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Skelly-Belvieu Pipeline Company, L.L.C.

**Skelly-Belvieu Pipeline
Natural Gas Liquids Specifications**

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Changed company name, reformatted, administrative changes.

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Skelly-Belvieu Pipeline Company, L.L.C.

**Skelly-Belvieu Pipeline
Natural Gas Liquids Specifications**

Product Index

Product Name	Destination(s)	Trac66 Product Code(s)
NGL, Demethanized NGL Mix (Y-1 Grade)	Mont Belvieu, TX	NY1
NGL Products, Propane	Mont Belvieu, TX	NP1
NGL Products, Butane, Normal	Mont Belvieu, TX	NNB
NGL Products, Iso-Butane	Mont Belvieu, TX	NIB
NGL Products, Ethane/Propane Mix ("E/P Mix")	Mont Belvieu, TX	EP
NGL Products, Propylene, Refinery Grade (RGP, or "P/P Mix")	Mont Belvieu, TX	PP

Effective Date: 1/1/2016

Skelly-Belvieu Pipeline Company, L.L.C.

Destinations:
Mont Belvieu, TX

Trac66 Code(s):
NY1

Skelly-Belvieu Pipeline Natural Gas Liquids Specifications

NGL, Demethanized NGL Mix (Y-1 Grade)

Property	Test Method	Units	Min	Max	Specific	Note#
Composition- See Below	GPA-2186	lv%				
Carbon Dioxide, lv% of Ethane lv%	GPA-2186	lv%		.35		
Methane, lv% of Total lv%	GPA 2186	lv%		.5		
Methane, lv% of Ethane lv%	GPA-2186	lv%		1.5		
Ethane, lv%	GPA-2186	lv%	report			
Aromatics, lv%	GPA-2186	lv%		10.0		
Olefins, lv%	GPA-2186	lv%		1.0		
Vapor Pressure	D2163 @ 100°F	psig		600		
Copper Strip Corrosion	D1838 @ 100°F for 1 hr	Rating		1		
Sulfur, Total	D2784	ppmw		1200		
Sulfide, Hydrogen (H2S)	ASTM D2420		pass (neg)			
Distillation- End Pt.	D2887	Deg F		375		
Color, Saybolt	D156		+25			
Moisture Content- Free Water	Visual @ 34°F			None		1
Product Temperature, <65 mole%		Deg F	40	100		
Other Deleterious Substances	Inspection		see note			2
Test Methods	See Note					3
Most Current Version	See Note					4

Notes:

1. No moisture (free water) shall be deemed to be contained within the Y-1 product being inspected if no more than one (1) tablespoon of a second phase liquid comprised of free water, methanol, glycol, amine, or other aqueous solutions is present within the fluid sample drained from the bottom of the meter strainer basket located at the Delivery Point. If more than one (1) tablespoon of any such substances is visibly present in the inspection container, then the NGL's so delivered shall be deemed to be OFF Specification.
2. This specification defines only a basic purity for this product. This product is to be free of any contamination or impurities that might render the product unusable for its commonly used applications, or may be injurious to the pipeline's property or the property of 3rd parties, or may interfere with its transmission through the pipeline. Specific contaminants include (but are not limited to) dirt, rust, scale, and other types of solid contaminants, gum, gum-producing substances, oil, inhibitors, amines, caustics, chlorides, heavy metals, glycol, oxygenates, and inorganic gases or any compound added to enhance the ability to meet these specifications.
3. Test methods designated with the letter "D" are ASTM test methods. The most recent year revision shall be used.
4. The most current version of this specification can be found on the Phillips 66 Pipeline website, www.phillips66pipeline.com.

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Destinations:
Mont Belvieu, TX

Trac66 Code(s):

NP1

Skelly-Belvieu Pipeline Natural Gas Liquids Specifications

NGL Products, Propane

Property	Test Method	Units	Min	Max	Specific	Note#
Composition, Propane	D2163	lv%	90.0			
Composition, Propylene	D2163	lv%		5.0		
Composition, Butane & heavier	D2163	lv%		2.5		
Copper Strip Corrosion	D1838	Rating		1		
Lead Acetate	D2420			Neg		
Moisture Content- Freeze Valve	D2713		Pass			
Residual Matter, Oil Stain	D2158		Pass			1
Residual Matter, Residue	D2158	ml		0.05		
Specific Gravity @ 60/60F	D1657		.500	.510		
Sulfur, Total	D4468, D5623, D6667	ppmw		123		
Vapor Pressure @ 100F	D1267, D2598	psig		205		2
Volatile Res., 95% Evap	D1837	deg F		-37		
Other Deleterious Substances	Inspection		see note			3
Test Methods	See Note					4
Most Current Version	See Note					5

Notes:

1. Product shall not yield a persistent oil ring when 0.3 ml of solvent residue mix is added in 0.1 ml increments to a white, medium grade filter paper and examined in daylight after two minutes.
2. The referee method will be ASTM D1267.
3. This specification defines only a basic purity for this product. This product is to be free of any contamination or impurities that might render the product unusable for its commonly used applications, or may be injurious to the pipeline's property or the property of 3rd parties, or may interfere with its transmission through the pipeline. Specific contaminants include (but are not limited to) dirt, rust, scale, and other types of solid contaminants, gum, gum-producing substances, oil, inhibitors, amines, caustics, chlorides, heavy metals, glycol, oxygenates, and inorganic gases or any compound added to enhance the ability to meet these specifications.
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Skelly-Belvieu Pipeline Company, L.L.C.

Destinations:
Mont Belvieu, TX

Trac66 Code(s):

NNB

**Skelly-Belvieu Pipeline
Natural Gas Liquids Specifications**

NGL Products, Butane, Normal

Property	Test Method	Units	Min	Max	Specific	Note#
Comp.- Normal Butane	D2163	lv%	94.0			
Comp.- Propylene, Propane & Lighter	D2163	lv%		.35		
Comp.- Iso-butane	D2163	lv%		6.0		
Comp.- Pentanes & Heavier	D2163	lv%		1.5		
Comp.- Hexanes & Heavier	D2163	lv%		.05		
Comp.- Total Olefins	D2163	lv%		.35		
Comp.- Butadiene	D2163	lv%		.01		
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Fluorides	UOP 619	ppmw		1.0		1
Moisture Content- Free Water	Visual			None		
Oxygenates, Total	UOP-845	ppmw		50.0		
Oxygenates, Methanol	UOP-845	ppmw		50.0		
Oxygenates, IPA & Heavier Alcohols	UOP-845	ppmw		5.0		
Oxygenates, MTBE & other Ethers	UOP-845	ppmw		2.0		
Oxygenates, Other Oxygenates	UOP-845	ppmw		5.0		
Sulfur, Total	D4468, D5623, D6667	ppmw		140		
Vapor Pressure @ 100°F	D1267, D2598	psig		50		2
Volatile Res., 95% Evap	D1837	deg F		+36		
Other Deleterious Substances	Inspection		see note			3
Test Methods	See Note					4
Most Current Version	See Note				PSX Spec	5

Notes:

1. UOP Method 619 should be used. However, an instrument with a properly calibrated Electrolytic Conductivity (Hall or ELCD) Detector can also be used.
2. The referee method shall be ASTM D1267.
3. This specification defines only a basic purity for this product. This product is to be free of any contamination or impurities that might render the product unusable for its commonly used applications, or may be injurious to the pipeline’s property or the property of 3rd parties, or may interfere with its transmission through the pipeline. Specific contaminants include (but are not limited to) dirt, rust, scale, and other types of solid contaminants, gum, gum-producing substances, oil, inhibitors, amines, caustics, chlorides, heavy metals, glycol, oxygenates, and inorganic gases or any compound added to enhance the ability to meet these specifications.
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Skelly-Belvieu Pipeline Company, L.L.C.

Destinations:
Mont Belvieu, TX

Trac66 Code(s):

NIB

Skelly-Belvieu Pipeline Natural Gas Liquids Specifications

NGL Products, Iso-Butane

Property	Test Method	Units	Min	Max	Specific	Note#
Comp.- Iso-butane	D2163	lv%	96.0			
Comp.- Propane & Lighter	D2163	lv%		3.0		
Comp.- Normal Butane & Heavier	D2163	lv%		4.0		
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Moisture Content- Free Water	Visual			None		
Sulfur	D4468, D5623, D6667	ppmw		140		
Vapor Pressure @ 100°F	D1267, D2598	psig		70		1
Other Deleterious Substances	Inspection		see note			2
Test Methods	See Note					3
Most Current Version	See Note					4

Notes:

1. The referee method shall be ASTM D1267.
2. This specification defines only a basic purity for this product. This product is to be free of any contamination or impurities that might render the product unusable for its commonly used applications, or may be injurious to the pipeline's property or the property of 3rd parties, or may interfere with its transmission through the pipeline. Specific contaminants include (but are not limited to) dirt, rust, scale, and other types of solid contaminants, gum, gum-producing substances, oil, inhibitors, amines, caustics, chlorides, heavy metals, glycol, oxygenates, and inorganic gases or any compound added to enhance the ability to meet these specifications.
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Skelly-Belvieu Pipeline Company, L.L.C.

Destinations:
Mont Belvieu, TX

Trac66 Code(s):

EP

Skelly-Belvieu Pipeline Natural Gas Liquids Specifications

NGL Products, Ethane/Propane Mix ("E/P Mix")

Property	Test Method	Units	Min	Max	Specific	Note#
Comp.- Methane & Lighter	D2163	lv%		1.5		
Comp.- Ethane	D2163	lv%	75.0	82.0		
Comp.- Ethylene	D2163	lv%		4.0		
Comp.- Propane	D2163	lv%	11.5	25.0		
Comp.- Propylene	D2163	lv%		1.0		
Comp.- Butanes & Heavier	D2163	lv%		.8		
Carbon Dioxide	D2505	ppmw		1000		
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Moisture Content- Free Water	Visual			None		
Sulfur	D5623	ppmw		30		
Other Deleterious Substances	Inspection		see note			1
Test Methods	See Note					2
Most Current Version	See Note					3

Notes:

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Skelly-Belvieu Pipeline Company, L.L.C.

Destinations:
Mont Belvieu, TX

Trac66 Code(s):

PP

Skelly-Belvieu Pipeline Natural Gas Liquids Specifications

NGL Products, Propylene, Refinery Grade (RGP, or "P/P Mix")

Property	Test Method	Units	Min	Max	Specific	Note#
Arsine	UOP-834-82	ppbw		200		1
Comp.- Ethane & Lighter	D2163	lv%		2.0		
Comp.- Propylene	D2163	lv%	65.0			
Comp.- Butane & Heavier	D2163	lv%		1.0		
Carbon Monoxide (CO)	D2504	ppmw		1.0		
Carbon Dioxide (CO2)	D2505	ppmw		5.0		
Moisture Content- Freeze Valve	D2713		Pass			
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Methanol	UOP-845	ppmw		5.0		
Methyl Acetylene	D2712	ppmw		10.0		
Propadiene	D2712	ppmw		10.0		
Moisture Content- Free Water	Visual			None		
Sulfur	D4668, D5623, D6667	ppmw		50.0		
Other Deleterious Substances	Inspection		see note			2
Test Methods	See Note					3
Most Current Version	See Note					4

Notes:

1. Charcoal adsorption/atomic absorption (UOP method 834-82) or stain tubes may be used.
2. This specification defines only a basic purity for this product. This product is to be free of any contamination or impurities that might render the product unusable for its commonly used applications, or may be injurious to the pipeline's property or the property of 3rd parties, or may interfere with its transmission through the pipeline. Specific contaminants include (but are not limited to) dirt, rust, scale, and other types of solid contaminants, gum, gum-producing substances, oil, inhibitors, amines, caustics, chlorides, heavy metals, glycol, oxygenates, and inorganic gases or any compound added to enhance the ability to meet these specifications.
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