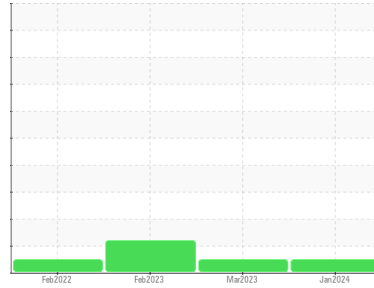




FUEL REPORT

Sample Rating Trend

NORMAL



Machine Id
NYU SMILLOW

Component
Diesel Fuel
Fluid

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (9000 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 INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC06073458	WC05810162	WC05761173
Sample Date	Client Info			29 Jan 2024	20 Mar 2023	07 Feb 2023
Machine Age	hrs	Client Info		0	0	0
Sample Status				NORMAL	NORMAL	ATTENTION

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	0.840	0.841	0.841
Fuel Color	text	*Visual Screen	Yellow	Red	Red	Red
ASTM Color	scalar	*ASTM D1500		L4.0	L5.5	L4.0
Visc @ 40°C	cSt	ASTM D445	3.0	2.46	2.5	2.6

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	0	0	0
Sulfur (UVF)	ppm	ASTM D5453		7	7	7

DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	162	163	161
5% Distillation Point	°C	ASTM D86		186	190	188
10% Distill Point	°C	ASTM D86	201	196	200	200
15% Distillation Point	°C	ASTM D86		206	211	211
20% Distill Point	°C	ASTM D86	216	215	220	219
30% Distill Point	°C	ASTM D86	230	232	236	236
40% Distill Point	°C	ASTM D86	243	247	251	252
50% Distill Point	°C	ASTM D86	255	264	267	267
60% Distill Point	°C	ASTM D86	267	280	283	282
70% Distill Point	°C	ASTM D86	280	297	298	298
80% Distill Point	°C	ASTM D86	295	314	313	313
85% Distillation Point	°C	ASTM D86		322	321	321
90% Distill Point	°C	ASTM D86	310	331	330	330
95% Distillation Point	°C	ASTM D86		344	342	341
Final Boiling Point	°C	ASTM D86	341	353	350	350
Distillation Residue	%	ASTM D86	3.0	1.4	1.4	1.4
Distillation Loss	%	ASTM D86	3.0	0.7	0.7	0.6

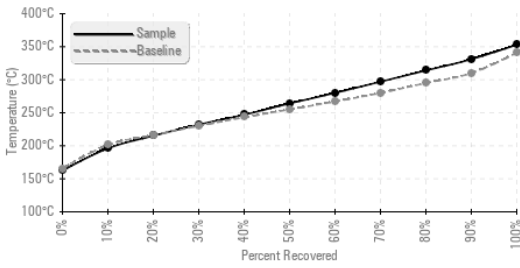
IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	37.0	36.8	36.8
Cetane Index		ASTM D4737	<40.0	48.7	49.1	49.1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	0	0	0
Sodium	ppm	ASTM D5185m	<0.1	0	0	0
Potassium	ppm	ASTM D5185m	<0.1	0	<1	<1
Water	%	ASTM D6304	<0.05	0.006	0.004	0.004
ppm Water	ppm	ASTM D6304	<500	69	42.4	47.6
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	6.3	6.5	7.0



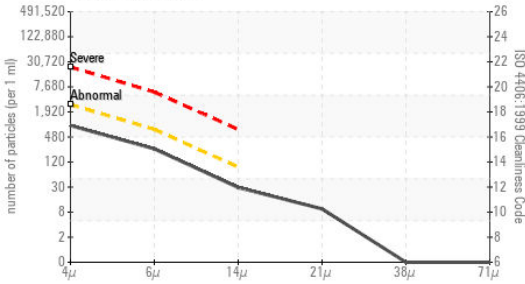
FUEL REPORT

Fuel Distillation Curve



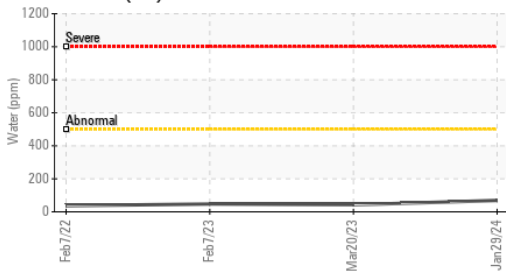
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	793	2426	▲ 4981
Particles >6µm	ASTM D7647	>640	219	488	▲ 1368
Particles >14µm	ASTM D7647	>80	26	12	21
Particles >21µm	ASTM D7647	>20	8	2	2
Particles >38µm	ASTM D7647	>4	0	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	17/15/12	18/16/11	▲ 19/18/12

Particle Count



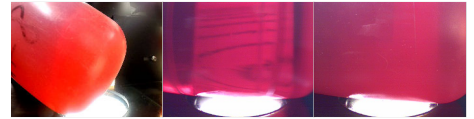
HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	0
Nickel	ppm	ASTM D5185m	<0.1	0	0
Lead	ppm	ASTM D5185m	<0.1	0	0
Vanadium	ppm	ASTM D5185m	<0.1	0	0
Iron	ppm	ASTM D5185m	<0.1	0	0
Calcium	ppm	ASTM D5185m	<0.1	0	0
Magnesium	ppm	ASTM D5185m	<0.1	0	0
Phosphorus	ppm	ASTM D5185m	<0.1	0	4
Zinc	ppm	ASTM D5185m	<0.1	0	8

Water (KF)

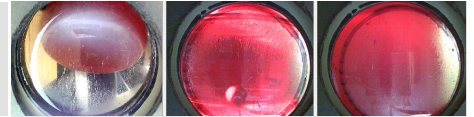


SAMPLE IMAGES	method	limit/base	current	history1	history2
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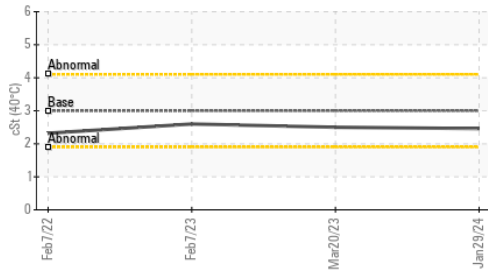
Color



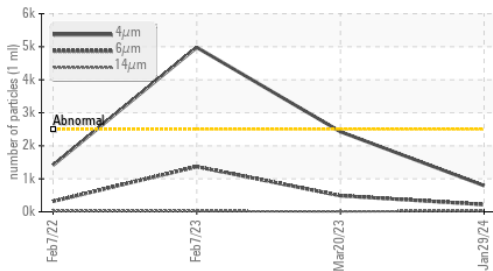
Bottom



Viscosity @ 40°C



Particle Trend



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06073458 **Received** : 30 Jan 2024
Lab Number : **06073458** **Diagnosed** : 06 Feb 2024
Unique Number : 10850135 **Diagnostician** : Doug Bogart
Test Package : DF-1 (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)

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T:
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