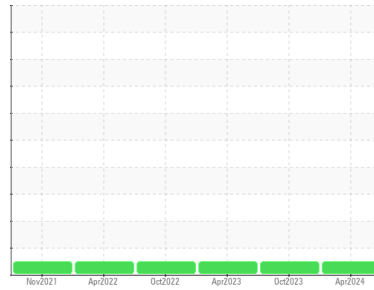




FUEL REPORT

Sample Rating Trend



NORMAL



Machine Id

D
Component
Diesel Fuel
Fluid

No.1 DIESEL FUEL (ULTRALOW SULPHUR) (--- 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

The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample. 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			WC0929844	WC0873526	WC0812016
Sample Date	Client Info			07 Apr 2024	31 Oct 2023	18 Apr 2023
Machine Age	hrs	Client Info		0	0	0
Sample Status				NORMAL	NORMAL	NORMAL

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
ASTM Color	scalar	*ASTM D1500		L3.5	L4.0	L4.0
Visc @ 40°C	cSt	ASTM D445		2.44	2.5	2.41

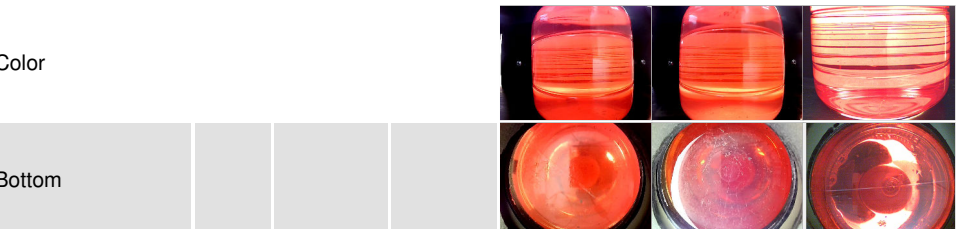
SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	7	0	0	1
Sulfur (UVF)	ppm	ASTM D5453		10	8	10

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1	<1	0
Sodium	ppm	ASTM D5185m	<0.1	<1	2	0
Potassium	ppm	ASTM D5185m	<0.1	0	<1	<1
Water	%	ASTM D6304	<0.05	0.003	0.004	0.003
ppm Water	ppm	ASTM D6304	<500	29	44.3	36.8
% Gasoline	%	*In-House	<0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	0.0	0.0	0.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	800	2016	2649
Particles >6µm		ASTM D7647	>640	291	538	567
Particles >14µm		ASTM D7647	>80	59	90	44
Particles >21µm		ASTM D7647	>20	23	32	8
Particles >38µm		ASTM D7647	>4	2	2	1
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	17/15/13	18/16/14	19/16/13

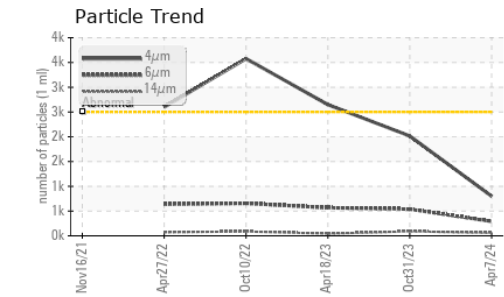
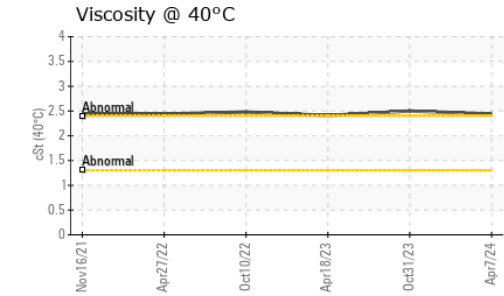
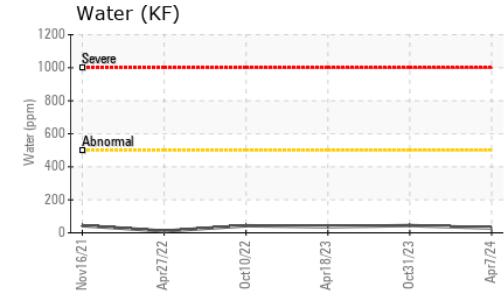
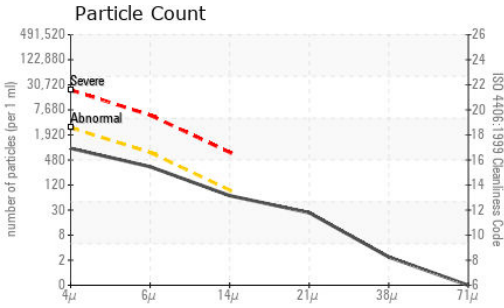
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	<0.1	0	0	0
Nickel	ppm	ASTM D5185m	<0.1	0	<1	0
Lead	ppm	ASTM D5185m	<0.1	0	<1	0
Vanadium	ppm	ASTM D5185m	<0.1	0	0	0
Iron	ppm	ASTM D5185m	<0.1	0	0	0
Calcium	ppm	ASTM D5185m	<0.1	0	0	0
Magnesium	ppm	ASTM D5185m	<0.1	<1	0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

SAMPLE IMAGES		method	limit/base	current	history1	history2
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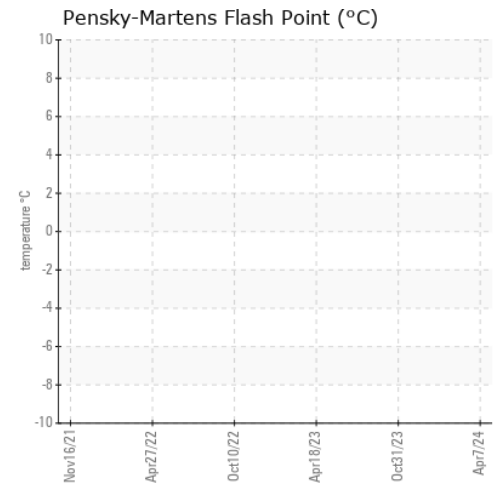




FUEL REPORT



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0929844 **Received** : 05 Apr 2024
Lab Number : 06140758 **Tested** : 15 Apr 2024
Unique Number : 10965566 **Diagnosed** : 15 Apr 2024 - Doug Bogart
Test Package : DF-5 (Additional Tests: Screen)

NALCO AN ECOLAB COMPANY
 1304 SEATON ROAD UNIT 8
 DURHAM, NC
 US 27707
 Contact: SHAWN SMITH
 shawn.smith@ecolab.com

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)