

Effective Date: 12/1/2018

Phillips 66 Alliance - River Parish

**River Parish Pipeline
Natural Gas Liquids Specifications**

Current Publication Date: 4/3/2019

Previous Publication Date: 11/12/2018

Revision Notes:

Revised propane specification to require 2.50 lv% max for "Butane & Heavier".

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Phillips 66 Alliance - River Parish

River Parish Pipeline Natural Gas Liquids Specifications

Product Index

Product Name	Destination(s)	Trac66 Product Code(s)
NGL Products, Butane, Normal	Multiple	NNB
NGL Products, Butane, Refinery Grade (RGB)	Multiple	NCC
NGL Products, Iso-Butane	Multiple	NIB
NGL Products, Propylene, Refinery Grade (RGP, or "P/P Mix")	Multiple	PP
NGL Products, Propane	Multiple	NP1

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Destinations:
Multiple

Trac66 Code(s):
NNB

River Parish Pipeline
Natural Gas Liquids Specifications

NGL Products, Butane, Normal

Property	Test Method	Units	Min	Max	Specific	Note#
Composition- C5 & Heavier	D2163	lv%		2		
Composition- Iso-butane	D2163	lv%		6		
Composition- Normal Butane	D2163	lv%	94.0			
Composition- Propylene	D2163	lv%		2.5		
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Fluorides	D7359	ppmw		150		
Lead Acetate	D2420		Pass			
Most Current Version	See Note					1
Other Deleterious Substances	Inspection		see note			2
Sulfur, Total	D2784	ppmw		140		
Vapor Pressure @ 100°F	D1267	psig		55		
Volatile Res., 95% Evap	D1837, D216	deg F		+35		
Composition- Olefins	D2163	lv%		2.0		
Moisture Content- Freeze Valve	D2713		Pass			
Test Methods	See Note					3

Notes:

1. The most current version of this specification can be found on the Phillips 66 Midstream website, www.phillips66midstream.com.
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, masking agents, scavengers, 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.

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Destinations:
Multiple

Trac66 Code(s):
NCC

**River Parish Pipeline
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NGL Products, Butane, Refinery Grade (RGB)

Property	Test Method	Units	Min	Max	Specific	Note#
Most Current Version	See Note					1
Other Deleterious Substances	Inspection		see note			2
Volatile Res., 95% Evap	D1837, D216	deg F		+36		
Comp.- C5 & Heavier	D2163	lv%		40		
Comp.- Iso-butane	D2163	lv%		20		
Comp.- 1, 3 Butadiene	D2163	lv%		.05		
Comp.- Normal Butane	D2163	lv%	50.0			
Comp.- Olefins	D2163	lv%		10.0		
Comp.- Propane	D2163	lv%		3.0		
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Fluorides	D7359	ppm		150		
Lead Acetate	D2420		Pass			
Moisture Content	GPA C3 Dryness Test			None		
Moisture Content- Freeze Valve	D2713		Pass			
Sulfur, Total	D2784	ppmw		140		
Vapor Pressure @ 100°F	D1267	psig		56		
Test Methods	See Note					3

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Destinations:
Multiple

Trac66 Code(s):

NIB

River Parish Pipeline Natural Gas Liquids Specifications

NGL Products, Iso-Butane

Property	Test Method	Units	Min	Max	Specific	Note#
Most Current Version	See Note					1
Other Deleterious Substances	Inspection		see note			2
Volatile Res., 95% Evap	D1837, D216	deg F		+16		
Composition- Iso-butane	D2163	lv%	95			
Composition- Normal Butane	D2163	lv%		5.0		
Composition- Propane	D2163	lv%		3.0		
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Lead Acetate	D2420		Pass			
Moisture Content	GPA C3 Dryness Test			None		
Moisture Content- Freeze Valve	D2713		Pass			
Sulfur, Total	D2784	ppmw		140		
Vapor Pressure @ 100°F	D1267	psig		70		
Test Methods	See Note					3

Notes:

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Destinations:
Multiple

Trac66 Code(s):
PP

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

Property	Test Method	Units	Min	Max	Specific	Note#
Comp.- 1,3 Butadiene	D2163	ppmw		250		
Comp.- C4 Olefins	D2163	lv%		0.5		
Comp.- C4 Paraffins	D2163	lv%		15.0		
Comp.- C5 & Heavier	D2163	ppmw		75		
Comp.- MAPD	D2163	ppmw		37		
Comp.- Methane	D2163	ppmw		300		
Comp.- Propane	D2163	lv%		35.0		
Comp.- Total C2s	D2163	lv%		1.0		
Sulfur, COS	D5303	ppmw		2.5		
Comp.- Propylene	D2163	lv%	65.7			
Moisture Content- Freeze Valve	D2713		Pass			
Copper Strip Corrosion	D1838			1	1A or 1B is pass	
Oxygenates	UOP-845, Mod. EXM BRCP	ppmw		25.0		
Moisture Content- Free Water	Visual			None		
Sulfur, Total	D4668, D5623, D6667	ppmw		25.0		
Other Deleterious Substances	Inspection		see note			1
Test Methods	See Note					2
Most Current Version	See Note					3

Notes:

1. 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, masking agents, scavengers, amines, caustics, chlorides, heavy metals, glycol, oxygenates, and inorganic gases or any compound added to enhance the ability to meet these specifications.

2. Test methods designated with the letter “D” are ASTM test methods. The most recent year revision shall be used.

3. The most current version of this specification can be found on the Phillips 66 Midstream website, www.phillips66midstream.com.

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Destinations:
Multiple

Trac66 Code(s):

NP1

River Parish Pipeline
Natural Gas Liquids Specifications

NGL Products, Propane

Property	Test Method	Units	Min	Max	Specific	Note#
Residual Matter, Oil Stain	D2158		Pass			
Residual Matter, Residue	D2158	ml		0.05		
Volatile Res., 95% Evap	D1837	deg F		-37		
Composition, Butane & heavier	D2163	lv%		2.50		
Composition, Propane	D2163	lv%	90.00			
Composition, Butylene	D2163	lv%		5.0		
Copper Strip Corrosion	D1838	Rating		1		
Hydrogen Sulfide	D5623	ppmw		5		
Sulfide, Carbonyl (liquid phase)	D5623	ppmw		5		1
Sulfur, Total	D2784	ppmw		140		
Vapor Pressure @ 100F	D1267, D2598	psig		208		2
Moisture Content	GPA C3 Dryness Test			Pass		
Moisture Content- Freeze Valve	D2713		Pass			
Most Current Version	See Note					3
Test Methods	See Note					4

Notes:

1. Carbonyl sulfide above 3.0 ppmw can react in the downstream cavern to form hydrogen sulfide, which can result in a copper strip corrosion failure.
2. The referee method will be ASTM D1267.
3. The most current version of this specification can be found on the Phillips 66 Midstream website, www.phillips66midstream.com.
4. Test methods designated with the letter "D" are ASTM test methods. The most recent year revision shall be used.