the rural municipal stakeholder group proposes the following recommendation:**

That the current Well Drilling Equipment Tax Regulation be extended so that a more comprehensive review can be undertaken involving the following considerations:

1. Evaluate the extent and long-term cost of damage attributed to oil and gas drilling traffic activities
2. That the review involve a broader representation of municipalities – equal variety of shallow and deep well municipalities
3. That new tax models be identified and evaluated based on the fairness and equitability to both municipalities and the oil and gas industry
4. That the review be led by a qualified independent third party that can source and develop a common data set to evaluate various compensation model options
5. That the extension be for a period of at least 2 years or to coincide with the MGA review which would allow an opportunity to evaluate the WDET in relation to other types of taxation

## SECONDARY RECOMMENDATION

**If the ministry does not consider an extended review to be a viable option, then the rural municipal stakeholder group proposes the following secondary recommendation:**

That a new Well Drilling Equipment Tax Regulation be set as follows:

1. Change the current exponential formula model to a linear rate formula model
2. Implement a rate of \$4.40 per metre with a minimum tax of \$780
3. That the WDET be expanded to include major reworking of existing well sites
4. That the per metre rate continue to be calculated based on total measured well length
5. That municipalities maintain the flexibility to waive the WDET at their discretion
6. Develop rules for how municipalities must report WDET in financial statements

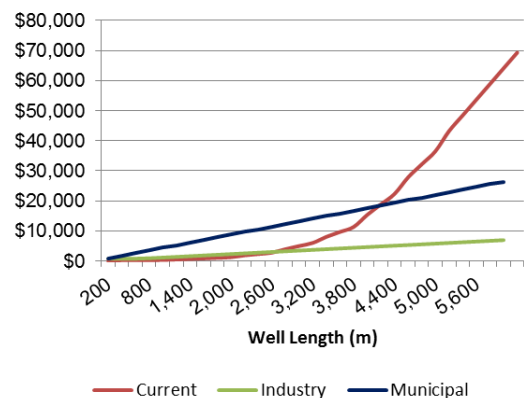
### Formula Model

Throughout the review, municipalities have been unable to identify the historical basis for the current formula's exponential growth. Industry has presented data that the volume of trucking traffic holds a linear correlation with the length of well. Without an opportunity to audit this data, municipalities generally accept this premise and are supportive of a straight line formula model (fig.7).

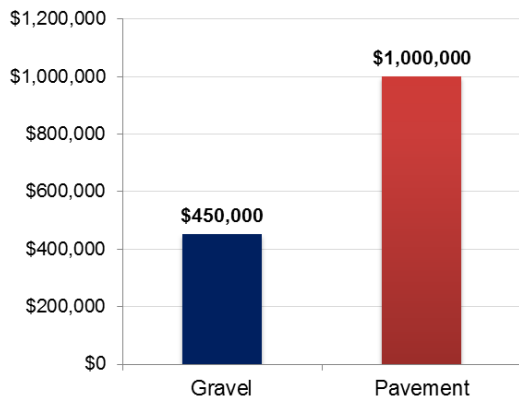
### Development of Proposed Per Metre Rate

The rural municipal stakeholder group has developed its recommendation for the per metre rate based on a case study in Saddle Hills County. This case involved a section of road that had only been used by local residents and oil and gas industry and therefore, provided a clear demonstration of the municipal road damage costs related to oil and gas drilling.

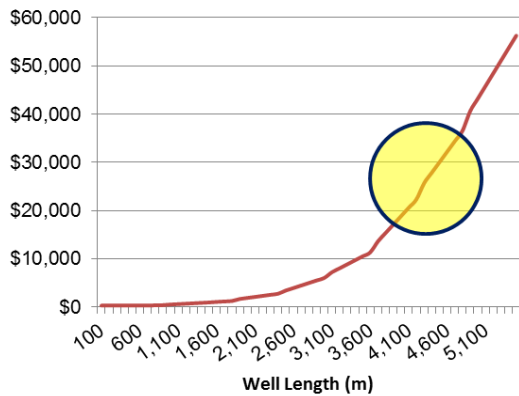
**Fig. 7  
WDET Linear Formula Comparisons**



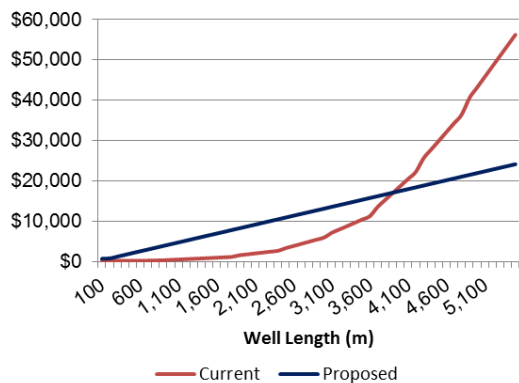
**Fig. 8**  
**Average Tender Cost for Road Construction**



**Fig. 9**  
**Saddle Hills RR 134 – Average WDET Per Well**



**Fig. 10**  
**Municipal WDET Proposal**  
**\$4.40 per metre with a minimum of \$780**



The subject of the case study was range road 134 that intersects with Highway 49. This 5.6 km stretch of road houses five residences and prior to 2010 had not involved any resource-based development. During 2010 to 2012, RR 134 was used by a drilling operator to drill 33 wells. During this time, both the municipality and the operator invested in maintaining the road; however, due to the nature of the activity, the road now requires a full rebuild.

	2010	2011	2012
Number of wells drilled	11	7	15
Average well length (metres)	4,386	4,227	4,359
WDET Collected	\$ 306,860	\$ 166,030	\$ 423,968

Saddle Hills County estimated that 75% of the road damage was directly related to drilling activities. As per Figure 8, the municipal average for gravel road construction is \$450,000 per km. This represents a total project cost of \$2,520,000.

The average depth of the 33 wells was 4,340 metres. Total WDET sourced from the wells amounted to \$896,000. Figure 9 demonstrates that these wells provided compensation at the higher end of the current rate model.

Despite industry concerns that deep well WDET rates are too high, this case demonstrates that those “high” rates only provided revenue to cover 35% of the cost to rebuild the road. The municipality is now responsible for meeting the shortfall using general revenues to rebuild a road that would not have even needed any work if it was not for the drilling activities.

Assuming the rates should compensate for 75% of the \$2.5 million rebuild cost (\$1,890,000), the rate calculates to \$13.20 per metre (fig.11). Recognizing that a rate of \$13.20 per metre would represent a substantial increase in costs to industry, rural municipal stakeholders proposed a lower rate of \$8.80 per metre which was presented during the May 22, 2013 meeting. Based on further analysis after this meeting, the municipal group determined that considering the variety of other heavy road users across the province, it cannot be assumed that oil and gas drilling causes 50% of the damage to rural roads.

Without having a significant data set to determine the impact of each industry on road use, the rural municipal stakeholder group have assumed that oil and gas drilling traffic is responsible for 25% of the road damage across Alberta. Based on this assumption and using the Saddle Hills case study, the rate required to provide for 25% of the rebuild cost amounts to \$4.40 per metre (fig.11 - page 7).

### **Development of Proposed Minimum Rate**

Under the current WDET, any well less than 660 metres in length will have the minimum tax of \$290 applied. Municipal Affairs data indicates that in 2012 there were 9,219 wells drilled. Of that amount, 35% (3,231 wells) would have been charged the minimum tax. Municipalities with shallow well activity still experience significant road damage; however, those municipalities have not considered the WDET to be a viable tool for compensation due to their experience of only receiving \$290 per well.

The rural municipal stakeholder group has acknowledged that the current minimum tax is too low but under the timeframe provided, the group was unable to source any quantifiable data that could justify a specific recommendation to the ministry. As such, the rural municipal stakeholders have deferred to industry's recommendation of \$780.

### **Road Costs**

Municipal roads serve as public transportation routes and as such must be built to a different standard than private industry roads. Since municipalities are the entity responsible for the costs of maintenance and reconstruction of municipal roads, the WDET formula should be based on the actual costs incurred by municipalities. As such, the WDET formula should be based on the average tendered costs that municipalities receive from market bids.

