#### Gas and In-Stream Component Reference Prices

Gas Reference Price		\$1.48 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$1.760 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$1.504 /GJ	
Pipeline Fuel/Loss Factor	0.982	
Price Before Amendments	\$1.477 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$1.477 /GJ	
Reference Price	\$1.48 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.251 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(1.760 - 0.256) \times 0.982 + 0.000 + 0.000 = 1.477$ 

Methane ISC Reference Price	\$1.48 /GJ
Breakdown:	
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$1.760 /GJ
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ
Price Before Pipeline Factor	\$1.504 /GJ
Pipeline Fuel/Loss Factor	0.982
Price Before Amendments	\$1.477 /GJ
Special Amendments	\$0.000 /GJ
Prior Period RP Amendments	\$0.000 /GJ
Calculated RP (Price Before Rounding)	\$1.477 /GJ
Reference Price	\$1.48 /GJ

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP = (1.760 - 0.256) x 0.982 + 0.000 + 0.000 = 1.477

Methane ISC Par Price \$1.48 /GJ

\$0.251 /GJ

Note: Calculations may not agree due to rounding.

Adjusted Intra-Alberta Transportation Deduction



#### Gas and In-Stream Component Reference Prices

Ethane ISC Reference Price		\$1.48 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$1.760 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$1.504 /GJ	
Pipeline Fuel/Loss Factor	0.982	
Price Before Amendments	\$1.477 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$1.477 /GJ	
Reference Price	\$1.48 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.251 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(1.760 - 0.256) \times 0.982 + 0.000 + 0.000 = 1.477$ 

Propane ISC Reference Price	\$1.48 /GJ	J
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$1.760 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$1.504 /GJ	
Pipeline Fuel/Loss Factor	0.982	
Price Before Amendments	\$1.477 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$1.477 /GJ	
Reference Price	\$1.48 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.251 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(1.760 - 0.256) \times 0.982 + 0.000 + 0.000 = 1.477$ 

Note: Calculations may not agree due to rounding.



### Gas and In-Stream Component Reference Prices

Butanes ISC Reference Price		\$1.48 /GJ
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$1.760 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$1.504 /GJ	
Pipeline Fuel/Loss Factor	0.982	
Price Before Amendments	\$1.477 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$1.477 /GJ	
Reference Price	\$1.48 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.251 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(1.760 - 0.256) \times 0.982 + 0.000 + 0.000 = 1.477$ 

Pentanes ISC Reference Price	\$1.48 /GJ	J
Breakdown:		
Nova Inventory Transfer Purchase Price-Alberta Market Price from NGX	\$1.760 /GJ	
Intra-Alberta Transportation Deduction (IATD)	\$0.256 /GJ	
Price Before Pipeline Factor	\$1.504 /GJ	
Pipeline Fuel/Loss Factor	0.982	
Price Before Amendments	\$1.477 /GJ	
Special Amendments	\$0.000 /GJ	
Prior Period RP Amendments	\$0.000 /GJ	
Calculated RP (Price Before Rounding)	\$1.477 /GJ	
Reference Price	\$1.48 /GJ	
Adjusted Intra-Alberta Transportation Deduction	\$0.251 /GJ	

Calculated RP = (AMP from NGX - IATD) x Pipeline Fuel/Loss Factor + Prior Period RP Amendments + Special Amendments Calculated RP =  $(1.760 - 0.256) \times 0.982 + 0.000 + 0.000 = 1.477$ 

Note: Calculations may not agree due to rounding.



### Gas and In-Stream Component Reference Prices

#### Intra-Alberta Transportation Deduction (IATD) Calculation

Average Firm Service Receipt Rate on NOVA Gas Transmission Limited (NGTL)	\$315.29	/1000m³
Average Number of Days in a Month	30.500	days
Average Heat Content on all NGTL Receipt Meter Stations	40.40	/GJ/1000m <sup>3</sup>
Intra-Alberta Transportation Deduction (IATD)	\$0.256	/GJ

#### **Pipeline Fuel/Loss Factor Calculation**

Alberta Fuel Usage and Measurement Variance on NGTL	1.79	%
Pipeline Fuel/Loss Factor	0.982	

#### Adjusted Intra-Alberta Transportation Deduction (AIATD) Calculation

Intra-Alberta Transportation Deduction (IATD)	\$0.256	/GJ
Pipeline Fuel/Loss Factor	0.982	
Adjusted Intra-Alberta Transportation Deduction (AIATD)	\$0.251	/GJ



### Gas and NGL Reference Prices

Natural Gas Liquids Reference Prices and Par Prices		
Ethane Reference Price	\$1.48	/GJ
Ethane Par Price	\$1.48	/GJ
Propane Spec Reference Price	\$222.68	/m³
Propane Mix Reference Price	\$157.53	/m³
Butanes Spec Reference Price	\$302.74	/m³
Butanes Mix Reference Price	\$249.91	/m³
Pentanes Plus Spec Reference Price	\$622.68	/m³
Pentanes Plus Mix Reference Price	\$606.16	/m³
Pentanes Plus Par Price	\$622.68	/m³
Sulphur Default Price	\$4.98	/tonne

Note: Calculations may not agree due to rounding.

