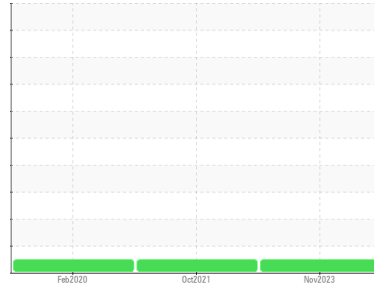




# FUEL REPORT

Sample Rating Trend

**NORMAL**



Area  
**Kentucky**  
 Machine Id  
**[Kentucky] Diesel - #2 Port**

Component  
**Diesel Fuel**  
 Fluid  
**No.2 DIESEL FUEL (ULTRALOW SULPHUR) (15761 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>WC0600238</b>	RP0014043	WCDF01164
Sample Date	Client Info			<b>28 Nov 2023</b>	08 Oct 2021	10 Feb 2020
Machine Age	hrs	Client Info		<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>	L5.5	L5.5
Visc @ 40°C	cSt	ASTM D445	3.0	<b>2.69</b>	2.18	2.47

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	<b>0</b>	3	0
Sulfur (UVF)	ppm	ASTM D5453		<b>8</b>	10	5

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<b>0</b>	0	0
Sodium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	<0.1	<b>&lt;1</b>	0	0
Water	%	ASTM D6304	<0.05	<b>0.001</b>	0.003	0.004
ppm Water	ppm	ASTM D6304	<500	<b>15</b>	29.3	40.5
% Gasoline	%	*In-House	<0.50	<b>0.0</b>	0.0	0.0
% Biodiesel	%	*In-House	<20.0	<b>0.0</b>	4.1	4.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	<b>3687</b>	---	---
Particles >6µm		ASTM D7647	>640	<b>963</b>	---	---
Particles >14µm		ASTM D7647	>80	<b>96</b>	---	---
Particles >21µm		ASTM D7647	>20	<b>39</b>	---	---
Particles >38µm		ASTM D7647	>4	<b>3</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>19/17/14</b>	---	---

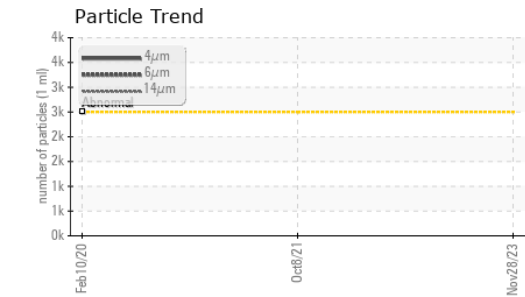
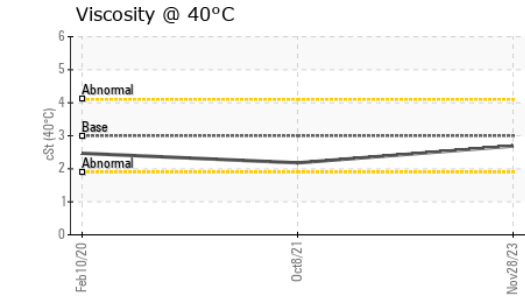
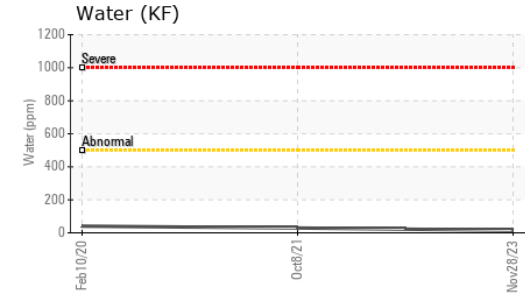
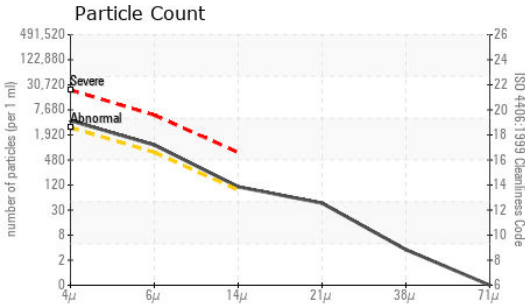
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	<b>2</b>	0	0
Nickel	ppm	ASTM D5185m	<0.1	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Iron	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<0.1	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<0.1	<b>0</b>	3	1
Zinc	ppm	ASTM D5185m	<0.1	<b>0</b>	0	1

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------

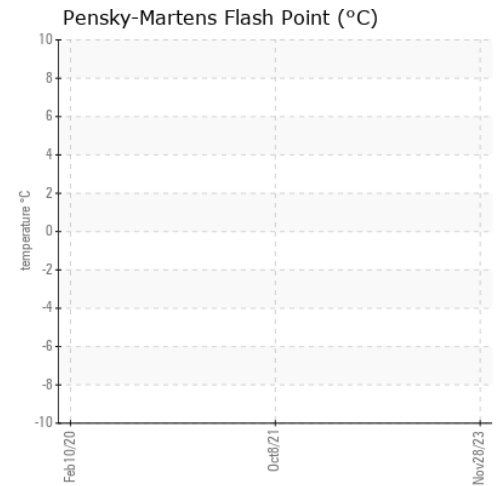




# FUEL REPORT



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0600238 **Received** : 06 Dec 2023  
**Lab Number** : 06026949 **Diagnosed** : 14 Dec 2023  
**Unique Number** : 10776740 **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: