



MOSAIC PRICE FILE - RELEASE NOTES

Enclosed within this .zip are files for Mosaic 2016 and prior. These files contain all tax, royalty, par/reference pricing, benchmark pricing and exchange rate information relevant to the most recent month end. It is important to load all four (4) decks for the associated forecast month.

These files also contain Alberta Modernized Royalty Framework (MRF) data. These files may be imported into either MRF or pre-MRF versions of the program.

If you encounter any difficulties, please do not hesitate to [contact Sproule](#).

New This Month (2017-07-31):

Changes for this month's release include those made to incorporate updates to pricing, exchange rate assumptions and inflation as of July 31, 2017. Please note that these files now include pricing forecasts needed for the MRF and there are certain assumptions that have been made regarding the MRF pricing forecasts. These assumptions include forecasts of hydrocarbon par pricing for oil, natural gas, natural gas liquids and the C* Capital Cost Index (C* CCI). These values may require updating once the AER releases more clarifying details regarding the MRF calculations.

Price Forecast Adjustment Notice – July 31, 2017

Sproule has adjusted its July 31, 2017 price forecast as outlined in the table below:



	CAD/USD Exchange Rate		GBP/USD Exchange Rate		Edmonton Butane as a % of WTI	
	June 30, 2017 Forecast	July 31, 2017 Forecast	June 30, 2017 Forecast	July 31, 2017 Forecast	June 30, 2017 Forecast	July 31, 2017 Forecast
2017	0.78	0.80	1.35	1.35	68%	65%
2018	0.78	0.80	1.40	1.35	70%	70%
2019	0.82	0.82	1.40	1.35	70%	70%
2020	0.85	0.85	1.40	1.35	70%	70%
2021	0.85	0.85	1.40	1.35	70%	70%

In the last month, we have seen the Canadian dollar strengthen with respect to the US dollar largely because of the Bank of Canada's recent interest rate hike. Sproule has increased its outlook for the CAD/USD exchange for 2017 and 2018 from 0.78 to 0.80 for both years.

Uncertainty surrounding the effects of Brexit has continued to put downward pressure on the British Pound. Sproule has revised our GBP/USD outlook down from 1.40 to 1.35 long term.

Edmonton Butane prices have been lower than anticipated throughout 2017. Sproule has revised our Edmonton Butane price outlook down from 68% to 65% of WTI for the remainder of 2017. Longer term, we still anticipate strong demand for Edmonton Butane from refineries and SAGD operations.

Lastly, on the "Par Prices" tab of our forecast spreadsheet, we have removed the NGL Transportation and Fractionation Allowances numbers as these numbers are no longer being made readily available each month.