

ATTACHMENT A
SPECIFICATIONS
FOR RAW MIX DELIVERED BY TRUCK TO
GEISMAR FRACTIONATOR

Acceptable Product shall be a mixture of constituents or component products of natural gas liquids (NGLs) and other light hydrocarbons and may be composed at some percentage of ethane, propane, propylene, butane and natural gasoline, meeting the following product specifications:

CHARACTERISTIC	PRODUCT SPECIFICATIONS	TEST METHOD
Hydrogen sulfide: PPM by weight, maximum	50	ASTM D-5504
Chlorine or Fluorine PPM by weight, maximum	20	ASTM D-7359
Total Mercaptans PPM by weight, maximum	100	ASTM D-5504
Phase-separated oil	None	Visual Inspection
Color: Saybolt Number, minimum	-10	ASTM D-6045
Dryness: Free Water, glycol or amine at 34° F	None	Visual Inspection
Copper strip corrosion at 100°F	No. 4	ASTM D1838

General Contaminants Note: The Product shall be commercially free from sand, dust, gums, gum-producing substances, oil, glycol, inhibitors, amine, caustics, chlorides, oxygenates, heavy metals, any other contaminants that make it unfit for its commonly used applications and any compound added to the product to enhance the ability to meet these specifications.

Abbreviations: **ASTM** = American Society for Testing and Materials, Standard Test Procedures; ° **F** = Degrees Fahrenheit; **GPA** = Gas Processors Association; **L.V. %** = liquid volume percent; **mg** = milligrams; **ml** = milliliters; **PPM** = Parts per Million; **psia** = pounds per square inch absolute; **wt. %** = percentage by weight.

The aforementioned specifications may be modified from time to time in the sole discretion of the issuing entity.

ATTACHMENT A
SPECIFICATIONS
FOR RAW MIX DELIVERED BY RAILCAR TO
LONE STAR NGL REFINERY SERVICES LLC'S ACCOUNT
AT ENLINK RIVERSIDE FRACTIONATOR

Acceptable Product shall be a mixture of constituents or component products of natural gas liquids (NGLs) and other light hydrocarbons and may be composed at some percentage of ethane, propane, propylene, butane and natural gasoline, meeting the following product specifications:

CHARACTERISTIC	PRODUCT SPECIFICATIONS	TEST METHOD
Hydrogen sulfide PPM by weight, maximum	20	ASTM D-5504
Chlorine or Fluorine PPM by weight, maximum	1	ASTM D-7359
Total Mercaptans PPM by weight, maximum	100	ASTM D-5504
Carbonyl Sulfide PPM by volume, maximum	15	ASTM D-5623
Phase-separated oil	None	Visual Inspection
Color: Saybolt Number, minimum	-10	ASTM D-6045
Dryness: Free Water, glycol or amine at 34° F	None	Visual Inspection
Copper strip corrosion at 100°F	No. 4	ASTM D1838
Vapor Pressure at 100°F, maximum	218 psig	ASTM D-1267

General Contaminants Note: The Product shall be commercially free from sand, dust, gums, gum-producing substances, oil, glycol, inhibitors, amine, caustics, chlorides, oxygenates, heavy metals, any other contaminants that make it unfit for its commonly used applications and any compound added to the product to enhance the ability to meet these specifications.

Abbreviations: **ASTM** = American Society for Testing and Materials, Standard Test Procedures; ° **F** = Degrees Fahrenheit; **GPA** = Gas Processors Association; **L.V. %** = liquid volume percent; **mg** = milligrams; **ml** = milliliters; **PPM** = Parts per Million; **psia** = pounds per square inch absolute; **wt. %** = percentage by weight.

The aforementioned specifications may be modified from time to time in the sole discretion of the issuing entity.