

## FUEL REPORT

### Area Lyden Road Commision of Macomb [7198 POST] [Lyden Road Commision of Macomb] TANK 1

Diesel Fuel

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (10000 GAL)

#### DIAGNOSIS

#### Recommendation

All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

#### Corrosion

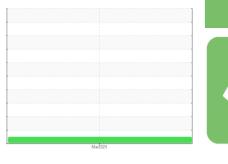
All metal levels are normal indicating no corrosion in the system.

#### Contaminants

There is no bacteria or fungus (yeast and/or mold) indicated in the sample. The water content is negligible. There is no indication of any contamination in the fuel. The amount and size of particulates present in the system are acceptable.

#### **Fuel Condition**

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



Sample Rating Trend

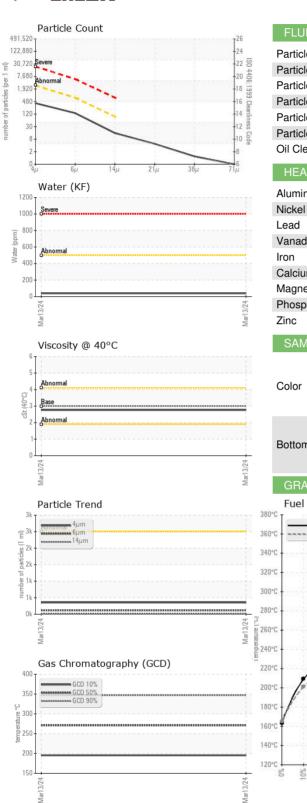


NORMAL

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06132852		
Sample Date		Client Info		13 Mar 2024		
Machine Age	hrs	Client Info		0		
Sample Status				NORMAL		
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	0.856		
Fuel Color	text	*Visual Screen	Yllow	Yllow		
ASTM Color	scalar	*ASTM D1500		L2.5		
Visc @ 40°C	cSt	ASTM D445	3.0	2.76		
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	65.5		
SULFUR CONTEI	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0		
Sulfur (UVF)	ppm	ASTM D5453		8		
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	163		
5% Distillation Point	°C	ASTM D86		196		
10% Distill Point	°C	ASTM D86	201	209		
15% Distillation Point	°C	ASTM D86		220		
20% Distill Point	°C	ASTM D86	216	228		
30% Distill Point	°C	ASTM D86	230	242		
40% Distill Point	°C	ASTM D86	243	254		
50% Distill Point	°C	ASTM D86	255	265		
60% Distill Point	°C	ASTM D86	267	278		
70% Distill Point	°C	ASTM D86	280	291		
80% Distill Point	°C	ASTM D86	295	306		
85% Distillation Point		ASTM D86		315		
90% Distill Point	°C	ASTM D86	310	326		
95% Distillation Point	°C	ASTM D86		343		
Final Boiling Point	°C	ASTM D86	341	354		
Distillation Residue	%	ASTM D86	3.0	1.4		
Distillation Loss	%	ASTM D86	3.0	0.5		
IGNITION QUALI	ΓΥ	method	limit/base	current	history1	history2
API Gravity		ASTM D7777		33.8		
Cetane Index		ASTM D4737	<40.0	44.0		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0		
Sodium	ppm	ASTM D5185m	<0.1	1		
Potassium	ppm	ASTM D5185m	<0.1	<1		
Water	%	ASTM D6304	< 0.05	0.003		
ppm Water	ppm	ASTM D6304	<500	39		
% Gasoline	%	*In-House	<0.50	0.0		
% Biodiesel	%	*In-House	<20.0	0.0		



# **FUEL REPORT**



FLUID CLEANLI	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	354		
Particles >6µm		ASTM D7647	>640	118		
Particles >14µm		ASTM D7647	>80	13		
Particles >21µm		ASTM D7647	>20	4		
Particles >38µm		ASTM D7647	>4	1		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>18/16/13	16/14/11		
HEAVY METALS	6	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	<1		
Nickel	ppm	ASTM D5185m	<0.1	1		
Lead	ppm	ASTM D5185m	<0.1	0		
Vanadium	ppm	ASTM D5185m	<0.1	0		
Iron	ppm	ASTM D5185m	<0.1	0		
Calcium	ppm	ASTM D5185m	<0.1	0		
		ASTM D5185m	<0.1	0		
Magnesium	ppm		<0.1	-		
Phosphorus	ppm	ASTM D5185m		0		
Zinc	ppm	ASTM D5185m	<0.1	0		
SAMPLE IMAGE	S	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Fuel Distillation C	Curve			Pensky-Marte	ns Flash Point (	°C)
° <sup>C</sup> I			ە 80		•	
°CBaseline			08 07 09 eremperature 00	-		
°C -			1 ad 60	Bace		
			50			4
°C -		/		Mar13/24		Mar13/24
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°C -	- North		500			
C-			450			
0				••••••••••••••••••••••••••••••••••••••		
			<u>م</u> 350			
			(Fd) 350 80 300 80 300 80 250 80 300			
°⊂ /			200			
•c 🖡			150			
°C -			100			
			50			
0% <sup>3</sup> 20% + 30% +	Percent Recovere	ра 60% <del>-</del> 70% <del>-</del> 80% -	100%		2 1 <u>5 9</u> 8 0 Time (min)	21 25 26 26
WearCheck USA - 5				PETRO	LEUM RECOVE	
WC06132852	Rece		3 Mar 2024			0 POWELL DR
06132852	Test		) Apr 2024	<b>D</b> .	SUM	MERVILLE, SC
10952317 DE 2 ( Additional Ta			Apr 2024 - Dou	ug Bogart	0	US 29483
DF-2 (Additional Te	sts: Fuel.	Screen)			Co	ntact: AJAY FL

Unique Number : 10952317 Test Package : DF-2 (Additional Tests: Fuel, Screen) Certificate 12367

Laboratory

Sample No.

Lab Number : 061328

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)

Report Id: PETSUM [WUSCAR] 06132852 (Generated: 05/27/2024 14:36:00) Rev: 1

Contact/Location: AJAY EL - PETSUM

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