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## **OIL SANDS INFORMATION BULLETIN 2014-08**

### **Subject: Monthly Bitumen Density Reporting for Bitumen Valuation Methodology (BVM)**

This Information Bulletin is to reaffirm the reporting requirements for monthly bitumen density submissions necessary for the administration of the [Bitumen Valuation Methodology \(Ministerial\) Regulation](#).

Letters sent by the Department of Energy (Alberta Energy) to operators with projects subject to BVM in late 2008 and early 2009 instructed these operators to value their bitumen based on the rolling average of the last 6 density measurements.

Under the authority of section 6 of the [Oil Sands Royalty Regulation, 2009](#), the Department is reminding operators to ensure that all bitumen densities, for the purpose of BVM, be reported based on the rolling average of the last 6 density measurements unless instructed otherwise. The prescribed methodology applies for reporting monthly densities on all royalty forms (e.g., Good Faith Estimates (GFEs), Monthly Royalty Calculation (MRCs), and Annual Reports (End of Period Statements)).

For new Projects to which BVM applies, the rolling average of the available information should be used until 6 suitable density measurements have been obtained, unless instructed otherwise by the Department. To clarify these reporting requirements, please refer to the attached example methodology calculation outlined in [Appendix A](#).

Additionally, both the monthly lab and rolling average density measurements should be reported to the nearest 0.1 kg/m<sup>3</sup> (i.e., to a maximum of one decimal place, e.g., 1008.9 kg/m<sup>3</sup>). However, if one decimal place is beyond the level of accuracy or error associated with the test method employed, the density should be reported to the nearest whole number (e.g., 1009 kg/m<sup>3</sup>). Please refer to [Oil Sands Information Bulletin 2014-06](#) for clarification.

Questions regarding this Information Bulletin may be directed to:

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**Appendix A: Example Calculation**

The “Measured Lab Density” column of the table below shows density measurements performed at a laboratory taken during the indicated months of a particular year (density measurements highlighted in green).

Month	Measured Lab Density (kg/m <sup>3</sup> )	6 Month Rolling Average Density to be reported on GFE/MRC/EOPS (kg/m <sup>3</sup> )
January	1011.2	
	1014.5	1012.9
February	1014.2	
	1013.8	1013.4
March	1013.7	
	1011.8	
	1011.5	1013.3
April	1014.0	
	1015.8	1013.4
May	1019.3	
	1018.7	1015.2
June	1011.6	
	1011.2	1015.1
July	1010.7	
	1010.3	1013.6
August	1019.2	
	1019.9	1013.8
September	1019.1	
	1020.2	1016.6
October	1021.6	
	1020.1	1020.0
November	1022.4	
	1020.2	1020.6
December	1015.3	
	1016.6	1019.4

The monthly density submissions should be calculated based on the rolling average of the last 6 measurements, regardless of the number of density measurements taken in a particular month. It should not be simply calculated based on the average density of the last 6 months. Finally, the monthly density submissions should also be rounded to the nearest 0.1 kg/m<sup>3</sup>. Specifically,

March

March Monthly Density Submission = (1014.5+1014.2+1013.8+1013.7+1011.8+1011.5)/6 = **1013.3 kg/m<sup>3</sup>**

In this example, the March monthly density submission should be calculated based on the average of the following density measurements:

- Second January density measurement (1014.5 kg/m<sup>3</sup>)
- Both February density measurements (1014.2 kg/m<sup>3</sup> and 1013.8 kg/m<sup>3</sup>)
- All three March density measurements (1013.7 kg/m<sup>3</sup>, 1011.8 kg/m<sup>3</sup>, and 1011.5 kg/m<sup>3</sup>)

It should not be calculated based on the average of the last 6 months (average density of October, November, December, January, February, March).

#### April

April Monthly Density Submission = (1013.8+1013.7+1011.8+1011.5+1014.0+1015.8)/6 =  
**1013.4 kg/m<sup>3</sup>**

In this example, the April monthly density submission should be calculated based on the average of the following density measurements:

- Second February density measurement (1013.8 kg/m<sup>3</sup>)
- All three March density measurements (1013.7 kg/m<sup>3</sup>, 1011.8 kg/m<sup>3</sup>, and 1011.5 kg/m<sup>3</sup>)
- Both April density measurements (1014.0 kg/m<sup>3</sup> and 1015.8 kg/m<sup>3</sup>)

It should not be calculated based on the average of the last 6 months (average density of November, December, January, February, March, April).