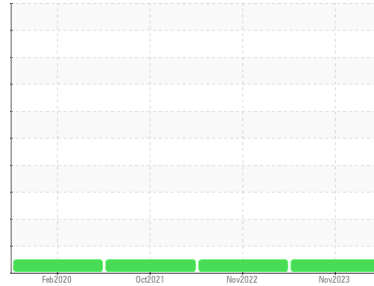




# FUEL REPORT

Sample Rating Trend

**NORMAL**



Area  
**Kentucky**  
 Machine Id  
**[Kentucky] Diesel - #3 Port**  
 Component  
**Diesel Fuel**  
 Fluid  
**No.2 DIESEL FUEL (ULTRALOW SULPHUR) (4454 GAL)**

## DIAGNOSIS

### Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel. ( Customer Sample Comment: Tyson Bias )

### Corrosion

All metal levels are normal indicating no corrosion in the system.

### Contaminants

The water content is negligible. There is no Bacteria, Yeast and/or Fungus indicated in the sample. There is no indication of any contamination in the fuel.

### Fuel Condition

Sulfur value derived by ASTM D4294 method for ULSD validation.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0600296</b>	WC0600453	WC0600298
Sample Date	Client Info	<b>28 Nov 2023</b>	04 Nov 2022	08 Oct 2021
Machine Age	hrs	<b>0</b>	0	0
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

## PHYSICAL PROPERTIES

method	limit/base	current	history1	history2	
ASTM Color	scalar	*ASTM D1500	<b>L4.5</b>	L5.0	L5.0
Visc @ 40°C	cSt	ASTM D445	<b>3.0</b>	2.46	2.24

## SULFUR CONTENT

method	limit/base	current	history1	history2		
Sulfur	ppm	ASTM D5185m	10	<b>0</b>	9	2
Sulfur (UVF)	ppm	ASTM D5453		<b>8</b>	9	10

## CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	<1.0	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	<1	0
Water	%	ASTM D6304	<0.05	<b>0.002</b>	0.004	0.003
ppm Water	ppm	ASTM D6304	<500	<b>24</b>	41.9	25.5
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	0.0	0.0
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	0.0	4.4

## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	<b>129</b>	66	---
Particles >6µm	ASTM D7647	>640	<b>45</b>	35	---
Particles >14µm	ASTM D7647	>80	<b>6</b>	9	---
Particles >21µm	ASTM D7647	>20	<b>3</b>	2	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	<b>14/13/10</b>	13/12/10	---

## HEAVY METALS

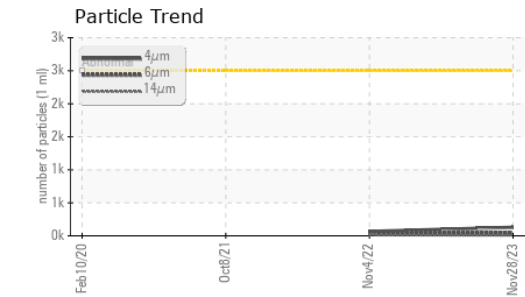
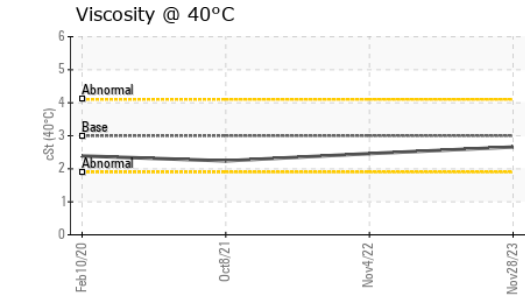
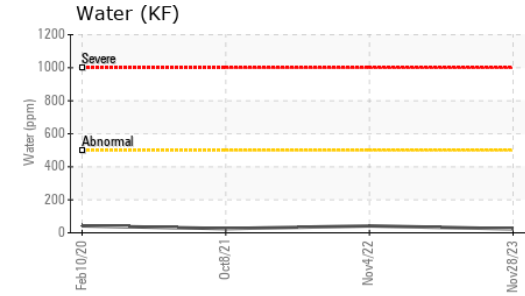
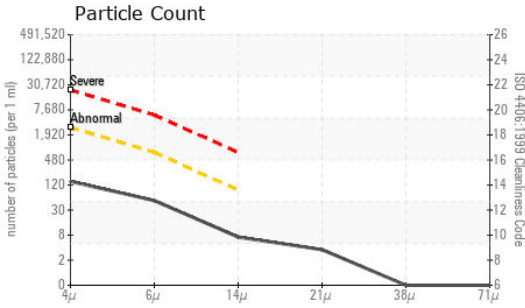
method	limit/base	current	history1	history2		
Aluminum	ppm	ASTM D5185m	<0.1	<b>2</b>	0	0
Nickel	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Iron	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m	<0.1	<b>0</b>	2	3
Zinc	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0

## SAMPLE IMAGES

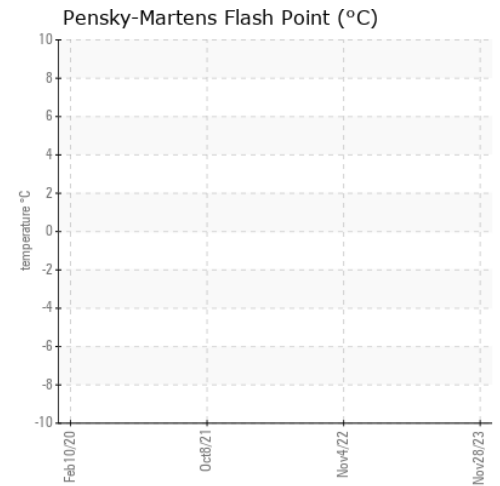
method	limit/base	current	history1	history2
Color				
Bottom				



# FUEL REPORT



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0600296 **Received** : 06 Dec 2023  
**Lab Number** : 06026953 **Diagnosed** : 14 Dec 2023  
**Unique Number** : 10776744 **Diagnostician** : Doug Bogart  
**Test Package** : DF-5 ( Additional Tests: Screen )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

**MARATHON PETROLEUM CO.**  
 101 12TH ST  
 CATLETTSBURG, KY  
 US 41169  
 Contact: CORY GUMBERT  
 cagumbert@marathonpetroleum.com  
 T: (606)585-3950  
 F: x: