

Plains Midstream Canada, ULC

NGL Specifications

Applicable for Co-Ed Pipeline, High Prairie Frac Plant, Buck Creek Low Ethane Truck Terminal, Plains Fort Saskatchewan Frac Plant

Quality	Test Methods	Units	Specifications
Compositional Analysis			
Methane	ASTM D2163	LV%	Only that minimal quantity unavoidably extracted by normal distillation methods.
Ethane	ASTM D2163	LV%	≤2 % of the propane content of the NGL
Propane	ASTM D2163	LV%	Any combination of these components that meet the physical specifications and contamination restrictions outlined elsewhere within this specification.
Butane			
Pentanes and heavier			
Vapour Pressure (at 100°F/37.8°C, max)	ASTM D1267	psig/kPa	145psig/ 1000kPa
Copper Strip Corrosion (max)	ASTM D1838		1B
Hydrogen Sulphide (H ₂ S)	ASTM D5623	ppm (wt H ₂ S)	Any amounts that are consistent with the copper strip limitations, typically less than 2 ppm (wt)
Carbonyl Sulphide (COS)	ASTM D5623	ppm (wt COS)	<20
Methyl and Ethyl Mercaptan	ASTM D5623	ppm (wt CH ₄ S + C ₂ H ₆ S)	<150
Total Sulphur	ASTM D6667	ppm (wt S)	<250
Receipt Temperature			
Minimum		°C	-10
Maximum		°C	40
Particulate Concentration		grams/m ³	No more than 20 grams per m ³ of solids shall be collected when tested using a 5 micron filter in accordance with the developed and accepted lab procedures for Millipore Filter Testing.
Free Water Content			No free or entrained water at -15oC and the saturation vapour pressure of the mixture. In any event, maximum water content shall not exceed 300 ppm wt.

Note: In addition to the above quality specifications, the product shall also be free of: catalyst poisons, olefins, organic halides, fluorides, hydrogen fluorides, carbon dioxide, oxygenates, methanol, impurities and other objectionable substances which any be injurious to the pipelines, or downstream facilities, or which may interfere with transmission through pipelines, or which may result in un-marketable product in the system or interconnected downstream facilities.

Revised: 1-Apr-21

Plains Midstream Canada, ULC
NGL Specifications
Buck Creek (High Ethane Truck Terminal)

Quality	Test Methods	Units	Specifications
Compositional Analysis			
Methane	ASTM D2163	LV%	Defined by vapor pressure limit
Ethane	ASTM D2163	LV%	Defined by vapor pressure limit
Propane	ASTM D2163	LV%	Any combination of these components that meet the physical specifications and contamination restrictions outlined elsewhere within this specification.
Butane			
Pentanes and heavier			
Vapour Pressure (at 30°C; max)	ASTM D1267	kPa	<1400
Copper Strip Corrosion (max)	ASTM D1838		1B
Hydrogen Sulphide (H ₂ S)	ASTM D5623	ppm (wt H ₂ S)	Any amounts that are consistent with the copper strip limitations, typically less than 2 ppm (wt)
Carbonyl Sulphide (COS)	ASTM D5623	ppm (wt COS)	<20
Methyl and Ethyl Mercaptan	ASTM D5623	ppm (wt CH ₄ S + C ₂ H ₆ S)	<150
Total Sulphur	ASTM D6667	ppm (wt S)	<250
Receipt Temperature			
Minimum		°C	-10
Maximum		°C	30
Particulate Concentration		grams/m ³	No more than 20 grams per m3 of solids shall be collected when tested using a 5 micron filter in accordance with the developed and accepted lab procedures for Millipore Filter Testing.
Free Water Content			No free or entrained water at -15oC and the saturation vapour pressure of the mixture. In any event, maximum water content shall not exceed 300 ppm wt.

Note: **In addition to the above quality specifications, the product shall also be free of:** catalyst poisons, olefins, organic halides, fluorides, hydrogen fluorides, carbon dioxide, oxygenates, methanol, impurities and other objectionable substances which any be injurious to the pipelines, or downstream facilities, or which may interfere with transmission through pipelines, or which may result in un-marketable product in the system or interconnected downstream facilities.

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