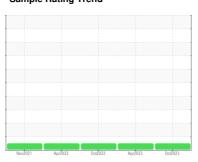


FUEL REPORT

Sample Rating Trend



NORMAL



Machine Id D

Component

Diesel Fuel

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

Recommendation

No corrective action is recommended at this time. 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 moderate amount of particulates 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.

0.4.4.51.5.4.5.5.5						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0873526	WC0812016	WC0750386
Sample Date		Client Info		31 Oct 2023	18 Apr 2023	10 Oct 2022
Machine Age	hrs	Client Info		0	0	0
Sample Status				NORMAL	NORMAL	NORMAL
PHYSICAL PROP	ERTIES	method	limit/base	current	history1	history2
ASTM Color	scalar	*ASTM D1500		L4.0	L4.0	L4.0
Visc @ 40°C	cSt	ASTM D445		2.5	2.41	2.48
SULFUR CONTE	NT	method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	7	0	1	0
Sulfur (UVF)	ppm	ASTM D5453		8	10	7
` ,						
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1	0	<1
Sodium	ppm	ASTM D5185m	<0.1	2	0	1
Potassium	ppm	ASTM D5185m	< 0.1	<1	<1	0
Water	%	ASTM D6304	< 0.05	0.004	0.003	0.004
ppm Water	ppm	ASTM D6304	< 500	44.3	36.8	43.0
% Gasoline	%	*In-House	< 0.50	0.0	0.0	0.0
% Biodiesel	%	*In-House	<20.0	0.0	0.0	0.0
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	2016	2649	3577
Particles >6µm		ASTM D7647	>640	538	567	656
Particles >14µm		ASTM D7647	>80	90	44	87
Particles >21µm		ASTM D7647	>20	32	8	34
Particles >38μm		ASTM D7647	>4	2	1	4
Particles >71μm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/16/14	19/16/13	19/17/14
HEAVY METALS		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m	< 0.1	0	0	2
Nickel	ppm	ASTM D5185m	<0.1	<1	0	<1
Lead	ppm	ASTM D5185m	< 0.1	<1	0	0
Vanadium	ppm	ASTM D5185m	<0.1	0	0	1
Iron	ppm	ASTM D5185m	<0.1	0	0	0
Calcium	ppm	ASTM D5185m	< 0.1	0	0	0
Magnesium	ppm	ASTM D5185m	< 0.1	0	<1	0
Phosphorus	ppm	ASTM D5185m	<0.1	3	0	0
Zinc	ppm	ASTM D5185m	< 0.1	0	0	0

SAMPLE IMAGES

Color

Bottom

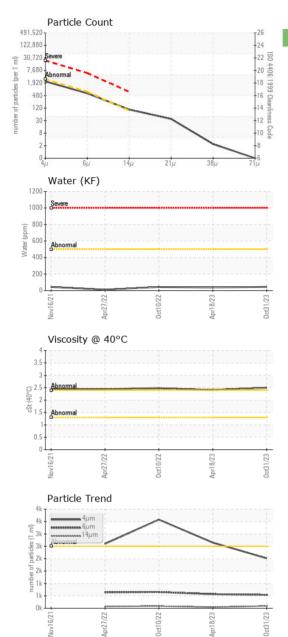




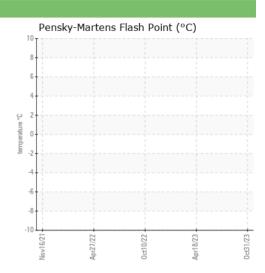




FUEL REPORT









Laboratory Sample No. Lab Number Unique Number : 10723537

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 05995177

: WC0873526 **Test Package**: DF-5 (Additional Tests: Screen)

: 31 Oct 2023 Received Diagnosed Diagnostician : Doug Bogart

: 13 Nov 2023

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

NALCO AN ECOLAB COMPANY 1304 SEATON ROAD UNIT 8 DURHAM, NC US 27707

Contact: SHAWN SMITH shawn.smith@ecolab.com T:

* - 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)

F: