

# FUEL REPORT

# GRAND STRAND REGIONAL MEDICAL CENTER [17822] [GRAND STRAND REGIONAL MEDICAL CENTER] DAY 2

**Diesel Fuel** 

Fluid No.2 DIESEL FUEL (ULTRALOW SULPHUR) (200 GAL)

## DIAGNOSIS

#### A Recommendation

We advise that you filter this fluid before use. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

#### Corrosion

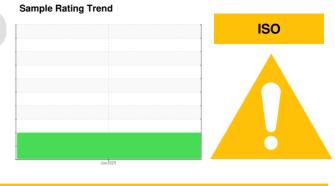
All metal levels are normal indicating no corrosion in the system.

## Contaminants

There is a high amount of particulates present in the fuel. Moderate concentration of visible dirt/debris present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

## **Fuel Condition**

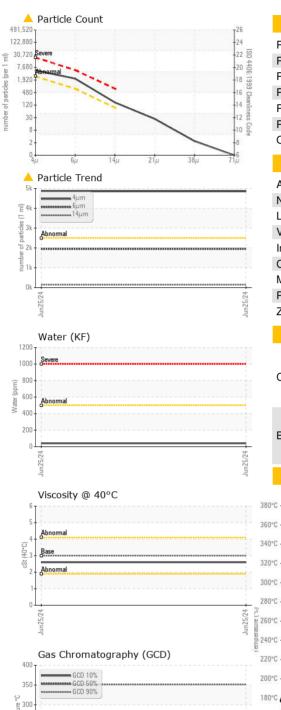
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.



SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0957740		
Sample Date		Client Info		25 Jun 2024		
Machine Age	hrs	Client Info		0		
Sample Status				ABNORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Fuel Color	text	*Visual Screen	Yllow	Red		
ASTM Color	scalar	*ASTM D1500		L4.0		
Visc @ 40°C	cSt	ASTM D445	3.0	2.6		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	66.3		
SULFUR CONTEI	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0		
Sulfur (UVF)	ppm	ASTM D5453		10		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	177		
5% Distillation Point	°C	ASTM D86		200		
10% Distill Point	°C	ASTM D86	201	208		
15% Distillation Point	°C	ASTM D86		216		
20% Distill Point	°C	ASTM D86	216	224		
30% Distill Point	°C	ASTM D86	230	238		
40% Distill Point	°C	ASTM D86	243	251		
50% Distill Point	°C	ASTM D86	255	264		
60% Distill Point	°C	ASTM D86	267	278		
70% Distill Point	°C	ASTM D86	280	292		
80% Distill Point	°C	ASTM D86	295	308		
85% Distillation Point	°C	ASTM D86		318		
90% Distill Point	°C	ASTM D86	310	328		
95% Distillation Point	°C	ASTM D86		344		
Final Boiling Point	°C	ASTM D86	341	358		
IGNITION QUALI	ΓY	method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	36		
Cetane Index		ASTM D4737	<40.0	48		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1		
Sodium	ppm	ASTM D5185m	<0.1	1		
Potassium	ppm	ASTM D5185m	<0.1	<1		
Water	%	ASTM D6304	<0.05	0.004		
ppm Water	ppm	ASTM D6304	<500	40		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	1.7		



# **FUEL REPORT**



FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	<u> </u>		
Particles >6µm		ASTM D7647	>640	<u> </u>		
Particles >14µm		ASTM D7647	>80	<b> </b> 142		
Particles >21µm		ASTM D7647	>20	23		
Particles >38µm		ASTM D7647	>4	2		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	<b>A</b> 19/18/14		
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0		
Nickel	ppm	ASTM D5185m	<0.1	0		
_ead	ppm	ASTM D5185m	<0.1	0		
/anadium	ppm	ASTM D5185m	<0.1	<1		
ron	ppm	ASTM D5185m	<0.1	0		
Calcium	ppm	ASTM D5185m	<0.1	0		
Magnesium	ppm	ASTM D5185m	<0.1	0		
Phosphorus	ppm	ASTM D5185m	<0.1	<1		
Zinc	ppm	ASTM D5185m	<0.1	0		
SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						1
Fuel Distillation Cu	irve			Pensky-Marte	ns Flash Point (	°C)
Sample			္ <sup>8</sup> ။ ၂			
Baseline						
•			11 5	Base		
		/		Jun25/24		Jun 25/24
		1		Junî		Jun2
		1		GCD Spectrur	n	
•	1	8 martin	55		90 %	
<b>بر</b> ا	A. Martin		45			
1			40			
1						
1			1) as 10	0 +		
			(¥d) 35 93 30 025 20			
V			15			
Frankinsk statistick (* 1976)			10		The second se	

%00

90%

70%

80%

: WearCheck USA - 501 Madison Ave., Cary, NC 27513



g 250

200

150

 Sample No.
 : WC0957740
 Received
 : 25 Jun 2024

 Lab Number
 : 06220300
 Tested
 : 02 Jul 2024

 Unique Number
 : 11098497
 Diagnosed
 : 02 Jul 2024 - Elizabeth Valachovic

 Certificate 12367
 Test Package
 : DF-2 (Additional Tests: Fuel, 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)

Percent Recovered

30% 40% 50%

20%

160°C

140°C

120°C

Jun25/24 -

Laboratory

10%

PETROLEUM RECOVERY SERVICES 210 POWELL DR SUMMERVILLE, SC c US 29483 Contact: AJAY EL Ajay@prsfuel.com T: (843)225-1777 CGM 106:2012) F:

15 15

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Time (min)

Report Id: PETSUM [WUSCAR] 06220300 (Generated: 07/02/2024 23:58:10) Rev: 1

Contact/Location: AJAY EL - PETSUM

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