### **Existing Well Sites**

In fall 2011, AAMDC members passed resolution 7-11F, *Municipal Sources of Revenue from Oil and Gas Exploration*, that requests the province to expand the WDET to include high intensity, major reworking of existing well sites. In its current form, the WDET is a one-time tax charged to the well leaseholder in the year in which it is drilled. With the introduction of horizontal drilling and hydraulic fracturing (fracking), many operators are returning to existing well sites to develop resources that were previously inaccessible. These operations typically involve high levels of traffic to truck fluids resulting in significant wear on road infrastructure. Despite this damage, there is no additional compensation to the municipality since the current WDET can only be applied once to each well. Therefore, the rural municipal stakeholder group supports resolution 7-11F and recommends that the WDET be expanded to include major re-workings of existing well sites.

## **FUTURE IMPACTS**

If compensation from the WDET is reduced, the public will still expect municipalities to provide a specific standard in road service. In order to achieve this standard, municipalities will need to use the tools that are available to them such as:

- Increased use of road bans to protect road infrastructure
- Increased use and enforcement of road-use agreements to protect road infrastructure
- Source needed revenue through increases to the non-residential mill rate – unfortunately, this poses a negative impact on all other businesses

## **CASE STUDY – SADDLE HILLS COUNTY**

Figure 11 on the following page provides a summary of the Saddle Hills County wells that were drilled between 2010 and 2012 using RR 134 as the access road. The table shows the WDET that was received under the current regulation and provides a comparison of the amount of WDET that would have been sourced using a linear rate model based on:

- (A) \$4.40 per metre compensates for 25% of total project cost
- (B) \$8.80 per metre compensates for 50% of total project cost
- (C) \$13.20 per metre compensates for 75% of total project cost

Fig. 11  
Supporting Data for Saddle Hills Case Study- RR 134- Well Drilling Equipment Tax

Municipal Average of Tendered Cost for Gravel Road Construction (per km)	\$	450,000								
Total Project Cost (5.6 km)	\$	2,520,000								
<hr/>										
A. 25% of Total Project Cost	\$	630,000								
B. 50% of Total Project Cost	\$	1,260,000								
C. 75% of Total Project Cost	\$	1,890,000								
				Perm Rates Required to provide 25% of Total Project Cost (A)	Perm Rates Required to provide 50% of Total Project Cost (B)	Perm Rates Required to provide 75% of Total Project Cost (C)				
	Min. Tax	\$ 7801	\$ 7801	\$ 7801	\$ 7801	\$ 7801	\$ 7801			
Year	Well Length (m)	Current WDET	Per Metre	\$ 6.261	\$ 4.40	\$ 8.80	\$ 13.20			
2012	4,560	31,330	\$	28,546	\$	20,064	\$	40,128	\$	60,192
2012	4,200	22,333	\$	26,292	\$	18,480	\$	36,960	\$	55,440
2012	4,314	25,977	\$	27,006	\$	18,982	\$	37,963	\$	56,945
2012	4,761	35,703	\$	29,804	\$	20,948	\$	41,897	\$	62,845
2012	4,605	32,309	\$	28,827	\$	20,262	\$	40,524	\$	60,786
2012	4,647	33,223	\$	29,090	\$	20,447	\$	40,894	\$	61,340
2012	4,327	26,260	\$	27,087	\$	19,039	\$	38,078	\$	57,116
2012	4,385	27,522	\$	27,450	\$	19,294	\$	38,588	\$	57,882
2012	4,610	32,418	\$	28,859	\$	20,284	\$	40,568	\$	60,852
2012	5,055	44,658	\$	31,644	\$	22,242	\$	44,484	\$	66,726
2012	4,490	29,806	\$	28,107	\$	19,756	\$	39,512	\$	59,268
2012	4,290	25,454	\$	26,855	\$	18,876	\$	37,752	\$	56,628
2012	2,415	2,978	\$	15,118	\$	10,626	\$	21,252	\$	31,878
2012	4,217	23,866	\$	26,398	\$	18,555	\$	37,110	\$	55,664
2012	4,505	30,133	\$	28,201	\$	19,822	\$	39,644	\$	59,466
2011	4,545	31,003	\$	28,452	\$	19,998	\$	39,996	\$	59,994
2011	4,150	21,463	\$	25,979	\$	18,260	\$	36,520	\$	54,780
2011	3,924	17,531	\$	24,564	\$	17,266	\$	34,531	\$	51,797
2011	4,440	28,718	\$	27,794	\$	19,536	\$	39,072	\$	58,608
2011	4,285	25,346	\$	26,824	\$	18,854	\$	37,708	\$	56,562
2011	4,055	19,810	\$	25,384	\$	17,842	\$	35,684	\$	53,526
2011	4,190	22,159	\$	26,229	\$	18,436	\$	36,872	\$	55,308
2010	4,265	24,910	\$	26,699	\$	18,766	\$	37,532	\$	56,298
2010	4,293	25,520	\$	26,874	\$	18,889	\$	37,778	\$	56,668
2010	5,080	45,311	\$	31,801	\$	22,352	\$	44,704	\$	67,056
2010	4,065	19,984	\$	25,447	\$	17,886	\$	35,772	\$	53,658
2010	4,847	39,227	\$	30,342	\$	21,327	\$	42,654	\$	63,980
2010	4,850	39,306	\$	30,361	\$	21,340	\$	42,680	\$	64,020
2010	4,253	24,649	\$	26,624	\$	18,713	\$	37,426	\$	56,140
2010	4,120	20,941	\$	25,791	\$	18,128	\$	36,256	\$	54,384
2010	3,935	17,722	\$	24,633	\$	17,314	\$	34,628	\$	51,942
2010	4,080	20,245	\$	25,541	\$	17,952	\$	35,904	\$	53,856
2010	4,455	29,045	\$	27,888	\$	19,602	\$	39,204	\$	58,806
TOTAL WDET		\$896,858	\$	896,513	\$	630,137	\$	1,260,274	\$	1,890,412

