

TEST REPORT

1.	Name of substance	:	WABASCA HEAVY CRUDE OIL
2.	General data		
2.1	Composition	:	100% Petroleum Crude Oil
2.2	Proper Shipping Name	:	Petroleum Crude Oil
2.3	UN Number	:	UN 1267
2.4	Molecular formula	:	Complex mixture of hydrocarbons
2.5	Physical form	:	Liquid
2.6	Colour	:	Brown/black
2.7	Density	:	0.950 kg/m ³ @ 15° Celsius
2.8	Last Sample Date	:	August 29, 2016*
2.9	Laboratory	:	Exova
3.	Flash Point Determination		
3.1	Method	:	ASTM 93-08, Pensky-Martins Closed Cup (Automatic)
3.2	Result	:	<-5° Celsius
4.	Initial Boiling Point Determination		
4.1	Method	:	ASTM D-7169 Standard Test Method for Boiling Point Distribution of Samples with Residues Such as Crude Oils and Atmospheric and Vacuum Residues by High Temperature Gas Chromatography
4.2	Result	:	35.6° Celsius
5.	Class Determination		
5.1	Method	:	<i>TDG Regulations Part 2, 2.18 Class 3 Flammable Liquids</i>
5.2	Criteria	:	<i>(1)(a) Flash point ≤ 60°C in closed-cup test</i>
5.3	Result	:	Class 3 substance
6.	Packing Group Determination		
6.1	Method	:	<i>TDG Regulations Part 2, 2.19 Packing Groups</i>
6.2	Criteria	:	<i>(1)(a) Flash Point ≤23°C; Initial Boiling Point ≤35°C</i>
6.3	Result	:	Packing Group I
7.	Conclusion	:	UN1267, Petroleum Crude Oil, Class 3, PG I
7.1	Date	:	October 28, 2016

*The latest laboratory results available on request.