

Area

## FUEL REPORT

# VIS DEBRIS

# Diesel Fuel

**[QTS SUWANEE DC1] HV DAY 1** 

**QTS SUWANEE DC1 [17726]** 

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (75 GAL)

### DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. All laboratory tests indicate that this sample meets specifications for No.2 ultralow-sulfur diesel fuel.

### Corrosion

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

### Contaminants

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

### **Fuel Condition**

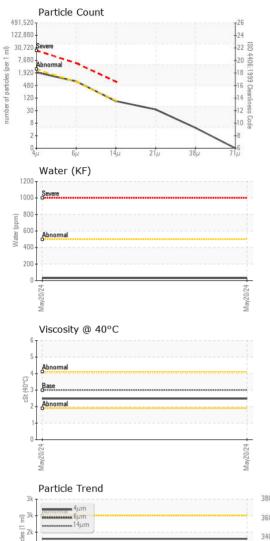
Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0953823		
Sample Date		Client Info		20 May 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		L4.5		
Visc @ 40°C	cSt	ASTM D445	3.0	2.48		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	61.5		
SULFUR CONTER	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0		
Sulfur (UVF)	ppm	ASTM D5453		11		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	172		
5% Distillation Point	°C	ASTM D86		195		
10% Distill Point	°C	ASTM D86	201	205		
15% Distillation Point	°C	ASTM D86		213		
20% Distill Point	°C	ASTM D86	216	221		
30% Distill Point	°C	ASTM D86	230	236		
40% Distill Point	°C	ASTM D86	243	249		
50% Distill Point	°C	ASTM D86	255	263		
60% Distill Point	°C	ASTM D86	267	276		
70% Distill Point	°C	ASTM D86	280	290		
80% Distill Point	°C	ASTM D86	295	305		
85% Distillation Point	°C	ASTM D86		315		
90% Distill Point	°C	ASTM D86	310	326		
95% Distillation Point	°C	ASTM D86		344		
Final Boiling Point	°C	ASTM D86	341	359		
IGNITION QUALIT	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	2		
Potassium	ppm	ASTM D5185m	<0.1	2		
Water	%	ASTM D6304	<0.05	0.003		
ppm Water	ppm	ASTM D6304	<500	29		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	0.0		



# FUEL REPORT

FLUID CLEANLINESS



Trend	Sector GRAPHS Fuel Distillation Curve	
	380°C T	
rm μm	360°C - Sample	,
	340°C -	11
	320°C -	1
	300°C -	
	+7/02/eW	
	M G240°C	
omatography (GCD)	220°C -	
D 10%	200°C - 200°C	
D 50%	180°C	
	160°C	
	140°C -	
	120°C	;
	0.24 0.29 0.20 0.29 0.20 0.20 0.20 0.20 0.20 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.25 0.24 0.25 0.24 0.25	100%
	42/02/eW	

Sample No. : WC0953823

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

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

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

Lab Number : 06204065

Unique Number : 11071526

				000		
Particles >4µm		ASTM D7647	>2500	1799		
Particles >6µm		ASTM D7647	>640	672		
Particles >14µm		ASTM D7647	>80	76		
Particles >21µm		ASTM D7647	>20	30		
Particles >38µm		ASTM D7647	>4	4		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/17/13		
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	<1		
Nickel	ppm	ASTM D5185m	<0.1	0		
Lead	ppm	ASTM D5185m	<0.1	<1		
Vanadium	ppm	ASTM D5185m	<0.1	0		
Iron	ppm	ASTM D5185m	<0.1	<1		
Calcium	ppm	ASTM D5185m	<0.1	0		
Magnesium	ppm	ASTM D5185m	<0.1	0		
Phosphorus	ppm	ASTM D5185m	<0.1	0		
Zinc	ppm	ASTM D5185m	<0.1	0		
SAMPLE IMAGES	3	method	limit/base	current	history1	history2

limit/base

current

method

Color

Bottom

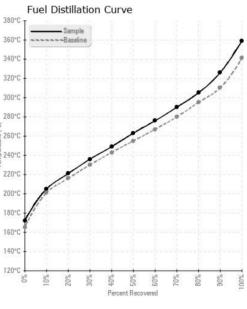




no image	no image
no image	no image

history1

history2



Received

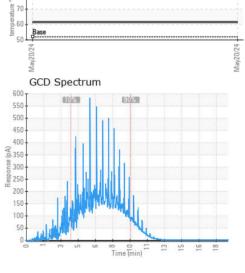
Diagnosed

Tested

: 07 Jun 2024

: 14 Jun 2024

: 14 Jun 2024 - Elizabeth Valachovic



Pensky-Martens Flash Point (°C)



te 2

Ωk

400

35

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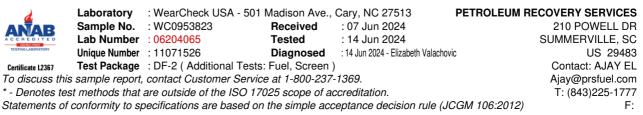
g 250

200

150

Mav20/24

Gas Cl



Report Id: PETSUM [WUSCAR] 06204065 (Generated: 06/15/2024 10:57:34) Rev: 1

Certificate 12367

Contact/Location: AJAY EL - PETSUM

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