**Well Drilling Equipment Tax**  
**Stakeholder Consultation Report**  
**Appendix C**  
**Stakeholder Group Report – Industry Perspective**

## **Industry WDET Proposal**

### **Background**

The WDET was first enacted in 1948 under the Alberta Municipal Government Act to authorize municipalities to pass a “well drilling equipment tax bylaw” to “impose a tax in respect of equipment used to drill a well for which a licence is required under the Oil and Gas Conservation Act”. The intent of the WDET is to compensate municipalities for the incremental damage to municipal roads caused by oil and gas drilling activity.

Given the original intent of the WDET, the industry members of the sub-group advocate that the revised equation should be based on the following principles:

- Fairness and equity for both industry and municipalities
- Representative of incremental damage to municipal roads caused by activities related to oil and gas industry including construction, drilling and completions
- Efficient administration

To accurately assess the WDET as it relates to current operating practices, data was collected for typical wells which included depth and load count by resource / extraction technique, and estimated and actual WDET charged. The data was analyzed to understand the relationships between well depth and load count, as well as WDET to depth in comparison to typical industry road use fees schedule (maintenance costs).

The analysis reveals that the relationship of well depth to load count is not exponential but in fact is a linear relationship. Since load count is directly related to the damage incurred on the roads and the intent of the WDET is to account for the incremental damage caused by drilling and completions activity, industry proposed to develop an equation based on this linear relationship and used industry road use fees as a template (fees that industry players charge to each other to compensate for road maintenance based on well count and distance traveled).

### **Industry/Municipalities - Aligned**

After discussing the proposal, the sub-group agreed to the following:

1. The current WDET (exponential relationship) is not representative of current operating practices and needs to be revised.
2. The revised equation should reflect the linear relationship of well depth to loads.
3. The equation should remain administratively simple – measured depth should remain the metric for determining the WDET value.

### **Industry/Municipalities – Not Aligned**

In addition, Industry feels that the following principles should be applied to ensure the WDET is accurately representing the impacts as a result of drilling and completions activity:

1. Industry advocates that the WDET should assume that municipal roads used by oil and gas companies are built to industry-specifications to address the immediate impacts of our

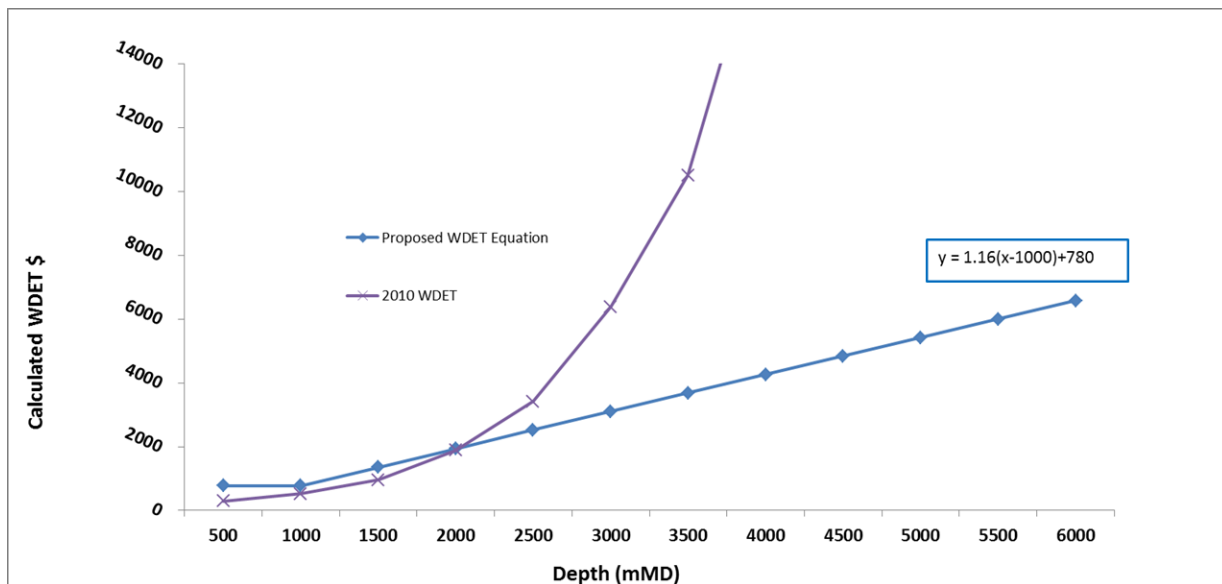
activities, as the municipalities are currently collecting other sources of revenue which can address additional road maintenance if required;

- The WDET is not meant to address long-term impacts or the impacts of other users
2. Industry advocates that the purpose of the WDET is not to build or upgrade roads, but to compensate for incremental damage as the result of oil and gas drilling and completions activity (and not for other industrial or commercial activity); as such the proposed equation reflects typical maintenance costs experienced by industry

### **Industry Proposal**

To align with the overarching principles, the aligned concepts and the original intention of the WDET, industry proposes a linear relationship based on industry road use fees.

The industry-proposed equation is displayed on the following chart. The exponential curve represents how the WDET is currently calculated based on the 2010 rate increase, and reflects how longer wells are unfairly penalized.



Graph 1: Industry WDET Proposal vs Current WDET

### **Proposed Equation: $y = 1.16(x - 1000) + 780$**

1.  $y =$  WDET
2.  $x =$  measured depth (well length)
3. Minimum WDET = \$780/well @ 1000m
4. Slope of the line = 1.16 (represents the linear relationship between the minimum WDET and the deep well maintenance cost data point)



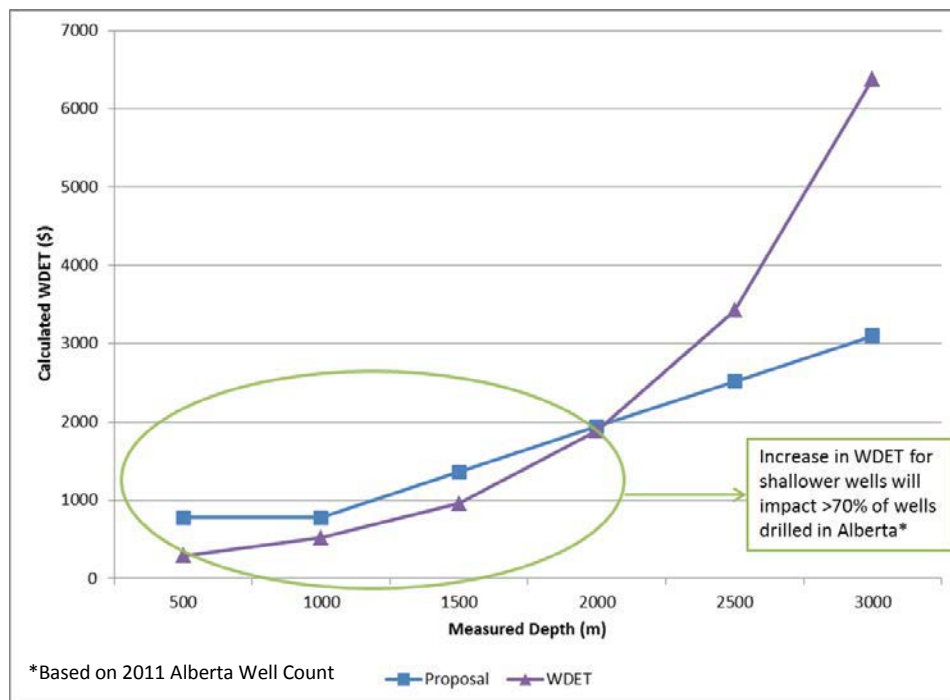
### Methodology:

1. Calculate a \$ value for maintenance on a per well basis based on industry road use fees for deep multi-well pad wells using a typical distance traveled in counties where longer drilling is conducted (industry trend going forward).
2. Using that number and understanding the number of loads, determine a \$/load.
3. Apply the \$/load to the number of loads for a shallow well (1000m) and determine the maintenance costs for wells drilled to 1000m.
4. Once we understood what our shallow and deep maintenance costs would look like, we were able to calculate what the linear relationship between the two would be.
5. In addition, since the # of loads between a 500m well and a 1000m well do not change drastically, we set the minimum WDET to the 1000m maintenance cost data point of \$780.

### Key Observations

The following are the key observations based on the Industry proposed equation (see graph below):

1. The shallow wells (wells less than 2053m measured depth) will see an increase in the WDET paid as the minimum has been increased to better represent the road impact of shallow well drilling and completion operations. This will also serve to redistribute the road maintenance funds collected across the Province.
2. The deeper wells (wells longer than 2053m measured depth) will see a decrease in WDET to better reflect the incremental damage caused by well drilling and completions operations.



Graph 2: Impact of Industry Proposal on Wells drilled less than 3000m in measured depth

### **Rationale**

The use of standard industry road use fees as a reference for maintenance costs provides a fair representation of the actual costs associated with incremental damage due to drilling and completions activity. Road use fees represent the road maintenance costs industry would charge another industry player (oil and gas or other industry) to travel on our roads and given the competitive nature of the industry, would represent the higher range in terms of road maintenance fees.

In addition, given that road damage is related to the number of loads and the equation is based on actual maintenance costs and \$/load, the industry approach is an accurate representation of the funds required to address the incremental damage.

The Municipalities are currently collecting additional funds that can be applied to road use maintenance (property tax, road use fees, road bonds with non-refundable portions, etc.). The layering of taxation creates cumulative road burdens that erode competitiveness and do not represent the damage to roads caused by industry activity. By ensuring that the WDET is representative of the incremental damage caused during the drilling and completions activity, the chance of the collection of overlapping maintenance fees is reduced.

### **Go Forward**

Going forward, Industry recognizes there are longer-term concerns with respect to road-related matters that are outside the scope of the WDET (i.e. layering of fees including WDET, road use fees, bonds, industry-paid maintenance and construction, etc.), which will be addressed through the Municipal Government Act Review (MGAR). Municipalities currently collect taxes for oil and gas activity through annual linear and pipeline taxes, property, equipment and maintenance taxes, which provide significant annual funding to the municipalities.

In addition, within the Industry proposal, there are still inequities that impact Industry. All municipalities collect if a well is drilled within their municipal boundaries, regardless of whether industry is using their roads to access their well sites. This is another aspect that will need to be addressed with respect to the WDET as part of the larger MGA review.