

**Frontier Oil And Refining Company
El Dorado Refinery
P. O. Box 1121
El Dorado Kansas, 67042-3698**

ULR (87) Unleaded Regular Specifications with 10% Ethanol

(Conventional Gasoline – this product does not meet the requirements for reformulated gasoline and may not be used in any reformulated gasoline covered area.)

Product property	Test Method	Minimum	Maximum
Gravity, ° API	D287		Report
Color			Undyed
Volatility (1*)			
Mercaptan Sulfur, wt % (2*)	D3227		0.004
Copper Strip Corrosion	D130		1
Gum, Existent, mg/100ml	D381		4
Oxidation Stability, minutes	D525	240	
Phosphorus, g/gal	D3231		0.003
Lead, g/gal	D5059		0.010
Octane (Base Gasoline) (3*)			
RON	D2699	85.0	
MON	D2700	79.0	
(R+M)/2 after blending		87.0	
Haze Rating	D4176		2
Sulfur, ppm	D2622		300

1. See attached seasonal Gasoline Volatility Specifications.
2. Mercaptan Sulfur determination is waived if the results of the Doctor Test ASTM D4952 is negative.
3. The calculated minimum R/DON octane number after the addition of 10% ethanol is 87.0. The addition of 10% ethanol is required for the minimum octane to be met.

Unleaded Regular (87 octane) with Ethanol – Volatility Specifications

	<u>1 – 15</u>	<u>16 – 31</u>
January	15.0	15.0
February	15.0	15.0
March	13.5	13.5
April	11.5	11.5
May	9.0	9.0
June	9.0	9.0
July	9.0	9.0
August	9.0	9.0
September	9.0	10.0
October	11.5	11.5
November	13.5	13.5
December	15.0	15.0