

## Certificate of Analysis

### ULSD

**Sample ID:** 1211005653  
**Tank:** 24-WM-ULSD-B:  
**Event ID:** WM805

**Batch #/Vessel:** TK 805  
**Sample Date:** 10/26/2021 12:09:00AM

Test	Method	Test Results	Specification		UOM
			Min	Max	
API Corr to 60F	D4052 UPPER	39.0	30.0	60.0	NONE
API Corr to 60F	D4052 MIDDLE	39.0	30.0	60.0	NONE
API Corr to 60F	D4052 LOWER	39.0	30.0	60.0	NONE
Homogeneous	D4052	1	1		NO UNITS
API Avg	D4052	39.0			°API
Gravity API at 60F	D4052	39.0	30.0		°API
Biodiesel Content	D7371			5.49	LV%
Flash Pensky Martin	D93	130	125		Deg F
Sulfur PPM	D7039	11.5		15.0	ppm, wt
Cetane Index	D4737A	49.6	40.0		
10%	D86	366.6			Deg F
50%	D86	480.8			Deg F
90%	D86	621.5	540.0	640.0	Deg F
FBP	D86	682.0		723.0	Deg F
* Cloud Point	D 5773	15.0			Deg F
Conductivity, Diesel	D2624	158	50	500	pS/m

\*Seasonal Tennessee MAXIMUM specifications for either Cloud Point (D5773) or "Low Temperature Flow Test" ("LTFT" - D4539) temperatures (F°) are listed by applicable month below and are consistent with the ASTM D975 Diesel Specification Table X5.1 Tenth Percentile Minimum Ambient Air Temperatures.

Month	Cloud-LTFT**Max., F°
Oct.	33.8
Nov.	23
Dec.	15.8
Jan.	12.2
Feb.11	15.8
Mar.	24.8

During the period above and specifically where **cold flowing improving additives** are injected into finish products, LTFT Temperatures, tested and reported by Valero Contract Laboratory supersede any Cloud Point Temperatures reported.

ASTM D6079 - Lubricity, HFRR @ 60°C - is monitored on a spot basis by an independent laboratory. Two separate aliquots are tested: one on a hand-blend with 5% Biodiesel and the other on a hand-blend with Lubricity additive.